# Scoping Report Springfield Aquatic Recreation and Supplemental Water Supply Project

Prepared for: U.S. Army Corps of Engineers, Rock Island District Rock Island, IL 61204-2004





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#### LIST OF ABBREVIATIONS AND ACRONYMS

City	City Water, Light & Power
Corps	United States Army Corps of Engineers, Rock Island District
EO	Executive Order
EIS	Environmental Impact Statement
FEIS	Final Environmental Impact Statement
ISWS	Illinois State Water Survey
NEPA	National Environmental Policy Act
NOI	Notice of Intent
SEIS	Supplemental Environmental Impact Statement





#### 1.0 INTRODUCTION

The United States Army Corps of Engineers, Rock Island District (Corps) is preparing a Supplemental Environmental Impact Statement (SEIS) to address the proposed Springfield Aquatic Recreation and Supplemental Water Supply Project in Sangamon County, Illinois. The Corps, working in conjunction with the City of Springfield, Office of Public Utilities, also known as the City Water, Light & Power (City), previously prepared an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et. seq.) that evaluated a range of alternatives to provide supplemental water supply to meet existing and projected deficits in water availability.

#### What is the Purpose of the Supplemental Environmental Impact Statement?

The purpose of this SEIS is to evaluate new and significant information within the project area, evaluate appropriate and reasonable alternatives, assess the potential impacts of the alternatives, and identify the preferred alternative that meets the project needs.

A Final EIS was prepared and published in November 2000 in which the Hunter Lake Reservoir was identified as the preferred alternative. The Final EIS was published in the Federal Register on November 24, 2000; however, no Record of Decision was issued.

On December 17, 2010, the Corps issued a letter to the City formally determining the need for a SEIS. The Corps identified analyses in the SEIS that needed to be updated to reflect current conditions. These included the water demand analysis, threatened and endangered species bat surveys, wetland delineations, the existing programmatic agreement related to cultural resources, water quality anti-degradation analysis, and mitigation plans. As a SEIS, this document does not repeat information presented in the Final EIS, rather the SEIS includes an evaluation of new and updated supporting information related to potential social, economic, and environmental impacts of reasonable alternatives that meets the purpose and need for the project.

The City's current water supply source is Lake Springfield (see Figure 1). The adequacy of Lake Springfield as a source of water was not questioned until the 1953-1955 drought which nearly caused the shutdown of both the water treatment and electric generation plants. As result of this drought event, the City constructed a moveable low head dam across the South Fork of the Sangamon River (South Fork) to divert water and provide supplemental water to Lake Springfield, during low lake levels when sufficient water is available in the South Fork.

NEPA regulations require an early and open process for deciding what should be discussed in an EIS or SEIS (i.e., the scope of the document). The scoping process involves requesting and using comments from the public and interested agencies to help identify the issues and alternatives that should be addressed in the SEIS. This document summarizes the input that the Corps received during the scoping process and defines the scope of the SEIS. In addition to agency and public input, the EIS will also address specific requirements associated with a number of federal laws such as National Historic Preservation Act of 1966, Endangered Species Act of 1973, Clean Water Act of 1972, and the Clean Air Act of 1970, as amended would satisfy the requirements of Executive Order (EO) 11988



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(Floodplains Management), EO 11990 (Protection of Wetlands), EO 12898 (Environmental Justice), EO 13112 (Invasive Species), and EO 13653 (Preparing the United States for the Impacts of Climate Change).

A formal scoping period was held for the SEIS in August and September of 2016. A summary of comments received during that scoping period is provided in Appendix D. On July 31, 2018 the City requested that recreation be added as an additional primary purpose and need for the water supply project. Following a request from the Corps for additional information supporting a demand and need for aquatic recreation opportunities in the Springfield Region, the University of Illinois conducted an aquatic recreation demand study. The study was completed in September of 2020 and demonstrated an unmet demand for over 12,000 acres of aquatic recreation activities within an approximate 50-mile radius of Springfield to the year 2035. The unmet demand represents a need for aquatic recreation activities to meet current and future demands in the greater Springfield area. On June 4, 2021 the City requested to add the demand and needs for aquatic recreation activities to the project's purpose and need for the screening of alternatives in the SEIS.

The change in the proposed project's purpose and need to include aquatic recreation as well as water supply prompted the need to issue a public notice to solicit comments for project alternatives for consideration in the SEIS. This public notice was issued July 01, 2021 with a formal comment period extending through July 30, 2021 (Appendix A). The intent of this scoping report is to provide a summary of comments received during the July 2021 scoping comment period.







Figure 1. Lake Springfield

#### 2.0 PURPOSE AND NEED

The purpose of the proposed action is to develop a multi-use reservoir that provides a minimum of 2,500 acres of flat water area available to recreation and provides a supplemental water supply for the City's municipal, commercial, and industrial customers during drought conditions through the year 2065. The project is needed to meet unmet demand for aquatic recreation activities in the greater Springfield area through 2035 (and beyond) and to provide a dependable water supply for the City.

#### Recreational Need

The aquatic recreation supply and demand study conducted by the University of Illinois in 2020 focused on fishing, fishing tournaments, waterfowl bird watching & hunting, boating, kayaking, canoeing, swimming, and water skiing within a 50+ mile radius of Springfield. The study concluded that there is an unmet demand for 12,773 acres of flatwater recreation activities within the 50+ mile radius of Springfield to the year 2035 and that these demands could be served by a lake in Central Illinois.



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#### Water Supply Need

Water is withdrawn from Lake Springfield to supply residential, municipal, and commercial clients as well as the City's power plants. During the drought of 1953-1954, the lake level declined from the full pool elevation of 560 ft mean sea level (msl) to 547.4 ft msl, almost causing the shutdown of both the City water treatment and electric generation plants due to the low lake levels. Based on a review of Lake Springfield's storage and capacity, the Illinois State Water Survey (ISWS) conducted a drought vulnerability analysis and classified Lake Springfield as an inadequate water supply system with a 50 percent probability of not meeting expected water supply demands (ISWS 2016). Based on information available at the time of the initial 2016 scoping event for the SEIS, under projected drought conditions, the estimated water deficit (demand minus yield) was 8.3 MGD, whereas future deficits (year 2065) were projected at 11.3 MGD. Due to the change in the City's purpose and need for the project and potential for water demand to have changed in the area since 2016, the Corps will evaluate the need to update this information.

Other incidental benefits of an increased water supply and aquatic recreation include providing support for regional economic development.

#### 3.0 ALTERNATIVES

A range of alternatives had previously been considered for the proposed project in the 2000 EIS. While the City had previously identified the Hunter Lake alternative as the preferred alternative in the prior EIS, the SEIS will undertake an updated analysis of alternatives using current information. Alternatives to be considered in the SEIS included the following:

- No Action Alternative.
- Development of a new water supply reservoir.
- Development of groundwater supply systems with associated pump stations and pipelines combined with surface water reservoirs that supply aquatic opportunities.
- Use of other existing surface water reservoirs.
- Dredging of Lake Springfield.

As noted, the intent of the 2021 scoping effort was to notify the public and stakeholders of the change to the purpose and need for the project and to solicit input on alternatives for consideration. Additionally, the City will be developing a revised Hunter Lake alternative to incorporate facilities to support the use of the reservoir for recreational activities. The Corps will use information from scoping and from the City to evaluate the viability of alternatives currently being considered in regard to the revised purpose and need and to identify additional reasonable alternatives for consideration in the SEIS. The results of that alternatives analysis and resulting evaluation of alternatives in the SEIS will be presented in the Draft SEIS.



#### 4.0 PUBLIC AND AGENCY INVOLVEMENT

The Corps intends to prepare an SEIS to consider alternatives for aquatic recreation and supplemental water supply for the City. When completed, the draft SEIS will be available for public review for 45 days. Once the public and other agencies have reviewed the document, the Corps will make revisions, if necessary, and publish a final SEIS. The Corps will make a final decision after the final SEIS is published.

Public and agency scoping for this SEIS was formally initiated with the publication of the notice of intent (NOI) to prepare an SEIS in the Federal Register on August 15, 2016. The public notice identifying the change of project purpose and need to include aquatic restoration was published July 1, 2021. Throughout the development of the draft SEIS the Corps has coordinated with state and federal agencies and tribes regarding compliance with applicable permits and approvals. This coordination will be ongoing throughout the NEPA process (see Section 7.0 for further information). The release of the Draft SEIS is anticipated by the third quarter of 2023 and will coincide with the issuance of the complete permit application public notice for the preferred alternative.

#### 5.0 SCOPING FEEDBACK

The publication of the public notice initiated the public comment period on July 1, 2021, through July 30, 2021. During the public scoping period, the Corps received 71 comment submissions which included letters, e-mails, comment forms, and submissions through the Corps website. The comment submissions were prepared by individuals, groups, federal and state agencies, and a Native American Tribe.

Written scoping comments were reviewed to identify particular issues raised by each commenter and were tabulated in general categories related to the following:

- Purpose and Need
  - Water Demand Basis
  - o Water Yield
  - Facilitate Economic Development
  - o Electricity Conservation
  - o Recreation
- Project Alternatives
  - Cost of Alternatives
  - o Combination of Alternatives
  - o No Action
  - o Hunter Lake
  - o Sand and Gravel Pits and Sangamon River Valley
  - Dredging of Lake Springfield
  - Use Existing Reservoirs
  - Existing Water Supply

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- Water Conservation
- Concerns Related to Environmental Resources
  - o Land Use
  - o Water Quality
  - o Floodplains
  - o Habitat Alteration
  - o Wildlife
  - o Cultural Resources
  - o Climate Change
  - o Socioeconomics
  - Cumulative Impact
  - o Mitigation
- Public Outreach
  - Improvement to SEIS
  - Public Input

In total, 70 individuals, groups (i.e., Citizens for Sensible Water Use, Coalition of Concerned Citizens, Prairie Rivers Network, and Sierra Club), and federal/state agencies provided 227 separate comments in the tabulation. The following exhibits provide a summary of the number of comments by category and subject area.



Figure 2. Overview of Scoping Comments Received







Figure 3. Summary of Comments Related to Purpose and Need



Figure 4. Summary of Comments Related to Alternatives







Figure 5. Summary of Comments Related to Environmental Resources



Figure 6. Summary of Comments Related to Public Outreach







Figure 7. Summary of Comments Related to Hunter Lake Alternative



Figure 8. Summary of Comments Related to Recreation Purpose and Need





Approximately 227 comments referred to the purpose and need (33 percent), alternatives (43 percent), public outreach (4 percent), or environmental resources (20 percent). A few impressions from the comments are identified below:

- *Purpose and Need.* Among the 74 comments that discussed purpose and need, 50 percent raised concerns about the City's water demand, and 36 percent raised concerns about the addition of recreation to the project scope.
  - Since the publication of the 2016 scoping report there has been changes in the regional water use, mainly the retirement of electric generation facilities. Of the 74 comments received, 15 comments focused on water use and 10 comments specifically noted electric generation facilities.
- *Alternatives*. A total of 97 comments were received regarding the alternatives under consideration. Approximately 52 percent of the comments on alternatives focused on the Hunter Lake alternative.
  - A majority of those commenters that specifically addressed the Hunter Lake alternative (N=45) were opposed (29), while 16 commenters supported Hunter Lake as a preferred alternative.
  - Additionally, of the 97 comments regarding alternatives, 4 comments focused on use or availability of existing reservoirs (Lake Springfield, Sangchris Lake, Lake Shelbyville, and Clinton Lake) with 4 comments regarding water supply.
- *Environmental Resources*. A total of 46 comments were received regarding environmental resources. Primary issues include wildlife, cultural resources, and socioeconomics, floodplains, and surface water quality (no comments were issued regarding groundwater sources).
- *Public Outreach*. A total of 10 comments were received regarding the SEIS, the primary issues include suggested improvement to the SEIS, requesting a public hearing, and longer public notice comment period.

A summary of the public scoping comments and the Corps public notice from July 2021 is included in Appendix A, copies of the public scoping comments are included in Appendix B, agency and interest group scoping comments are included in Appendix C, and the 2017 scoping report is included in Appendix D.





#### 6.0 **ISSUES TO BE ADDRESSED IN THE SEIS**

Based on the Corps' internal scoping and input gathered from the public scoping process, commenters raised concerns about the purpose and need, the alternatives, potential impacts, and general public concerns of the proposed action on natural resources: The SEIS will address the following:

- Purpose and Need Can the City demonstrate the need for additional recreation? Can the City demonstrate the need for a supplemental water supply? The need for recreational demand has been demonstrated through the study conducted by the University of Illinois in 2020. This will be addressed in the SEIS. The Corps will also conduct a review of the City water demand analysis as it relates to potable (treated) and non-potable (untreated or raw) water demand, benefits of water conservation, contractual potable water supply obligations, water supply to operate City power plants, and the need to maintain a dependable water supply to support future regional economic development.
- Alternatives The SEIS will review alternatives previously assessed in the FEIS, those proposed for consideration in 2016, and additional alternatives as appropriate. These alternatives will be screened based on the revised purpose and need and the Corps will include an analysis of reasonable alternatives as well as combinations of alternatives in the SEIS. Cost estimates for alternatives will be updated or developed.
- Water Quality Water quality issues related to reservoir alternatives will be evaluated. • Water quality concerns included total suspended solids, dissolved oxygen, phosphorus, and nitrates. Additionally, concerns related to agricultural runoff, bacterial water contamination, and effects of recreation on water quality will be evaluated. Watershed management plans will be discussed.
- Biological Resources (vegetation, wildlife, and aquatic life) Community types within the project area will be described. Significant natural features, including rare species habitat, important wildlife habitat, or locally uncommon natural community types will be identified. The Corps will evaluate the effect of each alternative on terrestrial and aquatic ecosystems.
- Threatened and Endangered Species State or federally listed threatened and endangered plants and animals known to exist in the vicinity of the different alternatives will be identified. The effects of each alternative on endangered, threatened, and rare species in need of management will be evaluated. This analysis will include, as appropriate, species that may be proposed for listing as threatened and endangered species prior to construction of a preferred alternative. The analysis will review species of concern identified in the Illinois Wildlife Action Plan.
- Floodplains and Wetlands Wetlands and floodplains on the proposed water supply • alternative sites will be identified and impacts will be quantified. The effects of each alternative on wetlands and floodplains will be evaluated. Potential flood impacts on the Village of Pawnee will be analyzed.



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- Geology and Soils Regional geology and soils on the proposed alternative sites will be identified and evaluated. Prime farmland issues will be analyzed.
- Land Use Land uses within the proposed alternatives and within the vicinity (5-mile radius) will be identified. Permanent and temporary direct and indirect impacts to land use associated with each of the proposed alternatives will be evaluated.
- Transportation The existing roadway network in the vicinity of the alternatives will be identified. The effect of construction and operation of each alternative on the nearby roadway network will be evaluated.
- Recreational and Managed Areas Natural areas, parks, and other managed areas within the vicinity of the alternatives (5-mile radius) will be identified and potential adverse and beneficial impacts associated with the proposed alternatives will be addressed.
- Visual Resources The aesthetic setting of each alternative site will be described and an analysis of changes to scenic attractiveness and scenic integrity associated with each of the proposed water supply alternatives will be completed.
- Cultural Resources Corps will characterize archaeological and historic resources • within the Area of Potential Effect of each alternative site based on information from IHPA. The Corps also will discuss any known National Register sites. The potential effects of each alternative on historic and archaeological resources will be evaluated. Results of the analysis will be reviewed by the Illinois Historic Preservation Agency.
- Solid and Hazardous Waste The Corps will identify any impacts from waste generation • during construction and operation of each water supply alternative.
- Public Health and Safety Potential effects of each alternative on public health and • safety will be evaluated.
- Noise Baseline noise conditions will be described based on existing land uses, and noise emissions associated with the construction phase equipment use will be assessed to determine the potential noise impact of each alternative on sensitive receptors.
- Air Quality and Climate Change Air quality considerations including attainment status, and regional air quality information will be presented. Impacts to air quality from construction and operations associated with each of the alternatives will be evaluated. Impacts of alternatives on climate change will be considered.
- Socioeconomics and Environmental Justice Demographic and community characteristics associated with each of the proposed alternative sites will be evaluated. Special attention will be given to identification of potential low income and minority populations to evaluate the potential for disproportionate impacts in accordance with Executive Order 12898. Impacts of potential relocations and changes to utility rates or community services will be analyzed.



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• *Mitigation* - Mitigative measures designed to minimize impacts also will be identified.

#### 7.0 ENVIRONMENTAL REVIEW PROCESS

NEPA requires federal agencies consider and study the potential direct, indirect, and cumulative environmental consequences of major actions. The NEPA review process is intended to help Federal agencies make decisions that are based on an analysis of the impacts of the action and, if necessary, to take actions to protect, restore, and enhance the environment. NEPA also requires federal agencies to provide opportunities for public involvement in the decision-making process. The general project schedule which includes opportunities for public involvement is identified in Section 8.

The Corps' involvement also includes circulation of the draft SEIS to local, state, and federal agencies and federally recognized tribes to request comments on the proposed action. An example list of agencies, tribes, and organizations that will be notified of the availability the draft SEIS is set forth below. Individuals who asked to be a stakeholder will also be notified of the availability of the draft SEIS.

#### **Federal Agencies**

- United States Department of Agriculture, Natural Resources Conservation Service
- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- United States Federal Emergency Management Agency

#### Federally Recognized Tribes

- Citizen Potawatomi Nation
- Delaware Tribe of Western Oklahoma
- Devils Lake Sioux Tribe
- Flandreau Sioux Tribe
- Ho-Chunk Nation of Wisconsin
- Huron Potawatomi Nation
- Iowa Tribe of Kansas and Nebraska
- Iowa Tribe of Oklahoma





- Miami Tribe of Oklahoma
- Otoe-Missouri Tribe of Oklahoma
- Peoria Indian Tribe of Oklahoma
- Ponca Tribe of Indians of Oklahoma
- Sac and Fox Nation
- Santee Sioux Tribe of Nebraska
- The Pawnee Nation of Oklahoma
- Winnebago Tribe
- Yankton Sioux

#### State Agencies

- Illinois Department of Natural Resources
- Illinois Environmental Protection Agency
- Illinois State Geological Survey
- Illinois Historic Preservation Agency
- Illinois State Water Survey

#### **Municipal Entities**

- Chatham Township
- Divernon Township
- Springfield Sangamon County Regional Planning Commission
- Village of Pawnee
- Village of Virden

#### Individuals and Organizations

- Citizens for Sensible Water Use
- Coalition of Concerned Citizens





- Prairie Rivers Network
- Sierra Club Illinois Chapter

#### 8.0 SCHEDULE FOR SEIS PREPERATION AND REVIEW

Following is a tentative schedule for the completion of the SEIS. Please note that this tentative schedule presents our best estimate at this time and is subject to change.

Task	Start Date	End Date
Public Review of Draft SEIS	Late 2022	Early 2023 (45 days)
Public Meeting	Early 2023	Early 2023
Development of Final SEIS	Early 2023	Mid 2023
Final SEIS Comment Period	Mid 2023	Late 2023 (30 days)
Record of Decision	Late 2023	Late 2023 (30 days)





# **Appendix A**

# Public Notice and Summary of Scoping Comments Received During the Scoping Period

(July 1, 2021, through July 30, 2021)



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# **Comment Summary**

A summary of the public comments received as part of the scoping process is included below:

## 1 Purpose and Need

#### 1.1 Water Demand

- 1) *Water need* Do not need another water source. (*Commenters: Charles Matheny, Deborah Russell, Mike A Chiles, Kelsie Bentley*).
- 2) **CDM Smith water demand forecast flawed** Raised issues about methodology and water demand forecast. (*Commenter: Prairie Rivers Network*).
- 3) **CDM Smith water demand forecast dated** Water demand is dated and not reflective of current trends and water usage. (Commenters: Joe McMenamin, Sierra Club).
- 4) **Conservation programs** What program or provisions for increased efficient or lack of conservation measures. (*Commentor: USPEA*).
- 5) **Address intermittency and frequency of water deficit** Explain intermittency and frequency of water deficit. (*Commenter: Prairie Rivers Network*).
- 6) **Actual water demand** Actual water demand has been flat the last few years so why do we need the project? (*Commenters: Prairie Rivers Network, Ann Graffagna*).
- 7) **Population and water demand** Smaller population growth requires less demand for water than shown by previous studies. (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Sheila Walk, Jim Monahan*).
- 8) **Probability of drought** Need additional water source, if there is a serious drought water supply would be endangered. (*Commenters: Geoffrey Davis, Rev. Richard A. Van Giesen, Joseph Langfelder, Jennifer Davis, Rich Solomon, Frank A. Tureskis, Reg Davis*).
- 9) **Need for another water source** Is population growing to need a second lake? (*Commenter: K. Bradbury*).
- Retired powerplants How does water demand change now that Dallman has retired units and Vistra Corporation is planning on retiring units? (Commenter: Citizens for Sensible Water Use, Prairie Rivers Network, USEPA, Larry Daily, Coalition of Concerned Citizens, Anne Logue, Will Reynolds, Walt Kruski, Al Pieper, Elise Ransdell).
- 11) **Need backup source** Hunter Lake is needed for backup source of water. (Commenters: Jeff Sexton, Nanci Ridder, Harold Vorreyer, Wynne Coplea, rjm Tell, Paula S. Collins).
- 12) **Regional annual average rainfall** Climate in the area seems to be getting wetter. (*Commenter: Lisa Beam*).



## 1.2 Water Yield

- 13) **Repairs at lake flood gates** The City repaired the lake flood gates and no longer draw the lake capacity down in preparation of spring flooding. (*Commenter: Larry Daily*).
- 14) *Evaporation* Consider impacts on evaporation estimates for Hunter Lake Alternative. (*Commenter: Thomas Denney*).

## 1.3 Facilitate Economic Development

- 15) *Economic development* Supplemental water supply needed as an economic development tool. (*Commenter: Rev. Richard A. Van Giesen*).
- 16) **Recreation venue** Another recreation venue will bring tourist and families to the area. (*Commenters: Rev. Richard A. Van Giesen, Paula S. Collins, Jennifer Davis, Wynne Coplea, Reg Davis*).

## 1.4 Recreation

- 17) **Recreation** There is no real need for recreation, there is already existing recreation. (*Commenters: Charles Matheny, Anne Logue, Will Reynolds, Charles Tamminga, Al Pieper*).
- 18) **Recreation study flawed** Raised issues about methodology, background, sample size, and conclusions made. (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network*).
- 19) Maintain existing recreation Reopen existing recreational opportunities on Lake Springfield and expand to create new recreation opportunities. (Commenters: Prairie Rivers Networks, Brittany Ottino, Carolyn S. Neitzke, Leslie A Dickson, Walt Kruski, Bridget L. Lamont, Deborah Russell, Elise Ransdell, Ronald E Howell, Melissa Eades, Heather Osborn).
- 20) **Create recreation at other existing sites** Create river-based recreation at the proposed Hunter Lake site, building boat launch at Riverside Park, and open gravel lakes for public use. (*Commenters: Citizens for Sensible Water Use, Lisa Beam, Kelsie Bentley*).
- 21) **Recreational use data for other area lakes** Provide data on recreational use for nearby lakes. (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, USEPA*).
- 22) **Non-lake-based recreation** All forms of recreation are of value (i.e., land-based, river/stream, forest-based recreation). (*Commenters: Sheila Walk, Coalition of Concerned Citizens).*
- 23) **Sangamon River for recreation** Improve existing recreation at Sangamon River through enhanced public access and funding. *(Commenter: Menard County Trails & Greenways).*
- 24) *Mr. Don Hanrahan's Letter* I agree with Mr. Don Hanrahan's letter to the editor published in the Illinois Times, regarding recreational justification for a second lake. (*Commenter: Joe McMenamin*).



## 1.5 Electricity Conservation

- 25) *Energy cost* CWLP should sell properties purchased for Hunter Lake to lower energy bills. (*Commenter: Ronald E Howell*).
- 26) *Remove coal plants* Get rid of high polluting coal-generated power plants. (*Commenter Ronald E Howell*)

# 2 Alternatives

## 2.1 Cost of Alternatives

- 27) **Costs of alternatives** Other alternatives are less expensive than Hunter Lake. (*Commenters: Lisa Beam, Carolyn S. Neitzke*)
- 28) Compare costs What is the comparison of alternatives? (Commenter: Allison Herbst).
- 29) *City officials and money* City officials are poor stewards of money; this project has accumulated a cost of 150 million dollars. *(Commenter: Laura R. Whetstone)*.
- 30) Cost How is this alternative being paid for? (Commenter: Charles Matheny).
- 31) **Ecological cost** Other alternatives are more ecologically sound and less damaging to landscape. (*Commenters: Charles Tamminga, Ann Graffagna, Doug Wagner*).

## 2.2 Combination of Alternatives

- 32) **Combination of alternatives** Combine alternatives or create a hybrid alternative. (*Commenters: USEPA, Doug Wagner*).
- 33) **Evaluate appropriate and reasonable alternatives** Need to consider all appropriate and reasonable alternatives include those previously considered in the FEIS and those dismissed. (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network*).
- 34) **Combine Lake Springfield and Hunter Lake** Is there a way Hunter Lake could become a larger part of Lake Springfield to tie both lakes together? (*Commenter: Mike A Chiles*).

## 2.3 No Action Alternative

35) **Changes to Springfield Lake operations** – The No Action Alternative should include and discuss operational changes made since 2000 to Lake Springfield, including investigations for and elimination of leaks and areas of supply loss (*Commenter: USEPA*).

## 2.4 Hunter Lake

36) **Support Hunter Lake** – Generally supportive of this alternative. (*Commenters:, Jeff Sexton, Mary Frances Squires, Roz Stein, Rev. Richard A. Van Giesen, Jennifer Davis, Robert L Wheatley, Rich Solomon, Betty Cawley, Lynn Brown, Nanci Ridder, Brynne Scott, Kathleen Alcorn, Duane Blore Carrell).* 

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- 37) Oppose Hunter Lake Generally oppose this alternative. (Commenters: Joe McMenamin, Lisa Beam, Sierra Club, Mary Carey, Sheila Walk Kimberly Riddle, James Butts, Carolyn S. Neitzke, Charles Tamminga, Deborah Russell, Andrew Southwick, Susan Allen, Doug Wagner, Elise Ransdell, Ronald E Howell, Jim Monahan, Heather Osborn, Kelsie Bentley).
- 38) **Depth of proposed lake** How deep will Hunter Lake be? What is the acreage of Hunter Lake? Is there a ratio comparing depth to acreage? (*Commenter: Thomas Denney*).
- 39) **Consider a smaller footprint** Smaller footprint would have reduced impact on natural resources. (*Commenter. USEPA*).
- 40) **Recreation** Would be a good source for recreation. (*Commenters: Jeff Sexton, Geoffrey Davis, Joseph Langfelder, Rich Solomon, Frank A. Tureskis, Lynn Brown, Naci Ridder*).
- 41) *Water level* How will Hunter Lake service recreational activity if the water is supplementing Lake Springfield? (*Commenter: Carolyn S. Neitzke*).
- 42) *Water source* Given the sources of water for the lake it seems it will be a waste rather than a water source or source for recreation. *(Commenters: Anna Graffagna, Susan Allen).*
- 43) **Waste of money** Hunter Lake is a waste of taxpayer dollars. (*Commenters: d-dog1995, Dylan Runge, Karen Roberts*).
- 44) **Sewage pipeline impacts** Discuss impacts of pipeline for sewage treatment from Virden, Pawnee, and Divernon. (*Commenter: Larry Daily*).
- 45) **Prevent sediment buildup** How will the City keep the shallow proposed lake from sediment build up as seen in Lake Springfield? (*Commenter: Mike Budd*).
- 46) **Construction** Construction would impact quality of life and make roads dangerous and cause excess noise and dust. (*Commenter: Walt Kruski*).
- 47) **Safety** Hunter Lake would have a High Hazard Dam whose failure could impact both lakes and Springfield's water source. (*Commenter: Jerald Jacobs*)

## 2.5 Sand and Gravel Pit/Sangamon River Valley Well Fields

48) **Sand and gravel pits** – Why can't the City use the sand and gravel pits? (*Commenters: Citizens for Sensible Water Use, Laura R. Whetstone, Coalition of Concerned Citizens, AI Pieper, Susan Allen, Sandra Lindberg).* 

## 2.6 Dredge Lake Springfield

- 49) **Dredging beneficial** Dredging would restore and expand existing resource. (Commenters: James Butts, d-dog1995, Ann Graffagna, Allison Herbst, Heather Osborn).
- 50) *Future of Lake Springfield without dredging* What will happen if we do not dredge Lake Springfield (*Commenter: K. Bradbury*).
- 51) **Dredging will allow for recreation** Degrading will end low summer lake levels allowing for recreational activities such as boating. (*Commenter: Brittany Ottino*).

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- 52) **Benefits to water yield from dredging** Discuss capacity gained by dredging Lake Springfield. (Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Lisa Beam, Dylan Runge, Walt Kruski, Elise Ransdell).
- 53) *Maintenance of Lake Springfield* Maintain Lake Springfield to meet water demand and recreation demand. (*Commenters: Mary Carey, Jonathan Ottino, Leslie A Dickson*).

## 2.7 Use Other Existing Reservoirs

- 54) **Clinton Lake** Address potential to use water from Clinton Lake. (*Commenter: Larry Daily*).
- 55) **Sangchris Lake** Sangchris Lake could be a potential supplemental water source and recreation source. (*Commenters: USEPA, Larry Daily, Sandra Lindberg*).
- 56) *Lake Shelbyville* Plenty of Water in Lake Shelbyville and water can get to Lake Springfield. (*Commenter: Larry Daily*).
- 57) **Purchase Vistra Corporation's land** Vistra Corporation is retiring operation along Sangamon River Valley, CWLP can purchase this land to meet water needs. (*Commenter: Prairie Rivers Network*).

## 2.8 Existing Water Supply System

- 58) **Sangamon River** Other resources are available such as aquifers and drawing from Sangamon River. (*Commenter: Jerald Jacobs*).
- 59) *Lick Creek* There is a creek and wetland west of Route 4 and south of Spaulding Orchard Road. (*Commenter: Brynne Scott*)
- 60) Use temporary dam on Sangamon River Use temporary dam on Sangamon River during drought. (Commenters: Citizens for Sensible Water Use, Prairie Rivers Network).

## 2.9 Water Conservation

- 61) *Water conservation* Implementation of water conservation would reduce water demand and could reduce or eliminate the need for the project. (*Commenter: Coalition of Concerned Citizens*).
- 62) **Repair Infrastructure** Repair infrastructure and enacting water conservation structure would supply as much water as the City needs. (*Commenter: Coalition of Concerned Citizens*).
- 63) *Water restrictions* City has not tried establishing water conservation measures or restrictions. (*Commenter: Leslie A Dickson*).



## 3 Resource Areas

## 3.1 Land Use

64) **Return land** – Return land city has for Hunter Lake. (*Commenters: d-dog1995, Dylan Runge*).

## 3.2 Surface Water Quality

- 65) *Water quality* Concerns raised regarding meeting water quality standards if Hunter Lake is constructed. (*Commenters: Prairie Rivers Network, Sandra Lindberg*).
- 66) *Water quality of Lake Springfield* Identify initiatives to meet water quality standards in Lake Springfield and showcase how water quality will be maintained at proposed Hunter Lake. (*Commenters: Prairie Rivers Network, Leslie A Dickson*).
- 67) **Recreation and water quality** Unusual for drinking water reservoir to be used for recreation use, what are the potential for water quality degradation and associated costs? (*Commenter: Kelsie Bentley*).
- 68) *Watershed management plans* Discuss watershed management plans (*Commenter: USEPA*).

## 3.3 Floodplains

- 69) *Flooding during construction* Hunter Lake would flood the landscape and surrounding habitats. (*Commenters: Leslie A Dickson, Walt Kruski, Elise Ransdell, Sandra Lindberg*).
- 70) **Flooding concerns in Pawnee** Hunter Lake could affect Village of Pawnee. (*Commenters: Kelsie Bentley, Sandra Lindberg*).

## 3.4 Habitat Alteration

- 71) **Dams** Building dams are a thing of the past and being removed for environmental reasons. (Commenter: Sierra Club).
- 72) **Use site to enrich natural areas** Hunter Lake site should be used to preserve forests and can be used as publicly accessible natural area. (*Commenters: Al Pieper, Will Reynolds*).
- 73) **Develop conservation lands** Hunter Lake will submerge forests; therefore marsh, swamp, and prairie habitats need to be provided around the lake. (*Commenter: H. David Bohlen*).

## 3.5 Wildlife

74) *Harm to plants and animals* – If constructed Hunter Lake, project will hurt plants and animals in area from construction and drawdown during droughts. (*Commenters: Lisa Beam, Sheila Walk, Kimberly Riddle, Laura R. Whetstone, H. David Bohlen, Carolyn S. Neitzke, Ann Graffagna, Susan Allen*).



- 75) *Hunter Lake provide habitat* Provide additional habitat for fish and wildlife. (*Commenter: Frank A. Tureskis*).
- 76) **Conservation plan** Has there been conservation studies on wildlife currently living on the Hunter Lake Site? (*Commenter: K. Bradbury*).
- 77) Lost wildlife Too much wildlife will be lost (Commenter: Dylan Runge).

## 3.6 Cultural Resources

- 78) *Native American concerns* Consultation is appropriate if any prehistoric human remains, or artifacts are discovered. *(Commenter: Miami Tribe of Oklahoma).*
- 79) *Historic resources* Hunter Lake would impact historic resources such as the Pensacola Tavern. (*Commenters: Leslie A Dickson, Charles Tamminga, Al Pieper, Ann Graffagna, Sandra Lindberg*).
- 80) **Cemetery impacts** Hunter Lake would destroy historic Joe Brunk Cemetery. (*Commenter: Lisa Beam*).

## 3.7 Climate Change

81) **Climate change** – Consider impacts on climate change and identify estimated greenhouse gas impacts for each alternative. (*Commenters: USEPA, Coalition of Concerned Citizens*).

## 3.8 Socioeconomic

- 82) *Effect on utility rates* Impacts of increasing water/sewer rates should be considered in CDM modeling. (*Commenter: Prairie Rivers Network*).
- 83) **Residential and commercial relocations** Project will dislocate landowners. (*Commenter: Charles Tamminga*)
- 84) **Other infrastructure needs** Money would be better spent funding other municipal needs. *(Commenters: Joe McMenamin, Sierra Club, Kimberly Riddle, Walt Kruski, Elise Ransdell)*

## 3.9 Cumulative Impact

85) **Long-term impacts** – Long terms impacts do not seem to be considered in plans. (*Commenter: Kelsie Bentley*).

## 3.10 Mitigation

86) *Mitigation plans* – Need to have detailed mitigation plans and cost of all alternatives and associated environmental impacts. (*Commenter: USEPA*).



# 4 Public Outreach

#### 4.1 Improvement to SEIS

- 87) Comment summary Recommend summarize public and agency comments and include in appendix of draft Supplemental Environmental Impact Statement. (SEIS) (Commenter: USEPA).
- 88) **Verify all sources in SEIS** Request that USACE critically review source documents and analyses. (*Commenter: Prairie Rivers Network*).
- 89) *Attach supporting studies to SEIS* Recommend including supporting studies and references as appendices, where appropriate. (*Commenter: USEPA*).
- 90) **2016 Scoping meeting** Address Concerns and questions raised in 2016 Scoping Meeting Summary Memorandum. (*Commenter: USEPA*).

## 4.2 Public Input

- 91) **Request public hearing** Changes to the purpose and need of the SEIS require new public hearing. (*Commenters: Sierra Club, Larry Daily*).
- 92) **Longer public notice period** Request longer public notice period to allow all parties to prepare comments. (*Commenters: Citizens for Sensible Water Use, Bridget L. Lamont, Walt Kruski*).
- 93) **Public notice lacking information** Public notice does not address prior issues raised during 2016 scoping. (*Commenter: Larry Daily*).



# **Appendix B**

# **Public Comments Received During the Scoping Period**

(July 1, 2021, through July 30, 2021)





#### List of Commenters

	Joe McMenamin	Ann Graffagna
l	Jeff Sexton	Lynn Brown
l	Lisa Beam	Harold Vorreyer
	Jennifer Satorius	Susan Allen
	Diane hunter	Doug Wagner
	Jennifer Alongi	Doug Wagner
	Geoffrey Davis	Elise Ransdell
	Mary Frances Squires	Nanci Ridder
	Roz Stein	Ronald E Howell
	Larry Daily	Melissa Eades
	Charles Matheny	Karen Roberts
	Don Hanrahan	Mike A Chiles
	Rev. Richard A. Van Giesen	Allison herbst
	Paula S. Collins	Brynne Scott
	Mary Carey	Waynne Coplea
	Sheila Walk	Rjm Tell
	Kimberly Riddle	Jim Monahan
	Laura R. Whetstone	Reg Davis
	James Butts	Heather Osborn
	Joseph Langfelder	Kathleen Alcorn
	H. David Bohlen	Duane Blore Carrell
	Jennifer Davis	Kelsie Bentley
	Brittany Ottino	Sandra Lindberg
	Jonathan Ottino	Ann Graffagna
	Jerald Jacobs	Lynn Brown
	Donald D. Davis	Harold Vorreyer
	Robert L. Wheatley	Susan Allen
	Carolyn S. Neitzke	
	Leslie A Dickson	
	Rich Solomon	
	Anne Logue	
	K. Bradbury	
	Will Reynolds	
	N/A (d-dog1995@comcast.comm)	
	Dylan Runge	
	Betty Cawley	
	I nomas Denney	
	Walt Kruski	
$\left  \right $	Charles Lamminga	
	AI Pieper	
	Bridget L. Lamont	
	Deboran Russell	
	Andrew Southwick	
	Frank A. Tureskis	



# Miami Tribe of Oklahoma



3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355 Ph: (918) 541-1300 • Fax: (918) 542-7260 www.miamination.com



Via email: james.c.kelley@usace.army.mil

July 23, 2021

US Army Corps of Engineers, Rock Island District Attn: OD-PE (James Kelley) Clock Tower Building P.O. Box 2004 Rock Island, Illinois 61204-2004

Re: CEMVR-OD-P-201-0095, Springfield Supplemental Water Supply & Aquatic Recreation, Sangamon County, Illinois – Comments of the Miami Tribe of Oklahoma

Dear Mr. Kelley,

Aya, kikwehsitoole – I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding CEMVR-OD-P-201-0095 in Sangamon County, Illinois.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Illinois, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter

Diane Hunter Tribal Historic Preservation Officer

#### Dear Mr. Kelley:

I write to you because I am a member of the Sangamon River Sierra Club Chapter, and I am very concerned with a project currently accepting public comments.

Having reviewed the Army Corps of Engineers' Public Notice and Request for Public Comment regarding PN 2016-0095

CEMVR-OD-P-2016-0095, I am writing to express my strong hope that this project will not proceed.

A quick review of current reports regarding the project suggest that the project is likely to damage water quality for people and animals in the Sangamon watershed by raising phosphorus levels above state mandated safety levels. The recently passed Illinois Nutrient Loss Reduction Act, signed into law this past spring, has set aside significant funds to take the State of Illinois in exactly the opposite direction of the Hunter Lake proposal; the State of Illinois, in consortium with 8 other states in the region, is intent on reducing the presence of phosphorus (and nitrogen) in Illinois waterways, thereby keeping these 'nutrients' out of the Mississippi River as well. This Hunter Lake project would undermine such state efforts.

Potential phosphorus levels are not the only issue posed by the creation of this man-made project, Hunter Lake. To create this lake will mean the destruction of hundreds of acres of existing wetlands and creek channels, over 30 miles of stream corridor and 1500 acres of hardwood forest, including the floodplain areas they provide. Illinois has already lost over 90% of its original wetland acreage. (https://www.inhs.illinois.edu/resources/inhsreports/jul-aug95/wetland/) At both the state and federal level, increasing numbers of scientists and government professionals are now advocating for the restoration of wetlands, not their destruction. If the acres are flooded to produce Hunter Lake, both endangered species and historical, indigenous archeological sites will be threatened or destroyed.

I also want to emphasize how strange it seems that a project to benefit the City of Springfield would be proposed even though it is already known Hunter Lake will bring serious harm to the Village of Pawnee IL in the form of flooding. The flooding that this plan asks the Village of Pawnee to anticipate unless the ecosystems of Horse Creek are also significantly altered seems both unfair and unwise. The Village of Pawnee is not likely to be able to fight the City of Springfield in this regard. I hope the Army Corps of Engineers will take the Village's future into account in a very serious way before the ACOE gives its approval for such a disruptive plan.

The Hunter Lake plan is not the only course that the City of Springfield could take to cope with anticipated droughts. It could build on current water approaches instead. The current plan to create Hunter Lake could be set aside for an approach that would expand Springfield's existing gravel pit reservoirs to meet the water consumption needs the City of Springfield anticipates. And as some of Hunter Lake's justification has been linked to the increased recreational opportunities it would offer to area residents, a better way to provide those without threatening the area's ecosystems so profoundly would be to increase recreational access to Lake Springfield and Sangchris Lake.

I live in a Central Illinois city that, like Springfield, is part of the Illinois River Basin system of miniscule wetlands, creeks and rivers. In Decatur IL where the City is working to formulate its first watershed plan and to update various water permits with the state, we have our own challenges over here. I submit this public comment today because I greatly fear that this Hunter Lake project will both harm the Springfield Lake watershed and set precedents surrounding drought preparation that could be harmful for our part of the region as well.

I want to acknowledge here that I know the City of Springfield has been working for many years on this plan and it can be very difficult to let go of a course of action a public body has come to believe is the best way to address its fears. Happily, thanks to the work of many scientists studying climate change and environmental/ecological systems, and thanks to shifts in how we increasingly value the historical sites of the indigenous people who called this part of the country home, the wisdom of creating man-made lakes like Hunter are now seen to bring more problems than they will ever solve. Please register this Illinois citizen's strong opposition to plans for Hunter Lake. There must be more environmentally sound and socially aware ways for the City of Springfield to prepare for the droughts to come.

Respectfully, Sandra Lindberg 1495 W Sunset Ave Decatur IL <u>sdlindber@gmail.com</u> 309-532-2452

From:	Kelsie Bentley
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Re: Hunter Lake Project
Date:	Sunday, July 25, 2021 5:20:20 AM

Dear Mr. James Kelley,

My name is Kelsie Bentley, and I am a resident of Pawnee, Illinois.

I am writing to oppose the Hunter Lake Project for the following reasons:

- Potential flooding concerns for the village of Pawnee. As a Pawnee resident, I have routinely seen State Route 104 flood within city limits. As this is a major thoroughfare for many of the surrounding small towns, this could be not only an inconvenience, but a matter of safety for many needing to use this highway. In addition, we routinely see flooding in our yard, and our neighbor has had to do significant foundation repairs due to damage from flooding that should not be happening in town. We are concerned that any additional projects impacting water runoff would only worsen the issue.

- Long-term impact doesn't seem to be considered in the plans. From reading the public notice, I see that the most recent requests are primarily centered around "demand for recreational use." This is something that I feel could be met by enhancing infrastructure around existing bodies of water. Additionally, the alternative is given in the notice that the shortage could be met by using other existing surface water reservoirs, meaning that this project is not even necessary for the proposed use.

- Water quality. It is highly unusual in many places for drinking water reservoirs to be used for recreational use. According to the American Water Works Association, recreational use of water supply should consider the potential for water quality degradation and associated costs that could be incurred due to treatment requirements. Most people in Sangamon county that I talk to already don't drink their tap water due to the poor quality, and constructing Hunter Lake with a dual purpose of supply and recreation isn't going to change the fact. Constructing a body of water to have it be immediately polluted doesn't make sense from a public health nor a cost point of view.

I understand that there are many pressures that the public faces of such projects must endure, but once this project is completed, it is the village residents who must endure any subsequent consequences. I ask you kindly to reconsider this project and divert funds to the suggested alternatives listed in the public notice.

Thank you for your time, Kelsie Bentley 217-414-6765 This message was sent from the Rock Island District website.

Message From: Duane Blore Carrell

Email: dbc49@comcast.net

Response requested: Yes

Message:

I wish to express support for the proposed Springfield Supplemental Water Supply (Hunter Lake) as I believe it is essential for the long-term well-being and growth of Springfield and vicinity. I have lived in Springfield and Chatham, Illinois, for 27 years and have seen the current water supply, Lake Springfield, get dangerously low on several occasions. It has not been uncommon for parts of the bottom of the lake to be visible during very dry conditions. On one occasion water had to be pumped from the Sangamon River to the lake to provide enough water. With forecasts of future warmer temperatures I feel it would be very unwise to ignore the need for an additional water supply. Thank you.

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HTTP\_CMS\_CLIENT\_IP: HTTP\_X\_ARR\_LOG\_ID: d1ef98c2-00c0-4487-9838-43edffba4117 HTTP\_ORIGIN: Blockedhttps://www.mvr.usace.army.mil HTTP\_TRUE\_CLIENT\_IP: 2601:248:8003:8700:8dc7:3944:f948:dec8 Dear Mr. Kelley:

Please find our report and public announcement from City Water Light and Power below.

As a private resident and proponent of clean water for our residents and growing needs, I am in support of the Hunter Lake effort. If you have any questions, please feel free to contact me. My information is in my signature block. Thank you, so much, for all of the research and work put forth in this study.

#### U.S. Army Corps of Engineers Seeking Comment on Aquatic Recreation For Springfield Supplemental Water Project

The City of Springfield is in pursuit of a supplemental water supply project to supplement the current water supply for City Water, Light and Power's regional water customers during periods of extreme drought. Numerous supplemental water supply alternatives have been evaluated in a Supplemental Environmental Impact Statement (SEIS) being prepared for the City of Springfield by a 3rd party contractor under the direction of the U.S. Army Corps of Engineers (Corps).

As part of the City's work to perform studies for the SEIS, a team of researchers from the University of Illinois was hired under the direction of the Corps to complete an aquatic recreation supply and demand study, assessing current and future needs. The study considered recreation activities such as fishing, fishing tournaments, waterfowl bird watching, boating, kayaking, canoeing and water skiing.

The study, <u>https://www.cwlp.com/Documents/Springfield%20Reservoir%20Project%20-%20Final%20Report-FINAL.pdf</u> identified a need for additional aquatic recreation facilities within a 50-mile radius of Springfield. The methods and results for the assessment of aquatic recreation supply and demand were collected, developed and prepared by the University of Illinois, independent from CWLP.

The Corps is taking comments to how best fill the demand for a secondary water supply that meets the recreational needs of this area. Written comments should be sent to Corps of Engineers: ATTN: Regulatory Division, U.S. Army Corps of Engineers, Rock Island District, Clock Tower Building, Post Office Box 2004, Rock Island, Illinois 61204-2004. Comments may also be submitted to: <u>cemvr-odpublicnotice@usace.army.mil</u>. See full public notice here public notice <u>https://tinyurl.com/ncmjrw7j</u>.

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KATHLEEN ALCORN DEPUTY MAYOR Office of the Mayor 800 E. Monroe Street Suite 300 Springfield, IL 62701

Phone: (217) 789-2200
From:	Heather Osborn
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Public Comment Re: PN 2016-0095
Date:	Monday, July 26, 2021 4:19:16 PM

To Whom it may concern and Mr. Kelley:

I am writing to protest the creation of another lake for Springfield, IL.

The option of dredging the current Lake is not being explored fully before creating a new one. In the attached U of I survey, nearly 60% were satisfied with the recreational options in the 50 mile radius, and less than 10% were unsatisfied. Creating a new lake would not address the issues with the beach that was previously open at the Springfield lake: it was a combination of the understaffing resulting in a drowning, and the water testing requirements for safe swimming. The water quality testing would likely not change for a lake in a primarily agricultural area that most of the alternatives would have it situated in. It would unlikely to be full enough for several years to meet those criteria by diluting any fecal coliforms.

Water sports are not the only recreational needs for this area - there is a serious lack of upland opportunities for nature watching. The land around the current lake DOES NOT provide a diverse aquatic waterfowl community - they do not leave the Illinois River Valley/Flyway to come to this current lake in its current state. The problem with Lake Springfield is not areas that a gun club can operate waterfowl hunts, but that there are not many that spend time that are considered main waterfowl for game - winter the dominant waterfowl is the ring-billed gull and Canada goose. Even at the nearby Sang-Chris State Park lake, there is not much waterfowl diversity, again because we are not located within the main flyway.

Hydraulic dredging of the sediments can be done in ways to minimize disruption to the current water supply, AND provide the depth to buffer summer droughts. THe increased depths will be capable of also providing more water area that can be oxygenated by the current boat users to avoid algae overgrowth (an issue that is not observed in the lake currently, but may be predicted with a warming climate). This can be done in a way to minimize disruptions to the mediocre scenery that has created a situation with a highly residentially settled lake. Additionally, nothing in the timeline provided by the City of Springfield indicates that an attempt to dredge was made before demanding that Hunter Lake or any other alternative would be developed. I implore the City to give more consideration to this option before demanding a permit to construct another surface water reservoir.

Thank you for your time,

Heather Osborn



Virus-free. <u>www.avg.com</u>

Please decine the request for a second lake in Springfield IL. People are moving out of illinois and Springfield, not moving in.

Thank you

Jim Monahan 2175228360

1301 franklin ave Springfield IL. 62702

Get Outlook for Android

From:	Reg Davis
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Public notice, Springfield IL
Date:	Monday, July 26, 2021 9:50:08 PM

I am in favor of building the new lake for several reasons. To provide us enough water to withstand a severe drought, for the many new recreational opportunities it will create for the people in our area, and for the large positive economic impact it will help bring to Springfield.

Sent from my iPhone



U.S. Army Corps of Engineers Regulatory Division Clock Tower Building Post Office Box 2004 Rock Island, Illinois 61204-2004

July 27, 2021

Dear Mr. James Kelley,

The Sangamon Valley Group of the Sierra Club represents approximately 1,100 dues paying members and has several more local supporters. We are writing today regarding the issue of the City of Springfield's proposed Hunter Lake project, otherwise known as Lake 2.

First, we would like to thank you for this opportunity to comment on this issue, and request the comment deadline be extended an additional six weeks to allow others more opportunity to weigh in on this important issue as we and many others only became aware of this comment period one week ago.

We would also like to request a public hearing, with a virtual option, on the Hunter Lake issue with both daytime and evening hours, and ample and robust public notice to allow for rigorous public engagement.

The Sangamon Valley Group of the Sierra Club has opposed the Hunter Dam project for many years, if not decades. This proposal for a second lake has been previously denied because the costs and negative environmental impacts are too great.

This project recently moved from a second water source to a recreational project, but we are concerned because the City of Springfield does not take good care of Lake Springfield and there are better, more cost efficient options for both recreation and water conservation. The city could add additional recreational areas to Lake Springfield and Lake Sangchris, invest in taking better care of Lake Springfield, and re-open the boat house.

Building dams are a thing of the past. Across the country, dams are being removed for environmental reasons. The local utility company, CWLP, has made presentations to the Springfield City Council showing that water demand for the city is flat and water efficiency investments are a cheaper way to 'grow' Springfield's source of water, including:

- o Repair leaky mains and dredge existing lake to original capacity
- o Price water properly to encourage conservation
- o Landscape to minimize water use
  - Educate Region on Landscaping with Natural Plants of Illinois instead of grass lawns
- o Dredging Lake Springfield is a necessity whether a new lake is built or not. It would restore millions of gallons per day of capacity.
- o Other cheaper and viable sources of water are available with substantially less environmental impact.
- Closure of City Water, Light and Power's oldest coal units at the Dallman Power Plant which have been taking water from and adding heat to Lake Springfield would further free up Lake Springfield for other uses while reducing greenhouse gases.

We urge the Army Corps of Engineers to deny the City of Springfield its permit to build this lake; it is not needed and is a great waste of resources that could be put to better use. The City of Springfield has huge infrastructure needs that must be addressed for current and future economic development. Replacing sewers to address flooding problems alone will cost tens of millions.

Thank you again for the opportunity to comment on this issue. We reiterate our request for the comment deadline to be extended, allowing others more opportunity to weigh in on this important issue as the public only became aware of this comment period one week ago.

We would also like to reiterate our request for a public hearing, with a virtual option, on this issue with both daytime and evening hours and ample and robust public notice to allow for rigorous public engagement.

Sincerely,

The Sangamon Valley Group of the Sierra Club, Executive Committee

Jennifer Alongi -- Chair

CC: Mayor Jim Langfelder, Springfield City Council, Doug Brown

2 Ridgeview Dr. Spring Sield, IL 62711 July 27, 2021 U.S. Army Corps of Engineers Rock Island Dist. Clock Tower Blog. P.O. Box 2004 Bock Island, IL 61204-200x To whom It. Muy Concern: & believe to is time for the Corps of Engineer to approve a second lake for Springfield. Living across the street from Lake Springfield, Iknow it needed dredging and if we ever have a seriour drought our water supply would be endangered. Then are no other realistic sources to back up what we have. The lake would also be a good source Precreation. Hopefully there would be bracher and decent suisming and fishing. Especially if it is not used by CWLP for its power plante The time for studies is over and we don't want to wait until the future is here and it is too late to fix the problem. It is time for the longe of Engineers to OK this lake. Thank you for listening and haping for your approval. Deoffrey Davin

From:	Kelley, James C Jr CIV USARMY CEMVR (USA)
To:	Love, Angela; Elzinga, William J
Subject:	FW: [Non-DoD Source] City of Springfield Supplemental Water Supply Project CEMVR-OD-P-2016-0095
Date:	Tuesday, July 27, 2021 2:15:49 PM

From: Popkin, Trevor E CIV USARMY CEMVR (USA) <Trevor.E.Popkin@usace.army.mil>
Sent: Thursday, July 22, 2021 2:36 PM
To: Kelley, James C Jr CIV USARMY CEMVR (USA) <James.C.Kelley@usace.army.mil>
Subject: FW: [Non-DoD Source] City of Springfield Supplemental Water Supply Project CEMVR-OD-P-2016-0095

From: Jeff Sexton <js5bgfsh@comcast.net>
Sent: Friday, July 16, 2021 11:55 AM
To: CEMVR-OD Public Notice <<u>CEMVR-ODPublicNotice@usace.army.mil</u>>
Subject: [Non-DoD Source] City of Springfield Supplemental Water Supply Project CEMVR-OD-P2016-0095

Please accept these comments in support of the above named project. As an avid fisherman and outdoorsman, I strongly support the building of Hunter Lake not only for a supplemental water supply for the City of Springfield, but also for the recreational opportunities it will provide. Our lakes are experiencing extremely heavy use and at times are so crowded as to be dangerous. We are in serious need of additional reservoirs to relieve the congestion on public waters.

Jeff Sexton

Lake Springfield Thursday Night Tournament Director (217) 836-7294

To Whom it may concern,

**RE: Hunter Lake** 

How long does it take to secure a permit??? Their is NO question that this back up water source is needed. Just look west and you will see the consequences of little to no water. Water is more valuable than any other resource we have on the planet. To take it for granted is being careless or down right stupid. Every effort should be made to protect this water resource and provide a clean plentiful back up water supply for the region. The region will grow. The economy will prosper.

Again, this is a no brainer. Get it done. And stop wasting time.

A concerned citizen.

Wynne Coplea
CEMVR-OD Public Notice
[Non-DoD Source] Springfield Lake 2
Tuesday, July 27, 2021 9:27:29 AM

Hi: A few years back I would have said this lake was unnecessary. These days, I believe we should forge ahead with the construe of Lake Springfield 2, not only for recreational and economic development aspects of the project, but for the long-term benefits that a stable, ample water supply will provide for decades to come.

Clean water has quickly become a much more valuable resource as we see the ravages of climate change across the globe and our nation. Lake 2 should afford the heartland bread basket of central Illinois with reliable supply of water for this crucial need.

Feel free to use my quotes and name, if you like.

Wynne Coplea 936 Cleveland Ave Springfield IL 62704

Wynne

From:	Brynne Murphy
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Additional Springfield Lake
Date:	Tuesday, July 27, 2021 9:40:56 AM

I think having another lake in the area would be a great idea for many reasons. I saw on the map that your interested in the area east of the current lake. I was wondering about the area west of Rt 4 and south of Spaulding Orchard Rd. There is a large creek and already very low wet land that is non-usable.

Thank you, Brynne Scott To whom it may concern,

I would like to see the current lake dredged and utilized rather than build another lake. My understanding is that our current lake was much deeper when it was built. If this is not an option, I would like to see the comparison costs dredge current lake vs. build a new lake.

Sent from my iPhone

Thank you,

We really appreciate that the army core is asking for input regarding Hunter lake. Im born and raised here in Springfield and am currently active in 2 lake clubs. I have even lived on lake Springfield in cottage grove as a child. I agree We do need additional water resources, but is there any way that hunter lake could become a larger part of lake Springfield?

Every year I see that lake Springfield seems to get shallower due to silt issues. Looking at your proposed new lake map I see a 10 foot full pool difference between the 2 lakes. Is there any way you can raise Springfield lake by a few feet and lower hunter lake to tie them together?

In my opinion a larger lake would bring more tourism and money to the area. Residents along the lake would also benefit by having a full lake during the state fair. The dry summer months combined with high demand leave boat owners holding the bag and cant enjoy the lake when its dry.

Mike

Sent from Mail for Windows 10

From:	<u>K ROBERTS</u>
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake in Springfield, IL
Date:	Tuesday, July 27, 2021 12:43:51 PM

I think that building Hunter Lake ad an additional water supply for Springfield, IL is just a big waste of taxpayer money and is not needed. In the fifty plus years that I have lived in Springfield, there have been very few times that water restrictions have been put in place. When Lake Springfield gets too full the dam gates have to be opened to let out water as to not cause damage to the power plant. This just another political ploy to tax the citizens of Springfield. Karen Roberts

2429 Sutherland Road

Springfield, IL 62702

From:	Melissa Eades
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Tuesday, July 27, 2021 3:27:42 PM

I'm not opposed to a new lake, if there is a true need for more water, but I do not feel it is needed for aquatic activities & revenue.

As if there is not enough room at Lake Springfield for aquatic activities. If they want to bring in revenue, as the article states, maybe we could, I don't know, open the existing beach!

Thank you for your time, Melissa Eades

Sent from Yahoo Mail on Android

From:	Linda VanEtten
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake Rejection
Date:	Tuesday, July 27, 2021 8:07:44 PM

Do not approve this proposed Hunter Lake for Springfield IL. Sell off the farm properties CWLP has owned for decades without revealing their true worth and use the proceeds to lower energy bills.

Get rid of the high polluting coal-generated power plants tomorrow.

This boondoggle is a political pork barrel proposal that has absolutely no viable use for tiny backwards Springfield IL. There is plenty of recreational opportunity already with the existing Lake Springfield that no one even uses.. They have had the Beach House shut down for years and failed to rehabilitate any other areas of the shoreline for public use.

SAY NO TO THE HUNTER LAKE PROPOSAL>

Ronald E Howell

Springfield IL citizen

From:	<u>Alsop, Erin</u>
To:	<u>Alsop, Erin</u>
Subject:	FW: [Non-DoD Source]
Date:	Tuesday, October 19, 2021 7:16:11 AM
Attachments:	text 0.txt

Please proceed on Hunter Lake for Springfield, Illinois. This has been delayed far too long! Hunter Lake is required not only for additional recreational opportunities...most importantly for primary water resource backup! Keep this Lake pristine and do not allow houses or lake lease lots. Thank you for proceeding with this important project!!

Nanci Ridder 217-652-5712 4514 Castle Pines Drive Springfield, IL 62711

From: 2176525712@mms.att.net <2176525712@mms.att.net>
Sent: Wednesday, July 28, 2021 7:20 AM
To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Subject: [Non-DoD Source]

From:	Elise Ransdell
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Comments regarding Hunter Lake proposal
Date:	Wednesday, July 28, 2021 8:42:40 AM

I am sorry, I just sent this email below with my comments and forgot to put my contact information in. I don't know if contact info is necessary, but I wanted to include it. I do appreciate you taking the time to listen to comments from concerned citizens.

Sincerely, Elise Ransdell 37 W Hazel Dell Springfield, Il

Begin forwarded message:

From: Elise Ransdell <eransdell@yahoo.com> Date: July 28, 2021 at 8:38:18 AM CDT To: cemvr-odpublicnotice@usace.army.mil Subject: Comments regarding Hunter Lake proposal

I live in Springfield Illinois, and I saw that the Army Corps was looking for comments regarding Hunter Lake. I think the proposal is a crazy miss-allocation of resources. I believe this for several reasons: the city is improperly managing the current lake, we would flood acres of beautiful land, and the power plant is scheduled to be decommissioned so the load on the current lake will be greatly reduced.

First, the city can't manage the lake it has, adding acres and acres of additional property to manage is insane. Lake Springfield is silting in and there are few efforts to control that. Why can't we put some money into the lake we already have? The infrastructure is already there with our present lake, why not dredge it and increase the water capacity back to original specifications? When Hunter Lake starts to silt in because of miss-management is the "logical" conclusion going to be that we will need a third lake? It is ridiculous.

Secondly, we would flood acres of land to build another lake. We are already losing farm land at an alarming rate. It is a shame to flood good land. The flora and fauna in some of the low areas in the planned Hunter Lake area is quite lovely as well. I also was not aware of the historical buildings, it would be a shame to lose them as well.

Third, the power plant is scheduled to be decommissioned. That should really decrease the demands on the present lake. Has anyone looked into this? The power plant was one of the main reasons for lake Springfield in the first place. Without it, the present lake should be sufficient for a water supply for the city.

It just seems crazy to me that we would spend millions on this project when there

are so many pressing needs in the community where the resources could be better spent. Why do we need this new lake? The latest proposal was that Hunter Lake would bring economic incentives to the city in the form of tourism. Good grief, won't tourists use the present lake if they want a lake? How about we reopen the beach house on the current lake, it used to be a very popular attraction that gave residents an easy, affordable way to enjoy the current lake? The beautiful building has been closed for years and looks safer every year? What would be special about Hunter Lake that would draw all this new economic activity, especially when Sancris Lake is just down the road? There just seems to be no real reason for the new lake other than it is new. When that wears off in ten years it will just be another thing for the city to miss-manage and destroy.

From:	DOUG WAGNER
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Fwd: Delivery Status Notification (Failure)
Date:	Wednesday, July 28, 2021 9:15:55 AM
Attachments:	icon.png
	icon.png

Hunter Lake not justified and should not be implemented.

------ Forwarded message ------From: **Mail Delivery Subsystem** <<u>mailer-daemon@googlemail.com</u>> Date: Wed, Jul 28, 2021, 9:07 AM Subject: Delivery Status Notification (Failure) To: <<u>doug.wagner5@gmail.com</u>>



The response was:

DNS Error: 1127677 DNS type 'mx' lookup of <u>usace-army.mil</u> responded with code NXDOMAIN Domain name not found: <u>usace-army.mil</u>

------ Forwarded message ------From: DOUG WAGNER <<u>doug.wagner5@gmail.com</u>> To: <u>cemvr-odpublicnotice@usace-army.mil</u> Cc: Bcc: Date: Wed, 28 Jul 2021 09:12:04 -0500 Subject: Hunter Lake I contend that the environmental and economic costs of proposed Hunter Lake would exceed benefits. Other emergency water supply alternatives should be further evaluated/implemented. Hunter Lake should not be built.

Douglas P. Wagner 600 Flaggland Dr, Sherman, IL 62684

From:	Susan Allen
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Public Comment on Hunter Lake
Date:	Wednesday, July 28, 2021 9:17:33 AM

Hello. I would like to submit this email as public comment **against** the development of Hunter Lake for the following reasons. First, I've lived with my family for more than 40 years in Springfield, and I love its natural beauty, flora and fauna. Second, I'm a Master Naturalist intern (through U of I Extension Service), and a member of the City of Springfield Urban Forest Commission, and I know how important ecosystems and tree canopies are.

My primary reasons against Hunter Lake are as follows: 1) it's a wasteful use of water, and better alternatives are a) water conservation and b) use of other existing water resources (gravel pits); 2) it will use land, flora, and fauna (whole ecosystems) in a destructive way; and 3) recreational 'advantages' should never offset natural degradation.

Therefore, Hunter Lake is a bad deal for the residents of Springfield. My family and I oppose it.

Thank you for the opportunity to comment.

Susan Allen 2400 Parkview Drive Springfield, Illinois 62704 (217) 220-1617

Sent from my iPhone

From:	<u>harold</u>
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake Springfield IL.
Date:	Wednesday, July 28, 2021 10:00:39 AM

Hunter lake is a great addition to the area, for water backup in case of a drought as we had in 1948. this das been a project for over 50 years . its time get the project going. When we have the next drought its too late to start the construction of Hunter Lake/

Harold Vorreyer 76 W Fairview Ln Springfield, IL. 62711

From:	<u>Lynn Brown</u>
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake-YES
Date:	Wednesday, July 28, 2021 11:51:17 AM

Yes, I definitely think Hunter Lake should be built. We've already spent tons to acquire land for it and on studies. Water supply is critical, and with climate change Lake Springfield may not meet the areas needs. While we are at it, I think we should definitely consider having Hunter as a recreational site as well. Thanks. Lynn Brown

#### To Whom It May Concern,

I want to voice my concerns and opposition to the proposed building of Hunter Dam to create Hunter Lake for Springfield, Illinois.

I am opposed to the destruction of the acres and acres of woods this dam will cause. I am opposed to the destruction of the historical structures in the area.

I am concerned that the dam will not create the type of lake that the proponents state it will. Given the sources of water for the lake it seems likely it will have large areas of shallow or dried up "lake".

Given the lack of care given to our current lake, and particularly the beach area, I am concerned that Hunter Lake will end up being a waste rather than a water source or source for water recreation. (I am interested to know the source of the stated demand for aquatic recreation.)

Studies show that there are less destructive sources of additional water for the area. Studies also suggest that the need for more water is not as great as the proponents of the dam/lake state.

I think a much better use of money would be to take care of the current lake with dredging and cleanup.

Thank you, Ann Graffagna Pleasant Plains, Illinois

PM

Dear Allen Marshall, (Army Corps spokesman) the following is my comments about the need for Hunter Lake as alternative water source for Lake Springfield.

# Do we need more water now or in the future?

Yes, because we just don't know when a drought will come and we wouldn't have enough water to meet that demand without another source of water. The drought of 1953-1955 caught us unprepared and without water. I saw the lake dried up with no more than a (12feet wide) creek running across what was a lake at Route 55 Lake bridge. Since then, part of the lake has filled in (was 15 feet deep, now 1-2 feet) near the Chatham curve. The population of the Springfield Area has increased and demand for water to meet population, business, and recreation needs will only increase in the future.

# Who would benefit from having Hunter Lake?

Springfield and surrounding communities. We would be prepared for a drought and the annual operating cost would be minimal. It's apparent that Lake Springfield is filling in with silt and the volume of water in the lake is decreasing every year. Springfield and the surrounding communities would also benefit on recreational opportunity that Hunter lake will provide. With increased population, recreational water sports, fishing, natural habitat for birds, and animals are being consumed by the expanding community.

# What is the environmental benefit or problem?

Additional water will provide water backup for Lake Springfield, additional habitat for fish and wild life.

Surrounding communities will get their sewage problems addressed to meet present and future needs. Minor problems will occur in the transition period, however, long term benefits will far out weigh these concerns. If the city had not decided to build Springfield Lake years ago, we would have wells with foul tasting water. People back then looked into the future and now we all are enjoying the benefits of their wisdom. Can't we look into the future for our children, grandchildren, great grandchildren etc. and make life better for them?

Sincerely, Frank A. Tureskis 800 Overlook Drive Glenarm, Illinois 62536 217-483-3669

7/29/21 Dear Sir, We do not NEED another water source. as far as recreational opportunities, not very many people use the lake we have now ... I have been following this essue for over 35 years. One question remains - how do we pay for it? My monthly use is I unit, but my bill is \$30. Certainly hope they arent raising our water rates again We have plenty of water - the idea we may run out is supply a Charles Matheny scare factic. 217-546-2846

HUNTER LAKE PROJECT SPRING-FIELD, ILLINDS SUPPORT FOR REGULATORS DIVISION US. ARMY CORPS IT ENGINEERS HUNTER LAKE PROJECT 2688 PIPER LANE SPRINGFIELD, ILLINDIS 62707 JULY 29, 2021 DENCE

US. RTRIMY CORPS ST ENGINEERS RSCK ISLAND DISTRICT CLOCK DUSER BUILDING P.O. BOX 2004 ROCK ISLAND, ILLINOSS 61204-2004 CONCERNED: CONCERNED:

PLEASE COMPLETE THIS NECESSARY AND WONDERFUL PROJECT TO ASSURE OUR COMMUNITY AND AREA HAS AN ADEQUATE SOURCE OF WATER AT ALL TIMES. HAVING LIVED IN THE SPRINGFIELD AREA ALL OF MY LIFE (75 YEARS), I REMEMBER PAST TIMES HERE -DROUGHTS WHEN LOCAL WELLS WENT DRY AND OUR CURRENT LAKE GOT SERIOUSLY LOW. TOWNS A ROUSNID SPRINGFIELD WISHED TO TAP INTO LAKE SPRINGFIELD, AS SOME STILL DO.

FROM VERY YOUNG I HAVE BEEN CONCERNED ABOUT ENVIRONMENTAL ISSUES. CERTAINLY THERE IS SOME LOSS OR SACRIFICE (THE AREA TO BE FLOODED) HOWEVER THE BENEFICIAL RESULTS WILL FAR OUT WEIGH THE LOSS IN THE FUTURE. IT IS SHORT SIGHTED AND FOOLISH NOT TO BE COGNESCENT OF THE LONG TERM. ALREADY WE SEE MANY CITTES AND AREAS IN THE WEST STRUGGLING FOR FAILURE TO ANTICIPATE THE IMPACT OF DRY WEATHER-DROUGHT AND WATER NEEDS. RESPECTS & SIGNATURE ON BROK



#### Greetings:

I saw that this is the email to use to make a public comment on the proposed Hunter Lake. However, I have no information on the lake itself. Can you please advise me of the details first?

What will be the acreage expanse of the Lake? What will be the average depth of the Lake? Do you have a ratio established comparing acreage to depth?

My point in asking these questions is to find out how much evaporation will affect the purpose of the Lake itself. Could there be so much evaporation as to make the Lake ineffective at being primarily a drinking water source?

Do you have data about evaporation for this expanse of water?

Thank you for whatever information you can provide. I'd also like to know about upcoming meetings on this topic.

Thomas Denney 2547 South 9th Street Springfield, Illinois 62703

512-750-5011

From:	<u>d-dog1995</u>
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Thursday, July 29, 2021 11:19:00 PM

This entire Hunter Lake project is a waste of taxpayer dollars. The city needs to sell or give back the land that they stole from the original owners. Springfield lake has so many low spots, its pitiful.. It needs dredged badly.

From:	Betty Cawley
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Lake 2/Hunter Lake, Springfield, IL
Date:	Thursday, July 29, 2021 9:39:35 PM

We are in favor of the contraction of Hunter Lake.

Sent from Yahoo Mail on Android

From:	Dylan Runge
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Thursday, July 29, 2021 11:18:18 PM

I am a resident nearby Hunter Lake property. I have not met a single person that thinks this would benefit our town. The mayor and the city of Springfield need to sell or give the land back to the original owners that they took it from. We have too much wildlife out here that will be lost. If the city wants a larger water supply, maybe they should consider dredging our current lake. This entire project is a total and absolute waste of taxpayers dollars.

From:	waltwwk@aol.com
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake - Opposing Rationale
Date:	Thursday, July 29, 2021 7:09:11 PM

#### Attn: Regulatory Division

I am totally opposed to the City of Springfield's plan to build "Hunter Lake". I live near the proposed location and have several comments:

1. This proposed Hunter Lake is not needed. The City of Springfield have repeatedly changed their justification for building this lake. The current version is that it would benefit recreation. I would propose that the City utilize the current Lake Springfield by reopening the Beach area and providing additional beaches, boat docks and access points.

2. The chance of a drought is also listed. Why not dredge the existing Lake Springfield to create more capacity? During recent heavy rainfalls, the City has often opened up their causeway dams and lets all of that water flow downstream, instead of being able to store the excess with a dredged Lake that could be much deeper and can store this water.

3. It is on record that the City Utility will soon close some of their Coal fired generating plants which will require less water.

4. The County residents who will be impacted should have a voice in the decision making process. Construction of this lake would impact the quality of life in the area. Construction equipment would cause dangerous driving conditions on our local county roads. Noise and dust would also be a factor.

5. The proposed lake would require that Horse Creek be dammed and the resulting flooding would cause environmental issues for wildlife and habitats. Also the City of Pawnee may be impacted as well as Historical buildings being lost to flooding.

6. The City has spent millions of dollars so far on studies and has accumulated a large amount of land. I would propose that the City contract for increasing the capacity of Lake Springfield by dredging the existing Lake, using funds from the sale of whatever property that they have "invested" in for Hunter Lake. Some of these funds could also be used to upgrade the recreation and fishing facilities at current Lake. Also use some of those land sale proceeds to upgrade infrastructure in areas of Springfield such as the Downtown and East Side.

7. If Hunter Lake was built, it is not going to provide recreation for all of Sangamon County residents, only a select few.

8. The USACE published a notice seeking comments on July 01.2021, but it was not widely distributed and written about in local papers until July 28, 2021. It would have been better to have more notice to prepare for the comments. Obviously, backers of Hunter Lake do not want any adverse comments and some would say they are happy that the Public is not informed about their plans.

Thank You for the Opportunity to Comment.

Walt Kruski 14 Florence Road Rochester, IL 62563 217-899-1966 (PC)

From:	Mike Budd
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Thursday, July 29, 2021 6:10:55 PM

A second lake in Springfield is OK with me, just as long as it doesn't grow houses along the edge. This should not be an opportunity for the City or County to create new lakeside homes. This will only benefit those with enough money to build a house on the waterfront and ruin the opportunity to have hunting or the chance to fish without feeling like you are in the middle of a subdivision.

We are starved for outdoor recreation in this State. I would leave the property undeveloped, except for the lake, dam and boat launches. Open it for fishing and more importantly, provide an opportunity to duck hunt. There will be rafts of diver ducks in the fall that hunters would love a chance to pursue. Allow hiking trails all along the edge, similar to Lincoln Memorial Gardens. That place gets a lot of use each year as, again, we are starved for outdoor opportunities.

How will you keep this from silting in from farm runoff as we are seeing with the existing lake? In 50 years we're going to see headlines about the lake running out of storage capacity as it has been silting in from conventional tillage in the watershed.

Thank you for the opportunity to comment,

Mike Budd 53 Blackington Ln Divernon, IL 62530

From:	CHARLES L TAMMINGA
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake Proposal
Date:	Thursday, July 29, 2021 5:52:45 PM

I would like to express my oposition to the props3ed construction of Hunter Lake by the city of Springfield. As a former Natural Resources Planner for the State of Illinois I was on the staff to write the State Water Plan and State Outdoor Recreation Plan. I also served a Associate Director for Lands and Historic Sites o the State of Illinois where I was inchage of all propeties managed by the Department of Conservation. My objections to this project are as follows:

1. This project as proposed for recreational benefits appears to be a "last ditch" effort by the City to justify its construction after other rationales have failed given the alternatives.

2. Hunter Lake would be located within 10 miles of 2 other lakes (Springfield and Sangchris) which are heavily utilize for recreational purposes. Sangchris has a 25 horsepower limit on boats which makes it a good place for kayaking and canoeing as well as fishing and waterfowl hunting. In additional the State Park has picnic areas and camgrounds as well a a trail system, dog training area, and allows upland game hunting. Lake Springfield has no limit on engine horsepower so it provides opportunities for larger watercraft as well as jet skis and sail boats. Parks around the Lake provide ball fields, playgrounds, a zoo, and boat ramps. In addition, the city is opening some of its public properties to archery deer hunting.

3. Springfield has an excellent Park District with parks located all throughout the city. The communities surrounding the project site all have one or more city parks. This includes communities like Chatham, Rochester, Pawnee and Auburn to provide for the recreational need o their citizens.

4. I have personally walked over much of the area hunting mushrooms, berries, small game and deer. This project would have a deleterious afect on all of these this not to mention the loss of oxygen producing timber resources.

5. The project would do severe damage to the old Penscola site.

6. The project would dislocate several landowners, many of whom have held these properties for several generations.

7. The project would have a seriously negative effect on the Pawnee infrastructure in that it sewage plant would have to be relocated causing increased costs for Pawnee residents.

8. While I am not a hydrologist, I questions the logic of the project being proposed as a back up lake in the event of a severe drought. It appears that this Lake will be a fairly shallow body of water. If that if that is the case I wonder how much water will be available in the event of a drought or if this Lake will be a huge mud flat. I don't know the answer, but I think it should be a serious question.

9. Given that there are alternative options to solve this problem that are much more ecologically sound and do less damage to the landscape I believe the people of Springfiel would be better served by taking another route to solve this problem. Thank you for this opportunity.

Charles Tamminga 76 Michele Drive Pawnee, Illinois

Al Pieper
CEMVR-OD Public Notice
[Non-DoD Source] Hunter Dam
Thursday, July 29, 2021 1:11:36 PM

I am writing to express my opposition to the creation of a second lake in the Springfield IL area. There are several reasons for my opposition.

1. The purpose of the lake seems to morph with time. Originally it was to be a back up to lake Springfield as a water source. Now it seems a recreational purpose is becoming the new reason for its creation. This is a project with no purpose. As the coalfired power plants run by CWLP one by one go offline the largest single use of water is ending.

2. The recreational argument for a second lake is farcical. How many lakes does a city of just over 100,000 need? This city can't manage one lake properly for recreational use. The beach and beach house on lake Springfield have been closed for several years. The shoreline of lake Springfield is dotted with a few parks. It is dominated by private homes and private clubs owned by the wealthy. Public money should not be used to create additional shoreline for the benefit of Springfield's wealthy.

Should severe drought occur, and that seems less likely in a warming climate, other water sources such as gravel pits make more sense. I do not claim any expertise in the area of hydrology but as I look at the land where a second lake is to be located it seems to me to be a potentially very shallow lake. The lake is apt to be dry simultaneously with Lake Springfield.
 The area to be covered by a second lake has, I believe, historically significant structures that would be destroyed. That should not happen.

5. The land that the city owns where the lake is to be located could be a valuable natural area or other public access area available for recreation for everyone. No dam need be built.

Thank you,

Al Pieper 507 S Glenwood Springfield, IL. 62704

From:	Deborah Russell
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Dam, Springfield IL
Date:	Thursday, July 29, 2021 12:37:00 PM

I am a longtime citizen and taxpayer in Springfield IL. I am writing to urge the Army Corps of Engineers to REJECT the city's proposal to build another lake. Previous studies of this request have shown no need for another lake to be built to provide an additional water source. Now the city is citing 'recreation' as a need for a second lake.

The city's policies continue to ensure that the public's access to the current lake is extremely limited and the few parks are unimproved. The majority of the shoreline is leased for private use. The public beach has been closed for many years. I have little confidence that another lake will mean greater recreational opportunities for the public.

Mismanagement and neglect of the current lake for public use and no need for a second lake as a water source shown are the basis of my appeal to the Corps to REJECT the request to build Hunter Dam.

Sincerely,

Deborah Russell 507 S Glenwood Springfield IL 62704

Deb
From:	Andrew Southwick
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Thursday, July 29, 2021 6:54:26 AM

My father was born in 1926 in a farmhouse now under Lake Springfield. My great grandfather moved his wife and son to a hundred acres on N. Pawnee Rd, close to where his own father (a country doctor and close friend of Vachel Lindsay's father) lived at the intersection of Pawnee and New City Roads, once known as Beamington. My dad and his younger brother went to war, came home, and became state troopers. They farmed that property until they grew too old to do so, then rented it out to a neighbor to do so.

CWLP has been trying to buy that land by hook or by crook since before I was born in 1971. Two men from there literally walked into my widowed grandmother's house there in the early seventies and told her she'd have to move sooner or later, prompting an office visit by two very large and angry state cops. The city has already bought everything around the property, more or less, we were just too stubborn to have our homes stolen twice in two generations. How's this for a public comment: Deal with the lake you've got, and leave my family the hell alone.

From:	<u>BLL airmac</u>
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Proposed Hunter Dam-Springfield, Illinois
Date:	Thursday, July 29, 2021 1:09:00 PM

I am writing in strong opposition to the City of Springfield's request to add "aquatic recreation" as a need to justify funding from USACE.

The city has a beautiful lake which it has refused to open to swimmers for at least the last 5 years citing money and safety issues; a huge new YMCA with a pool just opened last year; there are public pools; and private pools aplenty in Springfield.

Finally, this application was made public only 48 hours ago and continues the pattern of CWLP and the Mayor not informing the public on proposed projects.

I have great respect for USACE since my husband was at the Pentagon and cdl the privilege of meeting several generals who headed USACE-they would not be pleased at the methodology of this application and the proposed use of funds.

Bridget L. Lamont Springfield, Illinois. 62704

From:	<u>Will Reynolds</u>
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Public comment for city of Springfield, IL CWLP Supplemental Water Supply Project
Date:	Friday, July 30, 2021 7:56:50 AM

I'm submitting this comment on the requested "Change of the Project Purpose and Need to include Aquatic Recreation for the ongoing Draft Supplemental Environmental Impact Statement (DSEIS) for the Springfield Supplemental Water Supply Project."

For several decades, Springfield City Water Light & Power has struggled to show a need for Hunter Dam. The Army Corps of Engineers wisely chose not to permit deeply flawed requests for this needless waste of money.

Two things have changed with the latest request. First, CWLP announced it's closing the biggest water hogs in the community: their aging coal power plants. This makes any claim of need for a new water source completely absurd.

To compensate for the obvious lack of justification for Hunter Dam, CWLP is adding a new argument of need for a recreational water source. This is far-fetched as the region already has Lake Springfield, Lake Sangchris, and Lake Shelbyville nearby. Hunter Mud Puddle will be smaller and less appealing for outdoor recreation than existing lakes.

What Illinois lacks is wilderness. The State of Illinois 2019 Revised Forest Action Plan states 77% of forested land in Illinois is privately owned. The plan emphasizes the need to promote oak forests and also continuous blocks of forest. Keeping the land bought for Hunter Dam as a forest preserve would address the state's goal of providing more publicly accessible forested areas. Keeping forested land is also key to achieving the state's effort to address climate change.

It's common for permitting agencies like the Corps of Engineers to help address flaws in a permit request until it can be approved. Through this process, the permit will either be fixed, or the governmental body will withdraw their request after realizing it's a hopelessly flawed project that's never going to happen. After years of rejection, Springfield CWLP is a little slow to take the hint, like a teenage boy who honestly believes his crush had to wash her hair that night. CWLP didn't get the message after several decades of Hunter Dam not being approved so the Corps will have to help Springfield finally move on by explicitly denying it this time.

Will Reynolds Chicago, IL 60618

<u>Kim</u>
CEMVR-OD Public Notice
[Non-DoD Source] Hunter Lake II
Friday, July 30, 2021 8:19:19 AM

I am concerned that the City is following the second lake option rather than dredging the current lake which is badly needed. I question if 1) what will happen to Lake Springfield if not dredged in the near future 2). Is the population really growing to a point where a second lake is needed 3) what will happen with the wildlife currently living on that land that will be flooded. What wildlife conservation studies have occurred.

Sent from my iPhone

From:	Anne Logue
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Friday, July 30, 2021 8:53:45 AM

Because of closing heavy water use coal plants, Springfield no longer has the excuse for Hunter Lake. We already have a lake for recreation. No reason for it.

Anne Logue 1244 N Bengel Springfield, IL

Sent from my iPhone

 

 From:
 Rich Solomon

 To:
 CEMVR-OD Public Notice

 Subject:
 [Non-DoD Source] Springfield, IL Hunter Lake

 Date:
 Friday, July 30, 2021 9:13:08 AM

 Attachments:
 image001.png image002.png image003.png image004.png

July 30, 2021

U.S. Army Corps of Engineers Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, IL 61204-2004

Attn: Regulatory Division,

I am writing to you as a 64 year lifelong resident of Springfield, IL. Since the 1960ties Lake Two (Hunter Lake) has been recommended and many feasibility studies have been introduced by various Springfield Mayors and City Councils. I was on the board of the Springfield Chamber when the City conducted a report in 2000 that concluded building Hunter Lake was the most cost effective means for achieving a long term adequate water supply for the City of Springfield and surrounding communities.

History has shown that drought conditions occur every 10 to 15 years. With climate change drought conditions could become more often and severe. Having Hunter Lake water shed feed into Lake Springfield will keep Lake Springfield with adequate water in times of severe drought. Water is "King" for sustaining a City and community to prosper.

Solomon Colors, Inc. has a workforce of 150 employees at our facility in Springfield, IL and a high water consumer utilizing water in our production of liquid slurry iron oxide color. There has been times when we have been asked to reduce our water consumption during droughts. As with our water needs, the residents of Springfield depend on the City supplying water and electricity to their homes. Hunter Lake will assure Springfield will have adequate source of water for generations to come.

Hunter Lake will also provide the Springfield residents will recreational opportunities with fishing, boating, and parks surrounding the lake. In summary, Hunter Lake will offer a better quality of life through recreation while also delivering an adequate water supply. We are at a crossroad. Do we act with vision for the future or do we except mediocrity and do nothing. I strongly urge you to approve the building of Hunter Lake.

Best Regards,

## Rich Solomon | Chairman of the Board / CEO



CORPORATE HEADQUARTERS | 4050 Color Plant Road Springfield IL, 62702 | 800.624.0261 WEST COAST FACILITY | 1371 Laurel Avenue Rialto CA, 92376 | 800.624.0261 PRODUCT HELP LINE: 833.45COLOR | EQUIPMENT HELP LINE: 866.985.8324

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From:	Leslie Dickson
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] NO to Expensive and Unnecessary Hunter Lake
Date:	Friday, July 30, 2021 9:20:23 AM

To US Army Corps of Engineers:

I don't feel Springfield or CWLP have responsibly managed our current reservoir and lake resource (Lake Springfield) and it's watershed. We don't need an expensive second reservoir that would likely also be mismanaged.

1) Springfield and CWLP have not established a proactive community outreach and education program to inform users of how to conserve water on a daily basis let alone in the event of a drought. I have only ever seen that they reached out to the community to request alternate watering yard/ washing cars days in 2012's drought.

2) They aren't managing the lake resource they currently have. Nutrient levels and atrazine levels have started to rise again in recent years, and the lake water is continually sediment-laden from watershed runoff.

3) If the new lake is also supposed to offer recreation and they're managing Lake Springfield so well why hasn't the swimming beach ever reopened on Lake Springfield? The infrastructure is already in place, but hasn't been used in decades because of poor water quality.

4) Damming Horse Creek would inundate Pensacola tavern and other significant historical sites traversed by centuries of native Americans and occupied by settlers and our ancestors of Sangamon County.

5) Damming Horse Creek would flood beautiful landscape that has become habitat for innumerable species that have taken refuge on this land since the City started buying it up in the 70s.

6) I own a boat, but only occasionally use it on Lake Springfield, and would not consider swimming in it safe for myself, children or grandchildren.

7) A better solution would be to sell all the land gobbled up for Hunter Lake and utilize it to make improvements in the watershed and Lake Springfield to achieve safe water for consumption and recreation as well as fund community education programs for water conservation.

Sincerely, Leslie A Dickson, RN, MS, Prof of Nsg, retired

Sent from my iPhone

Regulatory Division U.S. Army Corps of Engineers Rock Island District Clock Tower Building Post Office Box 2004 Rock Island, IL 61204-2004

email: cemvr-odpublicnotice@usace.army.mil

I am writing this in regard to the public comment on the City of Springfield's plan to build Hunter Lake. I do not support granting the City of Springfield a permit for the lake.

Recently, providing a place for recreational water activities was given as a reason to build the lake, a reason beyond the original intent for a second lake. The public beaches, boat launches and shoreline fishing areas of the current lake, Lake Springfield, could be improved and expanded for any purported need for aquatic recreation. The initial plan for the second lake was to provide a water source that periodically supplemented Lake Springfield, the primary water source, when its level became low. That arrangement does not sound conducive to recreational activities if the water level of the supplemental source has been significantly lowered.

There has already been significant input on the other negative impacts of building the proposed lake: disruption of local wildlife, destruction of vegetation, loss of crop land and the flooding of several historic buildings and areas. As the greatgreat-great granddaughter of an original settler of Sangamon County, I find the latter especially tragic and unnecessary.

Building a second lake has been discussed, studied, reports written and money expended for far too many years. It's time to stop this wasteful pursuit and look at less costly and less destructive alternatives. I would have little confidence in the City of Springfield being able to successfully manage and maintain a second lake when there are problems with their current one. The City of Springfield should be denied a permit to build Hunter Lake.

Thank you for your time and attention to this matter.

Sincerely,

Carolyn S. Neitzke

July 30, 2021

ATTN: Regulatory Division, U.S. Army Corps of Engineers Rock Island District, Clock Tower Building Post Office Box 2004 Rock Island, Illinois 61204-2004

#### cemvr-odpublicnotice@usace.army.mil

Change of the Project Purpose and Need to include Aquatic Recreation for the ongoing DSEIS for the Springfield Supplemental Water Supply Project

Dear Mr. James Kelley, Project Manager et al:

On behalf of the Coalition of Concerned Citizens, I offer the following comments regarding the above subject of CEMVR-OD-P-2016-0095 Public Notice dated July1,2021. With the recent decision to permanently retire Springfield's CWLP Dallman Units 31,32 and 33 by 2023, the Illinois State Water Survey determination that Lake Springfield has a 50% probability of not meeting water supply needs in a 100-year frequency drought, must be revised. The ACE consultant, AMEC Foster Wheeler, states in Technical Memorandum 325216041 Table 3-3 the total direct and indirect raw water use of these three units is 9.9 million gallons per day (MGD), and a total of 1 MGD of potable water. After these are no longer in operation 10.9 MGD will not be removed from the existing lake. The design drought yield capacity,12 MGD, of the proposed Hunter Lake or other supplemental supply includes anticipated growth in commercial and industrial plus speculative future water demand, so this number should be reduced by 10.9 MGD to 1.1 MGD. It is reasonable to anticipate further increases in water use efficiency induced by federal energy conservation regulations will offset 1.1 MGD of future demand. Reducing leakage in the distribution system, enacting a water conservation rate structure and dredging the phosphorus-laden sediment out of Lake Springfield to comply with EPA water quality standards, in total would certainly make up for a 1.1 MGD deficit.

If more than 1.1 MGD is needed sometime in the future, the following local water supply alternatives should be seriously explored as reasonable and practicable.

The Sangamon River valley well field on the north side of Springfield was abandoned after Lake Springfield filled around 1936. Illinois State Geological Survey Circular 497 (1976) states on page 31 " The wells and infiltration galleries were in the Sangamon River flat just north of the city. In 1923 the capacity of the city ground-water facilities was more than 8 million gallons per day. " This source needs to be evaluated for future use. It lies within the city limits and has been utilized in the past for a public water supply.

Another nearby alternative source is Lake Sangchris. Vistra Corporation owns and operates Kincaid Power Plant and the lake's water rights, dam and many of the real estate parcels on the shoreline.

According to public news articles last year this plant is going to be retired soon.

The City should explore purchase of the right of reasonable use of Lake Sangchris water, the dam and other necessary shoreline real estate parcels from Vistra after the plant ceases operation. In times of need, lake water could be pumped just over the fixed dam into the spillway to travel down the South Fork of the Sangamon River to be captured by the city's South Fork Pump Station and moveable channel dam to supplement Lake Springfield.

Regarding aquatic recreation, is flat-water activities the only type to be considered due to the city's preferred alternative? Beginning in 1965 the city has purchased with threat of condemnation over 7,000 acres of private land assuming permission to build another dam and lake. The City, has blocked public recreation on this land including pond and stream fishing/canoeing/kayaking from the beginning of land acquisition to the present. CWLP leases to private entities has been the method. It is common knowledge that most of the land in a 50+ mile radius of Springfield is privately owned or controlled. Public access to all forms of outdoor recreation, not just flat-water activities, is in demand. There are many miles of river and streams, ponds and small lakes that could support public aquatic recreation with private and public landowner cooperation. Fortunately there is the Illinois Recreational Access Program (IRAP) managed by the IL Department of Natural Resources that partners with landowners to access, assume liability and manage individuals of the public to responsibly and lawfully use land and waters for recreation. The City could participate in IRAP to allow public aquatic recreation on its own land and Clear Lake gravel pit currently leased to a membership-only fishing club. The City should explore the private gravel pit lakes near Clear Lake for both a supplemental water supply during drought and additional public aquatic recreation.

A final comment regarding the ACE determination of the Least Environmentally Destructive Practicable Alternative. It should provide a best estimate of greenhouse effect gases (CO2, CH4, N2O, etc.) to be emitted during construction, operation and multiple use over the design lifetime of each reasonable and practicable alternative given current technologies.

Please add Coalition of Concerned Citizens c/o Donald D. Davis, 6363 Stagecoach Road, Pleasant Plains, IL 62677 to the ACE Rock Island District Public Notice contact list. Thank you. I appreciate this opportunity to comment.

Best regards, Don Davis 217-487-7571 donluan749@gmail.com

From:	Jerald Jacobs
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Friday, July 30, 2021 12:08:27 PM

I am a civil engineer and have done numerous dam inspections including Springfield, Decatur, Mattoon, Charleston, Centralia...design and construction observation. I would not think the COE would approve Hunter Lake. I was an expert witness years ago and testified that Hunter Lake would have a High Hazard Dam whose failure could jeopardize both lakes and leave Springfield without a water source.

Presently Springfield has a lake which was the source of Lepto about 20 years ago cancelling swim events. It has a closed swimming beach due to a drowning and now they want another lake that will not be safe for swimmers. Obviously Springfield would be a poor candidate for another lake.

Other sources of water such as pumping from aquifers and drawing from the Sangamon should be pursued before the COE allows Springfield to have another lake.

Jerald Jacobs, PE 3217 St. Francis Drive Springfield, IL 62703

217.972.1080

Jonathan Ottino
CEMVR-OD Public Notice
[Non-DoD Source] Hunter Lake
Friday, July 30, 2021 2:49:00 PM

In response to your request for public input on Hunter Lake:

I would personally like to see maintenance done on Lake Springfield. Why doesn't CWLP and the City of Springfield prioritize our current water source by implementing ways to prevent, decrease, control, and remove sediment/erosion? Is the best answer to build a second lake to maintain?

Thanks, Jonathan

From:	Brittany Ottino
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake Project
Date:	Friday, July 30, 2021 3:09:43 PM

As a long time resident of Springfield, I wanted to offer my opinion on the Hunter Lake project in relationship to water concerns. I believe the less expensive and better long-term solution is to put money into **dredging the existing Lake Springfield**. This will allow for increased depth and capacity, which could address the water supply issues in already existing area. The city of Decatur invested in a similar project that began in 2014. While I admittedly have not reviewed contracts on this project, information easily available suggests that given the size of the Decatur Lake in comparison to Lake Springfield, and the costs of the project, that the City of Springfield could support the dredging financially. Furthermore, it is well-known that several areas of the current Lake Springfield drop to very low levels late each summer, reducing its use for recreational activities such as boating in several areas. Dredging these shallower areas will allow for increased use throughout the summer months, and likely reduce risk of dangerous bacteria by increasing the overall lake volume. Finally, I would add, Lake Springfield already has sufficient boat launches for utilization, and the city already owns property that could be used to revitalize a swim area and add other non-motorized water sports. I see no reason to add another lake when our current one could be improved upon. Long-term, I do not have faith that the city has the ability to manage two water sources, particularly if both are used for recreation.

Sincerely, Brittany Ottino

From:	Jennifer Davis
To:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Public notice, Springfield, Illinois
Date:	Friday, July 30, 2021 3:19:42 PM

I am overwhelmingly in favor of building the new lake for several reasons. To provide us with enough water to withstand a severe drought (only a matter of time), for the many new recreational opportunities it will create for the people in our community, and for the large positive economic impact it will help bring to Springfield.

Thank you for your attention to this matter.

Jennifer Davis

From:	Bohlen, HDavid
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake comments
Date:	Friday, July 30, 2021 4:06:14 PM

I did the Environmental Impact Statement (ornithology section) on Hunter Lake in 1991. Much has changed since then both to the habitat through succession and the removal of buildings.

I monitor the area for my continuing study of the birds in Sangamon County and have observed that most wildlife in these areas improved in species and abundance. It is difficult to consider a new lake (Hunter Lake) in Sangamon County without looking at what is going on with Lake Springfield. Unfortunately, Lake Springfield has been surrounded by the city of Springfield, along with all the congestion, traffic, commuting, speeding, doublehousing of lots, proliferation of boat houses and boat docking, killing of natural occurring animals by drivers, harassing of wildlife by high powered boats and jet skis, the running of dogs off the leash and etc. Also, any well-intentioned set aside for mitigation for natural animals has been given over to humans, for example: Lick Creek with its bicycle trails, and the "refuge" (Chatham's dog park) with the Marina right there. It's not possible to provide native plants and animals a place to survive and have a playground for humans there too. A good example of this was the nesting of Bald Eagles at Marine Pt. Constant harassment by boaters pulling right under the nest tree (especially when the adults were trying to feed the young) ultimately caused the eagles to abandon the nest.

If Hunter Lake is built, it like Lake Springfield, will submerge a huge area including 9 +% of Sangamon County's remaining forest. Therefore, forest, marsh, swamp, and prairie habitats need to be provided around the Hunter Lake area and protected from human disturbances (this is not being done at Lake Springfield). Also, if aquatic recreation is increased this will produce more carbon dioxide, it would be better to plant more trees and prairies. If the US is really serious about reining in climate change, activities such as motor boating and jet skis should be phased out.

### H.David Bohlen

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# **Attn: Regulatory Division, U.S. Army Corps of Engineers, Rock Island District**

To whom it may concern:

My Father was in the Engineering Field for many decades and as a City of Springfield, **Illinois leader, advocated for a NEEDED CLEAN back-up water supply named** Hunter Lake. In recent years, the Illinois **Department of Natural Resources signed a** partnership with the City of Springfield to help manage the area of Hunter Lake. **Outside of the many recreational activities** & economic impact this project will provide, access will never be limited because of residential barriers surrounding Hunter Lake. Abraham Lincoln's home and many historic sites in Downtown Springfield - are less than a 30 minute drive to Hunter Lake!

The CLEAN water of Hunter Lake will be enjoyed by generations to come. Many thousands of people will be impacted and many more when a drought happens without Hunter Lake. See how people react when their water tap is restricted, or turned off! Please, grant the permit to finalize HUNTER LAKE IS NEEDED!

Thank You for Your Attention and Please allow Hunter Lake to Move Forward!

Springfield Resident, Joseph Langfelder Retired Springfield Fire Fighter

Sent from my iPhone

ames Butts
EMVR-OD Public Notice
Non-DoD Source] Second lake in Springfield
riday, July 30, 2021 4:27:06 PM

I oppose a second lake due to cost and environmental effects. The second lake as been looked at since the 1960's, over 70 years ago. The drought issue can me remedied by conservation and better care of our existing lake such as dredging.

Sent from Mail for Windows 10

From:	Laura Whetstone
To:	CEMVR-OD Public Notice
Cc:	greenrpastures16@yahoo.com
Subject:	[Non-DoD Source] Supplemental Environment Impact Statement Regarding Hunter Lake Proposal
Date:	Friday, July 30, 2021 7:24:00 PM

Springfield city officials have not been good stewards of \$30 million of taxpayers money for years. This precedent reflects they will only continue to be poor stewards as it relates to the proposed Hunter Lake project. City residents, if the proposal is approved, will continue to foot well over \$120 million and for what?

Springfield officials agenda is to only generate recreational revenue from this proposed lake first and foremost rather than a water source. A source that "might" be needed every 50 years.

Springfield officials and it's residents are responsible for being good stewards of their money and water usage not those individuals residing around the proposed lake site. Wildlife in this area will also be impacted.

How many centuries will it take for recreational/event fees to recoup the costs for building a lake? How long will it take residents to pay for this? This lake will likely cost over \$150 million at the end. Why place the financial burden on future generations?

Springfield officials have put the cart before the horse with this proposal. Springfield has other supplemental areas that can be utilized (Sangamon River) or city owned gravel lakes; areas that won't destroy well established forest areas and alter wildlife environments.

Hunter Lake is not a viable option until all available options are considered, properly researched and brought before the people.

Sincerely, Laura R. Whetstone

Sent from Yahoo Mail for iPhone

From:	Kim Riddle
To:	<u>CEMVR-OD Public Notice</u> ; <u>cityaldermen@springfield.il.us</u>
Subject:	[Non-DoD Source] Hunter Lake comments
Date:	Friday, July 30, 2021 9:00:08 PM

Hello, I am reaching out to provide resident comments opposing the proposed Hunter Lake addition. I do not feel that the benefits of a second cooling lake outweigh the need for the currently existing natural environment which supports thousands of wild animals as-is. Those animals won't just be displaced by this unnecessary project - many will be killed.

I do not agree that the infrastructure relief funds provided to Springfield should be used for this purpose when our schools and roads need attention and when this project will result in unnecessary loss of wildlife.

I oppose the Hunter Lake project.

Respectfully, Kimberly Riddle 528 W Fayette Ave Springfield, IL 62704 Sent from my iPhone

Begin forwarded message:

From: MARY CAREY <mdye0464@aol.com> Date: July 31, 2021 at 10:42:27 AM CDT To: cemvr-odpublicnotice@usac.army.mil Subject: Hunter Lake

Please stop wasting my hard earned taxpayer dollars on this farce. Properly care for and manage lake Springfield instead of looking for new ways to spend money! Mary Carey

Sent from my iPhone

From:	Sheila Walk
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake - Springfield, Illinois
Date:	Saturday, July 31, 2021 9:13:50 AM

I am among those who believe that a second Springfield lake is not needed. The city's population is not increasing. City resources can barely keep up with the maintenance of the current lake. Land-based recreation has as much value as water-based and is more egalitarian; that is, you don't need to have enough money to buy a boat, just walking shoes. Habitat loss for birds, animals, insects, plants is a major factor to consider. Thank you.

Sheila Walk 1035 North Third Street; Springfield, IL 62702

From:	P. S. Collins
То:	CEMVR-OD Public Notice
Subject:	[Non-DoD Source] Hunter Lake
Date:	Saturday, July 31, 2021 2:27:24 PM

My late husband and I have long been proponents of constructing Hunter Lake. One of the major concerns of climate change is lack of water. The population in central Illinois has long outgrown our water supply, plus Lake Springfield quality has deminished considerably over the years and has been polluted by the power plant. As temperatures continue to rise, we have much more serious impact on our existing lake. Plus, having an additional lake as a recreational resource, it could help attract more families to move to our area, or move back to us. Thank you for the opportunity to voice my thoughts on it. Paula S. Collins. 1803 Henry St, Springfield, IL 62703

I am writing in favor of the Hunter Lake project.

Springfield (IL) has been blessed with adequate rainfall for several years, but it has not been that long since I remember seeing boat docks and boats sitting in the mud on the shoreline of Lake Springfield.

It has not been that long since water restrictions were in place.

If Springfield is to grow, another source of water must be found. New businesses and manufacturers will not locate here if the availability of water is not a certainty.

In addition, another recreational venue will bring tourists and revenue to the city. As the exodus of state workers continues, Springfield cannot continue to rely on the presence of government employees to underwrite city revenues. The economic base of Springfield must diversify.

Climate change is a major concern. Who can say that in the near future there will not be a period of extended drought. Springfield must be prepared, not only to help ourselves but also to support neighboring communities.

I hope you will look favorably on the proposal.

Rev. Richard A. Van Giesen 2204 Renwick Dr Springfield, IL 62704 CSWU Addition Public Notice Comment

Dear Mr. Kelley:

Attached are two photos taken of Sangchris Lake on Sunday, August 1, 2021 at approximately 3 p.m. on a gorgeous summer's day with temperatures around 82 degrees, a light breeze, and no rain in the forecast. Sangchris is located just 15 minutes drive from Lake Springfield. CWLP and the City claim that there is huge unmet need for canoeing, kayaking, and fishing, yet Sangchris is clearly underused. On a fine summer weekend, I saw exactly two fishing boats on the entire lake. There was one couple bank fishing, and two small groups enjoying a picnic. I realize this is anectdotal, that there will be more at times. Nevertheless, this is not my first trip out to observe this exact same phenomenon. I arrived at approximately 2:30 p.m. and stayed for about an hour.

If there is an unmet need, it can be easily met at underutilized Sangchris Lake, Wedging another lake in between Sangchris and Lake Springfield is not going to help anything. The applicant has failed to demonstrate that Sangchris, standing alone, could not be an alternative for recreation.

Don Hanrahan Citizens for Sensible Water Use 4981 Smith Rd Pleasant Plains, IL 62677 <u>mail.cswu@gmail.com</u> 217-652-2639

Sent via the Samsung Galaxy S9, an AT&T 5G Evolution capable smartphone





Kelley, James C Jr CIV USARMY CEMVR (USA)
<u>Love, Angela; Elzinga, William J</u>
FW: [Non-DoD Source] PN 2016-0095
Tuesday, August 3, 2021 11:34:44 AM
PRN scoping comments July 2020.pdf

From: Clark Bullard <cwbullard3@comcast.net>
Sent: Friday, July 30, 2021 3:58 PM
To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Cc: Kelley, James C Jr CIV USARMY CEMVR (USA) <James.C.Kelley@usace.army.mil>
Subject: [Non-DoD Source] PN 2016-0095

I am forwarding the attached public comment from Prairie Rivers Network responding to PN 2016-0095.

Clark Bullard		
2206 Boudreau Cir		
Urbana IL 61801		

To: U.S. Army Corps of Engineers Attention: Regulatory Division – Allen Marshall

From: Mary Frances Squires 19 Turnberry Place Springfield, IL 62704 217-546 1900 - smaryfran@aol.com



A little over 50 years ago, my father's two small farms were taken due to eminent domain, in anticipation of building a new lake and providing the area with a continued water source. Along with many other owners, we did not want to give up this land, but it was taken anyway. It was a pretty wild time around here then – everyone was up in arms.

Here it is 50 years later and the lake is still an issue. It seems The Army Corps of Engineers is always deciding to do a new study. It would appear this surely is the 4<sup>th</sup> of 5<sup>th</sup> in past 50 years. I would think they should have gotten it right by now. From what I know of the area, the land footprint has not changed. The only thing that has changed is new engineers doing the study. Wonder if this is a study-project for them.

To repeat, while most land owners did not want to give up the land, it was taken anyway. So let's stop procrastinating and get on with building the lake. I would like to see it come to some fruition before I leave this earth.

From:	Kelley, James C Jr CIV USARMY CEMVR (USA)
То:	Love, Angela; Elzinga, William J
Subject:	FW: [Non-DoD Source] Public Comments Regarding Hunter Lake
Date:	Thursday, August 12, 2021 11:18:16 AM
Attachments:	image.png

**CAUTION:** External email. Please do not click on links/attachments unless you know the content is genuine and safe.

FYI-Another comment. Still going through these, more of these to come.

Jim Kelley Project Manager Eastern Branch Regulatory Division Rock Island District Corps of Engineers P.O. Box 2004 Rock Island, IL 61204-2004 309-794-5373 309-794-5191(fax)

From: Popkin, Trevor E CIV USARMY CEMVR (USA) <Trevor.E.Popkin@usace.army.mil>
Sent: Monday, August 9, 2021 8:18 AM
To: Kelley, James C Jr CIV USARMY CEMVR (USA) <James.C.Kelley@usace.army.mil>
Subject: FW: [Non-DoD Source] Public Comments Regarding Hunter Lake

From: Jennifer Satorius <jsatorius@gmail.com>
Sent: Wednesday, August 4, 2021 9:37 PM
To: CEMVR-OD Public Notice <<u>CEMVR-ODPublicNotice@usace.army.mil</u>>
Cc: Terri <<u>treacytt@gmail.com</u>>
Subject: [Non-DoD Source] Public Comments Regarding Hunter Lake

August 4, 2021

Regulatory Division - Mr. James Kelley U.S. Army Corps of Engineers Rock Island District Clock Tower Building PO Box 2004 Rock Island, IL 61204-2004

Re: CWLP - City of Springfield CEMVR-OD-P-2016-0095

Dear Mr. Kelly:

Menard County Trails & Greenways (MCTG) is responding to the public notice regarding the proposed Hunter Lake and the project specified above. MCTG is a non-profit organization in central Illinois that promotes the development and use of a network of land and water trails, such as the Sangamon River, for recreational purposes.

MCTG supports the improvement of existing resources, including the Sangamon River, for local residents to participate in outdoor aquatic activities. Designated in part as the Lincoln Heritage Canoe Trail by former Governor Otto Kerner in 1965, the Sangamon is a rich historical and cultural asset to the communities in central IL. Despite its designation as the state's first water trail, public access to the river - and its use - remains limited. Between Decatur and Oakford, IL, an approximate 100+ mile reach of river, only a handful of public access points exist. Compounding poor access are a number of unsafe low-head dams that impede recreation.

People want to be on the Sangamon River, evidenced by well-attended events that MCTG and other local organizations have held over the years, with permission from private landowners to access the river. MCTG hosts an annual fall paddle on the Sangamon and prior to this, the Lincoln Heritage Water Trail Association hosted an annual canoe/kayak race that drew participants from across the state. Improved and new public access points along the stretch of Sangamon that flows within the 50-mile radius anticipated to draw users to the proposed Hunter Lake would facilitate additional recreating on the Sangamon River, whether through organized events or private paddling. Enhanced public access, adequately funded and supported, would also facilitate wider appreciation of the river, thereby encouraging the conservation and sustainability of this historic river for the recreational enjoyment of generations to follow.

Jennifer Satorius Vice President, Menard County Trails & Greenways

c/c Terri Treacy, President, Menard County Trails & Greenways



From:	Kelley, James C Jr CIV USARMY CEMVR (USA)
То:	Love, Angela
Subject:	FW: [Non-DoD Source] City of Springfield proposed Hunter Lake project (Lake 2)
Date:	Monday, August 9, 2021 2:25:41 PM

-----Original Message-----From: Popkin, Trevor E CIV USARMY CEMVR (USA) <Trevor.E.Popkin@usace.army.mil> Sent: Monday, August 9, 2021 8:26 AM To: Kelley, James C Jr CIV USARMY CEMVR (USA) <James.C.Kelley@usace.army.mil> Subject: FW: [Non-DoD Source] City of Springfield proposed Hunter Lake project (Lake 2)

-----Original Message-----From: Joe McMenamin <joeforward7@aol.com> Sent: Friday, August 6, 2021 5:07 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [Non-DoD Source] City of Springfield proposed Hunter Lake project (Lake 2)

U.S. Army Corps of Engineers Regulatory Division Rock Island, Illinois

Dear Mr. James Kelley,

I am presently the longest continuously serving alderman on the Springfield City Council, serving since 2011. As such, I have followed the issues closely regarding the proposed Lake 2.

I am strongly opposed to the construction of a Second Lake. We do not need it to satisfy our water usage, and there are other pressing municipal needs we should finance with our finite resources.

Although well intended, I believe our current mayor's understanding of the facts is now significantly dated, especially regarding trends in current and future water usage. I plan to contribute to that discussion later after the EIS is issued.

Regarding the recreational justification for a second lake, I recently read Mr. Don Hanrahan's letter to the Editor published in Illinois Times. He is a respected local citizen who has studied the lake issues for decades. I understand he has submitted comments to the Corps. I fully endorse and agree with those comments.

Thank you for this opportunity to comment.

Very respectfully, Joe McMenamin Ward 7 Alderman Springfield, Illinois Sent from my iPhone The issues surrounding Hunter Lake has been discussed for decades. The Springfield Lake was originally constructed in 1935 to service the residents of the city. The surrounding communities were probably serviced by private wells, water districts and small community water systems. By 1950, Springfield city had a population of 80,832 and the county population was 130,649. By 2020, the city population has grown to 113,000 and the county 193,499. Today, many communities and water districts are serviced by waters from Lake Springfield for a total of 147,750 customers (not consumers).

Lake Springfield has a capacity of 17 billion gallons with consumption of 22 million gallons per day. At this rate, a total of 8 billion gallons is consumed in a normal year. With normal siltation, the capacity of the lake could be reduced over time. The lake level is maintained by the watershed that replenishes the lake level. In spring, the lake level has to be maintained by operation of the gates at the dam. Low rainfall throughout the summer and fall months reduces the lake capacity as well. In past, you could walk across the inlets and coves at low lake levels. Restrictions have been put into place over previous years that have caused residents grumble. Should Springfield experience a severe drought, the loss of water supply will be significant.

The lands that will be affected by the damming of Horse Creek will have no major impact on flooding the area. The concerns regarding the unincorporated area of Pensacola Township are unfounded. It has not been declared a State or National Historic Site. The only structure is the abandoned house of David Beam who died in 1850. There are numerous folklore stories about the house, but none substantiated by those who have reported thereon.

Finally, there is the cost to build and maintain a backup water supply. What doesn't cost? We have managed to keep the water flowing from Lake Springfield for 86 years. Treatment and water storage facilities been built to maintain services as Springfield has expanded into the smaller communities and farm lands. The quality of the water system has been maintained through chemical treatments. The delivery of water to the all consumers of Springfield has been cost effective.

The water level of the Lake Mead was 1225 feet in 1983. The level is approximately 150 feet below this level today. There is little chance of recovery. I don't want to see Lake Springfield resemble that picture. Build Hunter Lake! If you don't want to build it for me then build it for future generations.

## CITIZENS FOR SENSIBLE WATER USE 4981 Smith Rd

Pleasant Plains, Il 62677

Email: mail.cswu@gmail.com

Regulatory Division - Mr. James Kelley U.S. Army Corps of Engineers Rock Island District Clock Tower Building PO Box 2004 Rock Island, IL 61204-2004

Re: CWLP - City of Springfield CEMVR-OD-P-2016-0095

Dear Mr. Kelly:

This is in response to the public notice dated July 1, 2021 regarding the above project. The Corps previously recognized significant new circumstances and information relevant to environmental concerns raised by the proposed action, requiring preparation of a Supplemental Environmental Impact Statement, a process begun nearly 5 years ago. Since then, scoping has narrowed the list of considered alternatives. Good cause exists to reconsider alternatives previously eliminated, as set forth herein.

There have been dramatic changes in the proposed action itself: (1) a complete re-design, shrinking the size of the reservoir and adding two more proposed dams; creating a "backwash" area above the two new dams to hopefully filter phosphorus-laden sediment, and (2) changing the "purpose and need" to include "aquatic recreation," such as fishing, bird watching, hunting for aquatic bird species, swimming, boating, kayaking, canoeing, and water skiing.

We were not directly notified of the July 1 Public Notice. From now on, we request that all USACE public notices for Rock Island District be sent to us at the above physical and email address. A robust public debate requires that the deadline for comments be extended, as many members of the public do not subscribe to USACE public notices and the applicant failed to give the public notification that USACE was seeking comments until approximately July 23.

### I. <u>The SEIS has wrongly narrowed the scoping of alternatives.</u>

We have previously submitted scoping comments regarding the original "purpose and need" of the project for supplemental water supply. The regulations require that scoping remains a continuous process during the formulation of the SEIS, particularly where, as here, there have been subsequent changes to the design, the purpose and need, and the circumstances related to both demand and alternatives after the initial SEIS scoping. See 43 C.F.R. §46.235. The alternatives and changed circumstances / information set forth below require ongoing scoping reassessment pursuant to §46.235, adding and evaluating these clearly less destructive, cheaper alternatives, and critically reviewing their prior elimination. By way of example only, the
following eliminated alternatives need to be revisited:

# A. Gravel Lakes / Sangamon Valley Aquifer

The scoping process eliminated consideration of the gravel lakes, Sangamon Valley wells, the Sangamon River itself, and the South Fork watershed. The applicant's own studies have shown that the gravel lakes yield 9 mgd in the projected drought of record (i.e. the drought event giving rise to the "need" for supplemental water supply). This alternative was summarily dismissed in SEIS scoping based on the applicant's unsupported claim that the gravel lakes could only be used minimally without impacting South Sangamon Water District (SSWD) wells. The claim is true only if the applicant abandons common sense.

CWLP maintains a direct connection to SSWD water mains for emergency backup water. During a severe drought, there is no barrier, physically or politically, to CWLP agreeing to provide all water needed to SSWD (roughly 2 mgd ), then tapping into all of the 9 mgd available in the gravel lakes. Furthermore, the study that concluded the gravel lakes can provide 9 mgd deliberately failed to include the proximity of the Sangamon River (mere feet from the gravel lakes, and with a direct connection), which has an average flow of 70 mgd during drought-ofrecord events. Furthermore, the study ignored another obvious solution: simply drill SSWD wells deeper.

Excluding this alternative when the solution to the claimed problem is essentially a nocost intergovernmental agreement is contrary to common sense, let alone the intent of the regulatory scheme. USACE is responsible for determining the scope of the SEIS, not the applicant. It appears, however, that this alternative was excluded early in the SEIS process based on misinformation from the applicant. The extant physical connection between the two systems and a simple intergovernmental agreement for use of 9 mgd was wrongly excluded, effectively shutting down any further studies to determine the connectivity between the gravel lakes and the Sangamon River, or the efficacy of drilling wells deeper, or both.

Because SEIS scoping should be continuous throughout the SEIS process, changed and newly revealed circumstances and information strongly support USACE reconsideration of this alternative. The articulated basis for excluding it is unsupported by the evidence.

# B. Demand issues and other alternatives for water supply

# 1. Demand for water significantly reduced

Since the initial scoping, the applicant is retiring three of its four coal fired power plants. Collectively, they consume nearly 30 percent of the raw water taken from Lake Springfield. Alternatives that were dismissed because they do not meet the claimed "need" (not updated since the announcement of the power plant closings) need to be reconsidered, both separately and collectively, given the radically reduced demand for water occasioned by power plant retirements. We previously noted that the applicant again inflated demand, citing high population growth figures to come up with its alleged "deficit" in water, now projected at 8.2 mgd in the drought of record. Census figures obtained after the initial scoping, however, continue to show lack of population growth and even population declines, with no evidence of trend reversal in the future. This information justifies reconsideration of the projected "need" based on real population figures, not those unsupported by the census record.

# 2. Dredging Lake Springfield

The applicant persists in refusing to dredge its current reservoir, even though storage volume would increase by up to 20 percent, claiming that Lake Springfield cannot be dredged enough to achieve all of the claimed need. When combined with real conservation based water rate structures and other conservation measures (e.g., retrofitting old toilets and water wasting appliances, fixing leaking mains, etc.), dredging sufficient additional volume may obviate the need for supplemental water supply, particularly when considering revised demand. Dredging, moreover, will remove phosphorus-laden sediment, improving water quality for existing fishing, boating, and (if the city would re-open its shuttered public beach and beach house) swimming, thus impacting the new proposed "aquatic recreation" need at the same time. Finally, dredging MUST be done in any event at some point, and the costs will result in markedly increased water rates, which may further lessen demand and encourage conservation.

# 3. Lake Sangchris

Lake Sangchris was excluded from scoping because its water was "already allocated." Since the initial scoping, however, Vistra, the current owner of the Sangchris water supply usage, announced plans to retire its power plant at Kincaid by 2027. This entire 2,325 acre lake (average depth 13 feet), just a few miles from Lake Springfield, should be considered available as of 2027. Instead, it was summarily dismissed in scoping, despite the fact that water released from Sangchris could come straight down the South Fork a few miles to CWLP's existing pumping station. Sangchris is only a few hundred square acres smaller than the proposed project.

# 4. Sangamon River

The city gave up its previous permit for a temporary dam on the Sangamon that could divert water to the South Fork pumping station in a drought; this could easily provide needed water during the drought of record on a temporary basis, if needed, with far less environmental damage and minimal cost compared to building and maintaining a new lake. Climate models indicating that such a drought is even less likely make such an alternative attractive, as it may never need to be deployed at all.

# II. <u>Recreation "Need" is not established</u>, and better, cheaper, less destructive alternatives exist.

# A. Issues with Recreation Needs Study

The applicant commissioned a study purporting to show "need" for aquatic-based

recreation, including swimming, fishing, canoeing and kayaking, and waterfowl hunting, needs they contend can best be met at the least cost and least environmental damage by the proposed project. The study included both flat water and river/stream water-based activities, confusing the issue of what exactly is "needed" from a flat water lake and what can be satisfied with extant rivers and streams. For example, would canoeists and kayakers have a "need" for flat-water recreation if access was expanded on the Sangamon and Illinois Rivers, or if the two existing streams in the project land were opened to the public?

The claimed need was justified on the basis of respondent surveys. A majority of respondents indicated the main obstacles to their pursuit of water-based recreation was not lack of a lake, but rather their own lack of time, interest, health or proper equipment. The study does not show that a third lake within 15 miles of two existing lakes would affect the majority of the survey respondents whose needs cannot be met except by increasing their interest, improving their health, increasing their available time, or providing equipment they lack. The need, if there is one, may be met by a facility that rents canoes and kayaks on existing lakes (Lake Springfield, Sangchris, or even the nearby gravel lakes) and streams (e.g., the Sangamon River, Horse Creek, Brush Creek). The applicant's study cites no evidence that existing Lake Springfield, Lake Sangchris, or any other local water based recreation facility is overused, or if they were, that the project is the best way to relieve it. The applicant and its study produced no evidence that the survey respondents would actually use a new lake for recreation given those who cited lack of time and equipment preventing utilization, and the vast majority who reported being satisfied with the status quo.

# B. Alternatives for recreation

# 1. Swimming

The applicant claims the study demonstrated need for lake-based swimming, and justifies a massive dam building project to meet such need. Since 2008, the applicant has failed and refused to open its existing public beach at Center Park on Lake Springfield. When the applicant closed this facility, they cited declining use, poor attendance, losing money, and excessive maintenance costs, after previously closing Bridgeview Beach for similar reasons.<sup>1</sup> The applicant still has not opened its public beaches, even after receiving the study purporting to show a need. Under these circumstances, the applicant's claims of an unmet need so immense that a whole new lake has to be built should be viewed with great skepticism. Alternatives to Hunter Dam: Open shuttered beaches, or build new ones at Lake Springfield and at the Clear Lake gravel lakes. The public is more likely to utilize a conventional city pool, which can be built at existing parks or easily acquired land within the city for a few million dollars.

# 2. Fishing and boating

Similarly, the applicant urges a "need" for more fishing and boating to justify the project.

<sup>&</sup>lt;sup>1</sup> See Illinois Times, "On the Beach," July 2, 2008, available at: https://www.illinoistimes.com/springfield/on-the-beach/Content?oid=11446653

The applicant, however, can implement a simple, feasible alternative: Acquire additional Lake Springfield shoreline (through the simple expedient of not renewing existing shoreline leases, or paying for early terminations), and then build new access points for such activities. CWLP has only seven boat launches on Lake Springfield, but has submitted no evidence of overuse either of existing launches or of Lake Springfield itself. Furthermore, for the past 50 years, the applicant could have provided for canoeing and kayaks at the Hunter Lake site, which contains two creeks, to accommodate public use when the streams are flowing. The applicant has only one boat launch at Riverside Park on the Sangamon, and again has submitted no evidence that it is overused, nor any evidence of impediment to building additional facilities at its Riverside Park.

# 3. Other alternatives

The proposed change in purpose and need to include aquatic recreation assumes without evidence that flat water recreation is superior to all other recreation, including land based and other stream based recreation that could take place now on the 7000 acres of land the applicant acquired for the project. Discussion of alternatives should not be limited solely to aquatic recreation alternatives, but must include all needed recreation alternatives to the proposed project.

Stream based aquatic recreation is presently available in this land as it exists on Horse Creek and Brush Creek, but the applicant refuses to allow public access. The applicant thus deserves little credence in claiming recreational need, having forcibly kept the public from having any effective access to this land, which could have been used for the past 50 years for needed hiking, biking, camping, hunting (including waterfowl hunting, but also upland game, deer, etc.), bird watching, horseback riding, stream fishing, stream kayaking and canoeing, zip lines, ATVs, and more. The existing land without a dam can serve both aquatic and land based recreational needs at far less cost and far less environmental impact, and preserves the land intact should unforeseen need force its reconsideration as a reservoir in the future.

Similarly, the applicant presently excludes members of the public from using its large gravel lake, reserving it all for one private club. This publicly owned aquatic resource, as well as additional large gravel lakes in the same area, would be ideal for a public beach, boat launches, and other aquatic recreation (e.g., zip lines); recreational use can be implemented without the immense cost and environmental degradation proposed by the applicant's project.

The applicant also has a public park (Riverside Park) on the Sangamon River. There is no evidence of overuse of the Sangamon River for canoeing or kayaking, but if there was, additional boat launches, fishing areas, and other aquatic recreation facilities can be added to the solitary site at Riverside Park.

The applicant assumes, without proof or evidence, that the proposed project can meet the claimed needs for swimming, hunting waterfowl, and boating. Even assuming that "need" has been established, the very design of the project is that impounded water in the project lake is released into Lake Springfield, causing immense fluctuations in the water level of the project lake. The applicant must be forced to supply proof that the project will be the best alternative for

fishing, swimming, and boating even with projected swings in pool depth of four to seven feet in normal years, and up to nine feet and more in dry years.

# III. Conclusion

The USACE seeks comments particularly related to alternatives for the claimed "aquatic recreation" need. Because of massive changes in the project itself (including a complete redesign of the project) and because of changed and changing circumstances and information surrounding demonstrated need for water supply, USACE needs to reconsider alternatives wrongly eliminated by earlier scoping before addressing recreational need.

In addressing recreational need, the flaws of the Recreational Needs Study need critical review by USACE. The applicant must be required to demonstrate actual need, not speculative needs of people who lack time and equipment to engage in preferred activities. The applicant must explain its claimed need for lake-based swimming, belied by its articulated basis for closing its public beach(es), and explain why, if there is such an immense need, it has failed to reopen the beaches this year, after receiving the survey results. The applicant has to show not just need, but that the proposed project can best meet that need at the lowest cost and with the least environmental impact. The USACE should view with skepticism claims of need from this applicant, which has at hand the means to greatly improve access to swimming, boating and hunting, and other recreation with existing facilities, land, and water, but has done nothing to alleviate any claimed need in the months since the study was released, and has produced no evidence of overuse of existing lakes, streams and rivers within 50 miles of Springfield.

Multiple alternatives to the project exist to achieve superior land and stream based recreation. There is no evidence to support destruction of existing land and stream based recreation to provide only lake based recreation, nor any evidence that extant facilities cannot accommodate need with expanded facilities. Alternative forms of meeting recreational need can be implemented without the immense costs (both fiscal and environmental) of the proposed project. Aquatic recreational needs for swimming, boating, and fishing can be met by reopening or expanding existing city-owned facilities on Lake Springfield, at Riverside Park, and at the city-owned gravel lake.

Submitted by: Donald Hanrahan, CSWU

To the Army Corps of Engineers

## 8/5/21

Thank you for the opportunity to express my comments regarding the need for the proposed Hunter Lake. The reasons cited by some City of Springfield officials for Hunter Lake are for a secondary water source and for additional recreation. I am not in favor of Hunter Lake for a number of reasons. First of all, as far as the need for a secondary water source due to possible drought, according to Trent Ford of the Illinois Water Resources Center based in Champaign through the University of Illinois, our climate here in this area has been getting wetter by about 5 inches for the whole year based upon records kept since the 1880's. Also, according to Trent Ford at the Illinois Water Resources Center, if the proposed new reservoir is undersized or poorly designed, it could actually exacerbate our problems. There was a substantial drought period in the early 1950's. There have been periods of mild to moderate drought of limited duration here in the Springfield area in 1988, 2005, and 2012. Having lived here during these drought periods, it did not seem to affect the average citizen's water usage other than not being allowed to water lawns daily for a period of time, etc. It would seem that by simply dredging Lake Springfield more often it would increase our water capacity substantially. The last time Lake Springfield, our current water source, was dredged was in the 1980's, and only part of the Lake was dredged at that time. I grew up on Lake Springfield, and my parents lived there for 33 years.

The other two options for a secondary water resource that have been considered in past studies would be far less expensive than Hunter Lake, and would not involve the destruction of thousands of acres of historical farms, woods and forests, creeks and streams and cemeteries. Springfield has lost some population in the past few years. Although a great place to live, we are not growing by leaps and bounds. The potential water rate increases to cover the costs of maintaining a second lake, let alone building it, could be a financial burden to current citizens on fixed incomes, retirement and disability incomes, poor and disadvantaged citizens, and may be a deterrent to people wanting to move to the area.

According to the City, Water, Light and Power website in the section detailing Park information, Lake Springfield has eight public parks with 35 picnic areas, two recreation buildings, six softball diamonds, horseshoe pits, a volleyball court, and numerous playgrounds, and a wildlife preserve and trails. These areas are often not being used much, and some not at all, during the week, and many are sparsely used on the weekends outside of holidays or special events. I often take a drive around the perimeter of Lake Springfield, and for several days in a row this past week saw fewer than 5 boats out on the lake for the entire drive. There are more boats on parts of the lake on some weekends, but there are still wide open areas and plenty of room for all. We had a public beach with lifeguards, with a building called the Beach House where people could change clothes, shower, buy snacks, etc, for many decades, but City Officials announced that they were closing the Beach a few years ago due to lack of interest and use. There have been letters to the editor of our newspaper to reopen this public beach, but the City has declined. There are two public boat launch areas with ample parking, one at Lindsay Bridge and the other at Lake Springfield Marina. If there is truly a need for more public boat access, then simply expanding the current boat launch areas could be a help, or open additional sights on their currently owned property. Lake Springfield Marina offers two public launch areas that are always available. They also offer dry and water storage of boats, and boat rentals including pontoon boats, ski boats, jet skis, kayaks, canoes, etc. In addition to the City, Water Light and Power owned and managed parks and facilities, the lake area has Henson Robinson Zoo, Lincoln Memorial Garden and trails, Lincoln Greens Golf course, and the Muni Opera an outdoor theater. There are also numerous private clubs on Lake

Springfield offering food and dining, with beach areas for swimming, and some offering boat storage and sailing opportunities.

Sanchris Lake State Park (Dept. of Natural Resources) is just minutes from the proposed Hunter Lake and is minutes from southeast Springfield. This park totals more than 3000 acres with 120 miles of shoreline and 3 boat launches. Sanchris Lake State Park has fishing, boating, camping, hunting, family gathering areas, hiking trails and equestrian trails, and an area for dog training. There is a KOA campground near Joe Brunk cemetery in the proposed Hunter Lake land as well. With all of these opportunities, many of which are underutilized, it is hard to justify the need for an additional lake for recreational purposes.

There is so much rich history in the farms that were bought up for the proposed Hunter Lake. These pioneers were among the first settlers to this part of the State. It is all well documented in historical books, documents, and genealogical books. My great great grandfather Issac Keys came here in 1818 from Ohio and built a log cabin, coming back periodically to build a home, and then officially purchased the land (240 acres) from the U.S. government in 1824. Official records show that the two pieces of land totaling 240 acres were the 4<sup>th</sup> and 5<sup>th</sup> land transfers of land from the U.S. government. This was before Sangamon county had been created. This home and farm were in my father, Harvey Beam's maternal side of the family for 3 generations (Keys, Nave and Beam). The farm was bought out for Hunter Lake many years ago, and the home and historical log cabin allowed to become dilapidated. It is hard to know if the home and barn still stands as trees and weeds are so overgrown at the front entrance which is along Lake Services Road. My father grew up on this farm, and I often visited as a child. As a boy, my father collected numerous Indian arrowheads and axe heads from their fields each spring when they plowed. On his father's side of the family, the David Beam farm is located next to the Pensacola stagecoach stop which still partially stands. David Beam had a grain mill and allowed Native Americans to use it to mill their grains. He was also a justice of the peace for many years, and died in the 1850's. Many of my relatives are buried in the Joe Brunk Cemetery which is in the proposed Hunter Lake area. My great uncle left an endowment upon his passing for the upkeep of the cemetery. Not only are there many historic graves there, but also plots that are still for sale and bought, and there have been recent burials. The cemetery is well maintained and kept up in immaculate condition. I will forward pictures to you of the Joe Brunk cemetery taken 2 days ago. I am deeply saddened and concerned about the decimation of this cemetery because of Hunter Lake. How could all of these graves be moved and to where?

Several years ago I approached the person in charge of overseeing these CWLP properties at the time. She and I had served together on the Board of Directors of Springfield Audubon Society. When I told her about all the information and documentation that I had about the farm and early history of the area, she was excited about it. She told me that many history students from our nearby local University often called CWLP with questions about the history and stories behind the CWLP owned land. CWLP had scant if any information about much of the land. Unfortunately, she retired early and moved out of state before we could get together about it. In conclusion, to me it seems that the demand is truly not there for Hunter Lake. The other two alternatives for a secondary water source outlined in past studies would be cheaper, and far less destructive, and still meet any claimed needs. Thank you again for the opportunity to express my views.

Lisa Beam

Email address – lisabe855@gmail.com

Home Phone – (217) 546-5224

This purpose of this public notice is to solicit comments on the proposed project

POC: James Kelley, Telephone: 309/794-5373 cemvr-odpublicnotice@usace.army.mil

POPKRWS.



US Army Corps of Engineers

> Applicant: City of Springfield-City Water, Light & Power

REVOK

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Date: July 01, 2021 Expires: July 30, 2021

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Received

7/9/21

Change of the Project Purpose and Need to include Aquatic Recreation for the ongoing Draft Supplemental Environmental Impact Statement (DSEIS) for the Springfield Supplemental Water Supply Project

1. Applicant: City of Springfield, City, Water, Light & Power, 800 East Monroe, Springfield, Illinois 62757.

2. Project Location: IL-New City and Pawnee USGS quad sheets in Sangamon County, Illinois.

3. Summary: The United States Army Corps of Engineers (Corps) is preparing a Supplemental Environmental Impact Statement (SEIS) to address the proposed Springfield Supplemental Water Supply and Aquatic Recreation Project (previously referred to as the Springfield Supplemental Water Supply Project) in Sangamon County, IL.

# 4. Supplemental Information:

A. The City operates an integrated water supply, purification, transmission, and distribution system. The City's service area encompasses approximately 100 square miles with more than 52,600 service connections and a population of about 147,000. The City's current source of water is Lake Springfield which was constructed in the 1930's. The lake serves as the water source for the City's drinking water supply and the cooling water supply for the City's coal-fired power generating station. As a result of drought conditions in 1953-1955, the City constructed a movable low head dam across the South Fork of the Sangamon River to supplement the Lake Springfield water supply during low lake levels.

B. On July 26, 1989, the City submitted a joint permit application for the construction of the Hunter Lake Reservoir to the Corps and the Illinois Environmental Protection Agency (IEPA). A Notice of Intent to prepare a Draft EIS for the construction of the Hunter Lake Reservoir was published by the Corps in the Federal Register on October 31, 1989. The Corps, working in conjunction with the City of Springfield, Office of Public Utilities, also known as the City Water, Light & Power (City), prepared an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969 [42 USC §§ 4321 *et. seq.*] that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. A final EIS was prepared and published in

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# WRITTEN COMMENTS PUBLIC NOTICE CEMVR-OD-P-2016-0095

# ATTENTION MR JAMES KELLEY, PROJECT MANAGER

# EASTERN BRANCH REGULATORY DIVISION.

In response to the Public Notice on this project. Notice was not sent to all parties involved or has interest in the project. The notice was addressed on July 01.2021amd time stamped on July 14, 2021. The expiration of the notice is July 30, 2021. The notice did not arrive until around 7/20/21.

The notice is to inform us of a Change of the Project Purpose and Need to include Aquatic Recreation for the ongoing Draft Supplemental Environmental Imapact Statement (DSEIS) for the Springfield Supplemental Water Supply Project. ACE is drafter another SEIS to address the the proposed Springfield Supplemental Water Supply and Aquatic Recreational Project. The original Notice of Intent to prepare a Draft EIS for the construction of the Hunter Lake Reservoir was only for a supplemental water supply. It was dated on Oct. 31, 1989. The EIS was prepared. Afinal EIS was prepared and published in Nov. of 2000. The Final EIS was published in the Federal Register on Nov. 24, 2000.

A public hearing/meeting was held. The attending people were provided with copies of the FINAL ENVIRONMENTAL IMPACT STATEMENT. The meeting was held, as I recall at the U of I Spfd. Auditorium. Many issues were raised and basically not answered. The meeting ended and we did not have hear anything more about the matter for a while.

A PUBLIC NOTICE OF 12/3/08 NOTES THAT THE NOTICE WAS THE SAME NOTICE THAT WAS DATED 5/31/07 <del>6/29/07. The</del> notice is identified a CEMVE0ODP-2007 -327 Joint Public Notice, US Army Corps of Engineers Illinois Evvironmental Protection Agency Illinois Department of Natural Resources/Office of Water Resources. It was for the Hunter Lake Project. This notice goes into greater detail than this one. A public scoping meeting was held in Springfield on Dec. 5,1989. The Draft Environmental Impact Statement was published in the Federal Register on April 23, 1999. The Final Environmental Impact Statement was published in the Federal Register on Nov. 24, 2000. Aregulatrry public hearing was held on February 26, 2001 in Spfld. Illinois . All informatin received from agencies, organizations, and individuals during public review of the permit application DEIS, and FEIS has been considered as part of the Corps' public interest review.

Item 6. Project changes since the FEIS was published , there have been some changes in the proposed project. Up dated Alternatives Analysis. The updated demand analysis shows a demand for 10 to 12 million goallons of water per day(mgd) to satisfy the revised need. ( I will provide a copy of the full notice rather than going over each section. I will not the note the Joint Sewer Pipeline. The city proposed to pipe wastewater from these three munipalities to the Springfield Metro Sanitary District for treatment. The pipeline will begin at Virden, extend northeast to Divernon along rural roadways, then east along Illinois Route 104 to Pawnee, and extend norty to lake Springfield anIng East Lake Shore Drive and Rochester Road. ( I have to say to counter this plan, one the villages will not go along with this plan and for the less money a pumping station to pump water from any one of the gravel pits to the South fork pumps and pump water into lake Spfld. This alone would provide the amount of water needed to supplement lake Spfld with water. In all likelyhood much less pipe would be required. Pumping from the upper level Buckhart pit would only require about 4 milis of pipe to bring the water to the South Fork or the streams that gravity flow down to the river.)

To my knowledge the sewage treatment water problem has never been resolved. This notice also points out a proposed Horse Creek Relocation/Levee Construction near the Pawnee High School football field. This is another point of contention that has never been resolved. The PUBLIC NOTICE OF 7/01/21 does not provide the information to allow the public to address many of the prior issues. I was discovered that the the projects figures were off by around 1 billion gallons of water. The public was advised that in fact that they were going to reduce the project down about 10%. This created a substantial change in their project which should require a full hearing on the matter. The issue of piping the sewage water was raised and we were advised that they were working on it. We never heard anything more from them until this notice.

The notice does not provide the required information to determine how much water would be in the newly designed lake. They do not provide the average depth which is needed to calculate the total cubic foot acreage in the lake. They failed to provide the mean sea level of the newly designed lake. They failed to diagram the footprint of the new design. Does it back up to or near the Pawnee School district. Without this information we cannot address any of the previously raised issues.

Because they have failed to assist the public in fully understanding their plans I am requesting a full public hearing. The applicants have spread the matter out for at least 22 years. Many of the issues were never addressed. This includes such things as major changes effecting this project. The city has shut down or in the process of shutting down their 3 older coal fired power plants. They account for 5 mgd of water used to cool down the units. The heated water increases evaportion from out of the lake . This loss will no longer exist. They have failed to address the evaperation from the proposed lake. The proposed lake provides an additional evaporation pool. The proposed lake is a zero flow imput of water and the evaportion removes water that is being pumped from out of the S.Fork into the footprint of Lake Spfld. Because the water is being stored in an area that the evaportaion is occurring. The stored water will not loose any additional water. However so long as the proposed lake has water in it that is being evaporated that is additional water being lost. This is at least 7 to 10 or more million gallons a day.

The 2 water loss areas amount to more water than what they claim that they need. Any one of the alternate plans that I have submitted would be able to provide more water than what they have claimed to need. The city has repaired their lake flood gates and save 700,000 gallons per day. I do not believe that when they calculated the water available during a drought that they had changed their management of the lake. I believe that they no longer draw the lake down in the fall by 2 feet in prepartaion of spring flooding. This provides them with additional 5 million gallons a day. Their published information informs us that during the drought of 2000 2.1 billion gallons of water was pumped from out of the S. Fork of the river into lake SpfId from the begging of the year to May. Since this is not for a full year of pumping then the gpd the the pumped water amounts to will be somewhere around an addition 10 or more million gallons a day. This isn't all of the available water that can be used but must be properly addressed.

As for recreation and the need for additional recreation. The problem is not that there isn't enough acres available it is more of an economic problem Presently our society is facing a gloomy economic future. This applies to all levels of income. More directly the lower incom people will not be able to afford many or most of the recreatonal items listed in the study. If they want to assist the city could arrange for people to be able to rent canoes or kyaks or even fishing gear. As for swimming they can open up and enhance their closed public beach. They can reduce the cost to use public swimming pools. The proposed lake is a smaller lake and will not allow larger power boat to be used on them.

Additonal water and recreation can be found at Lake Sancris, Clinton and Shelbyville. The first 2 have a good chance of having their power plants being shut down. They can be purchased and used as backup water for Spfld and Decatur by using pumps to pump the water up and into the gravity flow streams and rivers to move the water into the lakes that are for public water supplies.

> Larry E. Daily 341 N. Park Rochester Illinois , 62563

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TEMOTHY J SAVIES. MAYOR



By May, due to months of low rainfall, the lake level is nearly six feet below full pool and would be much lower if not for the 2.1 billion gallons pumped from the South Fork since the beginning of the year. For the first time since 1988, the City Council restricts water use.



As in the mid-1950s, a drought in 2000 shriveled much of the lake to the size of its original creeks (background), leaving vegetation to flourish in the dried lake bed.

As part of its overall emergency water supply plan, CWLP seeks a permit from the IEPA to build a pipeline to recycle up to 6 MGD of water from the ash ponds to the lake.

Heavy rains in late June and early July end the drought. By July 12, the lake reaches full pool and water restrictions are lifted.

The drought renews public interest in building 540 × 6 = 3. 24 BR Hunter Lake. CALL

# 2002

Mother's Day weekend flooding raises the lake to 561.8 feet. Once again, sandbagging protects the water system pumps in the Lakeside Power Station basement.

## 2004

CWLP issues \$11.4 million in water revenue bonds to finance needed upgrades to the water system, including replacement of the five original Spaulding Dam gates, which have deteriorated to the point that optimum control of lake water levels is compromised.

Although a new sedimentation study indicates the lake's capacity has dropped to 16.7 billion gallons. the rate of capacity loss is slowing compared to the previous study.



During the Mother's Day 2002 weekend, Springfield received 4.79 inches of rain, causing significant flooding and forcing the release of 14.7 million gallons of water, equal to 88% of Lake Springfield's total volume, from the lake.

AND

## 2007

RRASON WE NEED In November, a catastrophic explosion at the lakeside Dallman Power Station sends oil into the lake, forcing a months-long clean up effort. Quick action to isolate and recover the oil keeps the SUING CAM OLA AZUMA DAM, drinking water supply safe.



(LEFT) Workers use blow torches to disassemble an old dam gata A temporary steel wall seen behind the seated worker, has been erected to keep lake water from rushing through the dam opening during the gate replacement.

WANEN MENTRON

This purpose of this public notice is to solicit comments on the proposed project.



**US Army Corps** 

of Engineers Rock Island District

# PUBLIC NOTICE

Applicant: City of Springfield

Date: December 3, 2008 Expires: January 5, 2009

Section: 404

CEMVR-OD-P-2007-327

Joint Public Notice US Army Corps of Engineers Illinois Environmental Protection Agency Illinois Department of Natural Resources / Office of Water Resources

➔ NOTE: This Public Notice is the same notice that was dated May 31, 2007 – June 29, 2007.

1. Applicant. City of Springfield, Office of Public Utilities, 800 East Monroe, Springfield, Illinois 62757.

2. Project Location. The 3,010-acre Hunter Lake reservoir is proposed to be built southeast of the existing Lake Springfield and north of Pawnee in Sangamon County, Illinois. The reservoir would be formed by constructing an earthen dam on Horse Creek, a tributary to the South Fork of the Sangamon River, in Section 31 of Rochester Township.

- Sections 31 and 32, Township 15 North, Range 4 West; Sections 4, 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 29, 30, 31, and 32, Township 14 North, Range 4 West; Sections 12, 13, 14, 23, 24, 25, 26, 35, and 36, Township 14 North, Range 5 West; Sections 2 and 3, Township 13 North, Range 5 West; Sections 5 and 6, Township 13 North, Range 4 West; near Springfield, Sangamon County, Illinois; Horse Creek.
- Datum NAD-83. UTM Zone 16, Northing 4 398 719.452, Easting 279 049.080 (dam location).
- Latitude: 039.7098. Longitude: -089.5774 (dam location).

# 3. Project Description.

a. In 1989, the City of Springfield, Illinois (the City), acting through its municipal utility, City Water, Light and Power (CWLP), applied for a Department of the Army permit for placement of fill material for a dam in Horse Creek to construct a new municipal water supply reservoir (Hunter Lake) near Springfield in Sangamon County. The 3,010-acre Hunter Lake reservoir is proposed to be built southeast of the existing Lake Springfield and north of Pawnee in Sangamon County, Illinois. The reservoir would be formed by constructing an earthen dam on Horse Creek, a tributary to the South Fork of the Sangamon River, in Section 31 of Rochester Township. The resulting reservoir would inundate portions of both Horse Creek and Brush Creek; the confluence of these creeks being within the project area. The 3,010-acre reservoir would hold 15.3 billion gallons of water with maximum and average depths being 46 feet and 14.6 feet, respectively. Preliminary engineering design calls for a 1,700-foot earthen dam with a 325-foot fixed crest principal spillway and 400-foot emergency spillway flanking the dam on opposite sides. Borrow material for the dam embankment would come from excavation of the principal and emergency spillways and from within the proposed pool area.

b. Impacts to aquatic resources resulting from the proposed Hunter Lake (below normal pool elevation of 571 feet msl) total approximately 194 acres (approximately 102 acres of wetland, approximately 88.3 acres of the channels of Brush Creek and Horse Creek and their tributaries, and approximately 4 acres of ponds).

c. Mitigation.

- The City proposes a 2:1 mitigation ratio for forested wetlands replacement, which would require approximately 156 acres
  of wetlands be created/restored and permanently dedicated to a conservation easement.
- Affected wetlands constituting abandoned ponds with littoral fringes of vegetation, emergent wetlands, shrub-scrub
  wetlands, and farmed wetlands comprise approximately 24.2 acres. It is proposed that these wetlands be mitigated
  with the creation of new emergent wetlands at a 1.5:1 replacement ratio.
- The Hunter Lake pool will inundate approximately 1526 acres of nonwetland forest resources. Approximately 1531 acres of existing croplands will be planted in mast producing upland forest species (white, red, black, and post oaks; shagbark, pignut, and mockernut hickories; and green ash) (approximately 150 acres of trees will be planted each year for 10 years). Another 890 acres of crop fields bordering the Hunter Lake pool will be allowed to develop wildlife habitat cover through natural succession.
- Currently, there are no prairie areas located in the project area. Two large prairie restoration areas (124 acres and 128 acres) are proposed.
- Vegetated habitats would border virtually the entire lake perimeter and result in some 4,700 acres of permanently
  dedicated wildlife habitats around the 3,010 acre reservoir.

### d. Background.

- The proposed project was described in a public notice issued by this office on November 8, 1989 (CENCR-OD-S-187020).
- A public scoping meeting was held in Springfield on December 5, 1989.
- The Draft Environmental Impact Statement was published in the Federal Register on April 23, 1999.
- The Final Environmental Impact Statement was published in the Federal Register on November 24, 2000.
- A regulatory public hearing was held on February 26, 2001, in Springfield, Illinois.
- All information received from agencies, organizations, and individuals during public review of the permit application, DEIS, and FEIS has been considered as part of the Corps' public interest review.

e. <u>Project changes since the FEIS was published</u>. Since the FEIS was published, there have been some changes in the proposed project.

- Updated Alternatives Analysis. The updated demand analysis shows a demand for 10 to 12 million gallons of water per day (mgd) to satisfy the revised need. The demand analysis summarized in the FEIS showed a demand for 15.3 mgd. CWLP provided a revised alternatives analysis based on this updated information. The revised analysis reconfigured the FEIS alternatives based on a 12-mgd yield. The reconfiguration reduced the number of alternatives that combined two or more supply sources and added one single source alternative. Based on this analysis, the Hunter Lake alternative remains CWLP's preferred alternative.
- Joint Sewer Pipeline. During the initial review process, there was concern regarding the water quality effects of the existing wastewater treatment effluents from the municipalities of Virden, Divernon, and Pawnee into tributaries and streams of Brush and Horse Creeks which create the proposed Hunter Lake. To address this concern, CWLP has proposed to pipe wastewater from these three municipalities to the Springfield Metro Sanitary District for treatment. The proposed pipeline will be 29.6 miles long which will include 18 stream crossings. The pipeline will begin at Virden, extend northeast to Divernon along rural roadways, then east along Illinois Route 104 to Pawnee, and extend north to Lake Springfield along East Lake Shore Drive and Rochester Road. Almost the entire length of the proposed pipeline will be constructed along existing roadways and railways. The pipeline corridor crosses Brush Creek at two locations, nine crossings of tributaries to Brush Creek, three crossings of tributaries to Horse Creek, and four crossings of tributaries to Sugar Creek. A 400-foot-wide construction corridor was evaluated for the sewer line. Wetland impacts are estimated at 33 acres.
- Horse Creek Relocation / Levee Construction. The City of Pawnee expressed concerns of increased flooding. CWLP has proposed channel modifications to Horse Creek and Henkle Branch in the Pawnee area to alleviate Pawnee's concerns. This includes the relocation of a 0.92-mile-long segment of Horse Creek, the widening of Horse Creek and Henkle Branch, and the possible construction of a levee between Pawnee High School and Horse Creek. Wetland impacts are estimated at 5 acres. Stream impacts total about 4850 feet. Material excavated for the new channels will be used in the channel relocation and in levee construction.

- The project will impact approximately 4050 feet of Horse Creek from about 1500 feet south of Illinois Route 104 to about 1800 feet north of Illinois Route 104 and approximately 800 feet of Henkle Branch at its confluence with Horse Creek. About 600 feet of new channel will be constructed to improve the drainage of Horse Creek and replace about 850 feet of the existing meandering channel east of Pawnee High School. The abandoned channel will remain as wetland habitat. About 1800 feet of Horse Creek upstream of the proposed channel relocation, about 1400 feet of Horse Creek downstream of the proposed channel relocation, and about 800 feet of Henkle Branch will be widened. The channel bottom will be widened from the existing 20 feet to about 40 feet.
- The proposed levee between Pawnee High School and Horse Creek levee will be approximately 1350 feet long, 80 feet wide at the base, and 10 feet high. It will be constructed using excavated material from the construction of the new stream channel. If the levee is not constructed, the material excavated from the channel will be spread along a 50-foot-wide corridor along Horse Creek.
- <u>New Gas Transmission Line</u>. A new gas transmission line to be constructed by Rockies Express Pipeline Company LLC will span 622 miles from central Missouri to eastern Ohio. The intended route through Illinois will traverse the Hunter Lake project area paralleling the southern-most existing gas transmission pipelines already in the area.
- <u>Addition of a Bridge on Road 3.5 E</u>. The Sangamon County Highway Department plans to replace the bridge over the small drainage on Road 3.5, immediately north of the Horse Creek Cemetery. This road, initially planned for closure, will not be closed. The construction of this bridge will impact approximately 1 acre of the proposed emergent wetland mitigation site near the proposed bridge. To compensate, the far north-western 12-acre emergent wetland mitigation site in Section 14 of Ball Township will be increased by one additional acre.
- <u>New Bridge constructed on New City Road at Horse Creek</u>. The Sangamon County Highway Department has completed construction on the replacement of the New City Bridge over Horse Creek. It was constructed to alleviate any impacts associated with the construction of Hunter Lake.
- <u>Wetland Mitigation Plan Amended</u>. A wetlands mitigation team of various resource agency members (US Fish and Wildlife Service, US Environmental Protection Agency, Illinois Department of Natural Resources, Illinois Natural History Survey, and Corps of Engineers) and CWLP was formed after publication of the FEIS to clarify and quantify the wetland mitigation plan. The following summarizes those findings:

Wetland Type	Existing	Recommended	Actual compensation
	acreage	Mitigation ratio	acreage
Palustrine forested	77.8	2:1	130.6
Palustrine emergent	8.9	1.5:1	14.0
Wet meadows			25.0
Scrub shrub	6.8	1.5:1	10.2
Unconsolidated bottom	5.7	1.5:1	8.6
NRCS farmed wetlands	2.8	1.5:1	4.2
Waters	92.3	1:1	3,025,2
Lacustrine wetland fringe			
(95 miles @ 6 foot-wide fringe)	0		69.1
Flooded timber			250.0
Wellands preservation (253.4 acres)		10% credit	25.3
Lake upland buffer (4460 acres)		10% credit	446.0

Total Compensation Summary	Acres
Created Wetlands	192.6
Waters of the US	3,025.2
Wetlands Preservation (10% of 253.4 acres)	25.3
Hunter Lake Upland Buffer (10% of 4460 acres)	446.0
Total	3,689.1

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NOTE: All regulatory processing will be under the currently assigned number (CEMVR-OD-P-2007-327). All previous correspondence will be considered in the decision-making process.

## 4. Agency Review.

a. <u>Department of the Army, Corps of Engineers</u>. The Department of the Army application is being processed under the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344). The Corps of Engineers is neither a proponent nor an opponent of this proposal by the City of Springfield. Permit decision options available to the District Engineer are: (1) issue the permit;
 (2) issue the permit with modifications or conditions; or (3) deny the permit.

#### b. State of Illinois.

(1) The applicant has applied to the Illinois Environmental Protection Agency (IEPA) for water quality certification, or waiver thereof, for the proposed activity in accordance with Section 401 of the Clean Water Act. Certification or waiver indicates that IEPA believes the activity will not violate applicable water quality standards. The review by the IEPA is conducted in accordance with the Illinois water quality standards under 35 Illinois Administrative Code Subtile C. The water quality standards provide for the IEPA to review individual projects by providing an antidegradation assessment, which includes an evaluation of alternatives to any proposed increase in pollutant loading that may result from this activity. The "Fact Sheet" containing the antidegradation assessment for this proposed project may be found on the IEPA's web site, at <a href="http://www.epa.state.il.us/public-notices/">www.epa.state.il.us/public-notices/</a>. In the event that the IEPA is unable to publish the "Fact Sheet" corresponding to the timeframe of this Joint Public Notice, a separate public notice and "Fact Sheet" will be address or telephone number shown below. Written comments specifically concerning possible impacts to water quality should be addressed to: Illinois Environmental Protection Agency, Bureau of Water, Watershed Management Section, 1021 N. Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276. A copy of the written comments should be provided to the Corps of Engineers. If you have any questions, please contact IEPA at (217) 782-3362.

(2) The Illinois Department of Natural Resources, Office of Natural Resources (IDNR/OWR), application is being processed pursuant to an Act in Relation to the Regulation of the Rivers, Lakes and Streams of the State of Illinois, Chapter 615, ILCS 5 (Illinois Compiled Statutes (1994)). Comments concerning the IDNR/OWR permit should be addressed to the Illinois Department of Natural Resources, Office of Water Resources, One Natural Resources Way, Springfield, Illinois 62702-1271, with a copy provided to the Corps of Engineers (see paragraph 11. of this public notice for address). (Mr. Mike Diedrichsen, IDNR/OWR (217/782-3863), may be contacted for additional information.

5. Historical/Archaeological. Archeological and architectural surveys conducted within the Hunter Lake area of potential effect have documented 117 historic properties that are potentially eligible for inclusion to the National Register of Historic Places. Of this total, 89 historic properties have been identified within the proposed pool and shoreline zones that will require determination of effect pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations 36 CFR Part 800. The remaining 28 historic properties will not require a determination of effect under the preferred alternative unless warranted by unforeseen development associated with lake construction. A Programmatic Agreement has been executed between the Advisory Council on Historic Preservation, the Illinois Historic Preservation Agency, the U. S. Army Corps of Engineers (Rock Island District), and the City of Springfield, Illinois, that identifies additional compliance needs, procedures, and responsibilities under the preferred alternative.

6. Endangered Species. The bald eagle (*Haliaeetus leucocephalus*) and the Indiana bat (*Myotis sodalis*) are listed as occurring or potentially occurring in Sangamon County. A 1990-1991 study records the bald eagle as an occasional visitor to the project area during the spring and fall migration. It has not been known to nest in Sangamon County. No Indiana bats were encountered during a 1990-1991 survey. The Federally endangered peregrine falcon (*Falco peregrinus*) has been observed as a flyover during migration. This species does not nest in the project area.

7. Dredge/Fill Material Guidelines. The evaluation of the impact of the proposed activity on the public interest will also include application of the guidelines promulgated by the Administrator of the United States Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

#### CEMVR-OD-P-2007-327 - City of Springfield

8. Final Environmental Impact Statement. The Corps of Engineers has prepared a "Final Environmental Impact Statement, Proposed Water Supply Reservoir, Hunter Lake, U.S. Army Corps of Engineers, Rock Island District, November 2000" for the project. Notification of availability of the Final Environmental Impact Statement (FEIS) appeared in the Federal Register on November 24, 2000. The FEIS was provided to local, state, and Federal agencies; institutions; public libraries; the media; organized groups; and individuals.

9. Public Interest Review. The decision whether to issue the Corps permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

10. Who Should Reply. The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. These statements should be submitted on or before the expiration date specified at the top of page 1. These statements should be and suitability of locations and should, if appropriate, suggest any changes considered desirable.

NOTE: All previous correspondence submitted during the earlier DEIS and FEIS review will be considered in the decision-making process. Currently, comments are being solicited for the project modifications since the FEIS was published. Previously submitted comments do not need to be resubmitted since they are a part of our file for the project.

11. Public Hearing Requests. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided. Comments and / or public hearing request previously submitted do not need to be resubmitted since they are considered to be a mitted

12. Reply to the Corps of Engineers. Comments concerning the Corps permit should be addressed to the District Engineer, U. S. Army Corps of Engineers, Rock Island District, ATTN: OD-P (Wayne Hannel), Clock Tower Building - Post Office Box 2004, Rock Island, Illinois 61204-2004. <u>Mr. Wayne Hannel (309/794-5378)</u> may be contacted for additional information.

Attach Plan

Wayne Hannel

Wayne Hannel Project Manager Regulatory Branch

**REQUEST TO POSTMASTERS:** Please post this notice conspicuously and continuously until the expiration date specified at the top of page 1. NOTICE TO EDITORS: This notice is provided as background information for your use in formatting news stories. This notice is not a contract for classified display advertising.



JOHN H. HUNTER LAKF

CEMVR-OD-P-2007-327 Vicinity Map – Lake Sheet 1 of 3



GUST (6, 2005 JLB JUDBS BISS 20000 SISP awnee \_ Channel \_ Mod.mxd

		Table S2: Supplen	nental Water Supply	y Alternative 2006 Co	sts		
			Illinois River	Sangamon River	Lick Creek Reservoir (8.3 mgd) & Sangamon River	Lick Creek Reservoir (8.3	Sangamon River Groundwater (6.67
	Hunter Lake (21.3 mgd)	Havana Lowlands Groundwater (12 mgd)	Valley Groundwater (12 mgd)	Valley Groundwater (12 mgd)	Valley Groundwater (3.33 mgd)	mgd) & Gravel Pits (B, C) (3.93 mgd)	mgd) – Clusters 5-9 & Gravel Pits A, B, C (4.80 mgd)
apital Cost*	\$80,853,000	\$67,776,000	\$100,422,000	\$50,967,000	\$72,798,000	\$67,686,000	\$41,574,000
mual Maintenance Cost	\$649,000	\$874,000	\$1,227,000	\$1,244,000	\$607,000	\$541,000	\$1,033,000
nnual Operating Cost	\$110,000	\$564,000	\$802,000	\$581,000	\$162,000	\$308,000	\$700,000
otal Yield of System (mgd)	21.3	12.0	12.0	12.0	11.63	12.23	111.47
apital Cost per mgd	\$3,795,915	\$5,648,000	\$8,368,500	\$4,247,250	\$6,259,501	\$5,534,424	\$3,624,586
8-Month Operation Cost	\$495,000	\$2,539,000	\$3,610,000	\$2,615,000	\$729,000	\$1,386,000	\$3,148,000
0-year Total Present Worth **	\$84,532,446	\$84,237,537	\$123,156,094	\$75,310,823	\$77,558,567	\$74,469,922	\$65,626,087
0-Year Total Present Worth per ngd	\$3,968,659	\$7,019,795	\$10,263,008	\$6,275,902	\$6,668,836	\$6,089,119	\$5,721,542
i0-Year Equivalent Uniform Annual North per mgd	\$251,789	\$445,366	\$651,129	\$398,170	\$423,100	\$386,320	\$362,997

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Funding needed after \$26,837,000 in land and sunk costs for Hunter Lake and a \$21,512,000 credit for Hunter Lake land value for all other alternatives is considered. Present worth is the net present value of the cost of debt service of the capital cost for 30 years plus annual maintenance and operating costs over 50 years.

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CEMVR-OD-P-2007-327 Supplemental Water Supply Alternative 2006 Costs Sheet 3 of 3

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# Written Comments presented by Larry E. Daily

341 N. Park Rochester Illinois 62563 217-498-9367 or 217-494-4558 9/14/16

ATTN. Regulatory Branch

06-54.

U.S. Army Corps of Engineers,

Rock Island, Illinois 61204-2004

Contact James Kelley

The decision to proceed in the matter of the Hunter Lake project, CEMVR-OD-P-2016 –0095 as a Supplemental Environmental Impact Statement is improper. The claim of no substantial change from the Final EIS published in 2000 is inaccurate and incorrect.

Several facts and determinations have changed which require a full EIS to be conducted. For example, the water demands have changed as has the population requiring the water. The power plant's needs have also dramatically changed. The new power plant requires less cooling water and a new extension to the potable water intake of 4'. Information provided by Crawford, Tilley and Murphy stated that installing the pipe added 2.8 billion gallons of water or about 5 months of additional water supply for the city. The 2.8 billion gallons of water is stated as providing about 5 mgpd. The original EIS did not cover these areas. The intake pipe for power plant cooling should be increased to the lowest point possible to ensure that the water is available.

It was suggested that perhaps this could not be done because during a drought the used cooling water temperature would be increased due to the lower water volume in the lake. This could be augmented or resolved by the cooler water from the gravel pit being released into the lake at the outtake of the cooling water. It could also be augmented with treated water from the Sugar Creek treatment plant. I will provide other more cost effective alternatives to augmenting the lake levels which would prevent the need to use the lower levels of Spfid lake water later in my comments.

The next change in the 2000 EIS which should require a full EIS is: The city no longer follows the practice of drawing the lake level down in the fall by 2 feet. By doing this, the city has added 8,400 acre feet of water to the amount of water to be available at the start of a drought. The 8,400 acre feet of water is 2.8 billion gallons or again an additional 5 mgpd of water.

The applicant's own published material as found in THE HISTORY OF DRINKING WATER IN SPRINGFIELD, published by the CITY WATER LIGHT AND POWER

"2007 CWLP announces slowed growth in water use, among other issues, has resulted in lower estimates of the amount of water required from a supplemental water supply during a severe drought. A recalculation of costs for alternative supplemental supply sources indicates that Hunter Lake is no longer the lowest first-cost option, but still will provide the lowest cost per million gallons of available capacity. A series of Sangamon River Valley wells and gravel pits now offer lowest first-cost."

In fact, the 2000 EIS contains estimates of the available water in the gravel pits. This estimation does not include the fact that the city has purchased the lowest level gravel pit. This is all that's required to draw water from all the gravel pits. Water seeks its own lowest level. Therefore, pumping water from the purchased pit is pumping water from all the pits. It should be noted by using the existing river water intake channels the upper 2 gravel pits will maintain their level at full pool even during a drought. The river water comes from the city of Decatur's use. The water will be filtered and purified as it flows from one pit to the other. The gravel pits have grown substantially over the past 16 years and will continue to grow as time passes. ANAR Tran AL & TAS OF GROWTH.

The applicant has replaced Lake Spfld Dam gates. This saves approximately 700,000 gallons of water daily that has not been included in the EIS or SEIS process.

Subsiguent to the 2000 EIS Chatham has built its own water treatment facility and is now providing water for their population rather than it coming from the city of Splfd. The Chatham treatment plant and water intake system is located in the upper area of the Buckhart gravel pit. The gravel pit studies claim that Springfield's water draw from the lower pit will reduce the amount of water available for all the small village pumping stations. This is not logical. Chatham is drawing water from an area prior to the pit that Springfield owns. Springfield's use of water from the gravel pit should not affect the amount of water in any of the gravel pits. The cost of pumping water year around for Chatham should be addressed by both towns. The water being provided to Chatham is not of the quality that the city has provided to Chatham for decades. Springfield still has the pipes and the ability to provide Chatham with water. Spfid could use Chatham's treatment plant as a backup should anything happen to Springfield's plant. The town of Chatham is considering breaking its contract with their treatment facility in order to get Spfild water again. Chatham is also paying an out of state firm to manage their plant to resolve the water quality problem. The 2 towns should join as limited partners for water. Chatham's facilities would only be used if and when Springfield needs additional raw water. Chatham's raw water capacity would be increased from 3.3 million gallons a day, of which Chatham uses only about 1.2 million gallons a day of treated water, to whatever amount Springfield needs. Lake Spfld can provide water for both towns during normal years. The Chatham facilities would only be used during a drought. The water from the Chatham plant would also be drawn from the gravel pit and pumped to the gravity flow streams near Berry Illinois. The water would gravity flow down the South fork of the Sangamon River to the pumps presently pumping water into Lake Spfld. To do this would only require about 4 miles of pipe and the pumping station from the Chatham facility. ALLOW MITTS TO BE COMPLETELY FILLED THEN RELEASE WATER JUTO SE SANG AND PURPLE THE LAGE SPECE

Of special note, there is a possibility that Lake Sangcris will be available as a water source. The <u>EUAA</u> power plant has been sold several times and due to the downturn in coal fired power plants and new EPA regulations it is possible that the plant will be closed. If it is closed the applicant could use eminent domain to purchase the lake. The lake has around 30,000 acre feet in it and around 20,000 acre feet of usable water in it. This supports the fact that a full EIS should be completed.

The 2000 EIS reported that the proposed Hunter Lake has 3010 surface acre feet, at 14.6 average depth. There is 385,858 gallons of water per acre. 14.6 times 3010 acres equals 43,946 acres feet of water in it. 395,859 gallons times 43,946 gives 14,319,935,938 gallons of water. It is not the 15.3 billion gallons reported in the EIS. As stated in my 2 letters to the ACE which include evaporation rates

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(cold water evaporation, which is actually lower than that of the zero flow, warm water of the proposed Hunter Lake) and use the claimed treated water of 21.5 mgpd rate times 540 day drought and you get 11.5 billion gallons of water to be removed from Hunter lake. The lower evaporation rates came out to 4.4 billion gallons of evaporated water from the lake. The figures do not include the amount of water which would be required to be left in the Hunter Lake to meet EPA rules. Because the proposed Hunter Lake would be a zero flow lake long before a drought was declared, the lake would lose even more water than calculated. 14.3 billion gallons of water minus the 11.5 billion that the 2000 EIS claimed was available, minus 4.4 billion gallons of water lost to evaporation (not even including the EPA water to be left in the lake) and you have more water removed than what is available by 1.6 billion gallons.

The applicant is now reporting that their need is 8.2 mdpd and 11.3 mgpd by 2065. 540 days times 8.2 is 4.428 billion gallons of water. 11.3 times 540 day drought equals 6.102 billion gallons of needed water from the proposed Hunter Lake. The difference for the 8.2 as compared to the 2000 EIS claim of 21.5 is 13.3 mgpd. This is less than ½ of the claimed need previously noted. A full EIS should be required.

Again, simple math shows the need for a full EIS 14.3 billion gallons minus the 6.1 billion gallons and the 4.4 billion gallons lost from evaporation only leaves 3.8 billion gallons in Hunter Lake. Again, note the actual evaporation will start long before the time of declared drought and will be more because of higher evaporation due to the warm water of the proposed Hunter Lake. 14.3 minus the 11.3 and the 4.4 billion is 1.4 billion gallons of water more than is held in Hunter Lake. This shows that the lake cannot provide the applicants stated needs in 2065. Comparing Hunter Lake to the use of the river water and gravel pit growth which can grow by 10 to 20 or more acres per year. At an average depth of 30 feet pit times 10 acres you get 200 acre feet or more per year. Times this from the date that the pits were last evaluated to 2065 you will get at least 9,800 acre feet of water or about 3.3 billion gallons of water increase. As previously noted, Hunter Lake's 14.3 billion gallons minus the 4.4 billion gallons or more lost to evaporation only leaves 9.9 billion gallons or less of water for use in the Hunter Lake.

Using the Layne Hydro study from 8/2/13 (which was the last completed study) to reach the gpd available from the gravel pits and times that by 540 drought days you get 4,860 billion gallons of water. Add 3 more years of pit growth and you get an additional 1095 acre feet of water. Together the amount is 5.955 billion gallons of water available at the present date. This amounts to about 10.7 mgd from the pits. At the stated growth rate in 49 years or 2065 the water potential will increase at or around 27 mgd. Add that to the 10.7 you get 37.7 mgd just from the pit. This does not include directing the water from the N. Fork of the Sangamon River into one or all three of the gravel pits. B and C pit would be provided with river water through channels already in place. Pit A could be provided with river water from both the South Fork and the North Fork by building swing gates at the old river dam near Riverside Park. The swing gates would remove the need for an emergency earthen dam and would impound and back the water up to the gravel pit A. The water would naturally infiltrate into the gravel pit where it would be pumped out to the South Fork pumping station and pumped into Lake Springfield at a capacity of 78 million gallons a day. The water from the Sugar Creek sewage treatment plant is released into the Sugar Creek and flows down to the area where the N. Fork and S. Fork Sangamon River comes together. The swing gates on the old river dam would impound the treated water and allow it to flow into the gravel pit A. The old river dam might be able to be raised enough to push the water back to the South For pumping station. The stream flow would assist in naturally cleaning up the treated water. A

wetland treatment facility could be created at or near the plant or in the area of the gravel pit to further clean up the treated water.

In 2001 and again in 2008 the applicant was prevented from obtaining the requested permit based on the sewage treatment water coming from Virden, Pawnee and Divernon. To address this problem, Springfield proposed building a 29.7 mile pipe to bring the water to the Spfid metro sanitary treatment facilities. Springfield has failed to firm up or get approval from any of the villages to proceed in any plan. Springfield's proposed plan would have an environmental impact by removing water from the streams and ensuring that streams dry up during any dry spell. Springfield's plan would also remove water that comes from areas outside of Springfield's watershed. This water once used and treated flows down to the S. Fork pumping station and is pumped into L. Spfid.

The villages are not willing to pay anything to do anything other than what they have presently. The applicant has failed to detail the cost of meeting the demands of the IEPA. Therefore the SEIS is wrong and should be a full EIS.

When the 2000 EIS was submitted the applicants failed to address the situation of Hunter Laker creating mud flats and creating insect breeding grounds adjacent to the Pawnee Schools. Because of the Zeka virus moving north it is entirely possible that it would be in this area by the time that the project would be completed. It is entirely unacceptable that our children would be exposed needlessly when there are more cost efficient alternatives available that have never been considered, let alone fully investigated.

The county has rebuilt 2 bridges in the area of the proposed lake. The cost of rebuilding the bridges has not been addressed or added to the project costs for proper comparison to the other alternate plans.

The Layne Hydro report failed to look into any other plan which would or could provide water to the villages of Riverton, Mechanicsburg, Dawson or Chatham. Springfield's proposed 29 mile sewage pipe could provide water from the pits to the small village's pumping stations or from Spfid water treatment plant with water rates the same as Spfid residents.

# ALTERNATIVE PLANS FOR A 2<sup>ND</sup> WATER SUPPLY

Starting from the North Fork of the Sangamon River area and moving to Springfield. The 2<sup>nd</sup> area would be started from the South Fork of the Sangamon river

OPTION 1. The Mohomet Aquifer. It can provide 400 mgd of good clean water. 30 million gallons as per one report is used for potable water. 100 million gallons is used for irrigation. 270 mgd is unused. Because Lake Decatur and Lake Clinton are in the footprint of the aquifer or their watershed extends into the area of the aquifer. Available water could be pumped from the aquifer and be allowed to gravity flow into either Lake Clinton or Lake Decatur. The water then naturally flows from Lake Decatur to the North Fork. Also 30 miles of pipe would just about reach from the aquifer to the water shed side of the N. and S fork of the Sangamon.

Option 1-A. Lake Clinton. The Clinton power plant owners attempted to attain additional funds from the state in order to keep the plant open. The state did not agree and it was announced that the

plant would be shut down in June of 2017. Springfield, Decatur and Lincoln should approach the federal government for a 30 year loan or grant to buy the lake and power plant. Using eminent domain they could purchase the plant at or near the price the company paid for lake and power plant in 2003, 40 million dollars. The government could keep the plant for emergency energy production and cities would have a backup water supply. Lake Clinton has 4900 surface acres of water at 14.9 average depth. Around 40 to 45,000 acres of water available to use, with additional flow from the Mohomet aquifer. The lake is at 690 feet msl. Lake Decatur is at 613 feet msl. The hump between the lakes is less than 2 miles from the south shore of Lake Clinton. Pumps could be installed to pump over the hump and allow the water to gravity flow to Lake Decatur. The siphoning effect of the piped water would not require pumps and would keep Lake Decatur full and still provide Spfid with water through the North Fork down to the gravel pit's channels or the old river dam.

OPTION B. Lake Shelbyville. I suggested this lake in the EIS hearings in 2000 and 2008. I would ask that they be readmitted and be applied to this. Because the water from the lake has already been allotted, the lake level could be raised 2 additional feet impounding over 22,000 acre feet of water. Installing a pumping station at the Shelbyville Lake and laying pipe to an area of Moweaqua where a direction control valve would be installed that would direct the water towards Decatur or Spfid. The water would gravity flow to the S or N. Fork of the Sangamon River. The ACE drains the lake down every fall 5.5 feet. Rather than releasing all that water into the river, 2 or 3 feet of water could be pumped to the rivers and gravity flow down to Spfid or Decatur.

OPTION C Moving down river to the SangChris lake. If the power plant closes in the future, eminent domain could be used to purchase the lake and use it for water for Spfld. The lake might even be able to raised 1 or 2 feet to provide additional water for Spfld.

OPTION D. The 2000 EIS considered raising Lake Spfid 2 additional feet and it was determined not to be cost effective, The highest lake flood level was at 564 msl. Raising the pool level only 1 foot would provide over an additional 4200 acre feet. This about 2.5 mgd. By not lowering the lake in the fall and raising the lake level by 1 foot about 7.5 mgd is provided. With only the 1.6 mgd as Layne reported for the gravel pit you have 9.1 mgd, which is Springfield's stipulated need. As the pits grow so would the available water. This does not include the 9 mgd maximum water available from the pits as detailed above.

OPTION E. Building a 300 surface area acre lake at 100 feet deep would provide 30,000 acre feet of water. Because the water surface area is 1/10 the size of the proposed lake it would mean 1/10th the size and 1/10<sup>th</sup> the evaporation. Over 7.2 MILLION GALLONS OF WATER PER DAY would be saved. This option is potentially more costly than the other options but perhaps less costly than Hunter Lake without as much environmental impact.

THE FOLLOWING IS TO BE CONSIDERED WRITTEN COMMENTS TO THE IEPA HEARING ON WATER QUALITY CERTIFICATION PUBLIC HEARING DATED 12/3/08 ON HUNTER LAKE AND A FORMAL REQUEST FOR PUBLIC HEARINGS TO BE HELD BY THE US ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT FOR THE FOLLOWING REASONS.

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- 1. Miscalculation of the figures as they relate to the amount of water available as a back-up water supply. The miscalculations include the comparisons of water available and cost associated to Hunter Lake as compared to the gravel pits and perhaps any other surface water option.
  - A. The ILWS incorrectly assumed and calculated the entire volume of water in HL was available for use over the duration of a drought. During the calculations it was assumed HL would be emptied, in fact the lake is to only be drawn down 19.8 feet from the normal pool level of 571 feet. This would leave about 27 feet of water in the lower level of the lake. At this level the surface level would be about 31% of the surface amount at 571 feet. The city does not report how much of the lakes total volume of 15.3 billion gallons of water would remain in the lake. In order to reach some sort of estimate of the amount left I took the length of the drought in days and multiplied that times the projected amount of water. 15.3 billion gallons minus the 11.5 billion gallons of use left 3.5 billion gallons of water.
  - B. The ISWS at pg 27 states "Evaporation from the surface of a lake is one of the largest loss components in a yield analysis." In the analysis by the ISWS they improperly used figures involving the stream flows of cubic feet per second from the South Fork staging areas and the water being pumped from the south fork of the Sangamon River. Hunter Lake would not benefit from the majority of water flow of the south fork in that HL is only a fraction of the watershed area. In fact the amount of water flow into HL during and prior to a drought would be very little or zero flow. Water loss and HL lake level deterioration would occur long before a formal declaration of drought and before L. Springfield would be drawn down far enough to require taking water from HL.

C. The evaporation rate of HL was not calculated into the figures or applied to the amounts of water available as they were in the comparison to the gravel pits. Crawford, Murphy and Tilly calculated the evaporation rates of the gravel pits to be an average of 500,000 gallons per day on 188 acres of water. In order to reach an evaporation rate comparable to the gravel pits I doubled the acres of the 188 acre lake to 376 acres equaling 1 million gallons of water evaporated per day on the average. (as applied and used unfairly to compare the pits to HL.). I divided 376 acres into the HL surface area of 3010 acres to reach an evaporation rate of HL of about 8 million gallons of water per day. I then took the length of the projected

1 of 4

drought in days (540 days) times the 8 million gallons. This resulted in roughly 4.4 billion gallons of water lost to evaporation to HL during the actual drought duration. This amount does not include the water evaporated prior to a drought in which HL lake does not receive any additional water from rain fall or from the sanitary water from Divernon, Virden or Pawnee. Sanitary water from another watershed area. (This water is proposed to be diverted out of the South Fork pumping stations and water drainage area. The 29 miles of pipes will divert the water directly to the sugar creek sanitary plant). The FEIS report at 2-41 2.3.4 "The usable water supply is primarily derived from the stored volume of water at each site, with additional gains and losses from infiltration and evaporation, respectively. These pits currently have a total volume of almost 6 billion gallons." Because of the rate of gpd increase to 7.39 mgd this is an increase of about 50% percent and implies an increase of about 50% of stored water and surface water. 780 acres of water and 9 billion gallons of water. The city's plans are not cost effective and there are better ways to create the back-up that I will detail later.

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- D. Adding the water remaining in HL to the evaporation rate provided by the city agent CMT of 4.4 billion comes out to just under 7 billion gallons or less (with extra evaporation time) of water available to resupply L Springfield. This is actually around 13 million gallons of water per day that is available, not the claimed 21.3 million gallons of water per day.
- E. Miscalculation of HL to gravel pits. CWLP 's response to the Council Aldermen supply question of the gravel pit/pits and HL. CWLP claimed on 10/27/08 all the gravel pits combined would yield 7.39 million gallons of water per day during an 18 month drought. The clearlake pit would provide 1.54 mgd yield. The revised amount needed per day is now only projected to be 9 million gallons. The total cost of the city's gravel pit plan was 16.5 million dollars in 2000. In order to reach the 9 million gpd rate cluster 6 of the Sangamon River Valley Well System would have to be added with a cost of 10 million dollars. The cost of the 2 systems would be about ¼ the amount of HL.

# 2. OTHER OPTIONS NOT PROPERLY CONSIDERED BY CITY.

A. Purchase of Gravel Pits. The city could purchase all the gravel pits and increase the storage capacity by continuing the gravel operations. The gravel pit operations would be leased back to private operators who would continue to operate the business and increase the storage capacity of the lakes. A development plan would be created to develop the areas into parks and recreational use. The gravel businesses would be required to store 2 or 3 years worth of material to be able to continue to operate even if the pits were drained completely.

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- B. Gravel Pits combined with water from the North Fork of the Sangamon River. Because the city can only build a dam on the N Fork of the Sang. During an extreme drought an existing canal or one to be built at the Site C (NE Corner) gravel pit with a collection/pump pit and 2 gate control valves. The canal would run from the river bed to the gravel pits. The pump pit /pond would be situated in the canal between the river and the gravel pit. The gates would allow the control of water coming from the river, the pit or both. The water would be pumped from gravel pit c to the area nearest Berry and the South Fork of the Sang. River. The water would be allowed to gravity flow to the pumps already on the SF of the Sang. The water from the gravel pits C could be pumped and/or gravity flow to pit B. The water would then be pumped to the moveable dam on the SF and gravity flow to the pumps to be pumped into L Springfield. The water from the pit and the NF Sang. River would be more water than the total volume of water claimed for HL.
- C. The issue of using Lake Shelbyville was never properly addressed by CWLP. The concept was to pump water to Mowequa and gravity flow the water to Springfield and Decatur with a flow control valve to direct the water to Spfld or Decatur. Because the water available has been used Illinois should began to create a new water use plan for the lake as a central Illinois back-up water supply. The plan would include raising the lake level by 3 to 5 feet (around 60,000 acre feet of water) and changing the requirement that the lake be drained down 5 feet every winter to prepare for potential spring flooding. I have been advised such action would require Congress to act on it and take 20 years to achieve. We have been trying to force HL through for the past 40 years, isn't now a good time to start to prepare for the water shortages that are claimed to be coming this way. L Shel. Only requires the flood gates to be raised and better management of the lake as compared to the impacts of HL.
- D. Because the Springfield Metro Sanitary District is in the process of attempting to build a new Spring Creek plant and rebuild the Sugar Creek plant the CWLP could work with the sanitary district and the Federal EPA and State EPA to build algae based biodiesel ponds capable of producing 5,000 to 20,000 gallons of biodeisel per year. The power plants cooling water could be used to heat the ponds and to heat a wetlands waste water treatment below the L Spfld dam. The water would go from the bio ponds thru the wetlands and flow towards the NF and SF of the Sang. River. Sugar Creek would have a movable dam placed near the point that NF and SF and Sugar Creek flow together. The SF would have a movable dam built in this area and the water from Sugar Creek would flow into the SF. The impounded water would back up to the pumps on the SF to be pumped into L Spfld. The water from the gravel pits and NF of the Sangamon could be pumped or gravity flow into the SF behind the new moveable dam. The

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wetland treatment area could divert the water to the near the L Spfld over flow and ash ponds. The water could be pumped to the power plant and used to cool the power plant down. The wetlands could in part be used to grow switch grass to be converted into biodeisal fuel. In order to increase the sanitary plant water flow into this area until such time that a similar wetland and returned water pump plan could be developed for the Spring Creek plant, water could be diverted from areas such as Chatham to the Sugar Creek Plant.

3 Hunter Lake is one of the most or the most expensive plans considered when the calculations are applied fairly to the compared systems. It is also the most harmful to the environment and invasive. Until ALL THE OTHER OPTIONS HAVE BEEN PROPERLY EXAMINED AND COMPARED THE CITY SHOULD NOT BE GIVEN A PERMIT TO PROCEED WITH ANY OF ITS PLANS. BECAUSE WE HAVE AN OPPORTUNITY TO HELP THE PEOPLE AND CLEAN UP THE ENVIRONMENT BY COMBINING THE SANITARY DISTRICTS PLANS WITH THE CITY'S PLANS AND NEEDS, the permits should be withheld and all other options be considered.

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LARRY BATLY 3941 N. STH SPRID IL 62707

1/5/09

1. My letter to ACE, Mayor Langfelder 2015 on H. Lake.

2 Spfld Gravel Pit Volumes-Elevations, ave. depth Prought yeilds Letter.

3. Lake Spfld. informaton. Phamlets. 1988 IEPA Permit to bld. 2 Earthen Dams on the N. Fork Sang. River and SF. Emerg water supply. Replaced Flood Gates saves 700,000 gallons of water per day.

4. History of Drinking water 2997 Hunter Lake is NO LONGER THE LOWEST FIRST COSTS OPTION.

S.J.R. ARTICLE 8/25/15 . LAYNE HYDRO PG5 5 5. OF 7 STUDY THEIR STUDY 1.6 BILLION GALLONS PER DAY AVAILABLE RATHER THAN THE PREVIOS **REPORT OF 9.5 MGD. 1.6 MGD BECAUSE MORE** WOULD AFFECT RIVERTON, DAWSON MECHANICSBURG AND THE SOUT SANGAMON WATER COMMISSION W PROVINE MAJORATI OF THES WAMA WAS PREATINGU CHATHAM AND NEW BERLIN. CITY HAS SPENT LANE TO B MORE THAN 30+ MILLION DOLLARS ON H NORTH FORK OF THE SANGAMON RIVER N ADDRESSED IN THIS STUDY.

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MY NOTE: WATER FROM THE PROPOSE H. LAKE WATERSHED IS BEING PUMPED INTO THE L. SPFLD. NO EVAPORATION LOST FROM THIS WATER DUE TO EVAPORATION REMAINS AS ZERO LOST. LOSS COVERED BY RATES ALREADY ADDED INTO THE LOSS OF L. SPFLD. H. LAKE WOULD ADD OVER 1 MILLION GALLONS PLUS PER DAY FOR EACH 376 ACRES OF H.L. SURFACE WATER. DURING 2000 DRY LAKE SPELL LAKE ONLY WENT DOWN 6 FEET DUE TO 2.1 BILLION GALLONS BEING PUMPED FROM S.F SANG. RIVER INTO L. SPFLD.

HUNTER LAKE WOULD IMPEDE WATER THAT WOULD HAVE FLOWED TO SF. SANG RIVER PUMPS AND WOULD HAVE BEEN PUMPED INTO LAKE SPFLD. THIS WATER WOULD NOT LOSE ANY WATER TO EVAPERATION BY BEING IN THE SPFLD. LAKE WATER EVAPORATION RATES. IN HUNTER LAKE, DEPENDING ON THE NEW DOWNSIZED PLAN THE EVAPERATION WOULD BE 1MILLION GALS. PER 376 ACRE FEET OF SURFACE WATER AND THE EVAPORATION WOULD BEGIN TO ADD UP LONG BEFORE A FORMAL DROUGHT IS CALLED. HUNTER LAKE WOULD BE A ZERO INPUT OF WATER INTO IT AS SOON AS THE IMPUT RATE WAS LESS THAN THAT OF THE EVAPORATION RATE. THE EVAPORTAION RATE WOULD BE AN ADDITIONAL MGD LOSS TO LAKE SPFLD'S STORED AND USABLE WATER FOR A DROUGHT.

OPEN HOUSE PUBLIC SCOPING MEETING ACE SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT 8/24/16 INFORMATION PACKET.5 PAGES PLUS DETAILED MAP OF SUPPLEMENTAL WATER SUPPLY PROJECT. PAGE 1. INTRODUCTION. ACE INTENDS TO PREPARE SEIS TO ADDRESS THE PROPOSED SPFLD. SUPP. WATER SUPPLY PROJECT. FINAL EIS WAS PREPARED AND PUBLISHED NOV. 2000. FEIS WAS PUBLISHED NOV 24, 2000. 2016 CITY PUB. UPDATED WATER DEMAND ANALYSIS NEEDS ADDITIONAL WATER

THE PURPOSE OF THE SEIS IS TO EVALUATE NEW AND SIGNIFICANT INFORMATION WITHIN THE PROJECT AREA, EVALUATE ALL APPROPRIATE AND REASONABLE ALTERNATIVES, ASSES THE POTENTIAL IMPACTS OF THE ALTERNATIVES AND IDENTIFY THE PREFERRED ALTERNATIVE THAT FULLY MEETS THE PROJECT NEEDS.

PG. 2 DROUGHTS 1953-55, 1988, 2000 AND **2012. WATER RESTRICTIONS WAS IMPOSED** DURING THE 1988, 2000 AND 2012 DROUGHT.(MY NOTE THE 2012 WAS THE DRIEST FOR CENTRAL ILL. **DURING THIS DROUGHT THE LAKE ONLY WENT** DOWN 6 FEET TO 554 IN PART DUE TO PUMPING **2.1 BILLION GALLONS OF WATER IN 2012 FROM JAN** TO MAY AS COMPARED TO THE MUCH LOWER AMOUNT OF THE 1952-55 DROUGHT. IN PART DUE TO PUMPING AND REPAIRED FLOOD GATES AND NOT DRAINING THE LAKE DOWN 2 FEET IN **PREPARATION OF SPRING FLOODING. THE AMOUNT OF WATER ADDED FOR ACTUAL USE IN THIS IS CWLP EXTENDING THE WATER INTAKE PIPES DOWN 4 FEET AND PROVIDING THE CITY WITH AN** ADDITIONAL 2.8 BILLION GALLONS OF WATER. 2.8 **BILLION ADDITIONAL GAL. OF WATER, PLUS 2.8 B. MORE FROM NOT LOWING THE LAKE IN** PREPARATION OF SPRING FLOODING PLUS 700,000 GALLONS A DAY TIMES 540 DAYS EQUALS

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# **378 MILLION GALLONS. ADDED TOGETHER THIS IS** 5.978 B GALLONS OF WATER.) UNDER PROJECTED DROUGHT CONDITIONS THE ESTIMAATED WATER **DEFICIT IS CURRENTLY 8.2 MGD, 4.59 B.GALLONS OF** WATER. FUTURE DEFICITS BY 2065 11.35 MGD IS **NEEDED, OR 6.26 B GALLONS ADDITIONAL WATER. MY NOTES INDICATE THAT THE LAKE IS ONLY SHORT** OF ABOUT 1/4 BILLON GALLONS OF WATER AS A PROJECTED NEED FOR 2065. THIS ALSO DOFS NOT **INCLUDE THE POSSIBILITY OF RAISING THE LEVEL OF** LAKE SPFLD 6 INCHES OR 1 FOOT, 6 INCHES WOULD **PROVIDE AROUND 750 MILLION GALLONS OF** WATER AND 1 FOOT WOULD PROVIDE AROUND 1.5 **BILLION GALLONS OF WATER. (THE NEW PROJECTED WATER NEED IS 12 MGD TIMES A DROUGHT OF 540 DAY LENGTH PROVIDES THE** FIGURE OF A NEED OF 6.48 BILLION GALLONS OF WATER. THE PREVIOUSLY NOTED ADDITIONAL WATER, NOT INCLUDING PUMPED WATER FROM THE SF OF THE SANG. RIVER PROVIDES MORE WATER AT THE PRESENT TIME THAT WHAT IS CLAIMED NEEDED BY 2065. THE DOWN RATED
WITH AN AVERAGE DEPT OF 25 FEET. AT JUST 10 FEET TIMES 10 ACRES TIMES 10 YEARS YOU WILL HAVE AN ADDITION OF 1000 ACRE FEET OF WATER. ACRE FEET OF WATER. AT 20 FEET TIMES 20 ACRES TIMES 10 YRS YOU WILL GET 4,000 ACRE FEET OF WATER OVER 10 YEARS. AT A MAXIMINE OF 4000 ACRES EVERY 10 YEARS AND TIMES THAT BY 45 YEARS OR 4.5 YOU WILL HAVE AN INCREASE OF 18,000 THOUSAND ACRE FEET OF WATER OR AROUND 6 BILLION ADDITIONAL WATER TO ALMOST MORE THAN DOUBLE THE CLAIMED NEED IN 2065.

THE CITY AND THEIR SPECIAL STUDIES HAVE FAILED TO ACTUALLY CONSIDER USING THE NORTH FORK OF THE SANG. RIVER AS A MEANS TO FILL ONE OR ALL 3 OF THE GRAVEL PITS. THE RIVER WOULD BE ABLE TO KEEP ALL THE GRAVEL PIT AT 100% EVEN WHILE PUMPING WATER FROM OUT OF THEM. SO LONG AS THE WATER IN IS EQUAL TO OR GREATER THAN THE WATER BEING PUMPED OUT. I WILL PROVIDE ADDITIONAL INFORMATION THAT WILL ALLOW AN INCREASE OF THE WATER FROM CLAIM OF WATER FROM THE GRAVEL PIT, EXCLUDING A CONSTANT REFILLING OF THE PITS FROM THE N. FORK OF THE SANGAMON R. AS ONLY BEING 1.6 MILLION GALLONS OF WATER. THIS IS AN ADDITION OF 864 MILLION GALLONS OF WATER. RAISING SPFLD LAKE 6 INCHES 750 MILLIN GALLONS 1 FOOT, 1.5 BIL. ALL TOTALLED 7.5 BIL. GALLONS. OVER A BILLION GALLONS OVER THE LATEST CLAIM OF 12 MGD. OR 6.48 BIL. GALLONS.

PG 2 PROPOSED ACTION THE CITY IS THE PROJECT PROPENENT AND WILL EVALUAATE ALL REASONABLE ALTERNATIVES FOR DEVELOPEMENT OF A SUPPLEMENTAL WATER SUPPLY. WHAT HAS BEEN SHOWN UP TO THIS POINT THAT THE CITY FAILED TO CONSIDER THE AMOUNT OF WATER CREATED IN PART BY THIER OWN ACTIONS. THEIR ACTIONS ALMOST STANDING ALONE PROVIDES MORE THAN THIER CLAIMED WATER AT THE PRESENT DATE. I HAVE NOT INCLUDED THE ADDITIONAL WATER EVEN WITHOUT THE WATER FROM THE N FORK OF THE SANG. RIVER. THE GRAVEL PITS CAN GROW 10 TO 20 ACRES A YEAR

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OUT OF THE RIVER. THIS WILL INCLUDE USING THE CITY'S AND IEPA'S EMERGENCY WATER SUPPLY THAT WAS APPROVED TO DO IN 1988. THIS WILL INCLUDE CHANGING THE PLAN FROM TEMPORARY EARTHEN DAMS ON THE SANG. RIVER TO BACK THE WATER UP TO THE DAM AND PUMPS ON THE S. FORK TO PUMP WATER FROM THE S. FORK INTO LAKE SPFLD.

PG. 3 OF THE REPORT NOTES THAT THE SEIS WILLL BE PREPARED FOLLOWING THE REQUIREMENTS OF NEPA THE SEIS WILL UPDATE SUPPORTING DATA, REVIEW THE PURPOSE AND NEED FOR THE PROJECT, ANALYZE WATER SUPPLY ALTERNATIVES. AS STATED PREVIOUSLY ALL VIABLE ALTERNATIVES HAVE NOT BEEN FULLY REVIEWED AS SHOWN BY THE CITY'S OWN PUBLIC INFORMATION ON THE IEPA'S PERMITS TO BUILD THE TEMP. EARTHEN DAMS TO FACILITATE MOVING WATER FROM THE NORTH AND SOUTH OF THE SANG. RIVER TO THE DAM AND PUMPS ALREADY IN USE ON THE S.F. OF THE SANG. THE PERMITS WERE ISSUED IN 1988 DURING A DROUGHT. PG 5 COMMENTS WILL BE REVIEWED AND CONSIDERED IN PREPARATION OF THE SEIS. NEXT STEP, ANALYZE ALTERNATIVES. THE STATEMENT TO THE PUBLIC WAS TO " GET INVOLVED AND STAY INFORMED. THE SUCCESS OF THE STUDY DEPENDS ON YOUR PARTICIPAATION AND INPUT. VISIT CWLP'S PROJECT WEBSITE" GET PROJECT UPDATES AND SEND COMMENTS OR QUESTIONS TO THE PROJECT TEAM. I WISH THAT THIS DOCUMENT BE CONSIDERED AS BOTH A COMMENT AND QUSTION FOR THE PROJECT TEAM.

SEPT/OCT 2013 CWLP DISPATCH A BI-MONTHLY NEWS UPDATE FOR CWLP CUSTOMERS. IAYNE HYDRO PRESENTED THE SPFLD CITY COUNCIL WITH THE RESULTS OF A RECENT STUDY THAT CONCLUDED THAT SEVERAL GRAVEL PITS IN THE SANGAMON RIVER VALLEY COULD NOT PROVIDE A VIABLE OPTION FOR A BACK UP WATER SUPPLY DURING A SEVERE DROUGHT. DUE TO THE FOUR NEIGHBORING COMMUNITIES THAT RELY ON WATER FROM THE SAME AQUIFER THAT FEEDS THE GRAVEL PITS THE PREVIOUS GPD OF 13-18 MILLION

# GALLONS WAS NOT AVAILABLE. THE REPORT **REFERS TO THE AQUIFER THAT FEEDS ALLTHE** GRAVEL PITS A REVIEW OF THE MAPS PROVIDED BY THE CITY FROM SEIS ON 8/24/16 SHOWS THAT ALL THE GRAVEL PITS ARE IN THE SAVE RIVER VALLEY UNDERGROUND BASIN. SINCE THE 3 LARGEST **GRAVEL PIT ARE EACH 8-10 FEET HIGHER THAN THE** NEXT IT IS SAFE TO BELIEVE THAT THE WATER IN THE HIGHEST PIT WILL FLOW DOWN TO THE NEXT LOWEST PIT AND SO ON DOWN THE THE LOWEST PIT, CLEARLAKE GRAVEL PIT WHICH IS ALREADY OWNED BY THE CITY OF SPFLD. AS REPORTED BY SEVERAL OF THE OWNERS THERE ARE CHANNELS THAT BRING THE WATER FROM THE NORTH FORK OF THE SANG. INTO THE PITS. WATER FLOWS DOWN HILL AND MOST LIKELY WILL FLOW FROM ONE PIT TO THE NEXT. EVEN WITHOUT DOING THIS A PUMP COULD BE PLACED IN ANYONE OR ALL OF THEM. THE BUCHHART GRAVEL PIT IS THE HIGHEST ONE AND IS ONLY ABOUT 4 MILES TO THE STREAMS THAT GRAVITY FLOW INTO THE S. FORK OF THE SANG RIVER. THE STREAM HEADÀ ARE NEAR ROUTE

PG 5 COMMENTS WILL BE REVIEWED AND CONSIDERED IN PREPARATION OF THE SEIS. NEXT STEP, ANALYZE ALTERNATIVES. THE STATEMENT TO THE PUBLIC WAS TO " GET INVOLVED AND STAY INFORMED. THE SUCCESS OF THE STUDY DEPENDS ON YOUR PARTICIPAATION AND INPUT. VISIT CWLP'S PROJECT WEBSITE" GET PROJECT UPDATES AND SEND COMMENTS OR QUESTIONS TO THE PROJECT TEAM. I WISH THAT THIS DOCUMENT BE CONSIDERED AS BOTH A COMMENT AND QUSTION FOR THE PROJECT TEAM.

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29 AND BERRY ILLINOIS. ONE PUMP WOULD BE ABLE TO PUMP THE SANG. R. WATER AND GRAVEL PIT WATER TO THE S. FORK OF THE RIVER. THE WATER WOULD GRAVITY FLOW DOWN THE RIVER TO THE DAM AND PUMPING STATION PRESENTLY USED TO PUMP WATER INTO LAKE SPFLD. TO EVEN EXPAND THIS WOULD TO CONSIDER GETTING CHATHAM AND SPFLD TO WORK TOGETHER WITH THEIR WATER NEEDS. CHATHAM WATER TREATMENT IS VERY NEAR THE BUCKHART GRAVIL PIT. THEY TREAT THEIR OWN WATER AND PIPE IT 365 DAYS A YEAR. THE WATER TASTES BAD AND THE PEOPLE CONSIDERED GOING BACK TO SPFLD TREATED WATER. THE INFASTRUCTURE IS STILL USEABLE. CHATHAM HAS PAID A WATER MANAGEMENT FIRM OVER A MILLION DOLLARS TO MAKE THEIR WATER BETTER. THEIR RATES ARE MUCH HIGHER THAN PROMISED. SPFLD NEEDS A BACK UP WATER SUPPLY INCLUDING AN EMERGENCY TREATMENT FACILITY. IF SPFLD AND CHAT. WOULD WORK ON A LIMITED PARTNERSHIP, SPFLD COULD PRODUCE THE WATER FOR CHATHAM

# AT A FAIR AND REASONABLE RATE AND WHEN NEEDED CHATHAM COULD PUMP THE WATER FROM THE PIT TO THE S. FORK OF THE RIVER. THIS WOULD SAVE CHATHAM ENOUGH MONEY THAT THEY COULD REFINANCE THE COSTS OF THEIR WATER PLANT. THEIR PLANT WOULD BE THER BUY IN TO THE CITY'S WATER SYSTEM AS A LIMITED PARTNER. IF SOME SORT OF DISASTER STRUCK THE **CITY'S TREATMENT FACILITIES THE PIPELINE FROM** CHATHAM'S TREATMENT FACILITIES COULD BE USED TO BRING TREATED WATER FROM THEIR FACILITIES TO PROVIDE AN EMERGENCY BACK UP SUPPLY OF DRINKING WATER. THE DISPATCH POINTS OUT THAT THE CITY KNEW AS EARLY AS OCT. OF 2013 OF THE CLAIM THAT THE PITS COULD ONLY PROVIDE 1.6 MGD. THIS WAS A TOTAL DISREGARD OF WHATTHE CITY AN IEPA SET IN PLACE IN 1988. MAYOR O.L & CZTY. ATTERNEY

3/4/2008

## Project Factsheet for: Springfield, Illinois (Ciy Water, Light & Power) / Hunter Lake EIS - PERMITS

Project Location Information

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Location: Springfield, Illinois River Basin(s): Illinois State(s): IL

Congressional District(s): IL-18

#### Status

There has been a lack of activity over the past year(s). Efforts have been underway for some time to complete the Record of Decision for the Final Environmental Impact Statement (FEIS). This has been held up as the Illinois Environmental Protection Agency (IEPA) has raised significant issues which need to be resolved prior their issuance of Section 401 water quality certification. We will concurrently finalize the 404 permit action once the IEPA water quality certification is issued and the record of decision is finalized.

On August 3, 2006, COE regulatory and planning staff met with City officials and the IEPA to discuss the project. There have been some project changes since the original Public Notice was distributed. Some additional technical information is needed. Once the information has been provided, the revised plans will be described in a new Public Notice this year (late summer / fall 2007).

Revised project plans were submitted. A revised Public Notice was distributed on May 31, 2007. A number of comments were received and provided to CWLP for a response. On September 4, 2007, CWLP provided a response to the comments sent out to them for a response. Copies of the response were forwarded to those making comments.

Section 401 water quality certification from the Illinois Environmental Protection Agency is needed.

A decision is needed if another Corps public hearing will be held.

#### Description.

Preliminary discussions began in August 1988 with City Water Light & Power (CWLP) about an additional water supply reservoir for the City of Springfield. A Section 404 permit application was received on August 1, 1989. On August 22, 1989, we notified state and federal agencies that an EIS would be prepared for this project. On October 21, 1989, the Notice of Intent was published in the Federal Register, and on November 8, 1989, the public notice was issued, also noting that an EIS would be prepared. Slow progress by the applicant occurred in compiling information necessary for the EIS.

Briefings were given to CWLP and congressional interests on July 6, 1995. Congressional interests at that time included <u>Congressman LaHood and Senator Durbin</u> and then Senator Mosely-Braun. Contact with congressional interests has been ongoing throughout the process.

Funding of the EIS has been an issue. In the early 1990s (FY 90-92) the Corps funded \$106.7K Subsequent regulatory guidance ceased Corps direct funding. The City has provided \$94,000 under Support For Others for the EIS preparation and review process. We do not anticipate requesting additional City funds unless some unforeseen costs are incurred.

In February 1998, we received the consultant's wetland delineation report stating that 42.8 acres of wetland were to be impacted. On April 9, 1998, we expressed our concerns to the City about the inadeguacy of this report. As followup in June and July 1998, the Corps with cooperation from the Natural Resources Conservation Service performed onsite verification of the delineation according to the 1987 Wetland Delineation Manual at several locations within the project area. The City's representatives were in attendance. By letter dated October 14, 1998, we informed the City that our verification estimated that 102 acres of wetlands were to be impacted.

The FEIS was published in the Federal Register on November 24, 2001. A regulatory public hearing was held on February 26, 2001, in Springfield, Illinois. The Record of Decision for the FEIS will be finalized once the IEPA issues their Section 401 water quality certification. The issues are complex, involving NPDES and other watershed issues, and need inclusion into the EIS. The DA permit decision will follow the Record of Decision.

Authority

SI - Special Interest - Clean Water Act and Rivers and Harbors Act

Project Manager Information

10F2

Ers PENNIN



# Appendix C

## Agency and Interest Group Comments Received During the Scoping Period

(July 1, 2021, through July 30, 2021)





## List of Commenters

Donald Hanrhan – Citizens for Sensible Water Use
Elliot Brinkman – Prairie Rivers Network
Kenneth Westlake – US EPA



## CITIZENS FOR SENSIBLE WATER USE 4981 Smith Rd

Pleasant Plains, Il 62677

Email: mail.cswu@gmail.com

Regulatory Division - Mr. James Kelley U.S. Army Corps of Engineers Rock Island District Clock Tower Building PO Box 2004 Rock Island, IL 61204-2004

Re: CWLP - City of Springfield CEMVR-OD-P-2016-0095

Dear Mr. Kelly:

This is in response to the public notice dated July 1, 2021 regarding the above project. The Corps previously recognized significant new circumstances and information relevant to environmental concerns raised by the proposed action, requiring preparation of a Supplemental Environmental Impact Statement, a process begun nearly 5 years ago. Since then, scoping has narrowed the list of considered alternatives. Good cause exists to reconsider alternatives previously eliminated, as set forth herein.

There have been dramatic changes in the proposed action itself: (1) a complete re-design, shrinking the size of the reservoir and adding two more proposed dams; creating a "backwash" area above the two new dams to hopefully filter phosphorus-laden sediment, and (2) changing the "purpose and need" to include "aquatic recreation," such as fishing, bird watching, hunting for aquatic bird species, swimming, boating, kayaking, canoeing, and water skiing.

We were not directly notified of the July 1 Public Notice. From now on, we request that all USACE public notices for Rock Island District be sent to us at the above physical and email address. A robust public debate requires that the deadline for comments be extended, as many members of the public do not subscribe to USACE public notices and the applicant failed to give the public notification that USACE was seeking comments until approximately July 23.

## I. <u>The SEIS has wrongly narrowed the scoping of alternatives.</u>

We have previously submitted scoping comments regarding the original "purpose and need" of the project for supplemental water supply. The regulations require that scoping remains a continuous process during the formulation of the SEIS, particularly where, as here, there have been subsequent changes to the design, the purpose and need, and the circumstances related to both demand and alternatives after the initial SEIS scoping. See 43 C.F.R. §46.235. The alternatives and changed circumstances / information set forth below require ongoing scoping reassessment pursuant to §46.235, adding and evaluating these clearly less destructive, cheaper alternatives, and critically reviewing their prior elimination. By way of example only, the

following eliminated alternatives need to be revisited:

### A. Gravel Lakes / Sangamon Valley Aquifer

The scoping process eliminated consideration of the gravel lakes, Sangamon Valley wells, the Sangamon River itself, and the South Fork watershed. The applicant's own studies have shown that the gravel lakes yield 9 mgd in the projected drought of record (i.e. the drought event giving rise to the "need" for supplemental water supply). This alternative was summarily dismissed in SEIS scoping based on the applicant's unsupported claim that the gravel lakes could only be used minimally without impacting South Sangamon Water District (SSWD) wells. The claim is true only if the applicant abandons common sense.

CWLP maintains a direct connection to SSWD water mains for emergency backup water. During a severe drought, there is no barrier, physically or politically, to CWLP agreeing to provide all water needed to SSWD (roughly 2 mgd ), then tapping into all of the 9 mgd available in the gravel lakes. Furthermore, the study that concluded the gravel lakes can provide 9 mgd deliberately failed to include the proximity of the Sangamon River (mere feet from the gravel lakes, and with a direct connection), which has an average flow of 70 mgd during drought-ofrecord events. Furthermore, the study ignored another obvious solution: simply drill SSWD wells deeper.

Excluding this alternative when the solution to the claimed problem is essentially a nocost intergovernmental agreement is contrary to common sense, let alone the intent of the regulatory scheme. USACE is responsible for determining the scope of the SEIS, not the applicant. It appears, however, that this alternative was excluded early in the SEIS process based on misinformation from the applicant. The extant physical connection between the two systems and a simple intergovernmental agreement for use of 9 mgd was wrongly excluded, effectively shutting down any further studies to determine the connectivity between the gravel lakes and the Sangamon River, or the efficacy of drilling wells deeper, or both.

Because SEIS scoping should be continuous throughout the SEIS process, changed and newly revealed circumstances and information strongly support USACE reconsideration of this alternative. The articulated basis for excluding it is unsupported by the evidence.

#### B. Demand issues and other alternatives for water supply

#### 1. Demand for water significantly reduced

Since the initial scoping, the applicant is retiring three of its four coal fired power plants. Collectively, they consume nearly 30 percent of the raw water taken from Lake Springfield. Alternatives that were dismissed because they do not meet the claimed "need" (not updated since the announcement of the power plant closings) need to be reconsidered, both separately and collectively, given the radically reduced demand for water occasioned by power plant retirements. We previously noted that the applicant again inflated demand, citing high population growth figures to come up with its alleged "deficit" in water, now projected at 8.2 mgd in the drought of record. Census figures obtained after the initial scoping, however, continue to show lack of population growth and even population declines, with no evidence of trend reversal in the future. This information justifies reconsideration of the projected "need" based on real population figures, not those unsupported by the census record.

## 2. Dredging Lake Springfield

The applicant persists in refusing to dredge its current reservoir, even though storage volume would increase by up to 20 percent, claiming that Lake Springfield cannot be dredged enough to achieve all of the claimed need. When combined with real conservation based water rate structures and other conservation measures (e.g., retrofitting old toilets and water wasting appliances, fixing leaking mains, etc.), dredging sufficient additional volume may obviate the need for supplemental water supply, particularly when considering revised demand. Dredging, moreover, will remove phosphorus-laden sediment, improving water quality for existing fishing, boating, and (if the city would re-open its shuttered public beach and beach house) swimming, thus impacting the new proposed "aquatic recreation" need at the same time. Finally, dredging MUST be done in any event at some point, and the costs will result in markedly increased water rates, which may further lessen demand and encourage conservation.

## 3. Lake Sangchris

Lake Sangchris was excluded from scoping because its water was "already allocated." Since the initial scoping, however, Vistra, the current owner of the Sangchris water supply usage, announced plans to retire its power plant at Kincaid by 2027. This entire 2,325 acre lake (average depth 13 feet), just a few miles from Lake Springfield, should be considered available as of 2027. Instead, it was summarily dismissed in scoping, despite the fact that water released from Sangchris could come straight down the South Fork a few miles to CWLP's existing pumping station. Sangchris is only a few hundred square acres smaller than the proposed project.

## 4. Sangamon River

The city gave up its previous permit for a temporary dam on the Sangamon that could divert water to the South Fork pumping station in a drought; this could easily provide needed water during the drought of record on a temporary basis, if needed, with far less environmental damage and minimal cost compared to building and maintaining a new lake. Climate models indicating that such a drought is even less likely make such an alternative attractive, as it may never need to be deployed at all.

## II. <u>Recreation "Need" is not established</u>, and better, cheaper, less destructive alternatives exist.

## A. Issues with Recreation Needs Study

The applicant commissioned a study purporting to show "need" for aquatic-based

recreation, including swimming, fishing, canoeing and kayaking, and waterfowl hunting, needs they contend can best be met at the least cost and least environmental damage by the proposed project. The study included both flat water and river/stream water-based activities, confusing the issue of what exactly is "needed" from a flat water lake and what can be satisfied with extant rivers and streams. For example, would canoeists and kayakers have a "need" for flat-water recreation if access was expanded on the Sangamon and Illinois Rivers, or if the two existing streams in the project land were opened to the public?

The claimed need was justified on the basis of respondent surveys. A majority of respondents indicated the main obstacles to their pursuit of water-based recreation was not lack of a lake, but rather their own lack of time, interest, health or proper equipment. The study does not show that a third lake within 15 miles of two existing lakes would affect the majority of the survey respondents whose needs cannot be met except by increasing their interest, improving their health, increasing their available time, or providing equipment they lack. The need, if there is one, may be met by a facility that rents canoes and kayaks on existing lakes (Lake Springfield, Sangchris, or even the nearby gravel lakes) and streams (e.g., the Sangamon River, Horse Creek, Brush Creek). The applicant's study cites no evidence that existing Lake Springfield, Lake Sangchris, or any other local water based recreation facility is overused, or if they were, that the project is the best way to relieve it. The applicant and its study produced no evidence that the survey respondents would actually use a new lake for recreation given those who cited lack of time and equipment preventing utilization, and the vast majority who reported being satisfied with the status quo.

#### B. Alternatives for recreation

## 1. Swimming

The applicant claims the study demonstrated need for lake-based swimming, and justifies a massive dam building project to meet such need. Since 2008, the applicant has failed and refused to open its existing public beach at Center Park on Lake Springfield. When the applicant closed this facility, they cited declining use, poor attendance, losing money, and excessive maintenance costs, after previously closing Bridgeview Beach for similar reasons.<sup>1</sup> The applicant still has not opened its public beaches, even after receiving the study purporting to show a need. Under these circumstances, the applicant's claims of an unmet need so immense that a whole new lake has to be built should be viewed with great skepticism. Alternatives to Hunter Dam: Open shuttered beaches, or build new ones at Lake Springfield and at the Clear Lake gravel lakes. The public is more likely to utilize a conventional city pool, which can be built at existing parks or easily acquired land within the city for a few million dollars.

## 2. Fishing and boating

Similarly, the applicant urges a "need" for more fishing and boating to justify the project.

<sup>&</sup>lt;sup>1</sup> See Illinois Times, "On the Beach," July 2, 2008, available at: https://www.illinoistimes.com/springfield/on-the-beach/Content?oid=11446653

The applicant, however, can implement a simple, feasible alternative: Acquire additional Lake Springfield shoreline (through the simple expedient of not renewing existing shoreline leases, or paying for early terminations), and then build new access points for such activities. CWLP has only seven boat launches on Lake Springfield, but has submitted no evidence of overuse either of existing launches or of Lake Springfield itself. Furthermore, for the past 50 years, the applicant could have provided for canoeing and kayaks at the Hunter Lake site, which contains two creeks, to accommodate public use when the streams are flowing. The applicant has only one boat launch at Riverside Park on the Sangamon, and again has submitted no evidence that it is overused, nor any evidence of impediment to building additional facilities at its Riverside Park.

#### 3. Other alternatives

The proposed change in purpose and need to include aquatic recreation assumes without evidence that flat water recreation is superior to all other recreation, including land based and other stream based recreation that could take place now on the 7000 acres of land the applicant acquired for the project. Discussion of alternatives should not be limited solely to aquatic recreation alternatives, but must include all needed recreation alternatives to the proposed project.

Stream based aquatic recreation is presently available in this land as it exists on Horse Creek and Brush Creek, but the applicant refuses to allow public access. The applicant thus deserves little credence in claiming recreational need, having forcibly kept the public from having any effective access to this land, which could have been used for the past 50 years for needed hiking, biking, camping, hunting (including waterfowl hunting, but also upland game, deer, etc.), bird watching, horseback riding, stream fishing, stream kayaking and canoeing, zip lines, ATVs, and more. The existing land without a dam can serve both aquatic and land based recreational needs at far less cost and far less environmental impact, and preserves the land intact should unforeseen need force its reconsideration as a reservoir in the future.

Similarly, the applicant presently excludes members of the public from using its large gravel lake, reserving it all for one private club. This publicly owned aquatic resource, as well as additional large gravel lakes in the same area, would be ideal for a public beach, boat launches, and other aquatic recreation (e.g., zip lines); recreational use can be implemented without the immense cost and environmental degradation proposed by the applicant's project.

The applicant also has a public park (Riverside Park) on the Sangamon River. There is no evidence of overuse of the Sangamon River for canoeing or kayaking, but if there was, additional boat launches, fishing areas, and other aquatic recreation facilities can be added to the solitary site at Riverside Park.

The applicant assumes, without proof or evidence, that the proposed project can meet the claimed needs for swimming, hunting waterfowl, and boating. Even assuming that "need" has been established, the very design of the project is that impounded water in the project lake is released into Lake Springfield, causing immense fluctuations in the water level of the project lake. The applicant must be forced to supply proof that the project will be the best alternative for

fishing, swimming, and boating even with projected swings in pool depth of four to seven feet in normal years, and up to nine feet and more in dry years.

#### III. Conclusion

The USACE seeks comments particularly related to alternatives for the claimed "aquatic recreation" need. Because of massive changes in the project itself (including a complete redesign of the project) and because of changed and changing circumstances and information surrounding demonstrated need for water supply, USACE needs to reconsider alternatives wrongly eliminated by earlier scoping before addressing recreational need.

In addressing recreational need, the flaws of the Recreational Needs Study need critical review by USACE. The applicant must be required to demonstrate actual need, not speculative needs of people who lack time and equipment to engage in preferred activities. The applicant must explain its claimed need for lake-based swimming, belied by its articulated basis for closing its public beach(es), and explain why, if there is such an immense need, it has failed to reopen the beaches this year, after receiving the survey results. The applicant has to show not just need, but that the proposed project can best meet that need at the lowest cost and with the least environmental impact. The USACE should view with skepticism claims of need from this applicant, which has at hand the means to greatly improve access to swimming, boating and hunting, and other recreation with existing facilities, land, and water, but has done nothing to alleviate any claimed need in the months since the study was released, and has produced no evidence of overuse of existing lakes, streams and rivers within 50 miles of Springfield.

Multiple alternatives to the project exist to achieve superior land and stream based recreation. There is no evidence to support destruction of existing land and stream based recreation to provide only lake based recreation, nor any evidence that extant facilities cannot accommodate need with expanded facilities. Alternative forms of meeting recreational need can be implemented without the immense costs (both fiscal and environmental) of the proposed project. Aquatic recreational needs for swimming, boating, and fishing can be met by reopening or expanding existing city-owned facilities on Lake Springfield, at Riverside Park, and at the city-owned gravel lake.

Submitted by: Donald Hanrahan, CSWU



1605 South State Street, Suite 1 Champaign, IL 61820-7231 prairierivers.org 217.344.2371

July 30, 2021

Regulatory Division U.S. Army Corps of Engineers, Rock Island District Clock Tower Building Post Office Box 2004 Rock Island, Illinois 61204-2004

Re: PN 2016-0095 Via email <u>cemvr-odpublicnotice@usace.army.mil</u>

Prairie Rivers Network (PRN) is an Illinois-based river conservation and clean water advocacy organization. Our mission is to protect water, heal land, and inspire change. With the support of our members throughout Illinois and the country, PRN strives to use science and collective action to protect and restore the health of lands and waters throughout the state.

The following comments are offered to supplement those already submitted for the record on September 13, 2016, when the project scope was limited to water supply. Those comments are hereby incorporated by reference, to minimize the amount of detail to be provided in this update.

This document addresses the revised multipurpose project and its purported need to satisfy unmet demands for both water supply and recreation. We suggest alternative ways of meeting each that are less environmentally damaging. We include some water supply alternatives that also meet recreation needs, and some recreation alternatives that meet water supply needs.

#### CONCERNS ABOUT THE DSEIS PROCESS TO DATE

At this point 5 years into a process originally designed to produce a Draft Supplemental Environmental Impact Statement in 79 days, we call your attention to the need for additional critical review of technical reports cited in public documents released since the 2016 DSEIS scoping meeting. Some of the reports date from 1990s and served as the basis for the EIS which was published in 2000. The credibility of those justifications for need, and descriptions of alternatives were repeatedly questioned by the public and never satisfactorily answered by CWLP, leading to the decision by USACE in more than a decade ago to require a Supplemental EIS.

Our main concern at this point is that, despite the best efforts of USACE and its third-party contractor, many results and conclusions from those "source documents" (especially those prepared prior to the 2016 scoping meeting) are being incorporated into the DSEIS without sufficient scrutiny. Most if not all those contractor reports were framed and funded by, and conducted in collaboration with, the applicant. Moreover, some later analyses conducted during the first two years of the DSEIS process by AMEC-Foster Wheeler show signs of excessive involvement by the applicant. Fortunately, that situation was addressed in 2018 when USACE intervened to protect the independence of the third-party



contractor by imposing a strict policy governing communications between the applicant and the contractor.

Nevertheless, some publicly accessible DSEIS documents on the CWLP website and elsewhere contain errors and omissions that overstate water demand, favor Hunter Lake, and overstate costs and complexity of water supply alternatives. Examples of the latter include routing pipelines across cropland instead of alongside rural roads; building unnecessary water towers along pipelines; or choosing a costly urban pipeline route to bring groundwater to the treatment plant vs. a rural route that discharges into Lake Springfield. We understand that analyses supporting early screening may be pre-decisional and not yet publicly available, but remain concerned that some may have been biased. Accordingly, we request that USACE critically review the source documents and analyses used to screen the water supply alternatives.

#### **SCOPING COMMENTS**

**Section I addresses the need for supplemental water supply.** Our 2016 scoping comments identified many deficiencies in the City's 2015 demand forecast. We cannot find evidence in publicly available documents that the deficiencies have been corrected. This letter highlights some of the most obvious deficiencies that must be corrected and documented in an updated forecast.

*Section II addresses alternatives for supplemental water supply*. The Project Status Briefing on the CWLP website contains a list of water supply alternatives that survived the Corps' Phase 1 screening process. We are concerned that some of those screening decisions were unduly influenced by the framing of those screening decisions, made in 2017 before the USACE communications policy was enforced.

Section III addresses the need for recreation. The estimate of future recreation need rests solely on a single survey, at a time when the accuracy of survey research appears to be declining. The forecasts lack supporting data on factors driving demand for the various recreational activities. We are also concerned about the applicant's inability or unwillingness to maintain water quality in its existing reservoir at a level that consistently supports primary contact recreation.

*Section IV addresses recreation alternatives.* We detail our concerns about the applicant's failure to maintain water quality in its existing reservoir, posing health risks for recreational users. We continue to emphasize ways in which recreation needs would be met by many of the water supply alternatives.

#### WATER SUPPLY NEED

Potable water demand has been essentially flat since the 1970s. Raw water demand will plummet to zero as the oldest power plants retire before Hunter Lake could possibly be built. For 30 years the applicant has failed to adopt professional advice to collect better data on water-using technologies, which would enable more accurate forecasting. Most egregiously, CWLP's forecasts fail to consider the effects of increasing water/sewer prices.

The applicant's assertions of need have evolved since the beginning of the EIS process 30 years ago. The originally stated need for "supplemental water supply" to meet a 50-year demand forecast led earlier



scoping processes focusing on long term solutions. For decades, the City held Section 404 permit to erect a temporary emergency diversion dam on the Sangamon River if needed before a long-term supplemental water supply could be secured. That permit had been issued in 1988 and renewed for 3 subsequent 6-year periods. Since the City declined to seek renewal, statements from CWLP have emphasized that "Springfield has no backup water supply".

For that reason, in section on project alternatives below, we include options that can meet both short and long-term water supply needs, while perhaps reducing lifecycle costs. Given realistic construction lead times, and delays in detecting onset of a 100-year drought, Hunter Lake and many of the other options considered to date, cannot meet the stated need.



#### Water demand is overstated

Chronic overestimation has plagued CWLP's demand forecasts since Hunter Lake was proposed in 1965. For 20 years CWLP relied on local engineering firms that relied mainly on extrapolating past trends because detailed data on sectoral demand was not available. In 1991 the outside contractor hired to forecast demand for the 2000 EIS highlighted this shortcoming and emphasized the need to understand the water use at the sectoral level to facilitate technology- and economics-based forecasting (PMCL,1991): *"CWLP disaggregates its water billing records by size of the meter... does not facilitate analysis of sectorial water use patterns... reclassification of CWLP water customers.... Would provide CWLP with a sensitive means of tracking water use and estimating future system demands."* CWLP's failure to adopt that recommendation impaired a subsequent effort in 2013 by the same firm (following



its acquisition by CDM-Smith) to update its forecast and extend it to 2065 for the DSEIS. Our 2016 scoping comment elaborates on the implications; some are summarized below.

**CDM's econometric modelling must be updated.** Potable water projections are based on the CDM report that used socioeconomic data from only 2004-2013, rejected population projections by the Sangamon County Regional Planning Commission and replaced them with higher growth rates. The annual US Census surveys show Springfield and Sangamon County populations have been declining since 2015 and 2012, respectively. As a result, the forecast provided to USACE overestimated 2020 potable water demand by 13%.

The Project Status Briefing on the CWLP website shows that CDM's forecast has been padded by assuming even more rapid growth of industrial demand, plus expansion of wholesale sales by serving unnamed outlying villages. The facts, illustrated in the above chart, show clearly that demand for potable water has been basically flat since 1970.

CDM assumed that the Dallman power plant would continue to consume 3 mgd of potable water through 2065. Forecasted demand must be reduced to account for the immediate elimination of >1 mgd associated with units 31-33, and assume a realistic retirement date for unit 4.

CDM's modeling assumed that the "real" (inflation-adjusted) combined water/sewer price will remain constant for the next 50 years, apparently because the poor quality of CWLP's data provided no analytical basis for a reasonable forecast.

Forecasted water demand must also be updated to include the effect of water/sewer rate increases attributable to costs likely to be incurred over 50 years, e.g.

- Construction, operation and maintenance of Hunter Lake or its alternatives;
- Safe Drinking Water Act compliance at water treatment plant, as agrichemical runoff continues to be unregulated;
- Clean Water Act compliance (e.g. CSOs, SSOs, NPDES);
- Replacing water and sewer pipes nearing the end of their 75-100 year life;
- Maintaining the existing 86-year-old Spaulding Dam;
- Dredging Lake Springfield to maintain lakeside property values and lease revenues, and compliance with water quality standards in Lake Springfield;
- Construction and operation of recreational facilities;
- Adopting a conservation rate structure that achieves economic efficiency by offering customers the same \$/gal price for "saved water" as the incremental \$/gal it is proposing to spend on new supply.

#### Lake Springfield yield is understated

The applicant's proposal assumes that capacity of its existing 86-year old reservoir will continue to decline as it collects sediment for 50 more years and will never be dredged to restore and maintain its original storage capacity. That assumption is unrealistic because it fails to account for the impact on property values and property tax revenues on the hundreds of upscale residences it leases around its



shoreline. It is also irresponsible because it will increase the public health risk of cyanotoxin outbreaks resulting from accumulated phosphorus loading of the reservoir.

The Project Status Briefing assumes that power plant operations constrain available water supply to only the top 12 ft of the 27-ft deep existing reservoir. Retirements of Dallman units 31-33 eliminate that constraint.

The yield of the City's existing water supply includes flow from the 73 mgd pump station that fills Lake Springfield whenever sufficient flow is available on the South Fork Sangamon River. That flow is likely to increase substantially when the largest water user in the South Fork basin shuts down by 2027. Vistra Corporation has notified federal and regional agencies that it will retire its 1100 MW Kincaid generating station located on Lake Sangchris. The plant currently consumes massive amounts of water via forced evaporation, coal ash handling, and other uses. The resulting increase in discharges from the Sangchris dam spillway must be included in the applicant's forecast of pumpage from the South Fork to Lake Springfield.

Lake yield estimates must be adjusted to account for climate forecasts that indicate increased annual precipitation for Illinois, with more intensive storms producing increased runoff. Moreover, precipitation patterns are expected to shift towards wetter winter/spring and drier fall/winter, making an 18-month drought less likely. The 1950s drought of record was caused by two consecutive dry winters, combined with an operational error that caused – as CWLP director Willis Spaulding explained to the City Council in 1956: *"unnecessary loss due to letting down the gates of the dam at the beginning of the drouth period. This was done to protect the shore line and to avoid possible downstream flooding in case of heavy rains which never came but a 3 year drouth came instead".* CWLP has since armored much of the shoreline and discontinued winter drawdowns.

**Uncertainty of yield estimates** Throughout the first 40 years of the 55 year Hunter Lake controversy, CWLP relied on "best estimates" (50% confidence) for both supply and demand – estimates that are equally likely to be too high or too low. However, in recent years as demand has remained flat, CWLP has promoted the idea of demanding 90% confidence level for estimates of Lake Springfield yield, reducing its predicted yield about 20%. On its face, this appears to be an act of desperation, applying this stringent criterion to Lake Springfield data while every other EIS and FEIS calculation of water demand (and all water supply alternatives) rests on "best estimates" of their input parameters. Given its chronic record of overestimating demand, CWLP is in no position to insist on such certainty about forecasted supply.

At a broader level, consider the depth of professional analysis and public engagement that was required over decades to achieve broad consensus reflecting a level of societal conservatism. That conservatism has been institutionalized by designing – as a default – on 1% probability (100-year) flood and drought events. When statistical data are lacking, the flood or drought of record is substituted. If USACE concedes to the applicant's preference for using seemingly arbitrary asymmetric criteria for comparing 50-year yield estimates of alternative water supplies (rivers, lakes, aquifers), it must provide a detailed rationale using social, economic, and engineering analyses. Are there any USACE guidelines or precedents that address situations where an applicant asserts a "need" for 99.999% confidence in the



estimated yield of some alternative supplies, but not others? What about asymmetric treatment of supply vs. demand forecasts?

#### WATER SUPPLY ALTERNATIVES

The Project Status Briefing on the CWLP website contains a list of water supply alternatives that survived the Corps' Phase 1 screening process. Those screening decisions, made in 2017, rely heavily on contractor reports that pre-date USACE policies to protect the independence of the third-party contractor. Many of the project alternatives suggested by Prairie Rivers Network during the 2016 scoping meeting were rejected at this early stage, apparently because they were based on erroneous data, evaluated at a piecewise level that ignored system-level synergies, or assumed only a single design approach. Examples include:

- The claim that dredging Lake Springfield would cost \$669M because of an unwarranted assumption that dredging alone must extract virgin soil in addition to sediment in order to yield 12 mgd.
- Declaring the "potential yield of the Sangamon River under drought conditions negligible". In fact, CWLP's own contractor report estimated the 100-year drought flow at the Riverton gage at 70 mgd (Layne, 2012). USGS gage data for the actual 1950s 18-month drought of record confirms that estimate.
- The requirement for "development of a pump station on the Sangamon River" to convey water to gravel pits. In fact, gravity would suffice to refill gravel pits that have been drawn down to supply water.
- A fundamental misunderstanding of Illinois water law which encourages landowners to share the use of any aquifer, river, or lake underlying or adjoining their properties. Unlike western states that operate under the principle of "prior appropriation", Illinois law is based on "reasonable use" which encourages neighboring landowners to develop creative ways of sharing the limited resource instead of hogging it at the expense of others.

With that in mind, we offer the following list of water supply alternatives to clarify and supplement those provided during the 2016 scoping meeting.

**Sangamon River Valley** Only a few miles from Lake Springfield lies a complex of interconnected underground and surface waters. Six deep gravel lakes totaling 700 acres, capable of producing 9 mgd during severe droughts, lie alongside the Sangamon River below its 1400 square mile watershed. Aquifers and well fields in the valley are recharged continuously by surface and groundwater from the uplands, and from the river as it floods frequently, sometimes 10 to 20 ft deep. Some of the gravel lakes are already connected to the river by channels visible from aerial photos. Together the river, aquifers and storage capacity of the gravel lakes are clearly capable of providing plenty of supplemental water supply for Springfield and the communities currently pumping from their existing well fields.

The Project Status Briefing on the CWLP website reported that all but one of the gravel lakes had been eliminated in Phase 1 screening. Subsequently it too was eliminated in Phase 2. Apparently, the screening analysis failed to recognize that CWLP, by acquiring the properties containing the gravel lakes, would have the right to reasonable use of the groundwater thereunder and the river adjoining. Neighboring landowners, including the South Sangamon Water Commission (SSWC) have similar rights, and every incentive to negotiate a mutually acceptable sharing arrangement.



The engineering opportunities for ensuring reliable operation during severe droughts are obviously too numerous to detail here. Doing so will require analysis of the interconnected hydrologic system as a whole. For example, if draining the gravel lakes during the drought of record were to interfere with SSWC's wells, the existing wells might be operated differently or drilled deeper or new wells drilled. For CWLP it might involve supplying SSWC with treated water through existing pipelines connecting Springfield with Chatham that are currently used for emergency backup services. In our 2016 scoping comments we mentioned some of these system elements and their possible roles intending to be illustrative, neither specific nor exhaustive. We ask that USACE and its independent third-party contractor identify a physically practicable and economically reasonable way to meet the needs of Springfield (and the four municipalities currently consuming 2 mgd from wells) from the entire Sangamon Valley hydrologic system. It should not be difficult, given the size of the resource. The analytical task should be no more difficult than analyzing various options for siting, developing and operating well fields in the Havana lowlands and dealing with the legal complexities associated with pipeline routing through an urban area directly to the water treatment plant or indirectly along rural roads into Lake Springfield.

**South Fork Sangamon River** Lake Sangchris did not survive the DSEIS screening process, despite our 2016 scoping request. Apparently it was dismissed because its "Effective yield is zero as the water is otherwise allocated." The dam and rights to reasonable use of the water are currently held by Vistra, who has announced plans to retire its 60-year-old coal power plant by 2027. At least 75% of the lake's shoreline north of Rt. 104 is currently owned and/or leased by the state and operated as Sangchris State Park. We see no reason that CWLP could not seek to purchase Vistra's land on the north shore of the lake containing the dam, spillway, adjoining day-use area, and/or associated water rights, just as it acquired land and associated water rights for Hunter Lake at a time when those rights were "otherwise allocated" to former owners. In theory CWLP could afford to bid an amount comparable to its planned cost of obtaining water from Hunter Lake. Modifying the dam at Sangchris Lake could enable water releases during a 100-year drought to be optimized to meet Springfield's needs while minimizing impact on recreation at Sangchris Lake. Water could be conveyed to Lake Springfield via pipeline, or via CWLP's existing 73-mgd pump station on the South Fork as it has been since 1955.

**Dredging Lake Springfield** Removing accumulated sediment to restore its original capacity could increase its current storage volume by more than 20%, according to estimates by the Illinois State Water Survey. This alternative has been repeatedly dismissed by the applicant because of the cost per gallon of storage recovered. Within the narrow context of a single-purpose water supply project by a private developer, such comparisons might be useful. For a municipal utility with obligations to serve broader public goals, more attention must be paid to external costs and benefits. The City has already begun to acknowledge these broader needs by adding recreation as a purpose and promoting Hunter lake as a "backup water supply". Data from a similar project should be available from the municipal utility in nearby Decatur IL, whose lake was recently dredged for \$90M to provide additional storage volume, protect lakeshore property values, etc.

We therefore ask that the project scope explicitly recognize the need to remove from Lake Springfield decades of accumulated phosphorus loading attached to sediment particles. Dredging would also



reduce public health risks such as cyanotoxin outbreaks. Removing the accumulated phosphorus load is absolutely necessary to have any chance of compliance with the Clean Water Act, which it currently violates. CWLP's IEPA inspections report the original volume of the lake at 21.4 billion gallons; together with existing augmentation from the South Fork, dredging could bring system yield above 45 mgd for an 18 month drought.

#### Reduce leakage from water mains

CWLP's 2019 annual disclosure to bondholders reported 3.6 mgd of treated water unaccounted-for as it passes through miles of mains and pipes that are nearing the end of their 75-100 year useful life. The USEPA reports that up to 75% of that is recoverable – a potential 2.7 mgd source of supplemental water supply. The American Society of Civil Engineers suggests that current leakage rates are self-inflicted: "With utilities averaging a pipe replacement rate of 0.5% per year, it will take an estimated 200 years to replace the system – nearly double the useful life of the pipes." CWLP's 50-year forecast of treated water "need" implicitly rejects the option of making the necessary investments to reduce this 3.6 mgd loss. Instead, it predicts such losses to grow at the same rate as population, inferring that it lacks the engineering expertise and/or commitment to reversing the trend.

**Sources for emergency supply** Despite mayoral statements to the City Council that "we don't have a backup water source" and CWLP's decision to let their emergency Sangamon dam permit expire a decade ago, the fact is that backup water sources do exist. If a severe emergency (e.g. serious drought or toxic spill) should occur before Hunter Lake could become operational, the City would have to turn to the Sangamon River and/or its adjoining gravel lakes. Part II.A of our 2016 scoping comments suggested key elements of an implementation plan, demonstrating how such a short-term emergency preparedness could also be part of a *long-term* supplemental water supply option.

For example, consider the experience of Aquarion Water Company in Southwest Connecticut during the 2016 drought. It is a system about 30% larger than CWLP (2 large reservoirs serving 200,000 population). Within a few weeks after an emergency was declared, 6 miles of temporary 12-24" pipelines and several large 6-20 mgd diesel pump stations and a floating barge had been rented and installed through several towns to transfer water between reservoirs and to the distribution network. All this was accomplished for about \$10M. The rented equipment was returned, leaving the company with a large electric substation and 2 miles of pipeline purchased and permanently installed.<sup>1</sup>

**Sequencing and stacking of alternative supplies** Considering the Sangamon River Valley interconnected hydrologic system (river, gravel lakes and wells) as a permanent supplement to the City's water supply creates an opportunity to defer major capital investments. Mathematically there is only a 39% probability that a 100-year drought will occur during the 50-year project life of the proposed dam and reservoir. Given uncertainties about the water demand, it may be cost-effective to wait for those uncertainties to be resolved before investing in a large dam or long-distance pipeline. Rights-of-way could be secured now, while acquisition of pumps and pipelines needed to reach the treatment plant from the Sangamon River can be deferred until a severe drought or other emergency occurs. A rent-orbuy decision could be made at that time.

<sup>&</sup>lt;sup>1</sup> "Emergency Drought Response in Southwest Connecticut" Aquarion Water Co. Connecticut American Water Works Assn Annual Conference, May 2017.



Since many of the individual sources of supplemental water supply yield only a fraction of the projected need 50 years hence, some of the alternatives will necessarily be bundled. Investing in all of them immediately could be economically wasteful, fail to minimize lifecycle cost and – worst case – leave an unneeded stranded asset in the long run. Examples of other measures consistent with the Sangamon Valley system include dredging and leak reduction along with conservation rates and other demand side management options detailed in our 2016 scoping letter.

#### **RECREATION NEED**

The applicant asserts that recreation need, like water supply need, exists today. Since its preferred option, Hunter Lake, cannot meet those near-term needs due to lead-time issues, we will address ways of meeting those needs in Section IV below.

The Public Notice cites the UI survey of 625 respondents as the sole justification for supporting the existence of a need for another large reservoir tucked between Lake Springfield and Lake Sangchris. It presents no evidence that those two lakes are overcrowded and if so, what recreational activities are exceeding capacity. If those two lakes are not overcrowded, there is no need for building another one between them.

The University of Illinois survey concluded that there is an unmet need for about 15,000 additional acres of flatwater to meet recreation demand in the area within 50 miles of Springfield. After 2025, demand for flatwater recreation is forecast to decline, mainly due to declining population.

It is hard to believe, given the existence of eleven large (>1000 acres) bodies of flat water within 50 miles, that the priority is to build another one at a time when canoeing and kayaking are among the fastest growing sports. Illinois has 21,000 miles of rivers and streams but is famous for lacking publicly accessible places for boaters to access them. About half the canoe/kayak respondents in Sangamon County reported travelling more than 100 miles (one way) to enjoy their sport.

By far, the four most popular activities identified in the UI survey report do not "need" a 2500-acre reservoir (swimming outdoors in lake, river, or pool); fishing; canoeing or kayaking; and waterfowl hunting). The real need, in this state with 21,000 miles of rivers and streams, is the severe lack of places to access them to enjoy any of the four most popular activities. Only small percentages of respondents reported motorboating (10%), boarding (5%), jet skiing (4%), sailing (2%).

The survey asked anglers if they wanted more fishing opportunities, and then assumed that such demand could only be satisfied from boats with two anglers per boat and 20 acres per boat. The report failed to determine whether respondents would prefer to fish from the banks of rivers closer to home if they could access them without a boat.

When asked why they did not engage at all, or engage more in a particular activity, relatively few respondents cited crowding or a lack of nearby places to go. By far the greatest complaints were "do not have time" and "do not have the necessary equipment"; it is not clear how another reservoir would fix



that. Canoe/kayak respondents were an exception; a substantial fraction cited the lack of places to go and the distance involved.

The survey report apparently summed the acreage of flatwater required for all kinds of recreational activities, implicitly all were simultaneously compatible on the proposed Hunter Lake. The public notice provided no evidence that the applicant had plans for avoiding the kinds of conflicts that could diminish demand, for example, conflicts between speedboats and paddleboards; between anglers and jet skis; etc.

The public notice also contains no evidence that the City provided USACE with any other kinds of evidence of need. For example: data quantifying the decline in fishing license sales, motorboat licenses sales, and motorboat registrations issued by CWLP for Lake Springfield.

#### **RECREATION ALTERNATIVES**

*Lincoln Heritage Water Trail.* This State-designated water trail along Sangamon River between Decatur and Petersburg lacks facilities for providing public boat access points for use by individuals and privately owned boat rental operations or concessions. The UI recreation demand study found that far more people participate in canoeing/kayaking than motorboating. IDNR has recently developed a new comprehensive plan to guide facility development along the Sangamon River. <u>https://www2.illinois.gov/dnr/recreation/greenwaysandtrails/ComprehensivePlans/LincolnHeritageRive</u> rTrailReport.pdf

From a practical standpoint the Sangamon River, as one of the flattest rivers in one of the flattest states, provides flatwater recreation. It is far narrower than the series of pools that constitute the Illinois River, providing boaters with more solitude, silence, and natural surroundings – an experience fundamentally different from bucking motorboat wakes or waves produced by prairie winds on a large reservoir.

#### Purchase or lease some or all the gravel lakes to meet recreation demand as well as water supply. All

the lakes are suitable for swimming, fishing, and boating. Activities can be distributed among the lakes to meet different management goals and separate potentially conflicting activities. The riverside location is ideal for operating a canoe/kayak/tubing rental concession because the same inventory can be deployed on both river and lakes.

Clear Lake has been owned by the City for years but is being leased for exclusive use by a private club. The existence of this arrangement begs a question that ought to be addressed when evaluating alternatives. For example, what amenities do the gravel lakes provide that Lake Springfield does not?

One or more of the lakes could accommodate cable water skiing or cable wakeboarding, where instead of using a boat, riders are pulled along a cable system suspended in the air by a series of towers around the lake. The clean and quiet electric powered cable system offers enormous capacity. For example, the Quarry Cable Park in Crystal Lake Illinois has a main cable a half-mile long that gives users 19 miles of water skiing or wake boarding in an hour. <u>https://www.thequarrycablepark.com/about-the-qry/</u>

*Improve recreational capacity and quality at Lake Springfield.* The DSEIS must first document the extent to which Lake Springfield lacks the accessibility and publicly accessible facilities needed to meet



the diverse recreational needs identified in the UI study. Only then would it be possible to develop plans for building the facilities and management practices required to meet the needs for each of the activities identified.

Shoreline access is an obvious limitation, as mentioned elsewhere in this letter, but the need to improve water quality may be the most critical. The public health risks associated with motorboating certainly differ from those associated with paddleboarding among wakes generated by motorboats. The City closed its public swimming beach and beach house a decade ago due to pollution and the excessive cost of operations. Reopening it may require improving water quality by dredging or reducing the inflow of sediment and agrichemicals into the lake.

Unfortunately, and without justification, the applicant has decided to rule out this alternative. The irony is that CWLP proposes expenditures to ensure that its proposed Hunter Lake meets water quality standards to provide quality recreational opportunities, while refusing to make similar investments at its existing reservoir to safely provide opportunities for primary and secondary contact recreation. It proposes to meet its water supply needs with a new reservoir while letting its existing reservoir lose capacity by filling with sediment for the next 50 years. We are compelled to ask whether this is what NEPA intended.

Since artificial lakes in Illinois naturally fill with sediment, periodic dredging is necessary for public health as well as economic reasons. Such dredging will be necessary whether Hunter Lake is built or not, and the cost of such dredging will raise water rates and suppress water demand. If this alternative is not adopted as a partial solution to the purported deficit in recreational opportunities, the DSEIS must quantify its effect on demand forecasts and reservoir yield.

*Make more of the existing lake's shoreline accessible to anglers who cannot afford a boat.* About 90% of Lake Springfield's 57-mile shoreline is closed to public recreation because it is leased to private interests. Determine how much bank fishing would be expected at Hunter Lake and determine the cost of accommodating it at Lake Springfield as existing leases expire or are modified. Consider adding amenities that would support increased bank fishing, e.g. piers, concessions renting equipment and supplies, etc. Similar opportunities exist at Lake Sangchris, and warrant the same level of analysis.

Thank you for the opportunity to comment. Please add Prairie Rivers Network to your distribution list for future public notices: <u>info@prairierivers.org</u>

Sincerely,

Glut lal

Elliot Brinkman Executive Director



REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

August 5, 2021

REPLY TO THE ATTENTION OF: Mail Code RM-19J

## VIA ELECTRONIC MAIL ONLY

James Kelley U.S. Army Corps of Engineers – Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, Illinois 61204

RE: EPA Comments – Change to Project Purpose and Need for the proposed Springfield Supplemental Water Supply Project (previously referred to as the Proposed Water Supply Reservoir Hunter Lake); Sangamon County, Illinois

Dear Mr. Kelley:

The U.S. Environmental Protection Agency has reviewed the Public Notice (PN) dated July 1, 2021, proposing a change to the Project Purpose and Need for the U.S. Army Corps of Engineers' (USACE) forthcoming Draft Supplemental Environmental Impact Statement (DSEIS) for the proposed Springfield Supplemental Water Supply Project. The project is now referred to as the "Springfield Supplemental Water Supply and Aquatic Recreation Project" (previously referred to as both the "Springfield Supplemental Water Supply Project" and the "Proposed Water Supply Reservoir Hunter Lake") in Sangamon County, IL. This project is being undertaken in conjunction with the City of Springfield - Office of Public Utilities, also known as the City Water, Light & Power (City). This letter provides our comments on the PN pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The City operates an integrated water supply, purification, transmission, and distribution system. The City's current source of water is Lake Springfield, a reservoir constructed in the 1930s; it serves as the City's drinking water supply and the cooling water supply for the City's coal-fired power generating station. As a result of drought conditions in 1953-1955, the City constructed a movable low head dam across the South Fork of the Sangamon River to supplement the Lake Springfield water supply during low lake levels.

On July 26, 1989, the City submitted a joint permit application to USACE and the Illinois Environmental Protection Agency (IEPA) for a Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification (WQC) for construction of the proposed Hunter Lake Reservoir. A Notice of Intent to prepare a Draft EIS (DEIS) for the construction of the Hunter Lake Reservoir was published by USACE in the Federal Register on October 31, 1989. USACE, in conjunction with the City, prepared a DEIS that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. The DEIS was published in April 1999. A Final EIS (FEIS) was published in November 2000 identifying the construction of the Hunter Lake Reservoir as the preferred alternative; however, a final NEPA decision document (Record of Decision) was not issued.

Between 2000 and 2010, negotiations continued between the City and USACE/IEPA regarding the status of the application for IEPA Section 401 WQC and the USACE Section 404 permit. On December 17, 2010, USACE notified the City that a Supplemental EIS was needed, due to the age of the FEIS, changes that occurred since publication of the FEIS, and the age of some of the supporting data. USACE identified areas where information should be updated, such as water demand analysis, threatened and endangered species bat surveys, wetland delineations, the programmatic agreement related to cultural resource impacts, water quality anti-degradation analysis, and mitigation plans. USACE also withdrew the City's application for a 404 permit at that time, due to the additional information needs and lack of activity on the project.

On January 27, 2016, USACE received a 404 permit application from the City proposing construction of an impoundment to create Hunter Lake for the purpose of creating a supplemental water supply for Springfield. On August 15, 2016, a Notice of Intent (NOI) to prepare a Supplemental EIS was published in the Federal Register and a public notice was issued announcing the NOI to prepare an DSEIS. This initiated a scoping period and alternatives were considered for a supplemental water supply that could provide the City with 12 million gallons per day, based on the City's water demand analysis that demonstrated a sustained need for additional water supply to meet current and future demands. The FR notice requested suggestions and information on the scope and significance of issues and alternatives to be addressed in the preparation of the DSEIS. EPA provided scoping comments on the FR to USACE on October 4, 2016.

On July 31, 2018, the City requested that recreation be added as an additional primary purpose and need for their water supply project. In August 2018, USACE requested that the City provide them with additional information to support a demand and need for aquatic recreation opportunities in the Springfield region. In accordance with CEQ regulations specified in 40 CFR § 1502.9, USACE, in conjunction with the City, is proposing a modification to the project purpose and need for the preparation of the DSEIS. The intent of this public notice (PN) is to solicit comments for project alternatives for NEPA and the SEIS only. After the DSEIS is completed, a DSEIS Notice of Availability (NOA) PN will be released along with the complete permit application PN for the City's preferred alternative.

EPA's comments and recommendations on the proposed change to purpose and need and project alternatives are enclosed. The comments from our 2016 scoping letter to USACE (enclosed for reference) are still valid and relevant and should be addressed in the forthcoming DSEIS.

We look forward to reviewing the DSEIS document when it is released for public comment. If you have any questions about this letter, please contact the lead NEPA reviewer for this project, Ms. Liz Pelloso, PWS, at 312-886-7425 or via email at pelloso.elizabeth@epa.gov.

Sincerely,

Kenneth A. Westlake Deputy Director Office of Tribal and Multimedia Programs

Enclosure 1: EPA Detailed Comments - Change of the Project Purpose and Need to include Aquatic Recreation for the Springfield Supplemental Water Supply Project Enclosure 2: EPA Comment Letter to USACE dated 10-4-2016

<u>CC's (via email, w/enclosures):</u> Kristen Lundh, USFWS Nathan Grider, IDNR Thaddeus Faught, IEPA Brian Koch, IEPA Darren Gove, IEPA CJ Wallace, IHPA

## EPA Detailed Comments Change of the Project Purpose and Need to include Aquatic Recreation for the Springfield Supplemental Water Supply Project August 5, 2021

## PURPOSE AND NEED

• To help USACE prepare going forward, EPA would like to emphasize the role and importance of the statement of purpose and need that will be required in forthcoming NEPA documentation for this project. The purpose and need statement should be specific enough that the range of alternatives can be evaluated in terms of how well they address purpose and need, but not so narrow that they pre-select a single alternative. Furthermore, a project's purpose and need must justify the impacts associated with a Proposed Project.

The 2017 project scoping report authored by the City's consultants (Amec Foster Wheeler) summarized project purpose as follows: "*The purpose of the proposed action is to develop a reliable supplemental water supply for the City's municipal, commercial, and industrial customers during drought conditions through the year 2065. The project is needed to provide a dependable water supply for the City that meets the current and projected long-term demands during dry weather periods.*" The need for additional recreational opportunities was identified as a "*secondary need.*" Identifying aquatic recreation as a secondary need does not preclude its consideration as a decision-making factor in selecting a preferred alternative.

If aquatic recreation is substantiated as a primary need going forward, then the range of alternatives should include other options to meet that need (e.g., user fees to support the city reopening beaches closed due to funding shortfalls; use of existing land for outdoor aquatic recreation, including use of existing natural streams).

As proposed, the modification to the project need to add "unmet aquatic recreation demand" as a primary need appears to predispose alternatives that are not reservoir-related and should not subvert the important step of developing a range of alternatives (including the No Build alternative) to meet a specific project purpose and need. All reasonable alternatives should be identified and studied, regardless of whether or not they are within the jurisdiction of the lead Federal agency.

• The forthcoming DSEIS must identify and <u>substantiate</u> the purpose and need for the proposed project as well as the identified and preferred alternatives. The project purpose and the project need statements for the proposed action should be clear and concise. After underlying problems have been identified and substantiated, the alternatives identified to solve the underlying problems should then be identified and explained. The no-action alternative and all action alternatives that would satisfy the substantiated purpose and need and are determined to be reasonable should be carried forward and fully studied in the DSEIS. The document should identify any alternatives considered but dismissed from further consideration and should provide elimination criteria and clear explanations for their elimination.

## **DEVELOPMENT OF PROJECT ALTERNATIVES**

- The DSEIS should include and address the following:
  - Explanation of why the drought yield of Lake Springfield for water cannot be met by partial or complete shutdown of electrical generation. The primary direct water withdrawal user of Lake Springfield water has historically the Dallman Power Plant. A November 2016 project technical memorandum from the City's consultants (Amec Foster Wheeler) estimates the Dallman Power Plant water withdrawal at 9.3 million gallons per day (all 4 units). Since that time, Dallman Unit 1 and Dalman Unit 2 were retired in December 2020. Dallman Unit 3 will be retired by September 2023, leaving only Unit 4 to generate and meet electric demand for ratepayers. Since Unit 1 and Unit 2 are now retired, and Unit 3 is nearly retired, the DSEIS should discuss why Lake Springfield can, or cannot, provide for water needs post shutdown of Dallman Units 1-3;
  - An updated water demand analysis that shows the age and character of waterconsuming devices currently used by the ratepayers, the rate of replacement of inefficient devices with efficient devices mandated by federal standards, and the effect that the use of efficient devices will have on demand projected forward, taking into account reasonable residential and commercial growth rates. This analysis should also account for any provisions or programs undertaken for increased efficiencies (e.g., retrofit programs for more efficient toilets) and the current lack of aggressive City water conservation measures during drought; and
  - Explanation on why recycling water from the Sangamon County Water Reclamation District's treatment plant cannot be used for cooling Dallman 4 or flushing and cooling units, thus reducing the need to pull water from Lake Springfield.
- Sangchris Lake, located minutes from Springfield, is a 3,022-acre reservoir built as a cooling lake for the Kincaid coal fired power station. In September 2020, Vistra Energy, the owners of Kincaid, said the Kincaid power station would be fully retired by the end of 2027. The DSEIS should include a study of the potential for Sangchris Lake to be a potential source of water. The Alternative to use Sangchris Lake (via South Fork pump station) as a water source was rejected in the previous EIS analysis because the then-owner of the dam was not interested. The imminent closure of the power station may present opportunities for the City to acquire the lake, water rights, and/or the dam.
- The PN states that the DSEIS will review all alternatives previously assessed in the FEIS and will include an analysis of reasonable and practicable alternatives which meet the dual purposes of supplemental water supply and aquatic recreation needs, consisting of the following:
  - No Action Alternative;
  - Development of a new water supply reservoir that also supplies aquatic recreation opportunities;
  - Development of groundwater well systems with associated pump stations and pipelines combined with surface water reservoirs that supply aquatic recreation opportunities;
  - Use of other existing surface water reservoirs for water supply and aquatic recreation opportunities; and

• Dredging of Lake Springfield for additional water supply and additional aquatic recreation opportunities.

Although several preliminary action alternatives have been identified as noted in the PN and on the City's website for the project, EPA expects that the DSEIS will evaluate hybrids of these various reasonable alternatives. This should include alternatives not included in that list, including the use of Sangchris Lake. EPA expects that the alternatives analysis will include combinations of one or more identified alternatives that pass a screening for fatal flaws.

- The No Action Alternative should include and discuss operational changes made since 2000 (publication of the FEIS) to Lake Springfield, including investigations for and elimination of leaks and areas of supply loss.
- The City indicated that water restrictions were imposed on customers in 1988, 2000, and 2012. These restrictions did not include surcharges for high usage, or restrictions on watering (times of day/allowing for watering on specific days based on even or odd addresses, etc.). EPA suggests that such conservation measures, which are common in other parts of Illinois, be investigated as additions to the No Action Alternative due to their value for water conservation.
- One of the issues identified in the past about the proposed Hunter Lake reservoir was the size as proposed, and whether or not it needed to be as large as proposed. As the DSEIS is developed, USACE should be evaluating a proposed Hunter Lake reservoir's size, meaning that several variations of a Hunter Lake alternative (differing sizes) may be considered reasonable and feasible.
- A new water supply reservoir will result in significant impacts to aquatic resources and will require issuance of an Individual Clean Water Act Section 404 permit for proposed discharges of dredged or fill materials to Waters of the United States. As USACE is well aware, issuance of a Section 404 permit approval is contingent upon a project complying with Clean Water Act Section 404(b)(1) guidelines. These guidelines are summarized as follows:
  - **Least Environmentally Damaging Practicable Alternative** There must be no practicable alternative to the proposed discharge (impacts) which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;
  - No Violation of Other Laws The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
  - **No Significant Degradation** The project must not cause or contribute to significant degradation of Waters of the United States; and
  - **Minimization and Mitigation of Adverse Impacts** The project must include appropriate and practicable steps to avoid impacts to regulated Waters of the United States. Where impacts are unavoidable, a project must demonstrate how impacts have

been minimized. Compensatory aquatic resource mitigation is required to offset unavoidable, minimized impacts to aquatic ecosystems.

The DSEIS should take into account whether each reasonable alternative is, in fact, the Least Environmentally Damaging Practicable Alternative.

- There are multiple recreational lakes in the Springfield area. The City should provide recreational use data and user capacities for these area lakes. The DSEIS should document if construction of a new reservoir would provide a warranted addition to recreational under capacity (assuming it is substantiated) or be a redundant supply of underutilized recreational capacity.
- As this project proceeds under NEPA, environmental impacts and costs for all viable and reasonable alternatives to be carried forward should be thoroughly analyzed in the DSEIS. Project costs should include estimated costs of mitigation, including mitigation siting, preparation of mitigation plans, land and easement acquisition, mitigation construction costs, and monitoring and adaptive management plans.
- Many of the regulatory agencies' comments on the FEIS included recommendations that the Hunter Lake alternative (and to expand on this, any new alternative proposing a new reservoir) not be finalized until a comprehensive watershed management plan is developed. EPA recommends that the DSEIS discuss whether or not watershed management plans (WMPs) have been completed for the watersheds in which each reasonable alternative is proposed. Details on the status of those WMPs, and how they have been folded into the development of each alternative, should be analyzed in the DSEIS.

## **RESPONSE TO COMMENTS RECEIVED**

- EPA recommends that the forthcoming DSEIS, include all substantive comments received on both the 2000 FEIS, the 2016 scoping period held for the DSEIS, and the comments received on this PN. EPA recommends that all comments be responded to in the DSEIS as well. The format utilized in the FEIS to respond to agency and public comments (reproduction of the original comment letter, numeric sequencing of specific comments, and corresponding responses to those comments) was extremely efficient and easy to read. EPA suggests that this format be utilized in the DSEIS to respond to comments received.
- The City's consultant, Amec Foster Wheeler, prepared a Public Scoping Meeting Summary Memorandum (dated September 15, 2016), which summarized attendance and comments received on the project. EPA recommends that the forthcoming DSEIS address all of these listed concerns and questions.

## PROJECT TRANSPARENCY

• A major concern during review of the DEIS and FEIS was the lack of detail provided in support of analysis of critical environmental issues. In many instances, readers were referred

to supporting materials from outside sources rather than having that information available directly within the document. While incorporation by reference is not necessarily discouraged, due to the length that this project has been ongoing, its complexity, and the amount of information that has changed since its inception, EPA encourages USACE and the City to ensure that as much information is included with the DSEIS as possible. This can be easily accomplished by including reference documents as appendices to the DSEIS, which is EPA's recommendation.


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

OCT 0 4 2016

REPLY TO THE ATTENTION OF: \$E-19J\$

James Kelley U.S. Army Corps of Engineers – Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, Illinois 61204

#### RE: Notice of Intent to prepare a Draft Supplemental Environmental Impact Statement for the Springfield Supplemental Water Supply Project (previously referred to as the Proposed Water Supply Reservoir Hunter Lake); Sangamon County, Illinois

Dear Mr. Kelley:

The U.S. Environmental Protection Agency has reviewed the Federal Register (FR) Notice dated August 15, 2016, proposing the U.S. Army Corps of Engineers' (USACE) intention to initiate the preparation of a Supplemental Draft Environmental Impact Statement (SDEIS) to address the proposed Springfield Supplemental Water Supply Project (previously referred to as the Proposed Water Supply Reservoir Hunter Lake) in Sangamon County, IL. This process is being undertaken in conjunction with the City of Springfield, Office of Public Utilities, also known as the City Water, Light & Power (City). This letter provides our scoping comments on the Federal Register notice pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The City operates an integrated water supply, purification, transmission, and distribution system. The City's service area encompasses approximately 100 square miles with more than 52,600 service connections and a population of about 147,000. The City's current source of water is Lake Springfield, a reservoir constructed in the 1930s; it serves as the City's drinking water supply and the cooling water supply for the City's coal-fired power generating station. As a result of drought conditions in 1953-1955, the City constructed a movable low head dam across the South Fork of the Sangamon River to supplement the Lake Springfield water supply during low lake levels.

On July 26, 1989, the City submitted a joint permit application to USACE and the Illinois Environmental Protection Agency (IEPA) for a Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification (WQC) for construction of the proposed Hunter Lake Reservoir. A Notice of Intent to prepare a Draft EIS (DEIS) for the construction of the Hunter Lake Reservoir was published by USACE in the Federal Register on October 31, 1989. USACE, in conjunction with the City, prepared a DEIS that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. The DEIS was published in April 1999. A Final EIS (FEIS) was published in November 2000 identifying the construction of the Hunter Lake Reservoir as the preferred alternative; however, a final decision document (Record of Decision) was not issued.

Between 2000 and 2010, negotiations continued between the City and USACE/IEPA regarding the status of the application for IEPA Section 401 WQC and the USACE Section 404 permit. On December 17, 2010, USACE sent a letter to the City formally stating that a Supplemental EIS was needed, due to the age of the FEIS, changes that occurred since publication of the FEIS, and the age of some of the supporting data. USACE identified areas where information should be updated, such as water demand analysis, threatened and endangered species bat surveys, wetland delineations, the programmatic agreement related to cultural resource impacts, water quality anti-degradation analysis, and mitigation plans. USACE also withdrew the City's application for a 404 permit at that time, due to the additional information needs and lack of activity on the project.

In accordance with requirements of CEQ regulations 40 CFR 1502.14, and the provisions of Section 404(b)(1) of the Clean Water Act, the SDEIS will evaluate all appropriate and reasonable alternatives to the proposed project. The SDEIS will review all alternatives previously assessed in the FEIS, and will include an analysis of reasonable alternatives consisting of the following:

- The No Action Alternative;
- Development of a new water supply reservoir;
- Development of groundwater well systems with associated pump stations and pipelines;
- Use of other existing surface water reservoirs; and
- Dredging of Lake Springfield

The SDEIS will provide updated supporting data where needed, review the purpose and need, evaluate alternatives, and assess impacts of reasonable alternatives resulting from the development of a supplemental water supply system for the City. Consideration of conservation measures is inherent in the City's ongoing objectives to optimize the efficiency of it water supply systems and is therefore inherent in each of the alternatives to be evaluated.

The FR notice asks for suggestions and information on the scope and significance of issues and alternatives to be addressed in the preparation of the SDEIS. EPA appreciates the opportunity to have met with USACE, the City, and other state regulatory agencies on September 16, 2016, in Rock Island, to discuss this project. EPA's scoping comments on the forthcoming SDEIS are grouped by subject and are as follows.

#### PURPOSE AND NEED / DEVELOPMENT OF PROJECT ALTERNATIVES

• EPA recommends that the forthcoming SDEIS identify and substantiate the purpose and need for the proposed project as well as the preferred alternative. The project purpose and the project need statements for the proposed action should be clear and concise. After underlying problems have been identified and substantiated, the alternatives identified to solve the underlying problems should then be identified and explained. The no-action

alternative and all action alternatives that would satisfy the substantiated purpose and need and are determined to be reasonable should be carried forward and fully studied in the SDEIS. The document should identify any alternatives considered but dismissed from further consideration, and should provide elimination criteria and clear explanations for their elimination.

During the September 16, 2016, interagency meeting, City officials explained how Springfield is in need of a secondary source or water, and provided information on how Lake Springfield is utilized as a secondary source by other communities, even though Springfield itself does not have a secondary water source. Water demands have changed over the years, and demand estimates for current and future forecasts should take into account the reasonable and expected users, including future wholesale water demands.

- Although several preliminary action alternatives have been identified and proposed to the public and on the project website, EPA expects that the SDEIS will evaluate hybrids of these various reasonable alternatives, that may include combinations of one or more identified alternatives that pass a screening for fatal flaws.
- The No Action Alternative should include and discuss operational changes made since 2000 (publication of the FEIS) to Lake Springfield, including investigations for and elimination of leaks and areas of supply loss.
- The City indicated that water restrictions were imposed on customers in 1988, 2000, and 2012. These restrictions did not include surcharges for high usage, or restrictions on watering (times of day/allowing for watering on specific days based on even or odd addresses, etc.). EPA suggests that such conservation measures, which are common in other parts of Illinois, be investigated as additions to the No Action Alternative due to their value for water conservation.
- One of the issues identified in the past about the proposed Hunter Lake reservoir was the size as proposed, and whether or not it needed to be as large as proposed. As the SDEIS is developed, USACE should be evaluating a proposed Hunter Lake reservoir's size, meaning that several variations of a Hunter Lake alternative (differing sizes) may be considered reasonable and feasible.
- A new water supply reservoir is likely to propose significant impacts to aquatic resources and wetlands, and require issuance of an Individual Clean Water Act Section 404 permit for proposed discharges of dredged or fill materials to Waters of the United States. As USACE is well aware, issuance of a Section 404 permit approval is contingent upon a project complying with Clean Water Act Section 404(b)(1) guidelines. These guidelines are summarized as follows:
  - Least Environmentally Damaging Practicable Alternative There must be no practicable alternative to the proposed discharge (impacts) which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;

- No Violation of Other Laws The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
- No Significant Degradation The project must not cause or contribute to significant degradation of Waters of the United States; and
- Minimization and Mitigation of Adverse Impacts -- The project must include appropriate and practicable steps to avoid impacts to regulated Waters of the United States. Where impacts are unavoidable, a project must demonstrate how impacts have been minimized. Compensatory aquatic resource mitigation is required to offset unavoidable, minimized impacts to aquatic ecosystems.

The SDEIS should take into account whether each reasonable alternative is, in fact, the Least Environmentally Damaging Practicable Alternative.

• As this project proceeds under NEPA, environmental impacts and costs for all viable and reasonable alternatives to be carried forward should be thoroughly analyzed in the SDEIS. Project costs should include estimated costs of mitigation, including mitigation siting, preparation of mitigation plans, land and easement acquisition, mitigation construction costs, and monitoring and adaptive management plans.

#### THREATENED AND ENDANGERED SPECIES/CRITICAL HABITAT

• While tree-dwelling bats such as the Indiana bat and the Northern Long Eared bats need to be surveyed for, EPA and other agencies also have concerns about the potential presence of cave dwelling bats (such as the little brown bat). There has been a precipitous fall in the numbers of these bats and tri-color bats, even though they are not a listed species. EPA recommends, when analyzing the potential impacts to bats associated with each reasonable alternative, that USACE be looking for impacts to suitable habitat in addition to critical or essential habitat.

#### **RESPONSE TO COMMENTS RECEIVED**

• It is likely that USACE received comments on the 2000 FEIS. More recently, a public scoping meeting for the SDEIS was held on August 24, 2016. Written comments from the public were received at this meeting. Other scoping comments have been received by the USACE via the web or email. It is also expected that USACE received comments during the public comment period of the Federal Register notice. EPA recommends that the forthcoming SDEIS, via an appendix, summarize all public comments received on both the 2000 FEIS and for the current preparation of the SDEIS. EPA recommends that all comments be responded to in the SDEIS as well. The format utilized in the FEIS to respond to agency and public comments, and corresponding responses to those comments) was extremely efficient and easy to read. EPA suggests that this format be utilized in the SDEIS to respond to comments received.

• The City's consultant, Amec Foster Wheeler, prepared a Public Scoping Meeting Summary Memorandum (dated September 15, 2016), which summarized attendance and comments received on the project. EPA recommends that the forthcoming SDEIS address all of these listed concerns and questions.

#### WATER QUALITY

- For years, Lake Springfield has been listed on Illinois EPA's (IEPA) Clean Water Act Section 303(d) list of impaired waterbodies as it does not meet state Water Quality Standards (WQS). The 2016 Illinois 303(d) list identifies total phosphorous, total suspended solids, and dissolved oxygen as causes of impairment for Lake Springfield. IEPA has continually raised concerns over the years that the water quality in the proposed Hunter Lake reservoir will exceed or match nutrient concentrations in Lake Springfield, which have been noted as excessive. IEPA has noted, as far back as 1999, that evaluation of the causes of the nutrient enrichment in the Hunter Lake basin will be required, and that identification of the sources and possible approaches to control nutrient loading will also be required for the Section 401 WQC review. Evaluations should be undertaken in sufficient detail as to indicate the measures necessary, if even possible, to reduce the nutrient levels to concentrations that will not result in impaired water quality and biological conditions. These concerns were reiterated by IEPA during the September 16, 2016, meeting; it is unclear if IEPA can issue Section 401 WQC for a project proposing creation of a new waterbody or reservoir that would, from the inception of its existence, not meet state WQS. EPA recommends that USACE and the City continue to have open discussions with IEPA on this issue. If it is determined that a new reservoir such as Hunter Lake would not be able to meet state WQS from its creation (thereby increasing the uncertainty that IEPA can issue 401 WQC), USACE will need to determine if pursuing the creation of Hunter Lake is in fact a reasonable alternative that should be studied further in the SDEIS.
- Many of the regulatory agency's comments on the FEIS included recommendations that the Hunter Lake alternative (and to expand on this, any new alternative proposing a new reservoir) not be finalized until a comprehensive watershed management plan is developed. EPA recommends that the SDEIS discuss whether or not watershed management plans (WMPs) have been completed for the watersheds in which each reasonable alternative is proposed. Details on the status of those WMPs, and how they have been folded into the development of each alternative, should be analyzed in the SDEIS.

#### PROJECT TRANSPARENCY

• A major concern during review of the DEIS and FEIS was the lack of detail provided in support of analysis of critical environmental issues. In many instances, readers were referred to supporting materials from outside sources rather than having that information available directly within the document. While incorporation by reference is not necessarily discouraged, due to the length that this project has been ongoing, its complexity, and the amount of information that has changed since its inception, EPA encourages USACE and the City to ensure that as much information is included with the SDEIS as possible. This can be

easily accomplished by including reference documents as appendices to the SDEIS, which is EPA's recommendation.

#### **MITIGATION**

- Any alternatives that propose new impoundments of a free-flowing stream or river propose irreversible or irretrievable commitment of resources and a permanent conversion of lotic ecosystems (flowing waters) to lentic ecosystems (still waters). Since the publication of the FEIS, mitigation expectations and requirements have changed significantly. Replacement in kind of lost resources (linear footage of streams or rivers; acreage of wetland) is expected. Previous mitigation commitments, such as outright acquisition of existing free flowing streams to be protected, still result in a net loss of lotic ecosystem. The SDEIS should take into consideration the ability to mitigate for resources to be damaged, destroyed, harmed, or permanently converted into a different type for each action alternative proposed. Furthermore, mitigation should also take into consideration the temporal loss of specific resources; as an example, the loss of forested wetlands takes decades to mitigate, as the definition of a forested wetland is dependent on tree height and diameter of trees at breast height. The ability (or inability) to provide adequate mitigation for resources to be impacted by an alternative may result in determination that an alternative is in fact not a reasonable alternative.
- EPA recommends that as the SDEIS alternatives are developed, and as discussions for mitigation progress, that all relevant Federal and state regulatory agencies be given the opportunity to review and comment on all proposed mitigation plans prior to release of a Final SEIS.

#### **CLIMATE CHANGE AND GREENHOUSE GASES (GHGs)**

 Final guidance has been published by the Council on Environmental Quality (CEQ) for Federal Agencies to consider the impacts of their actions on global climate change in their NEPA reviews<sup>1</sup>. Consistent with CEQ's Guidance, the EPA recommends that, in the SDEIS, USACE estimate the direct and indirect GHG emissions caused by the proposal and each alternative, and provide a qualitative summary of the impacts of climate change<sup>2</sup>. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website<sup>3</sup>. These emission levels can serve as a basis for comparison of the alternatives with respect to GHG impacts.

EPA recommends that the SDEIS identify and consider measures to avoid or reduce GHG emissions associated with the proposal, including identification and implementation of reasonable alternatives and practicable mitigation opportunities, and disclose the estimated GHG reductions for each action alternative (see CEQ Final guidance, p.18).

<sup>&</sup>lt;sup>1</sup> Final Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (finalized on 8/1/2016); available at:

https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/nepa\_final\_ghg\_guidance.pdf <sup>2</sup> Ibid, p. 11 and p. 16.

<sup>&</sup>lt;sup>3</sup> https://ceq.doe.gov/current developments/ghg-accounting-tools.html

Consistent with the CEQ Final guidance (p.20), EPA recommends that the SDEIS describe potential changes to the affected environment that may result from climate change, including an assessment of the potential for climate change to exacerbate the environmental impacts of the proposed action. Including future climate scenarios, such as those provided by the U.S. Global Change Research Program<sup>4</sup> (USGCRP), in the SDEIS would help decision makers and the public consider whether the proposal includes appropriate resilience and preparedness measures for the impacts of climate change (such as increased intensity and frequency of storm and flood events, as well as drought) as well as provide context for the impacts of the proposal.

In addition to looking at the direct impacts of the project's alternatives, CEQ regulations (Section 1502.16) instruct agencies to consider other effects that are reasonably foreseeable; this should include the potential effects of climate change. The SDEIS should make clear whether commitments have been made to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts.

We appreciate the opportunity to provide scoping comments, and we look forward to reviewing the SDEIS document it is released for public comment. When released, please send a hard copy and a CD to the EPA Region 5 office. If you have any questions about this letter, please contact the lead NEPA reviewer for this project, Ms. Liz Pelloso, PWS, at 312-886-7425 or via email at pelloso.elizabeth@epa.gov.

Sincerely,

Kenneth A. Westlake, Chief NEPA Implementation Section Office of Enforcement and Compliance Assurance

<u>CC's (via email):</u> Kristen Lundh, USFWS Keith Shank, IDNR Nathan Grider, IDNR Thaddeus Faught, IEPA Dan Heacock, IEPA Rachel Leibowitz, IHPA Bill Elzinga, Amec Foster Wheeler Marty Marchaterre, Amec Foster Wheeler Ted Meckles, Springfield City Water Light and Power

<sup>&</sup>lt;sup>4</sup> http://www.globalchange.gov/



# Appendix D

# Springfield Supplemental Water Supply Project Scoping Report

(January 2017)





### SPRINGFIELD SUPPLEMENTAL WATER SUPPLY PROJECT SCOPING REPORT Sangamon County, Illinois

Prepared for: U.S. Army Corps of Engineers, Rock Island District Clock Tower Building, P.O. Box 2004 Rock Island, IL 61204-2004

### Prepared by:

Amec Foster Wheeler



January 2017

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#### 1.0 Introduction

The United States Army Corps of Engineers, Rock Island District (Corps) will prepare a Supplemental Environmental Impact Statement (SEIS) to address the proposed Springfield Supplemental Water Supply Project in Sangamon County, Illinois. The Corps, working in conjunction with the City of Springfield, Office of Public Utilities, also known as the City Water, Light & Power (City), previously prepared an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et. seq.) that evaluated a range of alternatives to provide supplemental water supply to meet existing and projected deficits in water availability.

What is the Purpose of the Supplemental Environmental Impact Statement?

The purpose of this SEIS is to evaluate new and significant information within the project area, evaluate appropriate and reasonable alternatives, assess the potential impacts of the alternatives, and identify the preferred alternative that meets the project needs.

A Final EIS was prepared and published in November 2000 in which the Hunter Lake Reservoir was identified as the preferred alternative (see Figure 1). The Final EIS was published in the Federal Register on November 24, 2000; however, no Record of Decision was issued.

On December 17, 2010, the Corps issued a letter to the City formally determining the need for a SEIS. The Corps identified analyses in the SEIS that needed to be updated to reflect current conditions. These include the water demand analysis, threatened and endangered species bat surveys, wetland delineations, the existing programmatic agreement related to cultural resources, water quality anti-degradation analysis, and mitigation plans. As a SEIS, this document does not repeat information presented in the Final EIS, rather the SEIS includes an evaluation of new and updated supporting information related to, potential social, economic, and environmental impacts of reasonable water supply alternatives that meets the purpose and need for the project.

The City's current water supply source is Lake Springfield (see Figure 1). The adequacy of Lake Springfield as a source of water was not questioned until the 1953-1955 drought which nearly caused the shutdown of both the water treatment and electric generation plants. As result of this drought event, the City constructed a moveable low head dam across the South Fork of the Sangamon River (South Fork) to divert water and provide supplemental water to Lake Springfield, during low lake levels when sufficient water is available in the South Fork.

NEPA regulations require an early and open process for deciding what should be discussed in an EIS or SEIS (i.e., the scope of the document). The scoping process involves requesting and using comments from the public and interested agencies to help identify the issues and alternatives that should be addressed in the EIS. This document summarizes the input that the Corps received during the scoping process and defines the scope of the EIS. In addition to agency and public input, the EIS will also address specific requirements associated with a number of federal laws such as National Historic Preservation Act of 1966, Endangered Species Act of 1973, Clean Water Act of 1972, and the Clean Air Act of 1970, as amended would satisfy the requirements of Executive Order (EO) 11988 (Floodplains Management), EO 11990 (Protection of Wetlands), EO 12898 (Environmental Justice), EO 13112 (Invasive Species), and EO 13653 (Preparing the United States for the Impacts of Climate Change).





Figure 1. Lake Springfield

### 2.0 Purpose and Need

The purpose of the proposed action is to develop a reliable supplemental water supply for the City's municipal, commercial, and industrial customers during drought conditions through the year 2065. The project is needed to provide a dependable water supply for the City that meets the current and projected long-term demands during dry weather periods.

Water is withdrawn from Lake Springfield to supply residential, municipal, and commercial clients as well as the City's power plants. During the drought of 1953-1954, the lake level declined from the full pool elevation of 560 ft mean sea level (msl) to 547.4 ft msl, almost causing the shutdown of both the City water treatment and electric generation plants due to the low lake levels. During future drought conditions, the City is concerned that current and increased regional water demand may exceed local supplies resulting in water shortages.

Based on a review of Lake Springfield's storage and capacity, the Illinois State Water Survey (ISWS) conducted a drought vulnerability analysis and classified Lake Springfield as an inadequate water supply system with a 50 percent probability of not meeting expected water supply demands (ISWS 2016). Under conditions of reduced water availability the City is at risk of not meeting demands (both existing and future) for commercial and residential water use, and for industrial water supply (power plant operation and condenser cooling).



Other related needs include: 1) contractual obligations to provide water to nearby communities; 2) an adequate water supply to operate City power plants; 3) dependable water supply to support regional economic development; and 4) a demand for additional recreational opportunities. The need for additional recreational opportunities is a secondary need.

### 3.0 Alternatives

A range of alternatives had previously been considered for the proposed project in the 2000 EIS. While the City had previously identified the Hunter Lake alternative as the preferred alternative in the prior EIS, the SEIS will undertake an updated analysis of alternatives using current information. The SEIS will review alternatives previously assessed in the FEIS and will include an analysis of reasonable alternatives consisting of the following:

- No Action alternative
- Development of a new water supply reservoir
- Development of groundwater well systems with associated pump stations and pipelines
- Use of other existing surface water reservoirs
- Dredging of Lake Springfield
- Combination of components of the above alternatives

Figure 2 identifies alternatives under consideration. Conservation measures apply to all alternatives, including the No Action alternative.





Figure 2. Springfield Supplemental Water Supply Alternatives



#### 4.0 Public and Agency Involvement

The Corps intends to prepare an SEIS, the most intensive level of NEPA review, to consider alternatives for a supplemental water supply for the City. When completed, the draft SEIS will be available for public review for 30 days. Once the public and other agencies have reviewed the document, the Corps will make revisions, if necessary, and publish a final SEIS. The Corps will make a final decision after the final SEIS is published.

Public and agency scoping for this SEIS was formally initiated with the publication of the notice of intent (NOI) to prepare an SEIS in the Federal Register on August 15, 2016. In addition to the NOI in the Federal Register, the City published notices regarding this effort in regional and local newspapers; issued a news release to media; sent letters to interested parties, and posted information on the City's project website to solicit public input.

To initiate scoping, the Corps also sent copies of the NOI to federal agencies, including the United States Environmental Protection Agency, United States Federal Emergency Management Agency, United States Fish and Wildlife Service, and United States Department of Agriculture – Natural Resources Conservation Service. State and local agencies also received copies of the NOI (see Section 7.0 for further information).

#### 5.0 Scoping Feedback

A public scoping meeting was held in Springfield, IL on August 24, 2016 and was attended by 106 people. The purpose of the scoping meeting was to provide an overview and history of the project; present the project alternatives; and solicit comments from the public. Corps and City personnel were available to address questions and comments about the project. Written comments were submitted at the meeting or by mail to the Corps and comments were submitted electronically via a Corp website. This process provided meaningful opportunities for public involvement and comment on the issues associated with the Project.

During the public scoping period, the Corps received 52 comment submissions which included letters, e-mails, comment forms, and submissions through the Corps website. The comment submissions were prepared by individuals, groups, federal and state agencies, and a Native American tribe.

Written scoping comments were reviewed to identify particular issues raised by each commenter and were tabulated in general categories related to the following:

- Purpose and Need
  - Water Demand Basis
  - o Industrial Water Use
  - o Wholesale Customers
  - Power Plant Water Use
  - Water Conservation
- Project Alternatives
  - o No Action
  - Well Field and Pipeline Alternatives
  - New Reservoirs



- o Other Existing Reservoirs
- o Dredging of Lake Springfield
- o Gravel Pits
- o Diversion from Sangamon River
- o Combination of Alternatives
- Concerns Related to Environmental Resources
  - Water Quality
  - Habitat Alteration
  - $\circ$  Recreation
  - o Economic Impacts
  - Flooding
  - o Displacement of Residences and Businesses
  - o Agriculture
  - o Development of Conservation Lands

In total, 52 individuals, groups (i.e., Citizens for Sensible Water Use, Coalition of Concerned Citizens, Prairie Rivers Network, Sierra Club), and federal/state agencies provided 200 separate comments in the tabulation. The following exhibits provide a summary of the number of comments by category and subject area:



Figure 3. Overview of Scoping Comments Received



















#### Figure 7. Summary of Comments Related to the Hunter Lake Alternative



Approximately 200 comments discussed the purpose and need (27 percent), alternatives (42 percent), or environmental resources (31 percent). A few impressions from the comments are identified below:

- Purpose and Need. Among the 55 comments that discussed purpose and need, 47 percent raised concerns about the City's water demand.
- Alternatives. A total of 83 comments were received regarding the alternatives under consideration. Approximately 43 percent of the comments on alternatives focused on the Hunter Lake alternative. A majority of those commenters that specifically addressed the Hunter Lake alternative (N-37) were opposed (23), while 14 commenters supported Hunter Lake as a preferred alternative.
- Environmental Resources. A total of 62 comments were received regarding environmental resources. Primary issues commented on included water quality, habitat alteration, and economics.

A summary of the public scoping comments are included in Appendix A, copies of the public scoping comments are included in Appendix B, and agency scoping comments are included in Appendix C.

#### 6.0 Issues to be Addressed in the SEIS

Based on the Corps' internal scoping and input gathered from the public scoping process, commenters raised concerns about the purpose and need, the alternatives, and potential impacts of the proposed action on natural resources: The SEIS will address the following:

- Purpose and Need Can the City demonstrate the need for a supplemental water supply? The Corps will review City information on the potable (treated) and nonpotable (untreated or raw) water demand, current water yield from the Springfield Lake system, and impacts of water conservation and unaccounted for water on the system to determine the current and projected water deficit during a drought event. The Corps will evaluate other related needs such as meeting contractual obligations to provide water to nearby communities, providing adequate water supply to operate City power plants, maintaining a dependable water supply to support regional economic development, and supporting increasing demand for recreational opportunities.
- Alternatives The SEIS will review alternatives previously assessed in the FEIS and will include an analysis of reasonable alternatives as well as combinations of alternatives in the SEIS. A screening analysis will be undertaken to determine if an alternative is reasonable and should be more fully evaluated in the SEIS. Cost estimates for alternatives will be updated or developed.

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- Water Quality Water quality issues related to reservoir and well systems alternatives will be evaluated. Water quality concerns included total suspended solids, dissolved oxygen, phosphorus, and nitrates. Watershed management plans will be discussed.
- Biological Resources (vegetation, wildlife and aquatic life) Community types within the project area will be described. Significant natural features, including rare species habitat, important wildlife habitat, or locally uncommon natural community types will be identified. The Corps will evaluate the effect of each alternative on terrestrial and aquatic ecosystems.
- Threatened and Endangered Species State or federally listed threatened and endangered plants and animals known to exist in the vicinity of the different alternatives will be identified. The effects of each alternative on endangered, threatened, and rare species in need of management will be evaluated. This analysis will include, as appropriate, species that may be proposed for listing as threatened and endangered species prior to construction of a preferred alternative. The analysis will review species of concern identified in the Illinois Wildlife Action Plan.
- Floodplains and Wetlands Wetlands and floodplains on the proposed water supply alternative sites will be identified and impacts will be quantified. The effects of each alternative on wetlands and floodplains will be evaluated. Potential flood impacts on the Village of Pawnee will be analyzed.
- Geology and Soils Regional geology and soils on the proposed alternative sites will be identified and evaluated. Prime farmland issues will be analyzed.
- Land Use Land uses within the proposed alternatives and within the vicinity (5mile radius) will be identified. Permanent and temporary direct and indirect impacts to land use associated with each of the proposed alternatives will be evaluated.
- Transportation The existing roadway network in the vicinity of the alternatives will be identified. The effect of construction and operation of each alternative on the nearby roadway network will be evaluated.
- Recreational and Managed Areas Natural areas, parks, and other managed areas within the vicinity of the alternatives (5-mile radius) will be identified and potential adverse and beneficial impacts associated with the proposed alternatives will be addressed.
- Visual Resources The aesthetic setting of each alternative site will be described and an analysis of changes to scenic attractiveness and scenic integrity associated with each of the proposed water supply alternatives will be completed.
- Cultural Resources Corps will characterize archaeological and historic resources within the Area of Potential Effect of each alternative site based on information from IHPA. The Corps also will discuss any known National Register sites. The potential effects of each alternative on historic and archaeological resources will be evaluated. Results of the analysis will be reviewed by the Illinois Historic Preservation Agency.



- Solid and Hazardous Waste The Corps will identify any impacts from waste generation during construction and operation of each water supply alternative.
- Public Health and Safety Potential effects of each alternative on public health and safety will be evaluated.
- Noise Baseline noise conditions will be described based on existing land uses, and noise emissions associated with the construction phase equipment use will be assessed to determine the potential noise impact of each alternative on sensitive receptors.
- Air Quality and Climate Change Air quality considerations including attainment status, and regional air quality information will be presented. Impacts to air quality from construction and operations associated with each of the alternatives will be evaluated. Impacts of alternatives on climate change will be considered.
- Socioeconomics and Environmental Justice Demographic and community characteristics associated with each of the proposed alternative sites will be evaluated. Special attention will be given to identification of potential low income and minority populations to evaluate the potential for disproportionate impacts in accordance with Executive Order 12898. Impacts of potential relocations and changes to utility rates or community services will be analyzed.
- Mitigation Mitigative measures designed to minimize impacts also will be identified. In addition, the SEIS will include an analysis of the cumulative impacts of each of the alternatives.
- Cumulative Impacts A cumulative impact analysis considers the potential impact to the environment that may result from the incremental impact of the project when added to other past, present, and reasonably foreseeable future actions (40 CFR § 1508.7). The methodology for performing such analyses is set forth in Considering Cumulative Effects under NEPA (Council on Environmental Quality, 1997).

### 7.0 Environmental Review Process

NEPA requires federal agencies consider and study the potential direct, indirect, and cumulative environmental consequences of major actions. The NEPA review process is intended to help Federal agencies make decisions that are based on an analysis of the impacts of the action and, if necessary, to take actions to protect, restore, and enhance the environment. NEPA also requires federal agencies to provide opportunities for public involvement in the decision making process. The general project schedule which includes opportunities for public involvement is identified in Section 8.

The Corps' involvement also includes circulation of the draft SEIS to local, state, and federal agencies and federally recognized tribes to request comments on the proposed action. An example list of agencies, tribes, and organizations that will be notified of the availability the draft SEIS is set forth below. Individuals who attended the scoping meeting, provided comments on the Corps or City's web site, or asked to be a stakeholder will also be notified of the availability of the draft SEIS.



#### Federal Agencies

- United States Department of Agriculture, Natural Resources Conservation Service
- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- United States Federal Emergency Management Agency

#### Federally Recognized Tribes

- Citizen Potawatomi Nation
- Delaware Tribe of Western Oklahoma
- Devils Lake Sioux Tribe
- Flandreau Sioux Tribe
- Ho-Chunk Nation of Wisconsin
- Huron Potawatomi Nation
- Iowa Tribe of Kansas and Nebraska
- Iowa Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Otoe-Missouri Tribe of Oklahoma
- Peoria Indian Tribe of Oklahoma
- Ponca Tribe of Indians of Oklahoma
- Sac and Fox Nation
- Santee Sioux Tribe of Nebraska
- The Pawnee Nation of Oklahoma
- Winnebago Tribe
- Yankton Sioux

#### State Agencies

• Illinois Department of Natural Resources

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- Illinois Environmental Protection Agency
- Illinois State Geological Survey
- Illinois Historic Preservation Agency
- Illinois State Water Survey

#### **Municipal Entities**

- Chatham Township
- Divernon Township
- Springfield Sangamon County Regional Planning Commission
- Village of Pawnee
- Village of Virden

#### Individuals and Organizations

- Citizens for Sensible Water Use
- Coalition of Concerned Citizens
- Prairie Rivers Network
- Sierra Club Illinois Chapter

#### 8.0 Schedule for EIS Preparation and Review

Following is a tentative schedule for the completion of the EIS.

Task	Start Date	End Date
NOI	August 15, 2016	September 14, 2016
Public Review of Draft EIS	Mid 2017	Mid 2017 (45 days)
Development of Final EIS	Mid 2017	Late 2017
Final EIS Comment Period	Late 2017	Late 2017 (30 days)
Record of Decision		Late 2017



Appendix A

# Summary of Comments Received During Scoping Period



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# **Comment Summary**

A summary of the public comments received as part of the scoping process is included below:

## **1** General Comments

- 1) **Address public scoping meeting comments** Address concerns and questions raised in comments (*Commenter: USEPA*).
- Comment summary Recommend summarize public and agency comments and include in appendix of draft Supplemental Environmental Impact Statement (SEIS) (Commenter: USEPA).
- 3) *Attach supporting studies to SEIS* Recommend including supporting studies and references as appendices, where appropriate (*Commenter: USEPA*).

# 2 Purpose and Need

### 2.1 Water Demand

- 4) **Demonstrate water need** Prove need for supplemental water supply (water demand) (Commenters: Citizens for Sensible Water Use, Clark Bullard, Larry Daily, Don Davis, Vinod Gupta, Ron Howell, Bryon Johnsrud, Gary LaForge, Joe McMenamin, Jack Paxton, Prairie Rivers Network, Sheila Walk, Sierra Club, USEPA, irir1322435).
- 5) **CDM Smith water demand forecast flawed** Raised issues about methodology and water demand forecast (*Commenter: Prairie Rivers Network*).
- 6) **Address intermittency and frequency of water deficit** Explain intermittency and frequency of water deficit (*Commenter: Prairie Rivers Network*).
- 7) Water usage what is current City water usage? (Commenter: Ann Graffagna)
- 8) **Actual water demand** Actual water demand has been flat the last few years so why do we need the project? (*Commenters: Larry Daily, Joseph McMenamin, Sierra Club*)
- 9) **Population and water demand** smaller population growth requires less demand for water than shown by previous studies (*Commenters: Citizens for Sensible Water Use, Don Davis, Larry Daily, Gary LaForge, Prairie Rivers Network, Sierra Club, Peter Wagner*).
- 10) **Probability of drought** What is the probability of drought and most probably drought duration and frequency that supplemental water supply designed to meet? (*Commenters: Don Davis, irir1322435*)
- 11) **Partial or complete power plant shutdown** Explain why partial or complete shutdown of power plants would not meet drought demand need (*Commenters: Citizens for Sensible Water Use, Maureen Suhadolls*).
- 12) **Diminishing water demand at power plants** Consider options to diminish water demand from Dalman Unit 33, including recycling bottom ash sluice water back to power



plant and converting wet fly ash sluicing to dry ash management (*Commenter: Citizens for Sensible Water Use*).

- 13) **Reduce demand for potable water** Stop giving away water to the power plant and other "authorized users" (*Commenter: Prairie Rivers Network*).
- 14) **Review draft Purpose and Need** Provide opportunity for public to review draft purpose and need (*Commenter: Sierra Club*).

### 2.2 Water Yield

- 15) **Review water yield estimate** Update water yield estimate and consider if yield numbers are not accurate (e.g., evaporation rates incorrect) (*Commenter: Citizens for Sensible Water Use, Larry Daily, USEPA*).
- Climate change Climate change may increase annual rainfall, consider effects of climate change (Commenters: Citizens for Sensible Water Use, Don Davis, Joe McMenamin, Prairie Rivers Network, USEPA).
- 17) **Regional annual average rainfall** Provide regional trends in average annual rainfall, air temperature and seasonal rainfall distribution from current climate models (*Commenter: Don Davis*).
- 18) *Forced evaporation* Consider impacts on forced evaporation estimates if power plant units retire (*Commenter: Prairie Rivers Network*).
- 19) **Benefits to water yield from dredging** Explain why routine maintenance dredging would not increase yield (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network*).
- 20) **Elevation of Dallman power plant intakes** Consider whether elevation of power plant intakes can be lowered and what this would do to lake water yield (*Commenter: Prairie Rivers Network*).

### 2.3 Support Electric Power Generation

- 21) Support electrical power generation (Commenter: Reggie Davis)
- 22) Impact to electric rates if plants shut down due to drought (Commenter: Reggie Davis)
- 23) **Change if units retired or operations change to meet new requirements** What would be the impact on water supply if power units are retired or changes in operations occur based on regulatory changes? (*Commenters: Citizens for Sensible Water Use, Cyd Ayers, Larry Daily, Don Davis, Joseph McMenamin, Bryon Johnsrud, Prairie Rivers Network, Sierra Club, Peter Wagner*)
- 24) Water demand from power plant How much water is used to sluice ash to the ash ponds? (Commenters: Larry Daily, Joseph McMenamin, Bryon Johnsrud, Peter Wagner)



### 2.4 Facilitate Economic Development

- 25) *Economic development* Supplemental water supply needed as an economic development tool (*Commenters: Doug Butler, Robert Wire*).
- 26) **Economic development water need data** Provide data that existing water resources are a barrier to economic growth and development (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network*).
- 27) Lack of adequate water supply harming new business Businesses that use significant amounts of water are not coming to Springfield due to concerns about water, these businesses are locating in other areas such as Chatham, that have their own water supply (*Commenters: Gene Seelbach, Jeff Sexton*).

#### 2.5 Regional Water Source

- 28) Regional expansion as water supplier Provide data on future demand estimates when other regional suppliers are increasingly providing water to nearby municipalities (Commenters: Citizens for Sensible Water Use, Prairie Rivers Network,. irir1322435)
- 29) **Regional water source** seeking to market and export water puts unnecessary pressure on Lake Springfield water supply and could make City more vulnerable to water shortages (*Commenters: Don Cloyd, Peter Wagner*).
- 30) *Water savings if no longer a regional water source* How much water would be saved by not renewing or vacating regional water contracts (*Commenter: Don Davis*).

### 2.6 Recreation

- 31) *Recreation* Support additional fishing, hunting, and hiking opportunities (*Commenters: Julie Hulvey, Troy Williams*).
- 32) **Demonstrate recreation need** Provide information on recreational need (*Commenters: Clark Bullard, Citizens for Sensible Water Use, Don Davis, Ron Howell, Prairie Rivers Network, Sierra Club, Maureen Suhadolls*).
- 33) **Negative impact on recreation** Will periodic drawdown harm recreational opportunities? (*Commenter: Julie Hulvey*)
- 34) *Maintain existing recreation* Lack of funding (City and IDNR) has harmed existing recreational opportunities on Lake Springfield and around the state (*Commenter: Peter Wagner*).
- 35) **Partnership with IDNR** IDNR will partner with City to maintain Hunter Lake and recreational facilities but IDNR has seen its funding reduced. Demonstrate that IDNR will have capability to maintain Hunter Lake (*Commenter: Citizens for Sensible Water Use*).
- 36) **Recreational use data for other area lakes** provide data on recreational use for nearby lakes (*Commenters: Citizens for Sensible Water Use, Don Davis, Prairie Rivers Network*).



### 2.7 Electricity Conservation

- 37) **Conservation** Discuss electricity conservation measures being implemented and under consideration that could impact water use (*Commenter: Jack Paxton*).
- 38) **Power plant** Use the new generator unit more frequently as it uses less water (*Commenter: Bonnie Wright*).

# **3** Alternatives

### 3.1 Least Damaging Environmental Alternative

39) **Permitting** – Permit application should be evaluated using the least damaging environmental alternative (*Commenters: USEPA, Peter Wagner*).

#### 3.2 Cost of Alternatives

- 40) **Recalculation of costs** Update cost estimates for alternatives (*Commenters: Larry Daily, Prairie Rivers Network, Sierra Club, irir1322435*)
- 41) **Need to factor infrastructure changes into cost estimates** Infrastructure changes from Hunter Lake include pipeline to transport effluent from three communities to a City wastewater treatment plant and/or new sanitary sewer service to residences along pipeline. Rockies Express natural gas pipeline may need to be shifted (*Commenters: Larry Daily, Prairie Rivers Network, Sierra Club*).

### 3.3 Combination of Alternatives

- 42) **Combination of alternatives** Combine alternatives or create a hybrid alternative (*Commenters: Peter Berrini, Citizens for Sensible Water Use, Joe McMenamin, Sierra Club, Gene Seelbach, USEPA, Bonnie Wright*).
- 43) **Evaluate appropriate and reasonable alternatives** –Need to consider all appropriate and reasonable alternatives include those previously considered in the FEIS.

### 3.4 No Action Alternative

- 44) **Evaluate No Action Alternative** City needs to demonstrate why supplemental water supply alternatives necessary (*Commenter: Citizens for Sensible Water Use*).
- 45) Changes to Springfield Lake operations The No Action Alternative should include and discuss operational changes made since 2000 to Lake Springfield, including investigations for and elimination of leaks and areas of supply loss (*Commenters: Larry Daily, USEPA*).

### 3.5 Hunter Lake

46) **Support Hunter Lake** – Generally supportive of this alternative (*Commenters: Doug* Butler, Reggie Davis, Jim Dickey, Sue Doubet, Mike Goldasich, Jeff Sexton, Steve Stewart, Frank Tureskis, Dave Varner, Ed Veseling, Troy Williams, Robert Wire).



- 47) Oppose Hunter Lake Generally oppose this alternative (Commenters: Cyd Ayers, Jimmy Ayers, Citizens for Sensible Water Use, Coalition of Concerned Citizens, Larry Dailey, Daisemiin, Don Davis, Ann Graffagna, Vinod Gupta, Ron Howell, Julie Hulvey, Bryan Johnsrud, Anne Logue, Joe McMenamin, Don Mohler, Pawnee School District, Jack Paxton, Prairie Rivers Network, Gene Seelbach, Sierra Club, Peter Wagner, Sheila Walk, Bonnie Wright, irir1322435).
- 48) **Depth of proposed lake** How deep will Hunter Lake be?(Commenter: Ann Graffagna)
- 49) **Consider a smaller footprint** Smaller footprint would have reduced impact on natural resources (*Commenters: Peter Berrini, Larry Daily, USEPA, Village of Pawnee*)
- 50) **Development plans around lake** Does the City plan to sell land for future home builders? (*Commenter: Julie Hulvey*)
- 51) *Future of Springfield* Need Hunter Lake to maintain and grow community. It is an investment for the future (*Commenters: Reg Davis, Steve Stewart*).
- 52) **Backup plan for land previously purchased** If Hunter Lake is not implemented, what is the plan for the land previously acquired? (*Commenter: Dave Verner*).
- 53) **Sewage pipeline impacts** Discuss impacts of pipeline for sewage treatment from Virden, Pawnee, and Divernon (*Commenter: Larry Daily*).
- 54) **Permanent Pool near Pawnee** To avoid rotting vegetation, odors and insects, consider putting a permanent pool near Pawnee (*Commenter: Village of Pawnee*).
- 55) **Contamination concern**: Has watershed been studied to make sure no contamination sources upstream of new reservoir (*Commenter: Jimmy Ayers*).
- 56) **Long term dependability** if regional climate change trends towards desertification, Hunter Lake may not be a dependable supply of water since smaller watershed than Lake Springfield (*Commenter: Don Davis*).
- 57) **Climate change** impact of Hunter Lake on climate change (*Commenters: Don Davis, USEPA*).

#### 3.6 Sand and Gravel Pit/Sangamon River Valley Well Fields

- 58) **Sand and gravel pits** Why can't the City use the sand and gravel pits? (*Commenters: Citizens for Sensible Water Use, Larry Daily, Daisemiin, Joe McMenamin, Prairie Rivers Network, Maureen Suhadolls, Bonnie Wright*)
- 59) **Gravel pit studies** Prior administration thought purchase of gravel pits would solve water supply needs. Discuss this research and reasoning (*Commenters: Gary LaForge, Prairie Rivers Network, Gene Seelbach, Bonnie Wright*)s
- 60) **Gravel pit analysis is outdated and inadequate** Gravel pits have grown significantly since the analysis (*Commenter: Citizens for Sensible Water Use*).



### 3.7 Well Field Alternatives

- 61) **Consider well field options** (Commenters: Jimmy Ayers, Joe McMenamin, Don Mohler, Prairie Rivers Network)
- 62) *Water pipeline impacts* What are the impacts of pipeline construction and pumping water from the various well field alternatives? (*Commenters: Jim Dickey, Gary LaForge*)
- 63) **Poor water quality** Water from Sangamon River and wells along the river are of poor quality (*Commenter: Jimmy Ayers, Frank Tureskis*).
- 64) *Mohomet Aquifer wells* Consider use of wells in Mohomet Aquifer (*Commenters: Larry Daily, Gary LaForge*)
- 65) *Havanna Lowlands* Couldn't Havanna Lowlands provide an almost endless supply of water and its located in a different geographic area (*Commenter: Jimmy Ayers*).
- 66) **Location of groundwater** Identify where groundwater is available in area (*Commenter: Mike Goldasich*).

### 3.8 Dredge Lake Springfield

- 67) **Dredging beneficial** Dredging would restore and expand existing resource (Commenters: Peter Berrini, Citizens for Sensible Water Use, Joe McMenamin, Don Mohler, Prairie Rivers Network, Sheila Walk, Dave Varner, Peter Wagner, Bonnie Wright, irir1322435).
- 68) **Capacity gained** Discuss capacity gained by dredging Lake Springfield (*Commenters: Don Davis, Ann Graffagna, Bryan Johnsrud*).
- 69) *Lack of previous dredging* Why doesn't the City dredge Lake Springfield periodically so it will not fill up (*Commenters*: Peter Berrini, Citizens for Sensible Water Use, Don Cloyd, Jim Dickey, Bryon Johnsrud, *Prairie Rivers Network*).
- 70) **Reduce need for future dredging** Identify cost for permanent soil erosion prevention practices to reduce need for future dredging (*Commenter: Don Davis*).

### 3.9 Raise Lake Springfield

71) **Raise Lake Springfield 1 foot** – By raising Lake Springfield and combining with gravel pit, could provide supplemental water supply (*Commenter: Larry Daily*).

### 3.10 Put Treated Effluent Back into Lake Springfield

72) **Consider use of water recycling of treated effluent** – Discuss advantages and disadvantages of putting treated effluent back into Lake Springfield (*Commenters: Don Cloyd, Citizens for Sensible Water Use, Joe McMenamin*).

### 3.11 Use Other Existing Reservoirs

73) **Clinton Lake** – Address potential to use water from Clinton Lake (*Commenters: Jimmy Ayers, Citizens for Sensible Water Use, Larry Daily, Prairie Rivers Network*).



- 74) **Sangchris Lake** Sangchris Lake could be a potential supplemental water source (*Commenters: Citizens for Sensible Water Use, Don Cloyd, Larry Daily, Prairie Rivers Network*).
- 75) *Lake Shelbyville* Plenty of Water in Lake Shelbyville and water can get to Lake Springfield (*Commenters: Jimmy Ayers, Larry Daily*).

#### 3.12 Use Water from Other Cities or Water Districts

76) **Purchase additional water** – Discuss possibilities to purchase water from other cities or water districts (e.g., Chatham) (*Commenters: Larry Daily, Mike Goldasich, Gary LaForge, Maureen Suhadolls*).

#### 3.13 Existing Water Supply System

- 77) **Continue use of the South Fork of the Sangamon River** Evaluate continuing existing practices (*Commenters: Peter Berrini, Don Davis, Daniel Nelson, Prairie Rivers Network*).
- 78) **Volume of water pumped from South Fork** Discuss how much water was pumped to Lake Springfield from the South Fork historically? (*Commenter: Bryon Johnsrud*)
- 79) **Operations and maintenance costs** Identify the operating and maintenance costs for pumping water from the South Fork? (*Commenter: Bryon Johnsrud*)
- 80) Use temporary dam on Sangamon River Use temporary dam on Sangamon River during drought (*Commenter: Citizens for Sensible Water Use*).

### 3.14 Water Conservation

- 81) *Water conservation* Implementation of water conservation would reduce water demand and could reduce or eliminate the need for the project (*Commenters: Peter Berrini, Citizens for Sensible Water Use, Don Davis, Gary LaForge, Anne Logue, Joe McMenamin, Jack Paxton, Sierra Club, Maureen Suhadolls, Bonnie Wright, irir1322435*).
- 82) **Supportive of City Water Conservation Program** City has done a great job of helping people conserve water (*Commenter: Jimmy Ayers*).
- 83) *Implement water conservation incentives* Need to implement water conservation incentives for businesses and homes (*Commenters: Joe McMenamin, Prairie Rivers Network, Bonnie Wright*).
- 84) *Water loss* How much water is lost due to leaks in the water system? What would it cost to repair? (*Commenters: Citizens for Sensible Water Use, Don Davis, Bryon Johnsrud, Prairie Rivers Network*)
- 85) *Infrastructure* An upgrade of existing infrastructure would supply as much water as the city needs (*Commenter: Prairie Rivers Network*).
- 86) **Inefficient water use equipment** How many old toilets, faucets, shower heads, dishwashers, clothes washers are being used in Springfield? Does City have data on this issue? (*Commenters: Bryon Johnsrud, Prairie Rivers Network*)



- 87) *Water restrictions* Consider implementing water restrictions even when no drought occurring (*Commenters: Citizens for Sensible Water Use, Don Davis, Gary LaForge, Joe McMenamin*). Include consideration of water restrictions as part of No Action alternative (*Commenters:* USEPA)
- 88) Increase rates or seasonal pricing to encourage conservation (Commenters: Citizens for Sensible Water Use, Joe McMenamin, Prairie Rivers Network, Sierra Club)

## 4 Resource Areas

#### 4.1 Land Use

- 89) **Loss of farmland** Approximately 60 farms would be displaced by Hunter Lake Alternative and approximately 3,800 acres of farmland taken out of production (*Commenters: Citizens for Sensible Water Use, Cyd Ayers, Sierra Club*).
- 90) Accounting of Hunter Lake area land holdings Identify land values, appreciation, rental properties, etc. that would be affected by Hunter Lake (*Commenter: Don Davis*).

### 4.2 Wetlands and Waters of the United States

- 91) **Stream and wetland impacts** If Hunter Lake is chosen, analyze impacts to streams and wetlands (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Sierra Club, Maureen Suhadolls*).
- 92) Use updated National Wetlands Inventory data National Wetlands Inventory data for Illinois updated in 2010 (Commenter: Sierra Club).
- 93) **Stream impacts** Do not want to change the flow of existing streams (*Commenters: Gene Seelbach, Sierra Club, Sheila Walk*).
- 94) **Benefits of Hunter Lake Alternative** New wetlands will support waterfowl, deer, pheasant, and quail (*Commenter*: Troy Williams).
- 95) *Mitigation* Need to develop mitigation plans in coordination with regulatory agencies (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Sierra Club, USEPA*).

### 4.3 Surface Water Quality

- 96) *Water quality* Concerns raised regarding meeting water quality standards, such as total suspended solids, dissolved oxygen, and phosphorus if construct Hunter Lake (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Sierra Club, USEPA, Village of Pawnee*).
- 97) *Efforts to reduce phosphorus in Lake Springfield* Identify initiatives to reduce phosphorus in Lake Springfield and if they are proposed for Hunter Lake (*Commenter: Citizens for Sensible Water Use*).

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- 98) **Benefit to water quality** Hunter Lake would improve water quality by reducing runoff from farmed fields and new sewer line could take homes near Lake Springfield off septic systems (*Commenter: Reg Davis*).
- 99) *Watershed management plans* Discuss watershed management plans (*Commenter: USEPA*).

### 4.4 Groundwater

100) **Groundwater water supply contamination** – Need another water supply as concern groundwater may be contaminated in future from buried pipeline releases and fracking (*Commenters: Sue Doubet, Ed Veseling*).

#### 4.5 Floodplains

- 101) *Water releases* Concerns about water releases during large rain events. Impacts on downstream levees and farms (*Commenters: Cyd Ayers, Don Mohler, Charles Taylor, USACE*).
- 102) *Lake management* Requests more information about proposed lake management (*Commenter: Charles Taylor*).
- 103) *Flooding concerns in Pawnee* The land around Hunter Lake flooded in December 2015 even without the reservoir and Hunter Lake could affect Pawnee schools (*Commenters: Citizens for Sensible Water Use, Larry Daily, Pawnee Community Unit School, Prairie Rivers Network, Sierra Club, Village of Pawnee*).

### 4.6 Flora and Fauna

- 104) *Harm to plants and animals* If construct Hunter Lake, project will hurt plants and animals in area from construction and drawdown during droughts (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Sierra Club, Sheila Walk*).
- 105) **Insect breeding ground** Hunter Lake could support insect breeding grounds in mud flats (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network, Village of Pawnee*).
- 106) **Benefits from Hunter Lake mitigation** Hunter Lake could improve habitat in area (*Commenter: Reg Davis*)
- 107) *Mitigation* City needs to develop mitigation plan for impacts to forest and habitat in coordination with regulatory agencies (*Commenters: Citizens for Sensible Water Use, USEPA*).

#### 4.7 Threatened and Endangered Species

108) **T&E species** – Identify T&E species that have been found or could potentially be found within the study area of any of the alternatives (*Commenters: IDNR, Sierra Club, USEPA*).


- 109) **New threatened and endangered species listings** Designations or change in status of species, such as the rusty-patched bumblebee or northern long-eared bat. Expressed concern for other cave dwelling bat species (*Commenters: IDNR, Sierra Club, USEPA.*
- 110) *Illinois Wildlife Action Plan* Need to consider impact of alternatives on species of concern identified in Illinois Wildlife Action Plan (*Commenter: Sierra Club*).
- 111) **Continued coordination** Need to having ongoing consultation with federal and state agencies (*Commenter: IDNR*).

### 4.8 Cultural Resources

- 112) *Native American concerns* Consultation is appropriate if any prehistoric human remains or artifacts are discovered *(Commenter: Miami Tribe of Oklahoma).*
- 113) **Cultural resources** Over a hundred archaeological sites need Phase II investigations within footprint of proposed Hunter Lake (*Commenters: Prairie Rivers Network, Sierra Cl*ub).
- 114) *Historic Resources* Hunter Lake would impact historic resources such as the Pensacola Tavern (*Commenters: Citizens for Sensible Water Use, Prairie Rivers Network Sierra Club*).
- 115) **Cemetery impacts** Need to address impacts to cemeteries (*Commenters: Citizens for Sensible Water Use, Sierra Club*).
- 116) **Cost-benefit of historic recreation and tourism** The City needs to justify lost opportunity of maintaining historic sites (*Commenter: Citizens for Sensible Water Use*).

## 4.9 Climate Change

117) **Climate change** – Consider impacts on climate change and identify estimated greenhouse gas impacts for each alternative (*Commenter: USEPA*).

## 4.10 Socioeconomic

- 118) *Effect on utility rates* Discuss potential rate impacts of different alternatives (*Commenter: Joe McMenamin*).
- 119) **Residential and commercial relocations** Identify how many residential and business relocations will be necessary for the Hunter Lake Alternative (*Commenter: Citizens for Sensible Water Use, Ann Graffagna, Gene Seelbach, Bonnie Wright*).
- 120) **Tax impacts** Identify lost revenues from residential and business relocations (Commenters: Don Cloyd, Sierra Club).
- 121) *Economic impacts* Discuss impacts to farmers who lease land from City in Hunter Lake area as well as economic losses to crop production (*Commenters: Citizens for Sensible Water Use, Cyd Ayers, Gene Seelbach, Bonnie Wright*).
- 122) *Impacts on community services* Impacts of road closures on police, fire, and ambulance services need to be considered (*Commenter: Sierra Club*).



123) **Pawnee sewage rates** – If wastewater piped to Springfield, determine what impacts on sewage rates for Village of Pawnee will occur (*Commenter: Village of Pawnee*).

## 4.11 Mitigation

124) *Mitigation plans* – Need to have detailed mitigation plans (*Commenters: Prairie Rivers Network, Sierra Club, USEPA*).

# Appendix B

# Public Comments Received During the Scoping Period

(August 15, 2016 through September 14, 2016)

#### **List of Commenters**

Ayers, Cyd Ayers, Jimmy Berrini, Peter Bullard, Clark Butler, Doug via Sandra McGuire Cloyd, Don Davis, Don (Coalition for Concerned Citizens) Daily, Larry E. Daisemiin Davis, Donald Davis, Reggie Dickey, Jim Doubet, Sue Goldasch, Mike Graffagna, Ann Gupta, Vinod Hanrahan, Don (Citizens for Sensible Water Use) Howell, Ron Hulvey, Julie Johnsrud, Bryan LaForge, Gary Logue, Anne McMenamine, Joe Mohler, Don Myers, John Pawnee Community Unit School District #11 (Alexander, Gary) Pawnee, Village (Myers, Jim) Paxton, Jack **Prairie Rivers Network** Seelbach, Gene Sexton, Jeff Sierra Club Stewart, Steve Suhadolls, Maureen Taylor, Charles Tureskis, Frank A.

Unknown Commenter (irir13243546@gmail.com) Varner, Dave Veseling, Ed Wagner, Peter J. (Wagner Consulting LLC) Walk, Sheila Williams, Troy M. Wire, Robert Wright, Bonnie From: Sent: To: Cc: Subject: Attachments: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Wednesday, September 14, 2016 10:41 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Springfield Supplemental Water Supply Comments Dec2015flood.pdf; Dec2015flood1.pdf; Dec2015flood2.pdf; Dec2015flood3.pdf

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Cyd Ayers [mailto:farmmom29@gmail.com] Sent: Wednesday, September 14, 2016 9:09 AM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Springfield Supplemental Water Supply Comments

I was wondering if there has been a study of the potential impacts of flood waters if Hunter Lake was built? December 29 & 30 2015 there was a HUGE flood that waters rose and flooded much of the area that would be Hunter Lake.(attached a few pictures) Many people lost their homes due to the fact that Lake Springfield opened their flood gates and Lake Sangchris was flowing over the dam and the water backed up and pooled into the area of Hunter Lake. With sitting in the middle of 2 lakes the people in the area around new proposed lake would have great flood concerns. Have you done a study to this effect?

Also relating to the flood we saw the hundreds and hundreds of animals that were displaced by water has there been a study on how this will effect not only the animals but the people living by the proposed Hunter Lake it was a awful sight and it made a very dangerous situation having so much wildlife approaching homes as no place to go. As we know the flood was only a temporary situation and the animals are now back to their homes but the lake would leave them out and to be with people as not intended. Has there been a study as to how the wild animals would effect people? ex raccoons Opossum skunk fox coyote deer I have lived it water being in the area and these animals were out by homes. Please tell the plan for the people.

Has there been an environmental study done to see how CWLP and DNR would be able to keep a 2nd lake from going dry in a severe drought?. I think as 1 lake is drying up the other one will be drying up also. I would like to know what practice will be put in place to prevent evaporation? It just seems like putting another Lake in the middle of 2 lakes would not be a good steward of the land.

It seems in this day and age of all the new technology and going away from coal power plants that take much water there could be a better alternative water supply to fit for the city of Springfield.

In closing I live and farm in the area of this proposed lake and would like to extend an invitation to any person working on and making the decision if the proposed lake should be build to come out and see the real impacts this would have on our land/lives/area.....

Thank you for considering all comments and truly look forward to good answers for an alternative

Cyd Ayers 8640 Cardinal HIII Road Rochester IL 62563 217-498-8235

#### Marchaterre, Martin

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 15, 2016 10:33 AM Kelley, James C Jr CIV USARMY CEMVR (US) supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Springfield supplemental water supply

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----

From: Ag Production Specialists [mailto:agproductionspecialists@gmail.com] Sent: Thursday, September 15, 2016 12:00 AM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Springfield supplemental water supply

Army Corp,

Thanks for taking time for comments. The city has done a great job of helping people conserve water. If Springfield lake dies up, wouldn't the proposed lake 2 will also dry up shortly. If we are in a 100 year drought will it not last longer than the 12-14 months of water supply the 2nd lake would provide?

I worry about the safety and quality of the current lake. wouldn't a spill of harmful products from highways or chemical and or nitrate levels from the current lake watershed to high make it unusable?

How would Lake 2 help if lake 1 was contaminated.

Lake 2 is proposed to go into the south fork of the Sangamon and be pumped into lake 1. Has the watershed for the South fork of the Sangamon river been studied for possible problems? effluent from the many towns south of here, copper sulfate from the mines around Kincaid in the spring time.

A more diverse option may be better for guaranteed quality water for Springfield.

Doesn't the Havana Lowlands provide an almost endless supply and from a different geographic area?

Could Clinton lake be used if the power plant closes?

Couldn't lake Shelbyville be pumped a few miles the west and be put in the south fork of the Sangamon be pumped from the Sangamon river into the current lake if the watershed for the south fork is a quality supply?

Wouldn't a more diversified option or a little water from many sources being able to be pumped into the water system, rather than going into lake 1 and then processed be a safer option?

There seem to be many options better than lake 2 for safety of the city

Thank You

Jimmy Ayers 8640 Cardinal Hill Road Rochester Illinois 62563 217-414-0700

















From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 01, 2016 10:01 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Re: Springfield Supplemental Water Supply Project SEIS Comments

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

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-----Original Message-----From: Peter Berrini [mailto:pberrini@comcast.net] Sent: Saturday, August 27, 2016 9:57 AM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Re: Springfield Supplemental Water Supply Project SEIS Comments

U.S. Army Corps of Engineers, Rock Island District Attn: Jim Kelly, Regulatory Branch

After attending the informative and well attended Open House Public Scoping Meeting, I offer the following comments:

I have been aware of this proposed project for many years as a Springfield resident and am a consultant with significant lake restoration and water resource management experience. After reviewing the potential alternatives provided, it was evident that a holistic combination of select alternatives was not mentioned for consideration. Several alternatives like the Illinois River Valley and Havana Lowland Well Fields appear to be clear cast aways due to cost and logistics. I am aware that the Sand and Gravel Pit and Sangamon River Well Fields were not considered to have an adequate safe yield as required and was dismissed. Ongoing pumping has been active from the South Fork Sangamon R. as a partial supplementary source of make-up water and ongoing efforts are being completed to reduce soil erosion and nutrient loading in the Lake Springfield Watershed to protect and improve water quality. Until recently I was not as familiar with the plans for Hunter Lake and have recently observed the extent of inundation expected from a design pool elevation of 571.0.

After preliminary analysis of the proposed Hunter Lake watershed via aerial photos, topographic maps and ground level observations, I believe that Hunter Lake can be an integral component of an overall supplementary water supply system for Springfield with several caveats. Since the updated water demand study appears to indicate a flattening out of the projected rate of increase in future demand requirements, and that an approximate 11.3 MGD deficit is possible in the event of an extended drought, my opinion regarding a preferred supplemental water supply alternative is that a comprehensive and holistic approach be taken that includes a combination of alternatives and resources. As noted in the Information packet, conservation measures apply to all alternatives.

The select combination of components would include:

1) a modified Hunter Lake design that includes a lower water surface elevation of approximately 560.0 that would inundate a smaller flooded footprint and minimize hydrologic, cultural and environmental impacts, along with isolating a significant portion of the shallow upper watershed from the main reservoir to function as a sediment and nutrient control area by strategically installing multiple smaller basins;

2) selective use of the limited yield gravel pits located to the northeast of Lake Springfield;

3) continued use of the South Fork for make-up pumping into Lake Springfield;

4) more aggressive maintenance and protection of the existing Lake Springfield capacity and water quality by continued watershed BMP implementation, the installation of multiple upstream sediment and nutrient control structures (i.e. Lick Creek, Sugar Creek, Polecat Creek, etc.), deepened in-lake sediment traps (i.e. upstream of Lick Creek railroad tracks, upstream of Chatham S-Curve on Sugar Creek, etc.) and selective dredging and deepening in other areas for pool maintenance, etc.

The reduced capacity and yield of the lower elevation, smaller footprint Hunter Lake would include deepening of the area immediately upstream of the dam and spillway, preferably by utilizing as much borrow material as possible for embankment dam construction (pending suitability of soil). The lower pool elevation would reduce impacts to existing resources and would allow upstream sediment and nutrient control basins to be selectively constructed to trap and retain sediment and phosphorus while attenuating peak flows from significant runoff events.

I feel selective dredging and deepening of Lake Springfield will be beneficial for restoring and expanding existing resources. However, it is important to note that dredging only to increase storage capacity is not as cost effective as creating new or additional impounded reservoir storage.

So, in my opinion, a select combination of alternatives that include a modified Hunter Lake design should be investigated as a valid, comprehensive alternative. I am afraid that if only a Hunter Lake option (at the current pool elevation, 571.0) went forward that the existing primary resource, Lake Springfield, would not receive the maintenance and protection it needs in order to function effectively over the long term. Since the City owns the gravel pits that can produce a maximum allowable drought yield of 1.6 MGD (estimated), it seems like a wise component to include in the overall water supply system. The South Fork pumping would also continue to be utilized both for initial lake make-up water replenishment and for conveying selective discharges from Hunter Lake as required.

Thank you for the opportunity to provide comments.

Sincerely,

Peter Berrini, P.G 217-899-2153 pberrini@comcast.net <mailto:pberrini@comcast.net>

Berrini & Associates, LLC 2701 Seacroft Rd. Springfield, IL 62711 From: Sent: To: Subject: Kelley, James C MVR <James.C.Kelley@usace.army.mil> Wednesday, August 17, 2016 11:35 AM Elzinga, William J; Meckes, Ted; Marchaterre, Martin FW: [EXTERNAL] Springfield supplemental water supply

FYI-Comments from Prairie Rivers Network.

Jim Kelley Project Manager, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309-794-5373 309-794-5191(fax)

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From: Clark Bullard [mailto:cwbullard3@comcast.net]
Sent: Friday, August 12, 2016 4:56 PM
To: Kelley, James C MVR <James.C.Kelley@usace.army.mil>
Subject: [EXTERNAL] Springfield supplemental water supply

Mr. Kelley

Today the draft notice of intent was posted on the internet. I am planning to provide input on the project alternatives within the 30 day period. Therefore I request that you answer two very basic questions so I can focus my effort on alternatives of a realistic size and scope.

1. What evidence supports the assertions in the "need" section about the magnitudes of current and future water deficits? Can you please provide citations to facts (e.g. potable and raw water demand; Lake Springfield yield) that support those assertions? In order to invite the public into a rational dialog propose alternatives that are realistic, it would seem incumbent on the applicant to provide the evidence supporting any assertions of need. Presumably they are relying on their 2015 projections of potable water demand, but the assertions imply reliance on [to my knowledge] unpublished assumptions about raw water need and Lake Springfield yield.

2. Also in the Needs section there are unsupported assertions of "need" for recreation, water for additional communities, and for economic development. If USACE plans to consider these needs, and alternatives thereto, shouldn't the applicant be required to provide supporting evidence? Otherwise, how is can the public be expected to provide meaningful input on alternatives?

I respectfully request that USACE require the applicant to provide evidence supporting those assertions, soon enough for the public to provide meaningful input regarding alternatives before the comment period ends. If I am all wrong, and the applicant's assertions of need are to be taken at face value, I would like to know that now. If on the other hand the Scoping process invites rational challenges to stated needs, then the underlying evidence ought to be accessible at the beginning of the comment period.

Clark Bullard 2206 Boudreau Circle Urbana IL 61801 217 333 7734 (day) 217 337 1097 (eve) Blockedhttp://prairierivers.org Laws change; people die; the land remains. A. Lincoln (SOTU 1862)

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 01, 2016 9:46 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: Hunter Lake

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

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-----Original Message-----From: McGuire, Sandra [mailto:Sandra.McGuire@springfield.il.us] Sent: Wednesday, August 31, 2016 4:42 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Hunter Lake

Mr. Doug Butler called Mayor Langfelder's office to express his support for Lake II (Hunter Lake). He said the city must have a water supply to attract industry. He used to work at Pillsbury Mills and is aware of how much water is used for industrial purposes.

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Friday, August 26, 2016 4:00 PM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: Propaosed Hunter Lake

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

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-----Original Message-----From: Don C [mailto:donc\_69@hotmail.com] Sent: Thursday, August 25, 2016 2:30 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Propaosed Hunter Lake

What are the Pros and Cons of recycling the sewage treatments facilities output back into lake Springfield?

What is the power plants daily consumption VS their output?

What is the purpose of this proposed lake?

Water supply during drought conditions, recreational use, residential development OR a combination?

What was / is Sangamon County's yearly tax revenue on the land that will be utilized? How much money has and will no longer be paid yearly to each township involved?

Will other municipalities be allowed to used the lake as a water resource?

What advances have been made in dredging operations since the last dredging operation in the 1980's?

Why has CWLP NOT conducted minimal sediment removal each year or at least during low lake levels?

Thank You

Don Cloyd

Chatham IL

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Friday, August 26, 2016 3:57 PM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Hunter Lake Proposal

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

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-----Original Message-----From: Don Cloyd [mailto:donc62629@gmail.com] Sent: Friday, August 26, 2016 3:18 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Hunter Lake Proposal

I read somewhere about a pipeline to Clinton Lake. How about a pipeline to Sangchris Lake?

From:CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>Sent:Wednesday, September 14, 2016 10:34 AMTo:Kelley, James C MVRCc:supplementalwater@cwlp.com; Marchaterre, MartinSubject:FW: Scoping Comments on City of Springfield, IL- City Water Light and Power Section 404 Permit<br/>Application for Hunter LakeAttachments:Hunter Lake Scoping Comments and Questions.docx

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

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-----Original Message-----

From: don davis [mailto:outlook\_C357DC09468E7EFA@outlook.com] On Behalf Of don davis Sent: Tuesday, September 13, 2016 5:21 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Scoping Comments on City of Springfield, IL- City Water Light and Power Section 404 Permit Application for Hunter Lake

The attached document of comments are submitted by Donald D. Davis, 6363 Stagecoach Rd.,

Pleasant Plains, IL 62677, on behalf of Coalition of Concerned Citizens.

Sent from Mail <Blockedhttps://go.microsoft.com/fwlink/?LinkId=550986> for Windows 10

Scoping Comments and Questions on City of Springfield, IL- City Water Light & Power Section 404 Permit Application to Construct Hunter Lake

#### Probability of Supplemental Water Need

What are the regional trends in average annual rainfall, air temperature and seasonal rainfall distribution inferred from current climate models? We ask that CWLP provide the sources used to answer this question.

What is the probability of a drought occurring that would require 8.2 to 11.3 million gallons per day(MGD) by year 2065 of extra Lake Springfield yield? Can this yield be met with dredging the lake and/or pumping water from other sources? What sources will CWLP use to answer these questions?

What is the most probable drought duration and frequency of occurrence that a supplemental supply be designed to meet? We request the sources of information CWLP will use to answer this question.

Long Term Dependability of Supplemental Supply

If regional climate trends toward desertification, considering increasing uncertainty of accelerating rates of change, would Hunter Lake be disqualified as a dependable supply since its watershed is half the size and borders Lake Springfield's watershed?

If regional climate trends, in the next 50 years, toward wetter with short term heat waves, would CWLP be more dependably served by its South Fork Pump Station and short term water purchases from other area public water supplies(PWS) on wells?

Water Demand Reductions

How much treated water(TW) can be saved with a more comprehensive leak repair program and accelerated replacement of water distribution pipes nearing or exceeding design life? What is the cost of reducing the current unaccounted water of 14 % of daily TW pumpage by half that amount? What is the cost per unit of water saved compared to cost per unit of new supply?

How much TW can be saved by a CWLP program to accelerate replacement of older, less efficient toilets, plumbing fixtures, clothes washers, dish washers, and commercial water use devices in its service area? What is the cost per unit of TW saved compared to cost per unit of new supply?

How much TW can be saved by implementing seasonal water conservation prices?

What is the loss of seasonal TW sales revenue compared to the cost of Hunter Lake construction and maintenance over the terms of the bonds and annual operation expenses to year 2065?

How much TW can be saved by converting the Dallman 4 cooling tower from TW to treated waste water from Sangamon Water Reclamation District facilities on Sugar Creek? What is the cost for an emergency 6 month period and the cost for continuous use, including periodic cleaning of solid waste deposits from the tower?

How much TW was saved after Chatham vacated its wholesale TW supply contract with CWLP?

How much TW would be saved if Rochester and or Williamsville-Sherman vacate their CWLP supply contracts? What are the expiration dates of the current contracts? What would be the cost to CWLP water customers if the need for more supply does not materialize after Hunter Lake is built?

How much TW and untreated lake water will be saved when Dallman Units 1,2,&3 are retired and replaced with renewable electricity generation, or purchases from the electric power grid?

The Illinois Department of Public Health population projections,2014 Edition, indicates a Sangamon County increase of 9,373 by year 2025 over the 2010 Census population. How many of these new residents will likely be CWLP water customers since settlement trends have been toward municipalities on separate PWS and on private wells in exurban areas. What is the increase or decrease in residential and commercial water service taps per fiscal year(FY) from the 2000 FEIS to FY2016? What is the estimated TW demand by 2065 as the above listed reductions would take effect if implemented?

Recovery of Lake Springfield Storage Capacity

How much storage capacity remains at the end of 2015 since the Sugar Creek and Lick Creek dredging project was completed in the 1980s?

How often would these creek basins need re-dredging to maintain storage capacity?

To reduce the frequency of re-dredging, what are the initial and maintenance costs to install permanent soil erosion prevention practices on the floodplains of Sugar Creek, Lick Creek, and other significant tributaries draining into the lake?

Maintenance of Hunter Lake Storage Capacity and Water Quality

What are the initial and maintenance costs to install permanent soil erosion prevention practices on the floodplains of Horse Creek, Brush Creek, and other significant tributaries?

What are the initial and maintenance costs to install permanent soil erosion prevention on 100 % of the lake shoreline?

Over 80 % of Hunter Lake watershed is cropland, will CWLP commit annual cost share payments to farm operators for installation of soil erosion prevention, fertilizer/nutrient and pesticide residue capture practices on row crop fields and pastures? Would CWLP's share just be pass-through federal and state grant funds or also include CWLP water customer revenue? If the answer is yes, what portion will be funded by CWLP customers?

**Recreational Value of Hunter Lake** 

There are several existing recreational lakes in the Springfield area: Lake Springfield, Lake SangChris, lakes at Shelbyville, Decatur, Clinton, Taylorville, Jacksonville, Otter Lake near Girard and the lakes at Jim Edgar-Panther Creek State Wildlife Area. We ask that CWLP provide recreational use data and user capacities for these area lakes. Will Hunter Lake provide a warranted addition to current under capacity or will it be a redundant supply of underutilized recreational capacity?

Land acquisition for Hunter Lake began in 1965 according to a CWLP fact sheet. CWLP policy has been to lease back the acquired properties to the residents and farm tenants to continue to occupy their homes and to continue to farm the crop fields and pastures. These leases have been used to effectively block public recreational access to about 2,000 acres of unleased wildlife habitat land and privatize use of this publicly owned land from 1965 to the present. This represents nearly a lifetime of lost opportunities to many area outdoor enthusiasts. What is the estimated dollar value of the lost commercial market sales, taxes & fees, and employment opportunities from under- utilization of this annual renewable resource?

Loss of Ecological Services from Hunter Lake Flooded Land

In early August, 2016 the Council on Environmental Quality issued guidance to federal agencies that issue project permits, about considering the impact of increasing emission of greenhouse-effect gases(GHG) on the frequency and severity of extreme weather events and ocean shoreline damage from sea level rise and resultant higher storm surge in agency permit decisions. The process of photosynthesis in green plants is the

most available terrestrial method of capturing and sequestering carbon dioxide GNG from the atmosphere. In this region, temperate deciduous forest and tallgrass prairie are the land types having the highest photosynthesis capacity. The incremental loss of forest and permanent grassland should be considered with respect to this CEQ guidance.

Hunter Lake would inundate about 3,000 acres of land. How would the loss of the photosynthesis function of this land be mitigated?

What would be the estimated emissions in weight units of carbon dioxide from the harvest of lake bottom trees and other vegetation before inundation?

What would be the estimated emissions in weight units of CO2 from dam, bridge, road and recreational facility construction?

How many acres of new permanent forest would have to be created out of existing cropland to mitigate these CO2 emissions? We ask that CWLP provide the sources to establish the CO2 sequester capacities of temperate deciduous forest and permanent grasslands in weight units per year per acre to answer this question.

What would be the estimated emissions in weight units per year per acre of lake bottom, of methane, a more potent GHG, from accumulation of carbon wastes? How would the quantities of carbon wastes be determined?

#### Written Comments presented by Larry E. Daily

341 N. Park Rochester Illinois 62563 217-498-9367 or 217-494-4558 9/14/16

ATTN. Regulatory Branch

U.S. Army Corps of Engineers,

Rock Island, Illinois 61204-2004

**Contact James Kelley** 

The decision to proceed in the matter of the Hunter Lake project, CEMVR-OD-P-2016–0095 as a Supplemental Environmental Impact Statement is improper. The claim of no substantial change from the Final EIS published in 2000 is inaccurate and incorrect.

Several facts and determinations have changed which require a full EIS to be conducted. For example, the water demands have changed as has the population requiring the water. The power plant's needs have also dramatically changed. The new power plant requires less cooling water and a new extension to the potable water intake of 4'. Information provided by Crawford, Tilley and Murphy stated that installing the pipe added 2.8 billion gallons of water or about 5 months of additional water supply for the city. The 2.8 billion gallons of water is stated as providing about 5 mgpd. The original EIS did not cover these areas. The intake pipe for power plant cooling should be increased to the lowest point possible to ensure that the water is available.

It was suggested that perhaps this could not be done because during a drought the used cooling water temperature would be increased due to the lower water volume in the lake. This could be augmented or resolved by the cooler water from the gravel pit being released into the lake at the outtake of the cooling water. It could also be augmented with treated water from the Sugar Creek treatment plant. I will provide other more cost effective alternatives to augmenting the lake levels which would prevent the need to use the lower levels of Spfld lake water later in my comments.

The next change in the 2000 EIS which should require a full EIS is: The city no longer follows the practice of drawing the lake level down in the fall by 2 feet. By doing this, the city has added 8,400 acre feet of water to the amount of water to be available at the start of a drought. The 8,400 acre feet of water is 2.8 billion gallons or again an additional 5 mgpd of water.

The applicant's own published material as found in THE HISTORY OF DRINKING WATER IN SPRINGFIELD, published by the CITY WATER LIGHT AND POWER

"2007 CWLP announces slowed growth in water use, among other issues, has resulted in lower estimates of the amount of water required from a supplemental water supply during a severe drought. A recalculation of costs for alternative supplemental supply sources indicates that Hunter Lake is no longer the lowest first-cost option, but still will provide the lowest cost per million gallons of available capacity. A series of Sangamon River Valley wells and gravel pits now offer lowest first-cost."

In fact, the 2000 EIS contains estimates of the available water in the gravel pits. This estimation does not include the fact that the city has purchased the lowest level gravel pit. This is all that's required to draw water from all the gravel pits. Water seeks its own lowest level. Therefore, pumping water from the purchased pit is pumping water from all the pits. It should be noted by using the existing river water intake channels the upper 2 gravel pits will maintain their level at full pool even during a drought. The river water comes from the city of Decatur's use. The water will be filtered and purified as it flows from one pit to the other. The gravel pits have grown substantially over the past 16 years and will continue to grow as time passes.

The applicant has replaced Lake Spfld Dam gates. This saves approximately 700,000 gallons of water daily that has not been included in the EIS or SEIS process.

Subsiguent to the 2000 EIS Chatham has built its own water treatment facility and is now providing water for their population rather than it coming from the city of Splfd. The Chatham treatment plant and water intake system is located in the upper area of the Buckhart gravel pit. The gravel pit studies claim that Springfield's water draw from the lower pit will reduce the amount of water available for all the small village pumping stations. This is not logical. Chatham is drawing water from an area prior to the pit that Springfield owns. Springfield's use of water from the gravel pit should not affect the amount of water in any of the gravel pits. The cost of pumping water year around for Chatham should be addressed by both towns. The water being provided to Chatham is not of the quality that the city has provided to Chatham for decades. Springfield still has the pipes and the ability to provide Chatham with water. Spfld could use Chatham's treatment plant as a backup should anything happen to Springfield's plant. The town of Chatham is considering breaking its contract with their treatment facility in order to get Spflld water again. Chatham is also paying an out of state firm to manage their plant to resolve the water quality problem. The 2 towns should join as limited partners for water. Chatham's facilities would only be used if and when Springfield needs additional raw water. Chatham's raw water capacity would be increased from 3.3 million gallons a day, of which Chatham uses only about 1.2 million gallons a day of treated water, to whatever amount Springfield needs. Lake Spfld can provide water for both towns during normal years. The Chatham facilities would only be used during a drought. The water from the Chatham plant would also be drawn from the gravel pit and pumped to the gravity flow streams near Berry Illinois. The water would gravity flow down the South fork of the Sangamon River to the pumps presently pumping water into Lake Spfld. To do this would only require about 4 miles of pipe and the pumping station from the Chatham facility.

Of special note, there is a possibility that Lake Sangcris will be available as a water source. The power plant has been sold several times and due to the downturn in coal fired power plants and new EPA regulations it is possible that the plant will be closed. If it is closed the applicant could use eminent domain to purchase the lake. The lake has around 30,000 acre feet in it and around 20,000 acre feet of usable water in it. This supports the fact that a full EIS should be completed.

The 2000 EIS reported that the proposed Hunter Lake has 3010 surface acre feet, at 14.6 average depth. There is 385,853 gallons of water per acre. 14.6 times 3010 acres equals 43,946 acres feet of water in it. 385,853 gallons times 43,946 gives 14,319,935,938 gallons of water. It is not the 15.3 billion gallons reported in the EIS. As stated in my 2 letters to the ACE which include evaporation rates

(cold water evaporation, which is actually lower than that of the zero flow, warm water of the proposed Hunter Lake) and use the claimed treated water of 21.5 mgpd rate times 540 day drought and you get 11.5 billion gallons of water to be removed from Hunter lake. The lower evaporation rates came out to 4.4 billion gallons of evaporated water from the lake. The figures do not include the amount of water which would be required to be left in the Hunter Lake to meet EPA rules. Because the proposed Hunter Lake would be a zero flow lake long before a drought was declared, the lake would lose even more water than calculated. 14.3 billion gallons of water minus the 11.5 billion that the 2000 EIS claimed was available, minus 4.4 billion gallons of water removed than what is available by 1.6 billion gallons.

The applicant is now reporting that their need is 8.2 mdpd and 11.3 mgpd by 2065. 540 days times 8.2 is 4.428 billion gallons of water. 11.3 times 540 day drought equals 6.102 billion gallons of needed water from the proposed Hunter Lake. The difference for the 8.2 as compared to the 2000 EIS claim of 21.5 is 13.3 mgpd. This is less than ½ of the claimed need previously noted. A full EIS should be required.

Again, simple math shows the need for a full EIS 14.3 billion gallons minus the 6.1 billion gallons and the 4.4 billion gallons lost from evaporation only leaves 3.8 billion gallons in Hunter Lake. Again, note the actual evaporation will start long before the time of declared drought and will be more because of higher evaporation due to the warm water of the proposed Hunter Lake. 14.3 minus the 11.3 and the 4.4 billion is 1.4 billion gallons of water more than is held in Hunter Lake. This shows that the lake cannot provide the applicants stated needs in 2065. Comparing Hunter Lake to the use of the river water and gravel pit growth which can grow by 10 to 20 or more acres per year. At an average depth of 30 feet pit times 10 acres you get 200 acre feet or more per year. Times this from the date that the pits were last evaluated to 2065 you will get at least 9,800 acre feet of water or about 3.3 billion gallons of water increase. As previously noted, Hunter Lake's 14.3 billion gallons minus the 4.4 billion gallons or more lost to evaporation only leaves 9.9 billion gallons or less of water for use in the Hunter Lake.

Using the Layne Hydro study from 8/2/13 (which was the last completed study) to reach the gpd available from the gravel pits and times that by 540 drought days you get 4.860 billion gallons of water. Add 3 more years of pit growth and you get an additional 1095 acre feet of water. Together the amount is 5.955 billion gallons of water available at the present date. This amounts to about 10.7 mgd from the pits. At the stated growth rate in 49 years or 2065 the water potential will increase at or around 27 mgd. Add that to the 10.7 you get 37.7 mgd just from the pit. This does not include directing the water from the N. Fork of the Sangamon River into one or all three of the gravel pits. B and C pit would be provided with river water through channels already in place. Pit A could be provided with river water from both the South Fork and the North Fork by building swing gates at the old river dam near Riverside Park. The swing gates would remove the need for an emergency earthen dam and would impound and back the water up to the gravel pit A. The water would naturally infiltrate into the gravel pit where it would be pumped out to the South Fork pumping station and pumped into Lake Springfield at a capacity of 78 million gallons a day. The water from the Sugar Creek sewage treatment plant is released into the Sugar Creek and flows down to the area where the N. Fork and S. Fork Sangamon River comes together. The swing gates on the old river dam would impound the treated water and allow it to flow into the gravel pit A. The old river dam might be able to be raised enough to push the water back to the South Fort pumping station. The stream flow would assist in naturally cleaning up the treated water. A

wetland treatment facility could be created at or near the plant or in the area of the gravel pit to further clean up the treated water.

In 2001 and again in 2008 the applicant was prevented from obtaining the requested permit based on the sewage treatment water coming from Virden, Pawnee and Divernon. To address this problem, Springfield proposed building a 29.7 mile pipe to bring the water to the Spfld metro sanitary treatment facilities. Springfield has failed to firm up or get approval from any of the villages to proceed in any plan. Springfield's proposed plan would have an environmental impact by removing water from the streams and ensuring that streams dry up during any dry spell. Springfield's plan would also remove water that comes from areas outside of Springfield's watershed. This water once used and treated flows down to the S. Fork pumping station and is pumped into L. Spfld.

The villages are not willing to pay anything to do anything other than what they have presently. The applicant has failed to detail the cost of meeting the demands of the IEPA. Therefore the SEIS is wrong and should be a full EIS.

When the 2000 EIS was submitted the applicants failed to address the situation of Hunter Laker creating mud flats and creating insect breeding grounds adjacent to the Pawnee Schools. Because of the Zeka virus moving north it is entirely possible that it would be in this area by the time that the project would be completed. It is entirely unacceptable that our children would be exposed needlessly when there are more cost efficient alternatives available that have never been considered, let alone fully investigated.

The county has rebuilt 2 bridges in the area of the proposed lake. The cost of rebuilding the bridges has not been addressed or added to the project costs for proper comparison to the other alternate plans.

The Layne Hydro report failed to look into any other plan which would or could provide water to the villages of Riverton, Mechanicsburg, Dawson or Chatham. Springfield's proposed 29 mile sewage pipe could provide water from the pits to the small village's pumping stations or from Spfld water treatment plant with water rates the same as Spfld residents.

#### ALTERNATIVE PLANS FOR A 2<sup>ND</sup> WATER SUPPLY

Starting from the North Fork of the Sangamon River area and moving to Springfield. The 2<sup>nd</sup> area would be started from the South Fork of the Sangamon river

OPTION 1. The Mohomet Aquifer. It can provide 400 mgd of good clean water. 30 million gallons as per one report is used for potable water. 100 million gallons is used for irrigation. 270 mgd is unused. Because Lake Decatur and Lake Clinton are in the footprint of the aquifer or their watershed extends into the area of the aquifer. Available water could be pumped from the aquifer and be allowed to gravity flow into either Lake Clinton or Lake Decatur. The water then naturally flows from Lake Decatur to the North Fork. Also 30 miles of pipe would just about reach from the aquifer to the water shed side of the N. and S fork of the Sangamon.

Option 1-A. Lake Clinton. The Clinton power plant owners attempted to attain additional funds from the state in order to keep the plant open. The state did not agree and it was announced that the

plant would be shut down in June of 2017. Springfield, Decatur and Lincoln should approach the federal government for a 30 year loan or grant to buy the lake and power plant. Using eminent domain they could purchase the plant at or near the price the company paid for lake and power plant in 2003, 40 million dollars. The government could keep the plant for emergency energy production and cities would have a backup water supply. Lake Clinton has 4900 surface acres of water at 14.9 average depth. Around 40 to 45,000 acres of water available to use, with additional flow from the Mohomet aquifer. The lake is at 690 feet msl. Lake Decatur is at 613 feet msl. The hump between the lakes is less than 2 miles from the south shore of Lake Clinton. Pumps could be installed to pump over the hump and allow the water to gravity flow to Lake Decatur. The siphoning effect of the piped water would not require pumps and would keep Lake Decatur full and still provide Spfld with water through the North Fork down to the gravel pit's channels or the old river dam.

OPTION B. Lake Shelbyville. I suggested this lake in the EIS hearings in 2000 and 2008. I would ask that they be readmitted and be applied to this. Because the water from the lake has already been allotted, the lake level could be raised 2 additional feet impounding over 22,000 acre feet of water. Installing a pumping station at the Shelbyville Lake and laying pipe to an area of Moweaqua where a direction control valve would be installed that would direct the water towards Decatur or Spfld. The water would gravity flow to the S or N. Fork of the Sangamon River. The ACE drains the lake down every fall 5.5 feet. Rather than releasing all that water into the river, 2 or 3 feet of water could be pumped to the rivers and gravity flow down to Spfld or Decatur.

OPTION C Moving down river to the SangChris lake. If the power plant closes in the future, eminent domain could be used to purchase the lake and use it for water for Spfld. The lake might even be able to raised 1 or 2 feet to provide additional water for Spfld.

OPTION D. The 2000 EIS considered raising Lake Spfld 2 additional feet and it was determined not to be cost effective, The highest lake flood level was at 564 msl. Raising the pool level only 1 foot would provide over an additional 4200 acre feet. This about 2.5 mgd. By not lowering the lake in the fall and raising the lake level by 1 foot about 7.5 mgd is provided. With only the 1.6 mgd as Layne reported for the gravel pit you have 9.1 mgd, which is Springfield's stipulated need. As the pits grow so would the available water. This does not include the 9 mgd maximum water available from the pits as detailed above.

OPTION E. Building a 300 surface area acre lake at 100 feet deep would provide 30,000 acre feet of water. Because the water surface area is 1/10 the size of the proposed lake it would mean 1/10th the size and 1/10<sup>th</sup> the evaporation. Over 7.2 MILLION GALLONS OF WATER PER DAY would be saved. This option is potentially more costly than the other options but perhaps less costly than Hunter Lake without as much environmental impact.

#### Kelley, James C MVR

⊏rom: ent: ຠົo: Subject: CEMVR-CC MVR Thursday, September 01, 2016 2:21 PM Kelley, James C MVR FW: [EXTERNAL] To Jim Kelley, Re Hunter Lake

Jim,

The email below was received by the CC office general email address last week. Looks like this person was trying to contact you.

Thanks, Sam

-----Original Message-----From: Daisemiin . [mailto:daisemiin@gmail.com] Sent: Wednesday, August 24, 2016 1:34 PM To: CEMVR-CC MVR <CEMVR-CC@usace.army.mil> Subject: [EXTERNAL] To Jim Kelley, Re Hunter Lake

I cannot attend the briefing on Wednesday but would like to know more about it. Will your presentation be posted online?

am against Hunter Lake, mostly because CWLP keeps making us pay for expensive projects promising to return rates afterwards and never does. But I do think water supply issues are important.

I don't see how a second lake won't dry up along with the existing lakes in a drought so thought deeper would be better, 'ss evaporation that way, or storage reservoirs like that quarry.

But I don't know the engineering and I have the feeling that Springfield has not tried to hard to look at other options if they can instead create a big new lake to ring with expensive houses.

Would like to know your thoughts on the alternatives as I do trust math and engineering.

Thank you.



#### insectpoem #9

my current focus has been cecropia a lovely moth now in its beginning stages a botanist at my sister's elderliving establishment has glass jars set up with unhatched eggs strings of pale pearls and all the numerous hatches - tiny black fuzzy worms long as a fingernail busily munching box elder leaves a ledger details progress: five instar stages they split their skins keep gorging till at the finale they are fat green long as your pinkie finger they then spin cocoons sleep all winter emerge as moths in spring to start the cycle all over again the botanist on holiday left my sister in charge so I've helped pick leaves remove chewn greenery nudge the wee beasties toward lusher fields studied them with the convenient magnifier was sorry to leave my sib almost sorrier to bid farewell to the thriving tribe but this morn my my sister phoned the first has split its skin! it's into instar two! thrill thrill! she promises pix oh their poops are pepper-speckles lots and lots I knew you'd not want this bit omitted

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#### LETTERS

We welcome letters. Please include your full name, address and telephone number. We edit all letters. Send them to editor@illinoistimes.com.

#### ANOTHER **INCONVENIENT TRUTH**

At the May 17 CWLP electricity generation public forum, Mayor Langfelder said the proposed Hunter/Lake II is more about economic development than the need for more water in a severe drought. He may have revealed an inconvenient truth to the Army Corps of Engineers and USEPA, who must grant the permits to build it.

At the June 7 council meeting, Ward 7 Alderman Joe McMenamin reported the latest (2015) forecast of treated water use is 25 million gallons per day (MGD) by the year 2065, about four decades from now. Actual treated water use has averaged between 20 and 23 MGD over the last four decades since 1975. The projected increase is barely 10 percent more (2.5 MGD).

The Corps' 2000 final environmental impact statement projected treated water not accounted (via leakage, thefts) would average 2.5 MGD. How much unaccounted treated water was actually there? In 2015? Still 10 percent daily? Waste not, need not. Donald Davis Pleasant Plains

#### **RESIDENCY REQUIREMENT**

The article in the June 23 Illinois Times ("Return of the residency requirement," by Patrick Yeagle) regarding residency requirements stated that Alderman Ralph Hanauer did not agree with the logic that the residency requirement helped the east side because the ordinance gave future employees up to 12 months to move, meaning the city could still hire people living outside the city.

Hanauer's reasoning futt ignores the fact that the tou cost of moving into the city with within the 12 months would to a offset any additional beuefits hot which a person might get by to 🖞 switching jobs unless a person on is unemployed, which would to a be extremely rare for those \$1 living outside the city. The doe percentage of people living mι outside the city applying cus for the city jobs would be a tr extremely low. Therefore, sor these residency requirements ma do help the east side. Vinod Gupta sta Springfield up bil ROUND UP FOR THE eve

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From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Friday, August 26, 2016 4:02 PM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: Hunter Lake comments

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: REGGIE [mailto:reg.davis@comcast.net] Sent: Thursday, August 25, 2016 1:46 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Hunter Lake comments

Dear Sirs,

I would like to voice my support for building Hunter Lake. There are obviously many valid reasons for Springfield to build Hunter Lake but I will list just a few I think are very important.

Springfield needs to have a supplemental water supply to keep our power plant running and ensure its citizens have an adequate water supply at all times in the future. Having enough water to meet Springfield's citizens use is a no brainer, but without enough water to keep our power plant running during an extended drought I believe it could be devastating to CWLP and its ratepayers if they had to shut our power plant down for any extended period.

As part of the mitigation plan for this Hunter Lake project all the farm fields and a few other areas in Sangamon County are supposed to be planted back to natural areas. By my calculations this will amount to about 2 square miles more forests, prairies and wetlands than what is presently there, and this is after flooding 3,000 acres for Hunter Lake. Then, one has to consider the reduction of farm chemical runoff that will not be running down Horse and Brush Creeks anymore because of this. So overall, a huge environmental improvement in my mind.

As part of the Hunter Lake plan there was also a proposed sewer line that is supposed to run down the east side of Lake Springfield and reportedly could eventually take over 400 residences on and around Lake Springfield off their septic systems. If this is still included in the project I have to believe it would help improve the water quality of Lake Springfield, and again, would be another big environmental improvement in my mind.

I could go into the possible future economic benefits for the city of Springfield and its citizens by building this project, and there are many, but will not go into them in detail at this time.

So in summary, I personally believe this Hunter Lake project will result in a huge environmental improvement over what is there now. Most importantly, it will ensure Springfield has enough water resources to meet its needs well into the future. It has been proven time and time again to be the best alternative water supply solution out there, and it has the potential to improve Springfield's economic climate immensely in the future.

Thank You,

**Reg Davis** 

4655 Svenson Dr

Springfield IL 62711

217-899-2103

reg.davis@comcast.net

# **COMMENT FORM**

## **Springfield Supplemental Water Supply Project** Supplemental Environmental Impact Statement **Open House Public Scoping Meeting**

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

	PLEASE PRINT:
	NAME: Jim Dichey,
	ADDRESS: 520 S. Second, Apt, SI4
	CITY/STATE: Springfield, IL' ZIP: 62701
	PHONE: (2)7) 522-5344 E-MAIL: <u>none</u>
	COMMENTS:
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http://supplementalwater.cwlp.com
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PLEASE PRINT:
NAME: Jim Dichey (29982)
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You may also submit comments electronically at:
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PLEASE PRINT:
NAME: Juc Verebet
ADDRESS: <u>11 horsestee</u>
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You may also submit comments electronically at: cemvr-odpublicnotice@usace.army.mil

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PLEASE PRINT:
NAME: MIKE GOLDASICH.
ADDRESS: 2513 CHAPBL HUL PD.
CITY/STATE: SPEW 12 62702 ,ZIP: 62702
PHONE: 217. 787. 1432 E-MAIL: ONZEROTIUS C. INCEROTIUS. COM
COMMENTS:
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PLEASE PRINT:
NAME:ATAM Grattagna
ADDRESS:4981 Smith Rd
CITY/STATE: MOOSENT PIGINS ZIP: 62677
PHONE: <u>21-652-6694</u> E-MAIL: <u>99626716200/.com</u>
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cemvr-odpublicnotice@usace.army.mil

or http://supplementalwater.cwip.com

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 01, 2016 9:47 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Fwd: Springfield Supplemental Water Supply Project

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Vinod Gupta [mailto:vkguptammmd@yahoo.com] Sent: Tuesday, August 30, 2016 7:45 AM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Fwd: Springfield Supplemental Water Supply Project

Sent from my iPhone

Begin forwarded message:

From: Vinod Gupta <vkguptammmd@yahoo.com <mailto:vkguptammmd@yahoo.com> > Date: August 29, 2016 at 7:46:12 AM CDT To: "cemvr-odpublicnotice@usace.army.il <mailto:cemvr-odpublicnotice@usace.army.il> " <cemvrodpublicnotice@usace.army.il <mailto:cemvr-odpublicnotice@usace.army.il> > Subject: Springfield Supplemental Water Supply Project Reply-To: Vinod Gupta <vkguptammmd@yahoo.com <mailto:vkguptammmd@yahoo.com> >

I am opposed to Springfield Supplemental Water Supply Project. The existing water supply is adequate for next 100 years.

Vinod Gupta 3505 Deer Run Dr Springfield II 62711 2176227118

#### CITIZENS FOR SENSIBLE WATER USE

4981 Smith Rd

Pleasant Plains, IL 62677

C/O 1119 S. Sixth Springfield, IL 62703

September 11, 2016

Mr. Jim Kelley U.S. Army Corps of Engineers, Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, IL 61204-2004.

Re: SEIS, Hunter Lake (City of Springfield)

Dear Mr. Kelly:

Please consider this letter as our comments for the scoping process of the SEIS for Hunter Dam, pursuant to the notices of intent and of the public scoping process.

#### I. Introduction

Citizens for Sensible Water Use (CSWU) advocates for the use of existing water resources in a sensible, cost effective, environmentally friendly manner that minimizes the need for costly water supplementation projects.

The purpose of the SEIS is to promote informed decision-making by federal agencies by making detailed information concerning significant environmental impacts available to both agency leaders and the public. The range of alternatives considered must not be unduly restricted and should contain all reasonable alternatives, pursuant to NEPA Section 1505.1(e). CSWU notes that AMEC Foster-Wheeler (the City's contractor for the SEIS) publicly stated in its written contract proposal to the city that their purpose was to prepare a SEIS in which AMEC unequivocally commits to "make Hunter Lake a reality." USACE, taxpayers, and ratepayers have a right to expect that all detailed information of the scope, need, and reasonable alternatives for this project will be explored without bias, but AMEC's contract proposal prefers the Hunter Dam alternative even before SEIS studies have begun.

#### II. <u>Scoping the need for the project</u>

The stated need is that the applicant "desires to augment current sources by a minimum of 12 mgd to enable CWLP to meet the projected demand during the design drought (100 year

recurrence probability, 18-month duration) in the year 2065 for the expected service area, while maintaining minimal lake elevations necessary for power and water production. The Notice of Intent published by USACE on August 15, 2016 adds that additional regional needs for recreation and economic development are also indicated as justifications for the project.

The applicant thus asserts three "needs" for the project: (1) a need for a supplemental water supply due to alleged deficiency of existing Lake Springfield during the drought of record; (2) recreational opportunities; and (3) economic development.

#### 1. <u>Need for Supplemental Water</u>

The City asserts, based on the Illinois State Water Survey data from 1998, that Hunter Dam should be constructed to meet a need that has a 60% chance of occurring once every 100 years and persisting from beginning to end a total of 18 months. The SEIS needs to address:

A. <u>The lack of demand data</u> showing the age and character of water consuming devices currently used by the ratepayers, the rate of replacement of inefficient devices with efficient devices mandated by federal standards, and the effect that the use of efficient devices will have on demand projected forward. The City's current demand analysis studies make no provision for increased efficiency such as, for just one example, the effect of a city-sponsored plumbing retrofit program that replaces pre-1994 toilets with more efficient, 1.28 gallon or 1.6 gallon toilets.

The lack of any attempt at or study of true water conservation, including use B. of conservation rate structures, as a method to control and lessen demand, particularly during drought events. While the City asserts that conservation measures have been considered, by this they mean only that, in times of severe drought, they impose limited and generally useless conservation measures, such as restricting restaurants from giving ice water to patrons unless the patron asks, using a shut off nozzle when washing cars, and watering lawns only every other day instead of every day. Worse, the City's demand studies assume continued uses such as excessive summer use (e.g., lawn watering during a drought of record) in calculating the alleged need during a drought of record, but have not made any showing that such uses are essential uses during the drought of record. The City's data on usage show basic demand during winter months between 18-20 mgd, but spikes in usage during summer in dry years that exceed 40 mgd, more than double essential use. The City must show not that excessive use and demand needs to be met during the design drought, but that basic and essential needs cannot be met, and must provide data and studies showing how much treated water can be saved by conservation price rate structures and additional measures to control non-essential use during time of drought.

The City needs to further show the effect on demand of expected and foreseeable increased rates for both water and sewer (sewer rates are based on water consumption). The City has over \$150 million in needed sewer upgrades its mayor has proclaimed as "essential to economic development." Additional costs will be incurred to replace aging water mains which can reasonably be expected to further increase water rates, but the City has provided no data on

this infrastructure cost that will doubtless affect rates. Maintenance of Spaulding Dam, now 80 years old, may result in more water related infrastructure rate increases. At some point, the City must perform maintenance dredging of Lake Springfield, resulting in probable significant rate increases. The City should document the projected total rate increases for all such foreseeable infrastructure maintenance and upgrades, and then submit reasonable and verifiable estimates of the effect on water demand of such increases using available data. Instead, its study assumes, without data or analysis, no effect on demand from likely very high rate increases.

The City currently uses a rate structure which deliberately encourages excessive use by exempting lawn watering and residential outdoor uses (e.g., pools) from sewer charges by use of separate meters. The City must provide data showing the amount of treated water used by such meters and the water savings from preclusion of use of such separate meters during drought.

The City must show with facts and studies why its assumption of continued unaccounted for water loss of 14% is acceptable, and why the cost to lower lost water as a method of meeting ongoing demand is not acceptable, especially when combined with other methods of obtaining needed water.

C. <u>The lack of sufficient yield data for Lake Springfield</u>. The City must provide data to show why routine maintenance dredging of Lake Springfield is not expected to increase yields from the lake. The City has not shown (a) why it has failed to dredge lake Springfield (except for once and then only partially, 26 years ago) in its entire history, and (b) the effect that restoring capacity will have on yields, especially when combined with other no build alternatives (such as conservation/demand reduction/retrofit, etc.) or other less environmentally damaging supplemental water alternatives.

The City should be made to explain why the drought yield of Lake Springfield for potable drinking water cannot be met by partial or complete shut down of electrical generation. Dallman units 31, 32, and 33 use millions of gallons of water per day for cooling and flushing wet ash; almost all electric demand for its ratepayers can be met by Unit 4 except during highest peak demand. The City should be made to show the increased yield of potable drinking water during the drought of record by (a) partial shut down, using only Unit 4, buying excess need from the grid, and (b) purchase of all power off the grid during worst months of drought of record.<sup>1</sup> The ISWS notes that the intake supply pipe for drinking water is at 540' above sea level - an additional 8' or six months of water supply.

#### D. The lack of any information, data or studies on augmenting existing water by

<sup>&</sup>lt;sup>1</sup> The City should not be allowed to assume a need for drought supplementation for the entire length of the drought of record, e.g., for all 18 months. Rather, the period of critical need should be considered, e.g., the driest six months or three months, since the City admits and the studies show Lake Springfield clearly has sufficient capacity to provide all uses even in droughts that exceed 12 months.

<u>means of water recycling</u>. The City provides no evidence, data, or studies to show why recycling water from the Sangamon County Water Reclamation District's treatment plant, located less than two miles from CWLP, cannot be used for cooling Dallman 4 or flushing and cooling Units 31, 32, and 33. SCWRD recycles over 5 MGD even in the driest months - an amount sufficient to meet cooling needs - and has implemented expensive upgrades to provide clean recycled water at a location very close to CWLP. The City needs to explain, with data and studies, the justification for not finding other sources of cooling for its power plants as a method of diminishing need for water supplementation. The City further needs to show why, if such use is not appropriate or cannot be made appropriate on a *continuing* basis, why it cannot be effective even for rare, temporary periods of drought.

The City needs to justify the failure to account for available methods of diminishing water need at Unit 33, including recycling bottom ash sluice water back to the plant and converting from wet fly ash sluicing to dry ash (even assuming a 90-year old power coal fired plant will still be operational in 2065).

E. <u>The use of unsupported demand projections to justify Hunter Dam</u>. With a long history of inflating demand projections, the City's latest demand projections are no exception. The City has failed to justify its addition of a "high population growth" scenario, adding 5% population growth to historic population trends developed with actual data, a particularly unsupportable scenario given the massive loss of state jobs and declining growth of the past six years. The City needs to justify use of inflated population growth figures with facts, data and trend analysis, including *where* in the region population growth will occur, and whether such trending growth will be in territory served by CWLP or by other regional water suppliers (e.g., Chatham, Pleasant Plains, Riverton).

The City has not explained, with data, trends and analysis, why future demand estimates include increased demand for regional expansion of CWLP as a water supplier. Explanation backed by data is particularly needed when other regional suppliers have recently expanded by providing water to regional customers through ground water supplies (e.g., Curran-Gardner Water District; South Sangamon Water District).

The City must show with data and analysis the facts underlying their assumptions for future industrial demand; bald assertions of need are not scientifically based and verifiable.

F. <u>The use of outdated information without scientific studies of the effect of climate change models.</u> The City bases its drought demand information primarily on ISWS data from 1998, but studies of the impact of climate change on Central Illinois suggest that the region will experience a higher incidence of winter/spring flooding events (e.g., the kind of events that fill reservoirs, like Lake Springfield), and that while summer/fall droughts will be more common, so, too, will excessive rainfall events (again, the kind that fill reservoirs). The City needs to support, with data and studies, the effect of these climate change models on the likelihood of the kind of water deficiency/drought of record they project.

G. Failure to provide data on water demand reduction which includes a schedule for retirement of all four coal-fired power supply units. While the current demand projections do include some reduction for eventual retirement of Dallman Units 31 and 32, there is no consideration of retirement of Unit 33 (which will be 90 years old in 2065) or of Unit 4 (58 years old in 2065). The City should provide data and studies and projections including replacement of these units with gas or with other renewables, or with becoming a distribution network solely or in part, and the effect of such changes on future water supply.

#### 2. <u>Need for Recreation</u>

The City has failed to provide any data or studies showing a need for additional recreation that only a reservoir can provide. The City has failed to show why extant reservoirs within approximately an hour's drive of Springfield cannot provide adequate water-based recreation, such as Lake Springfield itself, the Sangamon and Illinois rivers, Lake Decatur, Lake Sangchris, Lake Taylorville, Lake Lou Yeager, Clinton Lake, Lake Shelbyville, Sunset Lake (Girard) and the numerous smaller lakes in and around Springfield, or even larger lakes within a couple hours of Springfield (e.g., Rend Lake; Lake Carlyle).

The City owns 7,000 acres of land it has purchased for Hunter Lake, but has failed and refused for over 40 years to allow citizen access to these public lands. This land includes hundreds of acres of forest and stream beds, and is rich in wildlife and recreational opportunities as is. The City has failed to demonstrate why motor boating and fishing are superior activities, compared to activities such as hunting, hiking, camping, horseback riding, wildlife watching and similar activities which can be enjoyed with minimal environmental impact compared to that imposed by destruction of the natural environment by flooding and the creation of man-made parks and marinas.

The City should be required to show why motor boating, water skiing, and fishing are superior and necessary needs that can only be addressed by building Hunter Lake, and that such uses are superior to historic, archeological and human preservation uses, as well as uses for hiking, camping, horseback riding, and similar activities. The City further needs to explain why lake recreation is inadequate at Lake Springfield and must be addressed by building new facilities when it fails to operate its beach and beach house for the public at Lake Springfield.

#### 3. <u>Need for "Economic Development."</u>

While the notice of intent states that economic development is a "need" to be addressed by Hunter Dam, the City has provided no data to show that existing water resources are a barrier to economic growth and development. The City has not shown by any data or studies that water efficient economic development cannot be implemented, has failed to provide any information showing that a range of water conservation and supplemental alternatives, either separately or combined, cannot address economic development, or that Hunter Dam is the best alternative with the least cost to promote economic development. The City needs to explain why, for example, improved sewer systems to replace 100 year old combined systems are not a superior method to encourage economic development. The City needs to demonstrate why industries that recycle water should not be encouraged over those which consume excessive water for little or no benefit in terms of economic development.  $^2$ 

#### III. <u>Alternatives to Hunter Dam</u>

A. <u>Introduction</u>. The City's proposed alternatives are deficient in failing to address altogether, or in failing to adequately address and assess, alternatives such as: conservation; water recycling; power plant restructuring, closures and partial or total shut downs with power supplied by the grid during severe drought of record only; the restoration of existing water capacity in Lake Springfield; the limited, one-time use of a temporary dam on the Sangamon River; the use of the Clear Lake gravel pits; and the use of other community/regional ground water supplies. Furthermore, the City's proposed alternatives are not adequately combined as a single alternative (e.g., resolving the problem by combining multiple alternatives). Because the City has inflated need, cost projections submitted by the City for alternatives need to be studied and adjusted downward to reflect the smaller need justified by factors inadequately considered previously.

B. <u>Conservation</u>: see above, Section II (1) (A) and (B).

C. <u>Water recycling</u>: see above, Section II (1)(D).

D. <u>Power plant restructuring, closure, or partial closure</u>. CWLP demand data show sufficient potable water for drinking in all drought scenarios, if only usage for drinking water is considered. The City seeks a permit in order to keep lake elevations at levels sufficient to continue operating its power plants.

The City should provide studies of cost and feasibility of (a) converting power plants to systems that consume less water, e.g., natural gas, or (b) cessation of operations at some or all of its plants for temporary periods during the worst parts of the drought of record. The City should provide data and studies showing the feasibility of transition to a power supply distributor only, purchasing power off the grid for its

distribution network by 2065, or even for temporary periods during the drought of record, as alternatives to dam construction.

<sup>&</sup>lt;sup>2</sup> For example, the City tried to encourage an ethanol plant in Waverly, illinois (40 miles from Springfield) which would have consumed 2 MGD and required a 40-mile pipeline, and which would have created only a few dozen jobs. See, e.g., Illinois Times, Wednesday, October 25, 2006; "Not In Their Front Yards." In contrast, Bloomington-Normal encouraged the Mitsubishi Motors plant in the late 1980's, a facility that used only 200,000 - 300,000 gallons per day, yet employed over 1200 workers. See, "Mitsubishi Plant Drives Environmental Efforts," Bloomington Pantagraph, July 20, 2014.

E. <u>Restoration of existing capacity in Lake Springfield</u>. Lake Springfield's yield has diminished by up to 20-30% because of CWLP's failure to regularly dredge it. The City plans to keep Lake Springfield as its primary water source, yet increasing capacity by dredging (adding up to 54 days of water supply during droughts, as the City of Decatur is doing), and implementation of ongoing dredging, necessary to maintain Lake Springfield, is not included as a viable alternative due to cost. The applicant needs to recognize this as a required cost of maintaining a the existing lake, and because it MUST done in any event to responsibly preserve Lake Springfield, the additional supply thereby created needs to be included among combined alternatives as well as in assessing need for supplemental water supply.

#### F. Use of temporary, short-term dam on Sangamon River.

The City should provide complete studies of the cost and feasibility of using a temporary dam on the Sangamon River to augment water supplies in rare times of extreme drought. U.S. Geological Survey data show that the river flow, even during extreme drought conditions (1953-55; 2011-2012) averages approximately 45 MGD. During brief, extreme conditions, flow drops below 30 MGD and for brief periods consists primarily (but not exclusively) of treated effluent from Decatur. However, this same data shows that any significant rainfall results in significant increases in flow (e.g., summer 2012) exceeding 45 mgd and more for sustained periods.

The City previously admitted the efficacy of this solution, and had or has a permit for such a dam. It owns the land on which a temporary dam can be constructed. The City needs to provide data and studies showing that a brief use of such a dam (60% likelihood of use once every 100 years, for a period of six months or less) could not provide a solution to even their inflated projected drought needs. The City projected to IEPA that had such a dam been extant in the drought of record, it would have been utilized "in the late summer of 1953," but the South Fork pumping station constructed in 1956 would have prolonged the implementation of the dam.

Because this alternative may never be used, and if it is, it would be extremely rare and for a brief period only (60% chance of occurrence once every 100 years), it has none of the permanent environmental degradation associated with the City's preferred alternative of a permanent dam. The City should show comparative costs, including the costs of maintaining a permanent reservoir, over the projected drought eventuality period.<sup>3</sup> The City needs to show with data and studies that a combination of alternatives augmented by the back up plan of a temporary dam cannot meet the stated need.

G. Gravel Pits

<sup>&</sup>lt;sup>3</sup> Had the City had its way, Hunter Dam would have been constructed more than 50 years ago, and yet not once would have been needed for its stated purpose in any year to date. Had it been built when first proposed, the residents and rate payers would now be looking at the costs of dredging not one, but two sediment filled reservoirs.

The City has declared that the Clear Lake gravel pits are not viable as an alternative.<sup>4</sup> The City's own studies show that the potential drought yield of the gravel pits is approximately 9 MGD. <sup>5</sup> The study concludes, however, that drawing more than 1.5 mgd may begin to impact the shallow wells of the South Sangamon Water Commission; therefore, CWLP concludes that they are not a viable alternative water source.

The City, however, has achieved the obvious political solution to this problem by agreeing with South Sangamon that, during a drought, CWLP will become the water supplier for South Sangamon. South Sangamon consumes at most 1.8 mgd in summer and averages 1.4 mgd. Because there is no longer a need to restrict withdrawals from the gravel pits because of the political solution, all 9 mgd of drought yield is available for extraction.<sup>6</sup>

Therefore, the City must show, with data and studies, why the gravel lakes are not a feasible alternative given simple water sharing solutions among communities impacted.

Furthermore, the City's study of August 2013 was inadequate. Despite comments received at city council meetings, the City has not studied the connection between the Sangamon River and the gravel lakes, despite the fact that the river is merely a few feet from some gravel lakes and is directly connected to at least two of them. U.S. Geological Survey data indicate that the average drought flow past the gravel pits in the Sangamon River is 45 mgd, and data from its station in Riverton show significant spikes with rainfall events; the City must show with studies and data why it is not feasible to use a portion of this flow to augment the gravel lakes. The City must also provide data and studies showing the effect of continuous gravel pit growth and increased yields, attributable

to continued sand and gravel mining at the lakes, projected up through 2065.

#### H. Additional ground water suppliers.

The City has modeled a high demand growth scenario, in part claiming that additional communities need to be supplied and that CWLP needs to become a regional water supplier. The City needs to show with studies and data that other regional water suppliers cannot serve the same communities, or conversely, why their ground water resources cannot be combined with CWLP's resources during a drought of record.

<sup>4</sup> CWLP Dispatch, September/October 2013.

<sup>5</sup> See, Potential Yield of the Gravel Pits in the Sangamon River Valley, Layne Hydrology, August 2, 2013, p. 12 available at <u>http://www.cwlp.com/water/GravelPitYieldStudy2013.pdf.</u>

<sup>6</sup> Though there are several other very small communities, e.g., Mechanicburg, Buffalo, and Riverton, which also draw from that aquifer, the aggregate use for South Sangamon plus these entities would not exceed 3 mgd; CWLP can easily supply all communities.

#### I. Additional lake supplies

Clinton lake is a 4500 + acre lake approximately 45 miles from proposed Hunter Lake. It is the cooling lake for the Clinton nuclear power station, currently owned by Commonwealth Edison. Edison has announced plans to close the plant. The SEIS needs to address the availability of Clinton lake as a supplemental source of water.

Sanchris Lake, located minutes from Springfield, is a 2300 acre lake built as a cooling lake for the 50 year old Kincaid coal fired power station, now owned by Dynegy after a series of ownership transfers. The age of this plant suggests that it will not continue to operate indefinitely and there amy be opportunities for the City to acquire it along with the lake. The SEIS needs to address the potential source of water from lake Sangchris.

#### J. <u>Combining alternatives</u>

The City needs to show, with actual data and studies, the total savings in treated water demand and the costs for achieving same by all demand reducing methods aggregated, instead of examining one at a time and ruling that each individually it is insufficient. Aggregating the savings from partial or total dredging, partial or total electric plant shutdown or remodeling, use of multiple conservation measures and recycling, etc. must be aggregated to determine true need. Each additional alternative for increasing water supply must be aggregated instead dismissed as individually inadequate.

For example, assume 10% of "needed" demand could be reduced by conservation rate structures; 3% of demand could be reduced by aggressive accounting for lost water, 2% of demand is reduced by higher water and sewer costs, and 10% is saved by dredging, then nearly 6.5 mgd is saved. In turn, this makes aggregation of cheaper alternatives easier and less costly (fewer wells needed, etc.).

#### K. Water quality costs and maintenance costs of Hunter Lake

The City must show, with data and studies, that the proposed Hunter Dam will not violate water quality standards, and that adequate consideration of the costs of building and maintaining a lake that meets said standards have been included in cost comparisons with other alternatives. What evidence is there to show that the City's expenditure of \$500,000 per year on Lake Springfield watershed management practices (which they propose to use for Hunter lake) have actually succeeded in reducing phosphorus load in Lake Springfield to levels that meet water quality standards? What evidence is there to show the costs of removing Hunter Lake watershed from crop erosion and chemical run off is adequate? Has the City shown advancement of costs for adequate rip-rapping of the entire shoreline to prevent erosion from banks, a primary cause of phosphorus load? Scoping needs to also address what contracts and agreements have been made, or are proposed to be made, between the City and landowners in the watershed to remove watershed land from agricultural production and pay for lost crops needed to protect the

proposed lake from phosphorus and chemical run off. Scoping must include actual data and cost projections that prove the lake can be built and maintained indefinitely in compliance with water quality standards of the Clean Water Act.

The City proposes that Illinois Department of Natural Resources will partner with them to provide ongoing maintenance of Hunter Lake and its recreational facilities. IDNR, however, has itself admitted the following on its public website:

Over the last 10 years the IDNR has lost more than 50% of its General Revenue funding it receives annually. In 2002 General Revenue funding (GRF) for the IDNR was over \$100 million. Today IDNR receives less than \$50 million. The IDNR has 1,400 FEWER employees than it did 10 years ago. Those employees are responsible for every program and service the agency provides to its constituents including maintaining state parks, regulatory functions, Law enforcement, and conservation and natural areas protection....

Because of the size of the backlog of maintenance projects (\$750 million worth) without additional revenue it will take decades to make all necessary repairs.

The City should explain how reliance on an agency with \$750 million in backlogged maintenance for prior commitments can effectively maintain Hunter Lake for the next 50 years. Alternatively, the City should show with relevant financial information that it, and not a financially and staff-impaired state agency, has the demonstrated capacity to manage the project on an ongoing basis, including reasonable costs for shoreline maintenance, facilities maintenance, and dredging. Scoping should include exploration of the City's claim that dredging lake Springfield and maintaining its public beach and beach house are cost prohibitive, but costs for water recreation and maintenance at Hunter lake are affordable and maintainable.

#### IV. Environmental Impacts

#### A. <u>Agricultural lands</u>

The City proposes to flood or otherwise take out of production hundreds upon hundreds of acres of high quality agricultural land, forever removing its use for that purpose. None of the other alternatives propose such a drastic removal of agricultural land. The City has not documented loss of income to the City of Springfield, the jobs associated with food production on these lands, and the food supply itself.

The City has not provided adequate analysis of the projected costs of permanently lost production of corn, soybeans and other crops as part of the dollar value of the costs of Hunter Dam in terms of environmental impact costs. The City needs to project the values of yearly crop losses, and loss of agricultural taxes paid to local and regional taxing agencies.

The human costs of lost residences, forced relocation, and lost jobs need to be weighed

with actual data.

B. Cemeteries.

The historic Brunk Cemetery would be affected by flooding caused by Hunter Dam. The City plans to simply relocate some of the graves. Two additional smaller cemeteries are in the Hunter Lake flood area; the City has not determined whether levees will be built, or whether relocation will have to be done. The City should be made to assess the financial and human impacts of cemetery flooding.

C. Loss of Historic Sites

The City acquired the land containing the Pensacola Tavern decades ago, and then left the historic structure to rot. Historic status was denied in 1994 due to the poor condition of the tavern, though it still stands today with intact foundation and walls. The City proposes to flood Pensacola and destroy the site.

The historic Edwards Trace, the oldest human construct in Illinois, runs through the areas the City plans to flood. Named for Illinois Territorial Governor Ninian Edwards soon after the War of 1812, this former Native-American footpath and later military road was once the only "highway between Kaskaskia and Peoria, the trail that brought Springfield's earliest settlers to the Sangamon River valley.<sup>7</sup> The City already flooded an extant part of the Trace when it constructed lake Springfield, though they have also erected a marker at Center Park where a short stretch of the trace remains preserved.

Both historic sites are irreplaceable. Additionally, the USACE notice issued in conjunction with the 2008 public hearing noted that 117 historic properties that are potentially eligible for inclusion in the Nation Register of Historic Places have been identified, including 89 within the pool and shoreline zones. The City needs to justify its claim that its preferred alternative is needed for recreational and economic development purposes in light of these historic sites the project will destroy. The City needs to justify with cost benefit analysis the potential costs of providing alternative recreation involving both historic recreation and tourism associated with the land as it exists.<sup>8</sup> The City should prepare a cost-benefit analysis of lost opportunity from historic sites.

D. Creation of extensive mud flats

<sup>7</sup> See <u>http://www.sancohis.org/OLDER%20FILES/trace.htm;</u> "Barely a Trace," Sangamon County Historical Society.

<sup>8</sup> There is no reason to assume that Illinois Department of Natural Resources would not manage a state historic site or state recreation area (or both) at the site as it exists now, should the City ask. Instead, the City only asked about managing a lake.

The City's proposed use of Hunter Dam, according to the 2000 EIS, would include lowering lake levels in Hunter Lake by approximately 4 to 7 feet in average years to maintain Lake Springfield at full pool, and 9 feet in dry years, and exceeding that in drought years. These draw downs are reasonably expected to create 1 to 3 square miles of mud flats, including in areas that border the town of Pawnee. The City needs to furnish data and studies showing that these mud flats will not have adverse effects (including health effects, e.g., mosquito populations). The City should complete studies showing adverse effects on planned fisheries and other recreational opportunities caused by the draw downs.

#### E. Lost streams and habitat.

The City proposes to flood and destroy two entire creek beds, those of Horse Creek and Brush Creek, which are presently lined with corridors of flood plains, over 1500 acres of forests, and wetlands. The proposed project would cause significant degradation of the environment. The SEIS needs to address the City's proposed mitigation plan, in that the City fails to appropriately compensate for environmental functions lost by the destruction of the two stram beds and corridors, and the hardwood forests and the wetlands which will be inundated. The City must show that their proposed replacement of stream bed and surrounding habitat with a lake and parks is a justifiable mitigation.

Furthermore, the City needs to explain and document the construction and maintenance costs proposed for wetland loss mitigation in detail. The City proposed using shallow coves of the proposed lake, but needs to provide studies showing that the contemplated methods of water retention during dry spells and forced draw downs are adequate to replace extant natural wetlands. The City should further be required to demonstrate how replacement of stream shorelines and corridors with lake shorelines is acceptable mitigation, including studies showing effects on flora, fauna, and downstream users. In other words, the City should be required to additionally document how proposed mitigation for wetland and stream destruction will replace lost functions of existing stream systems and their associated land corridors, as well as how mitigation will be monitored and maintained, with cost figures.

Over 1500 acres of natural hardwood forest will be destroyed by the City's preferred alternative. The City proposes to plant new trees in mitigation, and to create parks and picnic areas with trees, but has not explained how the replacement of natural hardwood forests with park planted with saplings replaces the lost hardwood forests with ancient trees, heron rookeries, Indiana bat habitat, and other wildlife habitat. The City needs to show with data and studies that sapling replacement of hardwood forests is acceptable mitigation.

F. Local villages impacted.

The City's preferred alternative threatens the Village of Pawnee with flooding. The City proposes to address this by construction of a canal and a levee at Pawnee High School. The

Village is publicly opposed to the aesthetic, health and human effects of the proposed alternative. The SEIS needs to address these concerns, including costs of mitigation, such as moving the high school. Furthermore, the preferred alternative requires reconstruction of Pawnee's sewage treatment system. The SEIS should require the City to provide data and studies addressing adverse aesthetic impacts, mitigation plans, and cost of 100% compensation for all associated costs of sewer restructuring and sewer system maintenance for the village. The SEIS should document agreement between the City and the Village of Pawnee.

G. The existing land as a carbon sink

Many recent studies show that activities to reduce deforestation are a highly cost-effective way of reducing greenhouse gas emissions. Because the City will continue to use four coal-fired power plants for the foreseeable future, and because the City may be required by clean air rules to mitigate greenhouse gas emissions, the City should show the value of the existing 1500 acres of forest as a greenhouse gas mitigation plan that will be lost if the preferred alternative, Hunter Dam, is chosen.

#### V. <u>Conclusion</u>

Citizens for Sensible Water Use requests that the SEIS require that the City provide much needed data and studies justifying the alleged need for supplemental water supplies, and justifying its demand and usage figures. The SEIS needs to address the seven listed areas of deficiency in re-assessing need for water supplementation, and if still indicated, the amount of need. The SEIS should require the City to further provide data and studies justifying its claim of need for recreation and economic development that can be satisfied by Hunter Lake as delineated herein. The scope of the SEIS further needs expansion to adequately address all alternatives, including but not limited to the ten alternatives listed herein, all of which are cheaper and less environmentally damaging. The City needs to justify the impacts caused by the preferred alternative and its proposed mitigation plans with actual studies and cost/benefit analysis.

Date: September 13, 2016

Don Hanrahan Citizens for Sensible Water Use C/0 1119 S. Sixth Springfield, IL 62703 217-652-2639

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

PLEASE PRINT:
NAME: Kon HOWEU
ADDRESS: 1210 E Washington St., #902
CITY/STATE: Spfld IP: 62703
PHONE: 217 55 58 206 E-MAIL:
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## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

PLEASE PRINT:
NAME: Julie Hulvey
ADDRESS:916 S. Third St
CITY/STATE: Springfield IL ZIP: 62703
PHONE: 217-622-1154 E-MAIL: julazul@amail.com
$\frac{1}{1}$
THE THIS Writing I am unconvinced that the
Hunter Lake project will be good for Springfield.
based on:
a) The cost to citizens vs. the uncertainty of
need, and
b) the negative environmental impact.
Theme account should the fold the and I also
Sincial since ability of the second state
Springtera since childhood, Towever, when the
<u>City refers to the trunter lake project as</u>
Lake Springfield 2" I wonder whether their plans
also include the selling tracts of land to future
home-builders. This needs to be made clear.
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popprtunities such as fishing, hiking etc.
that could come with Hunter Lake sound good.
yet it is my understanding that using the
lake for its main purpose, a water source that
You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or

¢

http://supplementalwater.cwlp.com

would need to be periodically drawn down, would negatively affect recreation. With many other ways of solving future water needs, I would want us to choose the most economically feasible and environmentally friendly alternative as opposed to the shiniest, sexiest one - Hunter Lake.

(Fold on dotted line)

Julie Huwey IL 62703 (Return address)

Place Stamp Here

U.S. Army Corps of Engineers, Rock Island District ATTN: Regulatory Branch Clock Tower Building PO Box 2004 Rock Island, IL 61204-2004

(Fold on dotted line)

Ptoo lazy to transfer to the "Comment Form"

Bryan Johnsrud - 127 N State St - mobile 494-8353 - email bryan217tenor@yahoo.com

I am here because I currently oppose "Hunter Lake" (the proposed water supply reservoir portion of The City of Springfield's Supplemental Water Supply Project). My primary interest is water conservation. I would like the following questions to be addressed:

- 1. What is Springfield's water conservation plan?
- 2. The City's own studies and Illinois State Water Survey studies project that Springfield current water system will support the city's needs under drought conditions for the next 50 years. Why is the City pushing this project now?
- 3. What additional capacity would dredging Lake Springfield provide?

Why haven't you dredged Lake Springfield for 30 years?

4. In 2015 how many gallons leaks each year out of the old pipes?

How do you know?

Why can't you eliminate it?

What would it cost to repair? (i.e. how much still leaks, how much is "unaccounted for")

5. How many of the toilets in town are older than the latest federal efficiency standards? (same question for faucets, shower heads, dishwashers, clothes washers)

How do you know?

Can you send me the data?

- 6. How much lake water was used to sluice ashes down to the ash ponds in 2015?
- 7. How much lake water was pumped from South Fork in 2015?

How much was spent on repair and maintenance?

On electricity for pumping?

From:CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>Sent:Thursday, September 15, 2016 10:35 AMTo:Kelley, James C MVRCc:supplementalwater@cwlp.com; Marchaterre, MartinSubject:FW: [EXTERNAL] Springfield Supplemental Water Supply Project SEISAttachments:image003.jpg; Source Map.pdf; Flow Estimates.pdf; COE Comment Memo 091416.pdf

Importance:

High

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----

From: Gary LaForge [mailto:garylf@greeneandbradford.com]

Sent: Wednesday, September 14, 2016 5:03 PM

To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>

Cc: Bullard, Clark W <bullard@illinois.edu>; Joe Greene <joeg@greeneandbradford.com>; KashifS@greeneandbradford.com Subject: [EXTERNAL] Springfield Supplemental Water Supply Project SEIS Importance: High

I would like to submit the attached comments for the Springfield Supplemental Water Supply Project and will also post these on the website provided. I appreciate the public involvement and your commitment to that process. Thank you and please contact me with any questions, concerns or comments. I would be happy to assist in any way that I can.

Gary W. LaForge

GREENE & BRADFORD, INC.

3501 Constitution Drive

Springfield, Illinois 62711

(217) 793-8844 Office

(217) 621-1036 Cell

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Wednesday, August 24, 2016 12:39 PM Kelley, James C Jr CIV USARMY CEMVR (US) Lenz, Gary W CIV USARMY CEMVR (US); Elzinga, William J; Meckes, Ted FW: [EXTERNAL] Hunter Lake Concerns

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

From: Anne Logue [mailto:anelogue@gmail.com]
Sent: Tuesday, August 23, 2016 5:00 PM
To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Subject: [EXTERNAL] Hunter Lake Concerns

I am writing to oppose Hunter Lake - Dam 2

The city of Springfield has not exhausted their options in water conservation. We do not have usage pricing that encourages reduced use, there are commercial businesses that continue to have sprinkler systems that water during rain events, the older coal fire generator that uses around 5 million gallons a day, has not been shut down, and other than seasonal drought periods, the city has yet to make permanent water conservation rules and practices to make a significant dent in our water use.

That being said, I looked at your website and had trouble finding any clear cut directives/guidelines for city's to follow to improve water conservation methods.

If you are asking cities to improve, it would make sense that you could let them know your expectations and give them some instructions. Also, we have an ongoing flood/sewer event issue that would be solved if we separated key sewer areas and increased our water harvesting practices.

Thank you. Anne Logue 1244 N Bengel Springfield, IL 62702



# Memorandum

Date:	9/14/2016			
Project:	Springfield Supplemental Water Supply Project - SEIS			
То:	U.S. Army Corps of Engineers – Rock Island District			
From:	Gary W. LaForge, P.E.			

As the Supplemental Water Supply Project SEIS document states the success of the study depends on the participation of the public; and collection and evaluation of all information regarding the current and future demands and system components.

The goals of a Supplemental Water Supply Project must include the following:

- Determine the anticipated shortfall during average years and drought conditions
- Development of strategies to reduce the shortfall during average years and drought conditions
- Diversify the sources of water to reduce the statistical possibility of a long term drought
- Develop a system that incorporates redundant components
- Provide a reliable 100-year water supply with minimal impacts on financing or the environment
- Minimize impacts on other public and private water supply systems

#### DEMAND ANALYSIS

The direct impacts to the determination of the water supply demand, as it relates to a reliable and sustainable 100-year water supply are population changes, economic development, water conservation ordinances and outdoor water use. Additionally, the water supply needs of the region must be analyzed to insure that the needs of the region are not adversely impacted by the needs of the single district (i.e. CWLP).

Since the original census for the City of Springfield in 1840 the population has grown at an average annual rate of 2.8% with a peak of 10.5% in the 1850s. However, the grown rate since 2000 has slowed to an average annual rate of 0.30%. This directly impacts the predictions for growth and places the anticipated rate somewhere between these rates. It seems reasonable to forecast the long range growth of the City at 3% per census (10-year cycle). Placing the anticipated population of the City at approximately 137,500 in the year 2070.

Based upon this growth, the demand needs to increase or be offset by other sources. One of the Resources that is available to the area is the use of effluent to meet outdoor irrigation demand for large areas of

vegetation. In other words, the use of effluent to irrigate the golf courses or other areas of large outdoor water use in the CWLP service area and the service areas of those communities that currently contract with CWLP for water. Based upon a study by Napton, D. E., & Laingen, C. R. (2008) entitled "Expansion of golf courses in the United States" and published in the Geographical Review, 98(1), 24-41. The average golf course uses 300,000 gallons of water daily for proper maintenance. The total use at this rate could exceed 3 MGD for the 11 golf courses in the area.

The typical water conservation ordinance incorporates language to reduce the water use for fixtures in the homes, including toilets, faucets, showers, dishwashers and washing machines. The impact of these ordinances are dependent on the redevelopment or remodeling schedule of the typical residence and the construction rate of new residences in the area. The reduction in demand is seen over an extended period of time and therefore does not have an immediate impact, but a significant impact over time.

Likewise, the development of ordinances that limit the amount of water used or the amount recycled by larger water users, such as car washes, public pools, industries are also not immediately seen at the meter, but can accumulate to a significant reduction in daily demand. The outdoor use also increases during drought conditions and has a greater impact on the system during that period of time.

The water conservation ordinances associated with periods of dry weather must include language associated with these large irrigation users, high water demands and residential conservation. The residential conservation is a significant impact, but the other recreational, commercial and industrial uses have a significant impact also and can be offset with other water sources. The shortfall identified in the demand analysis of 11.3 MGD in 2065 can be offset with effluent, conservation or onsite recycling of water. Based upon the current demand of 21 MGD, as documented on the CWLP website, the 11.3 MGD would be an annual increase of 1.1% versus the projected population annual increase of 0.3% or approximately 4 times to projected growth rate. Not to mention that the shortfall identified by CWLP is 20 MGD, which directly impacts the viability and cost of the alternatives.

#### REGIONAL WATER SOURCES

The current source of water for Lake Springfield is the Lick Creek, Sugar Creek and the South Fork of the Sangamon River and its tributaries. These sources of water have a 7-day 10-year Low Flow based upon historical flow records of 0.5 MGD and a total watershed area of approximately 1,136 square miles. The impact of a drought on an area is directly related to the size of the area. It is statistically significantly easier to force a watershed of 1 square mile into a drought condition that it is to force a watershed of 2,560 square miles into that condition (i.e. Sangamon River). Likewise, it is statistically significantly easier to force a single watershed into a drought condition that it is to force multiple watersheds into that condition. Thus, we need to diversify our sources into surface and ground water from multiple watersheds or aquifers.

Springfield is located within the Sangamon River watershed and along its shores. This watershed has a 7-day 10-year Low Flow of 24 MGD or 48 times the dry weather rate of the South Fork of the Sangamon River, but it is not being used as a water source. Likewise, the Salt Creek watershed that flows through Lincoln and Logan County has a 7-day 10-year Low Flow, since the construction of Clinton Lake, of 26 MGD and covers a watershed area of 1,177 square miles. The utilization of the Salt Creek and Sangamon River Watersheds would expand the area to over 3,700 square miles and diversity the surface water source into 2 fairly significant watersheds with a 35-mile pump station and pipeline from the gravel pit at the confluence of Salt and Kickapoo Creeks southwest of Lincoln and the Clear Lake pit along the Sangamon River.

In addition to the surface water sources listed above, the same pump station and pipeline from Lincoln could deliver water from the Mahomet Aquifer to serve the CWLP service area. The wells in Mason and Logan County have pump rates of 1,000 to 2,000 gallons per minute, while the pumps in Sangamon County have rates in the 300 to 500 gallons per minute range. The Mahomet Aquifer is one of the largest aquifers in the Midwest and was identified in the Havana Lowlands Well Field alternative. However, it is not necessary to place wells northwest of Mason City to reach this aquifer, as the boundary lies near the southern boundary of Logan County and can be reached based upon well logs around Middletown and Lincoln. This reduces the length of the pipeline by close to 20 miles and therefore the size of the pumps and the pipeline required to deliver the water!

The third source of water in the East Springfield area consists of the following existing public water agencies:

- Otter Lake Water Commission
- Edinburg City Water
- Taylorville Water
- Dawson water Plant
- South Sangamon Water Commission

These existing public water sources constitute a water delivery system that could be interconnected with the additional of 10 miles of 8" waterline and the capacity of the plants increased (net increase of 4 MGD possible) to meet a portion of the shortfall identified by CWLP for pennies on the dollar.

#### IMPACTS AND DIRECTION

The gravel pit source along the Sangamon River was eliminated as a viable source because of impacts to the Village of Chatham well field. However, the cost to lower the screens in the wells was not investigated. The cost impact to these wells is minimal compared to the cost of the other alternatives and components. The gravel pits are directly connected or connected via the gravel substrate to the Sangamon River and historically float at the river elevation within days. This surface water source is therefore the Sangamon River with a low flow rate of 24 MGD and excavation and impoundment of the water has already been completed with the removal of the sand and gravel.

The capacity of the public water supply loop would be approximately 1.5 MGD per side and have an available capacity of approximately 2 MGD. While this does not meet the needs of CWLP by itself, it is a significant portion of the shortfall. This may require the creation of a regional public water supply agency, but could be completed for 10 miles of 8" waterline and plant expansions at the plants located in the above existing public water supply agencies.

I have compiled the attached exhibit of the following sources

- Salt Creek surface supply
- Sangamon River surface supply
- Mahomet Aquifer groundwater
- Otter Lake Water Commission
- Edinburg City Water
- Taylorville Water
- Dawson water Plant
- South Sangamon Water Commission

The wells identified have pump rates of greater than 800 gpm and are located in Mason or Logan Counties.

			7-Day 10-Year Low Flow		100-Year Flow			
USGS	Watershed Gauge	Watershed Area, sq. miles	cfs	CF per Day	MGD	cfs	CF per Day	MGD
5-5758	Horse Creek at Pawnee	53.0	-	-	-	165.00	14,256,000	106.6
5-5758-3	Brush Creek at Divernon	32.4	-	-	-	136.00	11,750,400	87.9
5-5785	Salt Creek at Rowell	334.0	2.20	190,080	1.4	1,282.00	110,764,800	828.6
	Salt Creek at Lincoln Sand & Gravel	1,176.8	40.37	3,488,284	26.1	4,379.59	378,396,183	2,830.6
	Salt Creek at CR15 near Middletown	1,220.9	42.37	3,660,823	27.4	4,541.63	392,396,810	2,935.3
5-5820	Salt Creek at Greenview	1,800.0	68.60	5,927,040	44.3	6,670.00	576,288,000	4,310.9
5-5760	South Fork Sangamon River near Rochester	869.0	0.84	72,576	0.5	2,873.00	248,227,200	1,856.9
5-5765	Sangamon River at Riverton	2,560.0	37.20	3,214,080	24.0	7,486.00	646,790,400	4,838.3

# **East Springfield Multiple Water Source Map**



Salt Creek Withdrawal Site 2 Salt Creek Pumping Station 2

**CWLP System Connection** CWLP

Sangamon River Withdrawal Sites

- Clear Lake Pit
- 🕑 Builders Sand & Gravel Pit
- **C** Builders Sand & Gravel Pit
- Buckhart Sand & Gravel Pit
- S. Fork of Sangamon River

Public Water Plants

. Otter Lake Water Commission 🕤 Edinburg City Water Plant -**Taylorville Water Treatment** Plant Dawson Water Plant -South Sangamon Water Commission

Waterline Connections

👗 Line 1 👗 Line 2 💪 Line 3



Connection from Williamsville to Mahomet Aquifer & Salt Creek - Service to Williamsville, Elkhart, Broadwell & Lincoln

- Line 4
  Line 5
- 💪 Line 6
- 💪 Line 7
- 💪 Line 8
- 💪 Line 9
- 💪 Line 10
- 💪 Line 11
- 💪 Line 12

From: Sent: To: Cc: Subject: Attachments: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 15, 2016 10:34 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Re: Springfield Supplemental Water Supply image.png; ATT00001.txt

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Joe [mailto:joeforward7@aol.com] Sent: Wednesday, September 14, 2016 7:29 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Cc: McMen Joe <joeforward7@aol.com> Subject: [EXTERNAL] Re: Springfield Supplemental Water Supply

> Please incorporate this chart below showing the history and projections of 6 water demand studies for Springfield Illinois water usage from 1960 to 2015.

> Please review the implications of the first 5 studies on future water demand and assess why these studies grossly over estimated water demand in light of eventual actual demand and consider what this means for the future.

> Please assess the possibility that the same overestimation may be true for the 2015CDMA Smith study.

Please report and document recent declines in Springfield water demand for years since 2010.

> Please asses the impact of significantly raised water utility fees the last decade creating more conservative water usage by both business and residential users. Please report and detail the history of the following utility fee increases for:

- CWLP water
- Springfield Metro sanitary District
- Springfield Sewer fees

> Please include the chart below in the Public Record.

- >
- > Thank you.
- >
- > Joe McMenamin
- > Alderman, Ward 7
- > City of Springfield, Illinois
- >

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

#### **PLEASE PRINT:**

http://supplementalwater.cwlp.com

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 15, 2016 10:33 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Re: Springfield Supplemental Water Supply

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Joeforward7@aol.com [mailto:Joeforward7@aol.com] Sent: Wednesday, September 14, 2016 8:34 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Cc: joeforward7@aol.com Subject: [EXTERNAL] Re: Springfield Supplemental Water Supply

In considering the need and alternatives for supplemental water for Springfield, please consider options which combine several modest water supply enhancement initiatives together with water conservation strategies which in combination will obviate the need for the massive construction and financing costs of a second lake.

Please consider from among these options, forecasts, trends, strategies, and initiatives:

- Use of emergency dam at confluence of Sangamon River and the South Fork just south of Clear Lake during periods of severe drought to allow water from storms when they do occur to back up to the City's pumping station on Horse Creek which pumps water into Lake Springfield.. The City owns large plots of land at that confluence area and several years ago added to its land holdings when it purchased Clear Lake. Please report on the status of these historical Emergency Dam permits and any current applications to renew those permits. Please assess the amount of water that would be available from an emergency dam.

- Use of water from sand pit lakes and potential wells into the water table there for use in emergency droughts to pump water to Lake Springfield.

- In emergency droughts, pumping discharge water from the Sugar Creek Sanitary Treatment plant up river to the City's pumps located beyond the dam on the Horse Creek to pump into Lake Springfield

- dredging the most cost effective areas of Lake Springfield

- the impact of expected increased water supply resulting from changing from wet ash removal to dry ash removal at CWLP coal generating plants. Please calculate the amount and timing of these water savings.

- expected increased water supply resulting from the eventual complete retirement of CWLP electric generation Units 31, 32, and 33. Please calculate the amount of expected water savings from eventual retirement of these units.

- expected ever worsening cost efficiency of CWLP units 31, 32, and 33, as they age in combination with increased reliance upon cheaper clean fuels including local and grid derived alternative fuels and the impact on the timing of retirement of coal fired CWLP units 31, 32, and 33.

- increased use of water conservation resulting from increasingly efficient household and business appliances (clothes washers, dish washes, car washes etc) and plumbing fixtures (toilets, shower heads, faucets, etc.)

- potential strategy of purposeful increases in water utility fees to encourage water conservation and reduce water demand.

- the impact of ever more shaded home lawns in ever maturing subdivisions obviating the need for summer watering.

- the impact of global warming in the Midwestern states and forecasts of increased annual rainfall.

Thank you,

Joe McMenamin Alderman, Ward 7 City of Springfield, Illinois Don Mohler 3691 Honeywell Road Rochester, IL 62563



August 31, 2016

ATTN: Regulatory Branch, U.S. Army Corps of Engineers Rock Island District, Clock Tower Building Post Office Box 2004 Rock Island, IL 61204-2004

This letter is in response to the scope of the Draft Supplemental Environmental Impact Statement (SEIS) for the Springfield Supplemental Water Supply Project.

I am pleased that a new review of the Environmental Impact is occurring and information from decades ago is being reevaluated. I have serious concerns with the proposition to continue with the Hunter Lake project. It appears that efficiencies can be gained by better stewardship of the existing resources. The State of Illinois is in a poor financial situation. Wiser decisions need to occur now. I see the U.S. Army Corps of Engineers as a leader in this regard.

I recommend strong consideration to improving the existing Lake Springfield through dredging and the development of groundwater well systems. A 50% probability of not meeting expected water supply demands does not warrant action to begin a new lake project. Also, now is not a fiscally responsible time to begin addressing regional needs when local maintenance is lacking.

Environmentally, if Hunter Lake is completed, I understand that lake levels will fluctuate. Promises of hunting or fishing cannot reliably be met. Additionally, what are the impacts to the areas around Hunter Lake? My property will be right above the dam. What impacts will that have on my farm ground and potential flooding from Horse Creek?

Thank you for allowing me to voice my opinion on this topic. I hope you do the right thing.

Regards,

Om mohler

Don Mohler



## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

PLEASE PRINT:
NAME: JOHN W WYERS
ADDRESS: 1005 N. 7m St
CITY/STATE: Springfield 12 710. 62702
PHONE: (217) 5445003 E-MAIL: IMURYS19510 CMAIL COM
J J The grant com
COMMENTS:
See attached letter
You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil - Jim Kelley
or
http://supplementalwater.cwlp.com
# JOHN M. MYERS, P.C.

1005 North Seventh St. Springfield, II 62702

Donald M. Craven, P.C., of counsel



Transmitted via e-mail to cemvr-odpublicnoice@usace.army.mil

#### September 14, 2016

Army Corps of Engineers Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, IL 61204-2004

> Re: City of Springfield Supplemental Water Supply Project Comments of Village of Pawnee, IL

Ladies and Gentlemen:

I am the Village Attorney for the Village of Pawnee, Illinois (the "Village"). This letter is in followup to the public scoping meeting held in Springfield, IL on August 24, 2016 relating to the Draft Supplemental Environmental Impact Statement under preparation by the Corps of Engineers pertaining to the City of Springfield ("City") Supplemental Water Supply Project.

The Village's concerns about this project are little changed from its concerns expressed to the City in 2002, and to the Corps of Engineers, among others, in 2007.

Here are the Village's comments.

1. The Village's number one environmental issue was, and remains in 2016, the anticipated presence of mud flats and stagnant pools during drought conditions or when Hunter Lake is drawn down to maintain the level of Lake Springfield. As the Village understands the matter, the proposed drawdown would be 7 feet, more or less. The potential for rotting vegetation, odors, and insect infestations is obvious, and will significantly degrade the quality of life in the Village.

2. In 2007, the Village suggested that to address these and similar concerns, the City might construct a permanent pool in the vicinity of the Village. Specifically, the Village suggested that the City might excavate Horse Creek north of Route 104 to the township road approximately 3100 feet north. The Village suggested such an excavation would widen the

Page 2 of 3

creek to a width of 50 to 75 feet, deep enough to maintain a pool of 5 to 8 feet during a drawdown of Hunter Lake, and that the City would check the depth annually and dredge as necessary to maintain it. Subject to comment no. 4, the Village reiterates that suggestion.

3. The Village's second major concern was, and remains in 2016, that construction of the new lake will lengthen the duration of the 100 year flood event in Horse Creek. Relatedly, the Village has sewage lift stations and other utility lines which are subject to increased risk from flooding.

To address these issues, the Village proposed in 2007, and it proposes now, that the City do the following:

A. flood proof the sewage system lift station located by Pawnee High School;

B. provide standby power to the lift station;

C. replace all utility lines within the 100 year flood contour with new lines, and encase the new lines; and

D. raise roads and bridges in locations within the 100 year flood contour to ensure access of life safety personnel and equipment to flood-prone areas.

E. Raise the level of the ground underlying the High School track and sports fields to a level 6 feet above the 100 year flood contour, and rebuild the track and sports fields. This can be accomplished, at least in part, using fill from the excavation of the permanent pool as discussed in paragraph 2.

F. Also, due to the increased flooding risks, it may also be necessary for certain houses on Henkle Drive in the Village to be evacuated—which means they may need to be purchased.

4. The Village has been given to understand through discussions with the City's consultants and with CWLP management that there are newly discovered issues relating to phosphate pollution in the proposed lake. Subject to the findings of the ongoing anti-degradation study, this problem may well necessitate the southern terminus of the new lake being relocated to New City Road, approximately 4 miles north of the Village, with the new lake being dredged to a depth of 30 feet or so at that location. The Village fully supports the proposed relocation and dredging, which certainly goes a long way toward addressing issues nos. 1, 2 and 3.

5. Whether the southern terminus of the new lake is in Pawnee or 4 miles north, however, it appears that the Village's sewage effluent discharge point may have to be moved to another watershed. If it is necessary to move the discharge point, the Village offered in 2007, and reiterates its offer now, to cooperate in that effort, so long as the Village incurs no new costs,

#### JOHN M. MYERS, P.C.

#### Page 3 of 3

and the cost to the Village's citizens for sewer service is no higher than it otherwise would have been with the present discharge point. In this regard, the Village notes that one of the proposals has been and still is, to send its effluent to the Springfield Metropolitan Sanitary District for treatment. While this may be technically feasible, the Village has a major concern about having to pay for the pumping costs or the cost of infrastructure to deliver the effluent to Springfield for treatment. Similarly, the Village has concerns about losing control over its sewer rates should its sewer plant be decommissioned and should the Village become a customer of the Springfield MSD.

Lastly, the Village has a concern regarding elevations proposed for this new lake. 6. Specifically, the Village believes that there is at least a 3 foot discrepancy between the proposed elevation and elevations shown on the FEMA maps.

Thank you for your consideration.

Sincerely.

John M. Myers

Cc: Village President Jeff Clarke Village Engineer Joe Greene

## Pawnee Community Unit School District #11

Creating a community of empowered learners in an Atmosphere of mutual respect and Trust!

Mr. Gary M. Alexander, Superintendent Mr. Tim Kratochvil, High School/Junior High Principal Mrs. Jennifer Loftus, Grade School Principal

August 22, 2016

AUG 25 2016

Mr. James Kelley, Project Manager U.S. Army Corps of Engineers Rock Island District Clock Tower Building Post Office Box 2004 Rock Island, II 61204

Dear Mr. Kelley,

I am writing this letter in response to a public notice I received on August 22, 2016. The public notice applicant was from the City of Springfield, City, Water, Light & Power. The project is a proposed Springfield Supplemental Water Supply Project previously known as Proposed Water Supply Reservoir Hunter Lake. This letter is to express the viewpoint of the Pawnee Community Unit District #11 school board and administration. The proposed project is a project that brings great concern for our school district. I attended a meeting held at the Pawnee Village board. During this meeting, representatives from Springfield presented information on the project. The concern the school has is we already have flooding issues caused by a creek that is located to the east of our property. I am starting my 5<sup>th</sup> year in the district. I have seen the results of the so called "100 year flood" two times in this time period. It causes damage to our athletic fields and makes utilizing our fields and playground impossible until the water subsides and the mud dries. The information presented at the Pawnee Village meeting indicated the creek would become wider and deeper. We feel this would cause flooding and create more damage than we already see. The Pawnee School Board does not want the expanding of this creek to negatively impact our students and, therefore, we are opposed to this project.

Sincerely,

Dary M. alifand Gary M. Alexander

High School Office 810 4<sup>th</sup> Street Pawnec, IL 62558 217 625-2471

FAX 217 625-2251 www.pawneeschools.com Grade School Office 810 4<sup>th</sup> Street Pawnee, IL 62558 217 625-2231

## **COMMENT FORM**

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

PLEASE PRINT:
NAME: MIKE GOLDASICH.
ADDRESS: 2513 CHAPBL HUL PD.
CITY/STATE: SPEW 12 62702 ,ZIP: 62702
PHONE: 217. 787. 1432 E-MAIL: LONZEROTIUS C. IONZEROTIUS. COM
COMMENTS:
· WHERE TOES TAYLORVILLE CET ITS WATER SUPPLY ?
WHAT AREAS KER SERVICED BY LICK CREEK RESERVOIR?
· WHERE DOES CHAMPAGEN/URBANA GET ITS WATER SUPPLY?
It would HELP IF THE MAP WORD HAVE DELINGETOD THE
EUSTING FROM THE PROPOSED ELEMENTS.
WHY DOES THE MAP NOT SHOW THE AREAS UNDER GROUND
IT WOULD SEEM THAT IT WOULD BE POSSIBLE TO CONNECT THE
EXISTING WARE C KINGARDS TO THE SOUTH FORK OF THE
SANDAMON KIVER WHICH THEN CONNECTS TO LAKE SPEND.
THX.
You may also submit comments electronically at:
cemvr-odpublic otice@usace.army.mil
http://supplementalwater.cwip.com

## **COMMENT FORM**

### Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

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Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

#### **PLEASE PRINT:**

NAME: DR - ACK PAXTON
ADDRESS: MIGS, BROADWAY ANE
CITY/STATE: (IRBANA, IL ZIP: 61801
PHONE: <u>\$19-0667</u> E-MAIL: <u>JAX@UCSD, EDU</u>
COMMENTS:
The project the NAT School PATE A NRED
THIS PROJECT DOES NOT VEMONSTRATE A NEED
FOR SUPPLEMENTAL WATER, IT SEEMS TO ME THAT
CONSERVATION OF WATER AND FLECTPINITY SHOULD BE
EMPHASIZED THE ENVIRONMENTAL IMPACTS SEEM TO FAR
EXCERD BENEFITS FROM THIS PROPOSED PROJECT.
·
-
You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil or

http://supplementalwater.cwlp.com





1902 Fox Drive, Suite G Champaign, Illinois 61820 p: 217.344.2371 f: 217.344.2381

www.PrairieRivers.org

September 13, 2016

ATTN: Regulatory Branch U.S. Army Corps of Engineers Rock Island District Rock Island, Illinois <u>Cemvr-odpublicnotice@USACE.army.mil</u> Mr. James Kelley

Re: Notice of Intent to Prepare a Draft Supplemental Environmental Impact Statement (SEIS) for the Springfield Supplemental Water Supply Project – CEMVR-OD-P-2016-0095

Dear Mr. Kelley and other USACE officials:

This letter constitutes the comments of the Prairie Rivers Network (PRN) for the scoping of the Supplemental Environmental Impact Statement (SEIS) for the proposed construction of a new reservoir by the City of Springfield which it has been asserted would satisfy a need for additional water supply for the City of Springfield and other purposes. Prairie Rivers Network has numerous members who would be affected adversely by construction of this proposed reservoir through loss of natural resources, loss of cultural resources, diminution of water quality, and wasted use of public resources.

Given the doubtful need for this project, the wide range of alternatives available to meet whatever need might exist, and the environmental impacts of the project, it is clear that the SEIS must make a searching inquiry into a wide range of issues including:

- The extent of the documented need for this project to serve any purpose,
- The wide range of alternatives available that satisfy the purposes that have been suggested would be served by the project and the economic

and environmental costs of each alternative that might satisfy any part of the asserted need,

- The full costs of the new reservoir proposal including the full costs of assuring that the reservoir will not violate Illinois water quality standards,
- The many potential impacts that building this project would have on the human environment as compared to the effect of the alternatives that would satisfy any underlying needs that might be served by building the proposed dam.

### I. PROJECT PURPOSE AND NEED FOR A SUPPLEMENTAL WATER SUPPLY

It is, of course, the job of the United States Army Corps of Engineers (USACE) to define the purpose and need for the proposal and to examine the full range of reasonable alternatives that will meet the needs found to be valid. *Simmons v. USACE*, 120 F.3d 664 (7th Cir. 1997)

Here the basic purpose of the proposed project was stated by the applicant in the application on January 19, 2016:

... The City desires to augment current sources by a minimum of 12 mgd. This augmentation would enable CWLP to meet the projected demand during the design drought (100-year recurrence probability, 18-month duration) in the year 2065 for the expected service area while maintaining minimum lake elevations in Lake Springfield necessary for power and water production.

However, in the August 16, 2016 Public Notice, the USACE expands on the applicant's purposes and suggests additional project needs, the existence of which, to our knowledge, have never been documented:

Based on an analysis of the storage and capacity, the Illinois State Water Survey had determined that Lake Springfield is an inadequate supply system with a 50% probability of not meeting expected water supply demands. Under conditions of reduced water availability, the City is at risk of not meeting demands (both existing and future) for commercial and residential water use, and for industrial water supply (power plant operation and condenser cooling). Under projected drought conditions the estimated water deficit (demand minus yield) is currently 8.2 million gallons per day (MGD), whereas future deficits (year 2065) are projected at 11.3 MGD. Other associated regional needs have also been identified that may potentially be addressed by the City's proposed project. Specifically, the following regional needs are also recognized:

- Increased demand for regional outdoor recreational areas that provide additional fishing and hunting opportunities
- *Provide supplemental water supply for adjacent communities*
- Increased water supply to support regional economic development

It is doubtful if any of these needs actually exist. Focusing first on the need stressed by the applicant, the USACE must in the SEIS carefully study whether the alleged need for supplemental water supply project to eliminate the estimated water deficit (demand minus yield) under conditions of reduced water availability actually exists. Further, in order to identify alternatives to be considered, it is first necessary to characterize any water deficit in quantitative terms: its magnitude, intermittency, and frequency.

### A. THE SEIS MUST OBJECTIVELY DETERMINE THE TRUE MAGNITUDE OF THE WATER DEFICIT WITHOUT RELYING ON THE EXISTING FLAWED STUDIES

During the 50 years since Hunter Dam was originally proposed, City Water Light and Power (CWLP) has published numerous forecasts of future water demand that have chronically overestimated water use. (Figure 1)



In turn, CWLP's inflated forecasts of future water demand have led the Illinois State Water Survey to classify Springfield's water supply system as "inadequate." Such circularity cannot be accepted as evidence to support an assertion of "need."

Moreover, the demand projections have included demand for cooling water and ash sludge disposal for the operation of coal fired power plants that may close or switch to dry handling of coal ash so as to obviate much of the projected need.

The CDM-Smith forecast for potable water demand is not credible because it:

- Suffers from the same methodological flaws as the 1991 forecasts provided to CWLP by Planning & Management Consultants (PMCL. 1991) before they were acquired by CDM-Smith. The CDM-Smith forecast cannot possibly predict how increased water prices will affect water demand because the correct data has not been collected:
  - a. CWLP records usage by size of meter, providing no breakdown by end uses (e.g. sanitation, machine cooling, domestic and commercial laundry, irrigation) or insights into the rate at

which efficient technologies are replacing inefficient ones (e.g. recycling at commercial car washes).

- b. CWLP failed to adopt a 1991 recommendation from the demand forecast report prepared for the 2000 EIS (PMCL, 1991): "CWLP disaggregates its water billing records by size of the meter... does not facilitate analysis of sectorial water use patterns... reclassification of CWLP water customers.... Would provide CWLP with a sensitive means of tracking water use and estimating future system demands."
- c. The resulting mismatch between CWLP's meter sizes and the published literature on the effects of price increases on demand as affected by consumer income and type severely limits the power of the econometric model applied.
- d. Had CWLP heeded that advice it would now have 25 years of data for customer classes defined by similarity of usage patterns and options for increasing efficiency in response to water price increases, e.g. apartment buildings, car washes.
- e. The lack of physical data on age distribution of waterconsuming appliances and plumbing fixtures (arguably the most important contributor to declining per-capita water demand) contributes noise (not signal) to the CDM-Smith analysis, and makes it incapable of discerning past and future impacts of water efficiency standards.
- f. Physical data describing customers and their water-consuming infrastructure would enable a better match to data on price and income elasticities, and provide the analytical basis for design conservation rate structures, drought contingency plans, etc.
- 2. Its 50-year demand projection or "forecast" is based on only 10 years of historical water use data, and a highly questionable extrapolation of exponential population growth.
- 3. The study lacks statistical integrity by using different design weather conditions using 1953-55 as the 100-year drought condition (dry weather data is worst case for reservoir yield), but then using 2012 (hot weather data is worst case for demand) weather data to forecast a higher demand. The remoteness of the possibility of both conditions occurring in a single year was not addressed. If the two variables (dryness and heat) are independent, it is the 10,000- year scenario

(1/100 x 1/100) that was projected. Even assuming (without evidence in the study) that the there is a significant correlation between hot years and dry years, the supply and demand scenario being studied is less likely than the 100 year drought.

- 4. Assumes real water and sewer rates remain at 2013 levels for 52 years.
- 5. Assumes large and wholesale customers will remain, with no mention of the potential for coal-fired power plant retirement.
- 6. Assumes free 'authorized' use and unaccounted-for use will remain at 2.2% and 14.3% of total production, despite the emergence of advanced technologies for detecting pipeline faults and leaks, and the risks of damages attributable to delaying replacement of water mains beyond their design life.
- 7. Added a high-population growth scenario, despite acknowledging the trend toward downsizing and decentralizing state government, without providing evidence that supporting a reversal is likely (CDM Smith 2015).
- 8. Fails to consider the effects of climate change (wetter winter/spring, drier summer/fall, more intense rainfalls producing greater runoff) that are expected to lead to more rain during the time of year when rain is most helpful for increasing the amount of water in Lake Springfield (USGS, 2016).

### B. THE SEIS MUST PROVIDE A CREDIBLE DEMAND FORCAST FOR POTABLE WATER

The SEIS must provide a credible demand forecast for potable water that accounts for:

1. Estimated retirement schedule for the four Dallman power plants. Given the huge amount of the demand that is required for the operation of the units for cooling and ash handling, it is imperative that the retirement dates of the units be estimated as well as the effect of those retirements. The likelihood that the Dallman power plants will have to eliminate ash sluice and transition to dry ash handling must also be considered.

- 2. Reductions in "Unaccounted" water as distribution system is modernized by replacing aging pipes, and the deferred maintenance backlog is eliminated.
- 3. Impacts of existing and future water efficiency standards, as existing infrastructure replaced and new standards are strengthened and expanded to new equipment (e.g. proposals for smart irrigation equipment). This requires physical data on the age structure of existing plumbing fixtures, appliances, cooling towers, and the potential for converting many uses to gray water.
- 4. Reduced water demand as a result of water price increases that will likely occur due to factors including:
  - a. Hunter Dam project (capital and O&M) to ensure Clean Water Act compliance
  - b. Clean Water Act compliance for Lake Springfield
  - c. Dredging Lake Springfield to maintain lakeside property values
    & lease revenues
  - d. Safe Drinking Water Act compliance (e.g. treating lake water polluted with unregulated agrichemical runoff)
  - e. Replacing old, leaky distribution pipes to reduce 14.3% "unaccounted for" losses
  - f. Charging real cost instead of providing water free to "authorized users" in order to encourage conservation (2.2% of total)
- 5. The effect of sewer price increases on water demand (since they appear on water bill, computed directly from water use) due to factors such as:
  - a. Ongoing and future wastewater treatment plant upgrades
  - b. Clean Water Act compliance (CSO's, SSO's, etc.)
  - c. Eliminating the deferred maintenance backlog, replacing or lining existing pipes
- 6. Realistic population projections. CWLP added 5% to Sangamon County Regional Plan Commission projections to 2040 based on averaging three different methods (CDM Smith, 2015), but ignores what may be an equally likely decline. Illinois' Comptroller reports the number of state employees in Sangamon County plummeted 31% during the last 15 years. Illinois' population growth rate ranked 43<sup>rd</sup>

in 2000-2010 and 44<sup>th</sup> for the period 2010-2013 (US Census), and Springfield's population has actually fallen since 2012.

7. Additional scenarios reflecting rate restructuring that sets marginal price (tail block rate) equal to the marginal economic-plus-environmental costs of supplemental supply and uses seasonal rates to offset costs of excess underutilized capacity needed to treat peak demand. The applicant's current rate structure is economically inefficient - its marginal price per gallon is far less than the cost of water from the proposed Hunter Reservoir. In other words, the City's existing rate structure offers customers less for saving a gallon than the City is willing to pay for water from a supplemental supply.

#### C. THE SEIS MUST REVISE OUTDATED ESTIMATES OF LAKE SPRINGFIELD YIELD.

Since the purpose is to eliminate water supply deficits (demand minus yield) the yield of Lake Springfield must be recalculated taking into account at least the following factors.

- 1. The retirement dates of the Dallman units must be estimated because heat discharges from those units increases the rate of evaporation from Lake Springfield (forced evaporation). Thus lake yield will increase as each unit is retired.
- 2. Estimates should be made of lake yield would vary during droughts if the applicant would sustainably maintain Lake Springfield's original design storage capacity by:
  - a. Removing accumulated sediment to regain 3 billion gallons lost from original capacity (see ISWS, 2011; ISWS, 1991); and
  - b. Adopting sustainable dredging schedule to halt the ongoing annual loss of 50 million gallons capacity (ISWS, 1991)
- 3. The available science indicates that in the future climate change will actually increase runoff into the lake during the period in which it is most needed. (USGS, 2016). There will be a decreased likelihood of 18 month droughts caused by dry winters. Wetter winter/spring means lake more likely to be refilled every year. If the lake is full at the end of the spring, it is highly unlikely that it will prove inadequate even in the driest summer.

4. The current estimate of yield for Springfield's water supply lake is based in large part on assumptions about the current elevation of the Dallman power plant's cooling water intakes which would limit the lake's yield to a condition at which there is "roughly a six-month potable supply remaining" (ISWS, 2011). above the municipal water supply intake at 540 ft. above mean sea level. Removal of this unsupportable assumption that the plant intakes cannot be moved deeper results in a much greater supply being available.

### D. IN CONSIDERING THE ACTUAL EXTENT OF THE NEED THE SEIS MUST CONSIDER THE INTERMITTENCY AND INFREQUENCY OF WATER DEFICITS.

Future occurrences of deficits will be intermittent, because both water demand and lake yield vary substantially with weather and climate. Since yield has exceeded demand for more than a half-century, deficits are likely to be infrequent, at least in the near term. It is imperative that "need" be quantified as a function of time over the project lifetime, using clearly stated assumptions, and based on the best available facts and evidence. For example, expected annual shortfalls (demand minus supply) could be characterized as follows for the 50-year planning horizon:

- 1. Baseline: most likely shortfalls assuming average climate
- 2. Add severe shortfalls resulting from anticipated drought frequencies, e.g.
  - a. 25-yr drought has 87% chance of occurring in next 50 years
  - b. For 50- and 100-yr droughts, probabilities are 63.6% and 39.5%

Frequency of water deficits is not an entirely stochastic phenomenon. Both demand and yield are actively managed by the applicant, for example, by repairing water main leaks, and setting schedules for lake dredging and power plant retirements. The entire spectrum of policy decisions and management actions should be included in the analysis of alternatives to the proposed project.

#### E. THE SEIS MUST OBJECTIVELY CONSIDER AND DOCUMENT THE EXISTENCE OF ANY "NEEDS" THAT ARE INDEPENDENT OF MUNICIPAL WATER SUPPLY

Both the USACE (in the Federal Register Notice) and the applicant (in various public fora) have listed a seemingly arbitrary array of "regional needs" to be met by the project. The EIS which this SEIS is to supplement neither identifies nor analyzes alternatives that will meet those needs. It is improper to expect the public to comment on the proper scope of a SEIS without giving reasonable notice as to what needs are asserted for the project. To the extent that the USACE relies on vague, undocumented or discussed assertions of need, the legal validity of the scoping process and the SEIS have already been compromised.

Since Hunter Lake was first proposed 50 years ago projected water demand has failed to materialize, but that has not prevented the applicant from padding professional estimates of future demand with unsupported assertions about the emergence of additional "needs": most recently regional economic development; "industrial reserve" and "continuous" operation of power plants. Just how any of these economic goals relate to a need for increased water supply has never been documented.

If indeed the project purpose is expanded beyond the need to supplement Springfield's municipal water supply, the EIS must be expanded accordingly to identify specifically and document these needs and analyze alternatives for meeting those needs. Our concerns are illustrated by the following examples, which unfortunately cannot be made more specific because the supposed underlying needs are not properly explained in the public notice:

- 1. If the purpose is outdoor recreation, existing deficits must be quantified. Assuming it is being asserted that there is a need for more lake-based recreations, alternatives include:
  - a. Expanding and facilitating public use of Lake Springfield for fishing and boating by improving water quality and fish habitat;
  - b. Expanding public use of Sangchris State Park, 3000 acres of public land including a reservoir with 120 miles of shoreline, separated by only 5 miles from the proposed site of Hunter Lake and touted by IDNR as "an angler's paradise".
  - c. Managing existing public lands along Horse and Brush Creeks for access to cultural resources like the historic Pensacola Tavern stagecoach stop, and natural resources for hiking, camping, horseback riding, hunting, birdwatching, and

numerous other recreational activities in a manner that preserves the option for building Hunter Lake if and when needed in the future.

- 2. If the purpose is to supply water to nearby communities beyond the termination dates of existing contracts, deficits must be quantified and alternative ways of meeting those water demands (including conservation policies and rate structures) must be analyzed. Based on the recent secession of South Sangamon Water District, 50-year renewal of existing wholesale contracts cannot even be assumed. Certainly, under *Simmons v. USACE*, a dam cannot be justified or properly examined without identifying each of the nearby communities that might need increased water from Springfield and all of the alternatives for supplying those communities.
- 3. If the purpose of a supplemental water supply is to manage Lake Springfield water levels to increase lakeside property [lease] revenues and associated property tax revenues, alternative sources of revenue must be considered and analyzed. However, if the need is to maintain existing revenues, alternatives include periodic dredging of sedimentimpaired access to coves and boat docks and fishing areas, and compliance with the Clean Water Act via sustainable management of sedimentation, algal blooms, and runoff of agricultural pollutants from the upstream watershed.
- 4. If the purpose is to stimulate regional economic development by expanding water supply in excess of projected demand, the need must be documented, not merely asserted. Alternatives include a broad range of potentially more cost-effective economic development options that do not require supplemental water supply or recruitment of water-intensive industries.
- 5. If the purpose is to provide for "continuous operation" of CWLP's power plant (a purpose stated in the USACE information packet but not in the Federal Register notice), alternatives include purchasing wholesale power and implementing conservation rates and other measures to reduce native load. If the applicant repeats its prior assertion that Lake Springfield "yield" for drinking water is limited by the "need" to operate all of its power plants simultaneously during the 100-year drought to sell wholesale power, the SEIS must also analyze the option of prioritizing drinking water over power sales: e.g.

curtailing power production to enable 100% of potable water needs to be met.

### II. EVEN ASSUMING THERE IS A NEED, THERE ARE A WIDE VARIETY OF POTENTIAL ALTERNATIVES TO HUNTER DAM AND THE COSTS OF THE HUNTER DAM ALTERNATIVE MUST BE CALCULATED PROPERLY.

Proper consideration of alternatives to the proposed inundation should focus on three different types of actions.

- First, if what the applicant supposes to be true of the potential for a water supply shortfall is true, a number of steps should be taken immediately whether or not a dam is built to alleviate the supposed crisis. Insofar as those steps will relieve the need, they may eliminate any need for the project.
- Second, steps can be taken in the long run to increase water supply to address whatever need remains after taking immediate actions that should be taken in any case.
- Third, alternatives must be considered that would decrease the need for water in the period after the dam could be built.

Moreover, any analysis of alternatives must take into account all of the costs that will be created by the construction of the proposed dam and reservoir.

### A. THE SEIS SHOULD CONSIDER IMMEDIATE ALTERNATIVES TO ADDRESS THE ALLEGED WATER SHORTFALL THAT COULD BE IMPLEMENTED THAT MAY ELIMINATE MUCH OR ALL OF ANY LONG TERM NEED FOR THE DAM.

Any credible project to eliminate the estimated water deficit (demand minus yield under projected 100-year drought conditions) must necessarily consist of short- and long-lead time elements. By definition, there is a greater than 1% chance that the applicant's asserted current deficit of 8.2 mgd will be needed before longer-term infrastructure investments can be put in place. The "Need for project" statements from the applicant and USACE state that

the 8.2 mgd water deficit exists now, and emphasize the immediate nature of the need. For evaluating alternatives, the project need must be quantified in terms of scenarios expressing estimated water deficits (demand minus yield) as a function of time over the project life, with the project and its alternatives designed to meet the stated need.

For the proposed project – and for all its alternatives – whether they call for increasing supply or reducing demand over the 50-year planning horizon, contingency planning and some preparatory actions must be undertaken immediately: e.g. strengthening the drought emergency response ordinance, or establishing contractual arrangements that can be triggered upon recognition of drought onset. Contingency planning may also call for making some investments to enable rapid implementation of actions that may become necessary to meet the needs during an 18-month design drought that begins within the next few years.

Because of the allegedly urgent nature of the project need, such immediate plans and investments may include some or all of those listed below:

- 1. Amending the City's drought emergency response ordinance to
  - a. Increase the surcharges triggered by droughts and/or
  - b. Accelerate the schedule (trigger levels) for mandatory curtailment of irrigation and other nonessential uses
- 2. Preparing to augment Lake Springfield by pumping water from Sangamon river and/or gravel pits via
  - a. Temporary pipeline directly from gravel pits (or from river via gravel pits); or the
  - b. South Fork pump station from a temporary dam on Sangamon river
- 3. Modifying the Dallman power generating units to enable use of treated wastewater from Sugar Creek plant for once-through and/or evaporative cooling
- 4. Immediately shutting down the Dallman units
- 5. Offering treated wastewater for trucking from both SMSD plants to irrigators (e.g. golf courses; nurseries) and others at risk of losing non-native landscaping during droughts

- 6. Making equipment modifications and contractual arrangements enabling CWLP to purchase large amounts of wholesale power when cost is low (e.g. spring, fall, nights, weekends) in order to minimize ash sluice and evaporation from Lake Springfield
- 7. Retrofitting water intakes and/or pumps at Dallman power plant to enable power generation at lower lake levels
- 8. Enacting seasonal pricing and conservation rate structures to encourage investment in smart irrigation equipment and other efficient technologies
- 9. Mandating replacement of pre-1995 plumbing fixtures, inefficient irrigation equipment, etc.
- 10. Amending ordinances to facilitate and promote safe uses of graywater and stormwater

Immediate and short-term actions such as these must necessarily be part of the proposed project, because of the lead time required to build and fill Hunter Reservoir. Alternatives to the proposed project will have different lead times, some shorter and some longer. Therefore, the precise number and nature of such near-term emergency actions can be expected to differ among the various 50-year alternatives considered in the SEIS.

The worst-case scenario, where the design drought occurs within the next few years, would be addressed by bundles of emergency actions that may have relatively high costs/gallon delivered, compared to actions having longer lead times. Addressing this worst case would automatically eliminate deficits caused by near-term droughts of lesser magnitude.

Thus each "alternative" will consist of a bundle of actions and investments designed to deal with the expected magnitudes and frequencies of intermittent water deficits. The various actions and investments comprising an alternative may include water demand management or water supply management, or combinations thereof. Actions that can be implemented rather quickly were listed above because of the allegedly urgent nature of the project need. Other supply management and demand management elements are listed below.

#### **B. THE SEIS SHOULD CONSIDER ALTERNATIVES TO SUPPLEMENT AND DIVERSIFY EXISTING SUPPLY**

The applicant is already engaged in supplementing its primary source of supply, for example by pumping from the South Fork for 60 years, and increasing storage capacity with a partial dredging project 30 years ago. The following list includes examples of both types of alternatives. It is by no means exhaustive; it merely illustrates the type of creative thinking required to properly scope the SEIS in a manner responsive to final White House guidance that "Counsels agencies to use the information developed during the NEPA review to consider alternatives that would make the actions and affected communities more resilient to the effects of a changing climate" (CEQ, 2016). Providing resilience requires understanding that each type of water supply supplement (surface flows, storage, groundwater) will contribute differently to ameliorating the deficit caused by the design drought and affecting the magnitude and frequency of other water deficits. For example, tapping surface flows from a watershed larger and more diverse than the Lake Springfield watershed will provide better protection against extreme droughts than from the smaller and adjacent Hunter Reservoir watershed because drought characteristics will be highly correlated in the latter case. Similarly, groundwater supplies respond more slowly to weather than surface runoff – another example where diversity will add robustness.

Alternatives that the SEIS must consider to supplement and diversify supply include at least:

- 1. Increasing Lake Springfield yield by:
  - a. Modifying water intakes and pumps to enable withdrawals down to 540 ft. msl or below and/or
  - b. Accelerating the schedule for dredging Lake Springfield (beyond base level needed to preserve existing residential property values, boating, fishing, aesthetics).
- 2. Increasing alternative surface water supplies from:
  - a. Lake Sangchris via South Fork pump station (This option was rejected in FEIS because the then-owner of the dam was not interested. The SEIS must document the current owner's refusal to provide water at a per-gallon cost of water from Hunter reservoir, and consider using eminent domain.)

- i. Contract for water releases, then transfer to Lake Springfield via existing pump station (update and enlarge pumps as appropriate).
- ii. Purchase dam and/or water rights when coal power plant at Kincaid is retired (IDNR already owns lakeside land).
- b. Releases from Clinton Lake via Salt Creek could be withdrawn near Lincoln, then pipelined to Springfield
- c. Sangamon River, piped directly to treatment plant or via Lake Springfield. This option was rejected in the Final Environmental Impact Statement (FEIS) because CWLP considered only one means (a main stem dam) of capturing and diverting flow to Lake Springfield. The SEIS must consider the full range of alternative means of capture including Ranney wells and diversion/intake structures, and means of transport such as a permanent pipeline or deploying a temporary one in case of a low probability emergency, and then reassessing need for a permanent one.
- 3. Groundwater supplies could be increased by:
  - a. Constructing new wells in Sangamon Valley Aquifer northwest of city with construction staged to accommodate recent westward growth patterns
  - b. Using pipelines from wells in Mahomet Aquifer or Illinois River valley
    - i. Havana Lowlands or other parts of the aquifer nearer to Springfield; consider using existing pipeline corridors extending outward from CWLP (e.g. Williamsville, Chatham, Mechanicsburg)
    - ii. Wells in the Illinois River valley perhaps sharing Jacksonville pipeline ROW and capacity, or discharging to Lick Creek to minimize pipeline length. (The FEIS rejected the concept of connecting to Jacksonville's system because its well field and transmission pipeline could not supply the 21 mgd of water Springfield claimed at the time to be its "need". It also asserted without evidence that evaporation losses from Lick Creek would be too costly)
    - iii. Maximize use of existing pipelines and rights of way, e.g. from Williamsville; Chatham; Riverton

- c. Wells in more distant parts of the Mahomet Aquifer north of Decatur could deliver water to Springfield via the Sangamon river with appropriate contractual arrangements. This would be similar to Friends Creek now being used to convey water from the Mahomet Aquifer to Lake Decatur.
- 4. Gravel lakes could be used to store and supply water.
  - a. Pump groundwater from gravel lakes
    - i. Consider lease arrangements to enable continued mining and enlargement of pits
    - ii. Consider constructing pipeline first, then connecting additional pits and wells in stages
    - iii. Refill gravel pits from Sangamon River when sufficient flows available
      - 1. Could add surface water to the groundwater yield from gravel pits by utilizing storage created by gravel pit drawdown; or
      - 2. Could minimize any drawdown-induced impairment of nearby well fields by maintaining higher water levels in the gravel pits
  - b. Objections to the option of using gravel pits were found (or manufactured) through a finding that pumping water from the gravel pits during drought period would interfere with operation of nearby municipal well fields for Chatham and Riverton. However, such inference could be prevented or minimized through improved control technologies (e.g. cycling; throttling; variable speed pumps) at nearby municipal well fields. Further, the municipal well fields could be augmented by drilling additional wells. Still further, the effects of any interference could be mitigated by providing treated water via existing pipeline to nearby communities during severe droughts to compensate for any yield impairments at their well fields resulting from gravel pit drawdown. It would also be possible to reimburse owners for any equipment damages that might be caused by operating their wells when water table is lower than design condition due to gravel pit drawdown.

#### C. DEMAND MANAGEMENT, INTERGRATED WATER MANAGEMENT AND OTHER METHODS OF REDUCING DEMAND MUST BE CONSIDERED IN THE SEIS.

The applicant is currently engaged in actively managing water demand. The City regulates directly the monopoly prices charged by its water utility, and controls directly the investments and operation of the inherently water-intensive equipment used to generate power (for both native load and for export).

- 1. Reduce demand for potable water for example:
  - a. Stop giving away free water to the power plant and "authorized users". Charge the same \$/gallon as city residents would be forced to pay for supplemental supplies.
    - i. Raw water now used for coal ash sluice and evaporated from lake due to Dallman #31-33 cooling load makes power exports artificially cheap
    - ii. Potable water, 2.2% of metered use provided free to "authorized users" such as street cleaning
  - b. Adopt conservation rate structure that decouples revenue requirement from sales; conservation rate structures
    - i. Set the marginal (tail block) price, which is the customer's "reward" for saving a gallon, is set equal to per-gallon cost of new supply
    - ii. Periodic adjustments ensure that the utility's revenues are not affected by fluctuations in water demand
    - iii. Reduced price for 'lifeline' or 'subsistence' residential use
    - iv. Encourage investments on the customer side of the meter that save water at less cost per gallon than if the utility invested in new supply.
  - c. Adopt seasonal pricing to encourage investments in smart irrigation, drought-tolerant vegetation, etc.
    - i. Reduces severity of deficits because of irrigation's contribution to peaking of water sales in summer when deficits are greatest (CDM Smith, 2015; ISWS, 2011)

- ii. Reduces capital costs of seldom-used treatment capacity and distribution infrastructure that is needed only a few percent of the time
- iii. Alternatively, pay customers to replace turf grass with xeriscaping as is done in other cities (partly for its symbolic value to inspire imitation, similar to Springfield's policy of prohibiting restaurants from serving free water except on request)
- d. Amend drought emergency ordinance to provide for
  - i. Strict enforcement and penalties sufficient to deter waste
  - ii. Higher surcharges during droughts, permanent and large enough to encourage customer-side investments in more efficient infrastructure
- e. Mandate or subsidize replacement of plumbing fixtures and appliances that fail to meet federal efficiency standards (e.g. EPA, 2008)
- 2. Reduce losses of potable water for example:
  - a. Eliminate leaks in all distribution system pipes upstream of meters
  - b. Aim to eliminate 14% unaccounted water
- 3. Reduce demand for raw water at the three oldest power plants
  - a. Accelerate transition to dry ash handling
  - b. Purchase power during drought years, especially during periods when wholesale price is low.
  - c. Accelerate retirement schedule for 3 oldest Dallman units to eliminate 'forced evaporation' losses caused by dumping waste heat into lake

### D. PROPER ANALYSIS OF THE HUNTER LAKE ALTERNATIVE REQUIRES THAT THE SEIS CONTAIN A FULL ECONOMIC ANALYSIS OF WATER SUPPLY ALTERNATIVES

Since the project proposal involves integrated operation of Hunter Reservoir and Lake Springfield, the SEIS must be based on analytically reproducible (e.g. peer-reviewable) simulations quantifying daily inflows (e.g. tributaries), outflows (e.g. evaporation; discharges to South Fork and Lake Springfield), surface area and water levels in order to assess the economic and environmental impacts within and downstream of the proposed reservoir. In addition, the SEIS must

- 1. Quantify all project costs (borne by applicant and other entities) and all alternatives using the metric \$/gallon delivered (= present value of lifecycle costs divided by cumulative annual shortfalls eliminated).
  - a. Enables fair comparison between alternatives having different lifetimes, and between supplemental supply options and demand management alternatives.
- 2. Identify least-cost combinations of short- and long-term alternatives that eliminate all deficits throughout the entire 50-yr project life
  - a. Include contingency plans for alternatives that might be relatively costly (\$/gallon) but can be implemented on short notice (e.g. drought surcharges, curtailing power plant evaporation, drilling more wells)
  - b. Allow for adaptive management; e.g. accelerating schedule if demand grows; deferring actions if growth slows or declines
- 3. Account for the monetary impacts of risk factors and include in project costs, considering that
  - a. Surface water supplies must meet water quality standards and are more vulnerable to water quality degradation than groundwater
    - i. Chronic, from agrichemical runoff
    - ii. Acute (e.g. tanker truck rolls off bridge; pipeline ruptures; toxic algal blooms result from perfect storm of high nutrient concentrations and high temperature)
  - b. Dams pose risks of catastrophic failure that must be insured.
  - c. All alternatives to Hunter Reservoir allow for maintaining existing CWLP lands as hedge against very-long-term climate risks or other uncertainties in long-term supply and demand forecasts
    - (1)Locate permanent improvements above 571 ft. msl
    - (2) Manage as parkland, while leasing tillable land
    - (3) Selling the property would lead to irreversible development that could foreclose the option for a reservoir in the future.

### III. IMPACTS ON THE HUMAN ENVIRONMENT SHOULD BE UPDATED AND CONSIDERED IN DETAIL.

The FEIS that was created for this project must be updated as to cultural and environmental impacts. In particular:

### The SEIS must fully consider impacts on the lands to be inundated.

-The FEIS Programmatic Agreement concerning cemeteries and historic and cultural resources must be updated to detail in an understandable manner the kinds of mitigation actions that might be required. Provide enough detail to calculate a credible estimate of the maximum upper bound on the cost and cultural impacts of such activities.

#### The SEIS must fully consider the quality of the reservoir that would be created by the Hunter Dam, as well as environmental impacts on downstream waters and on Lake Springfield caused by water transfers

- The FEIS assumed, without justification, that fish populations in Hunter Lake would be similar to Lake Springfield. Those impacts should be reestimated to account for the relatively massive drawdowns proposed for Hunter Lake.

- The SEIS must ensure that all estimates of water quality conditions in Hunter Lake and Lake Springfield are calculated and compared based on the same assumptions for meteorological conditions, power plant withdrawals, water level management and water transfers from one reservoir to the other.

- The FEIS made assumptions about the water quality effects of the applicant's expenditures on efforts since 1983 to control agricultural runoff into Lake Springfield. The SEIS must therefore include an evaluation of those programs to serve as the analytical basis for any plans and claims to be made about future actions that may be taken to ensure Hunter Lake complies with the Clean Water Act.

- The SEIS analyses of flooding in the upstream reaches of Hunter Lake must account for increased storm intensities expected as a result of climate changes, even those extending beyond the economic life of the project to reflect the probable physical life of a municipal water supply dam.

- All FEIS data and analyses describing the relationship between drawdown, surface area and storage, must be updated to reflect sedimentation that has

occurred in Lake Springfield since prior analyses were done. This information is needed for examining effects of water transfers on drawdown, and the effects of dredging on lake yield, water quality, boating, etc.

- The SEIS must describe short- and long-term effects of drawdown on species composition in the proposed Hunter Reservoir and the overall health of the aquatic environment, as well as any impairment of recreational activities including fishing and boating.

- The SEIS must provide recent data and analysis supporting claims about demand for each type of recreational benefit claimed, and describe what if any restrictions will be placed on water-oriented recreation in Hunter Reservoir (e.g. swimming; ice skating; boating sizes, horsepower, and speed).

- For any stream channel alteration or wetland mitigation proposed upstream of proposed dam, the proposed SEIS must quantify the effects of evaporation and evapotranspiration on the magnitude and frequency of water level fluctuations in the reservoir.

-The SEIS must also consider water quality impacts on the South Fork and the 10-15 miles of the Sangamon River caused by diverting water from Hunter Reservoir through the city, until it rejoins the Sangamon River at the wastewater treatment plants.

- The SEIS should also consider whether construction of the dam will create stagnant waters that may source as a breeding ground for harmful species.

In addition to the foregoing comments, PRN incorporates by reference the comments of the Sierra Club that are also being filed with regard to the scoping for this project.

Sincerely,

Hays

Carol C. Hays Executive Director

#### REFERENCES

EPA, 2008 National Efficiency Standards and Specifications for Residential and Commercial Water-Using Fixtures and Appliances, <u>https://www3.epa.gov/watersense/docs/matrix508.pdf</u>

ISWS, 2011, Meeting East-Central Illinois Water Needs to 2050: Potential Impacts on the Mahomet Aquifer and Surface Reservoirs, Roadcap, George, H. Vernon Knapp, H. Allen Wehrmann, David R. Larson, CR-2011-08

ISWS, 1991, Drought yields of Lake Springfield and Hunter Lake, Fitzpatrick, William P., and H. Vernon Knapp, ISWS CR-515 Cite analyses of runoff from increasingly intense storms, by USGS,

PMCL, 1991, Planning and Management Consultants, Ltd. Water demand forecast for Springfield City Water Light and Power, USGS, 2016 National Climate Change Viewer https://www2.usgs.gov/climate\_landuse/clu\_rd/nccv.asp

CEQ, 2016, Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, <u>https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/nepa\_fin</u> <u>al\_ghg\_guidance.pdf</u>

## **COMMENT FORM**

### Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

PLEASE PRINT:
NAME: Gene Jechach
ADDRESS: 3425 Cash River Rd
CITY/STATE: Springfield IL 6271/ ZIP:
PHONE: E-MAIL: <u>See/bachgeneral gmailecom</u>
0 0
COMMENTS:
I believe FIRMLY That it would be far more
Cost effective to use a combination of
gravel pits, wells and possibly some
aredging of Lake Springfield ( which should
be done any way before the lake fills in than
It would be to build a new lake Hunter
New industry that uses significant amounts
of water do not come to conthis area
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water supply I don't know the date but
I suspect that water usage is not growing
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a gravel sit, What happened as a result of
Also, many local farments will go out of business
if Hustor Lake is built . The environmental impact
Will be tak more negative than positive as many
Many miles of small creeks will be underpatera
I Recommend that the ARMY CORDS does NOT ISSUE
You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil @permit To purity
or the kni

http://supplementalwater.cwlp.com

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 01, 2016 9:47 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Hunter Lake, Springfield, IL

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Jeff Sexton [mailto:js5bgfsh@gmail.com] Sent: Tuesday, August 30, 2016 7:04 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Hunter Lake, Springfield, IL

Sirs,

I'm writing to voice my support for the construction of Hunter Lake. I've lived in or near Springfield most of my life. In 56 years I've witnessed droughts severe enough that you had to ask for a glass of water at a restaurant because Lake Springfield was so low that even restaurants were put on restricted water usage.

The city has dredged the Lake, raised the level of the dam at the South Fork pumping station, and pumped water for years to try to meet the demands of a growing city. We keep putting band aids on a problem that isn't going to heal by itself. All this talk of tapping aquifers and pumping water from a limited quarry are just more band aid fixes that don't begin to address the long term water needs of the city and the adjacent communities they serve.

In the meantime, business and industry who might otherwise invest in Springfield, are moving on to other venues because of what they rightfully perceive as an inadequate water supply. The city has spent millions of dollars and countless man hours on this project going back thirty years. Numerous studies have been performed; there are no snail darters or snowy owls. It's time to issue the permits so the city can proceed with construction.

Jeff Sexton 6545 Bunker Hill Road New Berlin, IL 62670

(217) 836-7294 js5bgfsh@gmail.com <mailto:js5bgfsh@gmail.com>



ILLINOIS CHAPTER

tel: 312.251.1680 fax: 312.251.1780 web: illinois.sierraclub.org

70 East Lake Street • Suite 1500 • Chicago, IL 60601

September 14, 2016

Sent via email to cemvr-odpublicnotice@usace.army.mil

ATTN: Regulatory Branch U.S. Army Corps of Engineers, Rock Island District Clock Tower Building Post Office Box 2004 Rock Island, Illinois 61204-2004

Re: Notice of Intent to Prepare a Draft Supplemental Environmental Impact Statement (SEIS) for the Springfield Supplemental Water Supply Project - CEMVR-OD-P-2016-0095

Dear Mr. Kelley and other USACE officials:

The Illinois Chapter of the Sierra Club offers the following comments for the scoping of the Supplemental Environmental Impact Statement (SEIS) for the proposed construction of a new lake by the City of Springfield, which it has been asserted would satisfy a need for additional water supply for the City of Springfield and potentially serve other purposes. Sierra Club has many members who would be affected adversely by construction of this proposed lake through loss of natural resources, loss of cultural resources, diminution of water quality, and wasted use of public resources.

Given the doubtful need for this project, the wide range of alternatives available to meet whatever need might exist, and the environmental impacts of the project, it is clear that the SEIS must make a searching inquiry into a wide range of issues including:

- The extent of the need for this project to serve any documented purpose,

- The wide range of alternatives available (as listed below) that could satisfy the purposes that have been suggested would be served by the project and the economic and environmental costs of each alternative that might satisfy any part of the asserted need,

- The many potential impacts that building this project would have on the human environment as compared to the effect of the alternatives that would satisfy any underlying needs that might be served by building the proposed dam, including the full costs of assuring that the lake will not violate Illinois water quality standards or cause or contribute to violations of water quality standards in the Sangamon River.

#### The SEIS must thoroughly assess the stated Purpose and Need for this project.

The purpose and need for this project is described in the 2000 final Environmental Impact Statement (2000 FEIS) as the 'Proposed Water Supply Reservoir Hunter Lake' intended "to augment current sources by a minimum of 15.3 mgd...to meet the projected demand of 42.4 mgd during the design drought ...in the year 2025 for the expected service area while maintaining minimum lake elevations in Lake Springfield necessary for power and water production." The 2000 FEIS also states that the "design year 2025 existing supply is projected at 28.6 mgd."

The public notice for the SEIS contains a very different purpose and need statement:

Based on an analysis of the storage and capacity, the Illinois State Water Survey had determined that Lake Springfield is an inadequate supply system with a 50% probability of not meeting expected water supply demands. Under conditions of reduced water availability the City is at risk of not meeting demands (both existing and future) for commercial and residential water use, and for industrial water supply (power plant operation and condenser cooling). Under projected drought conditions the estimated water deficit (demand minus yield) is currently 8.2 million gallons per day (MGD), whereas future deficits (year 2065) are projected at 11.3 MGD.

Other associated regional needs have also been identified that may potentially be addressed by the City's proposed project. Specifically, the following regional needs are also recognized:

- Increased demand for regional outdoor recreational areas that provide additional fishing and hunting opportunities
- Provide supplemental water supply for adjacent communities
- Increased water supply to support regional economic development

Clearly there are changes in the stated need for the project that were not examined in 2000. Additional recreational areas were not part of the original purpose and need for this project. This new need must be thoroughly examined if it is to be added to the need for this project. Hunter Lake as well as all the other project alternatives to be examined in the SEIS should evaluate the recreational opportunities they provide as well as those they lessen or destroy. Recreational opportunities should not be limited to fishing and hunting but include other activities that people engage in including biking, hiking, bird watching, and other wildlife viewing. The 2013-2014 Illinois Outdoor Recreation Survey lists walking, picnicking, observing wildlife, including bird watching and using playgrounds as the top outdoor activities in which Illinois residents participate. (See p. 25 in the Illinois Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2015 - 2019 at https://www.dnr.illinois.gov/publications/Documents/0000823.pdf)

The current stated need to resolve a water deficit of 8.2-11.3 MGD also needs to be thoroughly examined. Based on the materials currently available for our review- the powerpoint and packet from the August 24, 2016 public meeting (see

<u>http://supplementalwater.cwlp.com/Documents.aspx</u>)- it is unclear why there is a deficit if the existing supply remains at 28.6 MGD. The following chart shows demand out to 2065 to be less than 26 MGD even under high growth scenarios.



## Need for Supplemental Water Supply

#### **Projected Water Demand**

CWLP Forecast Scenarios of Annual Average Demand in MGD



The various uses of water that are being factored into the projected water demand must be examined carefully as to the actual likelihood of being a need now and 50 years from now. These include commercial and residential water use, industrial water supply (power plant operation and condenser cooling) and supplemental water supply for adjacent communities. Clearly demand has leveled off since the 1980's despite a population increase of ~17% during that period (See chart above). Projections regarding the water needs of commercial and residential users must reflect current levels of demand per unit, not higher use patterns that occurred in the past.

More recently population growth in the City of Springfield has leveled off; over the last 10 years, the population has only increased by ~2%. (Per US Census there were approximately 100,000 residents in 1980, 116,000 in 2006 and an estimated 116,565 in 2015.) Since 2012, estimated population numbers from the US Census show the population of Springfield in decline. (See http://www.census.gov/popest/data/cities/totals/2015/files/SUB-EST2015\_17.csv)

Regarding industrial water supply for power plant operation and condenser cooling, the water demand analysis must take into account potential changes at the power plant. On June 7, 2016 the Springfield city council unanimously adopted an ordinance authorizing a \$552,000 contract with Burns & McDonnell Engineering Company to evaluate options for the Dallman Power Plant to meet the USEPA's Effluent Limitation Guidelines. (See starting p. 97 in <a href="http://www.springfieldcityclerk.com/Images/Adobe-PDF-Document-icon-48.png">http://www.springfieldcityclerk.com/Images/Adobe-PDF-Document-icon-48.png</a>) The facility must comply with these guidelines beginning November 1, 2018. It is our understanding from

the May 19, 2016 public forum that the Springfield City Council held on issues related to City, Water, Light and Power (CWLP) that this ELG study is critical to the future economics of the power plant's Units 31 and 32 and that CWLP is planning on conducting an economic analysis of those units based on the results of the ELG study. The ELG study is scheduled to be completed by February 15, 2017 with preliminary options and costs for coal ash pond impacts/modifications to be submitted to CWLP in early December 2016.

In addition, a report prepared by Synapse Energy Economics, Inc. for the Sierra Club found that these two units lost \$42 million from 2008-2013 and are projected to lose \$40 - \$46 million over the next twenty years, and are not needed for their generating capacity. (See Synapse Energy Economics, Inc. *Dallman Units 31/32: Retrofit or Retire? CWLP Should Not Gamble with Ratepayer Money*. January 14, 2015. http://www.synapseenergy.com/sites/default/files/Dallman%20Units%2031%20and%2032%20--%20Retrofit%20or%20Retire%2014-139.pdf) Decisions made on the operation of those units will impact the water needs for cooling and sluicing of coal ash at the power plant.

How coal ash is to be handled at the power plant in the future is another issue that will impact water demand at the facility. Coal ash disposal is now covered by the federal *Disposal of Coal Combustion Residuals from Electric Utilities Rule*, which was published in the Federal Register on April 17, 2015. (See <a href="https://www.epa.gov/coalash/coal-ash-rule">https://www.epa.gov/coalash/coal-ash-rule</a>) The December 2013 report *Environmental Compliance Study for Dallman Power Plant* prepared for CWLP by Burns & McDonald Engineering Company anticipates a conversion to dry handling of coal ash. (See <a href="http://www.cwlp.com/electric/generation/EnvironmentalComplianceStudy.pdf">http://www.cwlp.com/electric/generation/EnvironmentalComplianceStudy.pdf</a>) The current discharge permit for the plant allows up to 7 million gallons per day (MGD) of ash pond discharge to Sugar Creek through outfall 004. The draft permit placed on public notice on January 7, 2015 (See <a href="http://www.epa.illinois.gov/Assets/iepa/public-notices/2015/cwlp/public-notice.pdf">http://www.epa.illinois.gov/Assets/iepa/public-notices/2015/cwlp/public-notice.pdf</a>) would permit nearly 5 MGD of ash pond discharge to either Sugar Creek or Lake Springfield. The draft permit also permits 360.1 MGD daily average discharges of condenser cooling water.

The effect of increased water efficiency, and thus reduced demand, resulting from federal water conservation standards for plumbing fixtures and appliances implemented after this project was considered in 2000 must also be factored into the projected need.

Before forging ahead with the extensive alternatives analysis that the SEIS must contain, we recommend that an updated Purpose and Need Statement be developed and the public be given an opportunity to comment on the statement and its underlying assumptions.

#### The SEIS must evaluate all reasonable alternatives that meet the stated purpose and need.

The Corps must rigorously explore and objectively evaluate all reasonable alternatives, and for any alternatives eliminated from detailed study, must briefly discuss the reasons for such elimination. 40 CFR 1502.14. Reasonable alternatives are those that substantially meet the stated purpose and need. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. "A Citizen's Guide to the NEPA," Council on

*Environmental Quality, December 2007.* Agencies are obligated to evaluate all reasonable alternatives or a range of reasonable alternatives in enough detail so that a reader can compare and contrast the environmental effects of the various alternatives. 40 CFR 1502.14.

The economic and environmental costs of each alternative that might satisfy any part of the asserted need must be addressed. These are the options that we understand will be studied:

- No action alternative with water conservation
- Development of a new water supply reservoir with water conservation
- Development of groundwater well systems with associated pump stations and pipelines, in concert with water conservation
- Use of other existing surface water reservoirs, along with water conservation
- Dredging of Lake Springfield together with water conservation

We support the analysis of these alternatives. We recommend that combinations of alternatives also be studied. In addition to the alternatives described above, we recommend that these alternatives be studied as to their feasibility and effect, singly and in combination:

- Use of gravel pits to increase storage capacity
- Use of Sangamon River water during emergencies
- Changes in ash handling at the Dallman Power Plant that can reduce water demand
- Closure of Dallman plant units or curtailment during drought conditions
- Reduced water demand through federal water conservation standards for plumbing fixtures and appliances
- Reduced water demand through the use of seasonal pricing

In their September 14, 2016 comment letter on this matter, Prairie Rivers Network discusses in detail how a credible water demand forecast should be developed, numerous water supply alternatives, demand management and integrated water management to conserve water. We support these recommendations and incorporate them herein by reference.

# The SEIS must thoroughly consider the impacts of building Hunter Lake on the human environment.

The Corps must analyze the full range of direct, indirect and cumulative effects of the reasonable alternatives. 40 CFR 1508.7 Effects include ecological, aesthetic, historic, cultural, economic, social and health impacts, whether adverse or beneficial. 40 CFR 1508.8.

If Hunter Lake were to be built, agricultural land and habitat for threatened and endangered species and other wildlife will be destroyed. Forested areas will be lost. Water resources, including creeks, wetlands and floodplains will be impacted, requiring mitigation. Impacts on water resources and water quality must be assessed under Illinois antidegradation rules. Historic properties, including cemeteries, will be impacted. New recreational opportunities may arise but others will be lost. All these impacts must be studied for the proposed water supply project as well as for all the alternative ways that any determined increase in water supply need could be satisfied. Direct, indirect and cumulative effects must be assessed for each alternative.
## Water resource impacts are extensive.

Per the notice for project CEMVR-OD-P-2007-327 on which we last commented in January 2009, lost aquatic resources include 102 acres of wetland, 88.3 acres of stream channel and 4 acres of ponds. In addition, 1,526 acres of non-wetland forest will be inundated. There are also aquatic resources impacts from the proposed sewer pipeline planned to divert wastewater effluent from the towns of Virden, Divernon and Pawnee. The proposed 29.6 mile long pipeline will necessitate 18 stream crossings. The 2008 USACE notice stated that 33 acres of wetland impacts are anticipated.

Because of concerns that Hunter reservoir will cause flooding in the Village of Pawnee, channel modifications to Horse Creek and Henkle Branch are also planned, including relocation of a 0.92 mile segment of Horse Creek and widening of Horse Creek and Henkle Branch with impacts estimated on 5 acres of wetlands and 4,850 feet of stream. The USACE notice described this as impacts to 4,050 feet of Horse Creek and 800 feet of Henkle Branch. Of this, 850 feet of Horse Creek will be abandoned and replaced with a 600-foot new channel. Additional impacts will be from stream widening: 800 feet of Henkle Branch and 3,200 feet of Horse Creek, upstream and downstream of the new channel. The construction of a levee to protect Pawnee High School from Horse Creek is also being considered.

We are not alone in our assessment of the substantial environmental impacts of this project. In an Oct. 12, 2008 letter to Bruce Yurdin at Illinois EPA, Tom Skelly, Water Division Manager, Office of Public Utilities, for the City of Springfield acknowledges: "The environmental impacts of the Hunter Lake proposal are the greatest of the alternatives." In the November 21, 2008 response to questions posed to the City of Springfield by Dan Heacock of IEPA, Skelly acknowledged the greater environmental impacts of the project in relation to other alternatives, "Mitigation costs are included as contingency costs for all other alternatives and are not itemized, since the mitigation would be minor in comparison to one of the reservoir alternatives."

## Impacts on water quality cannot be ignored.

As shown below, the water stored in the reservoir would likely violate Illinois water quality standards for phosphorus in lakes and reservoirs and for dissolved oxygen. Also, the dissolved oxygen standard would likely be violated downstream of the reservoir.

The Illinois State Water Survey (ISWS) prepared a report in December 1997 entitled *Water Quality Evaluations for Lake Springfield and Proposed Hunter Lake and Proposed Lick Creek Reservoir* (See www.isws.illinois.edu/pubdoc/CR/ISWSCR-621.pdf). Figure 21, found at p. 50, is entitled *Predicted phosphate-phosphorus and surface elevation in proposed Hunter Lake during a 2-year drought under a selected operating scenario with Lake Springfield*. The graph shows that phosphorus levels at both the surface and bottom layers would exceed 0.1 mg/L (over two times the water quality standard of 0.05 mg/L) for all months for both Year 1 and Year 2. The ISWS report also predicts dissolved oxygen to be zero in bottom layers of the reservoir for all cases.

Phosphorus data used in this report are from very limited sampling done in 1994 and were stated to be "conservative." The ISWS simulations were done in 1997 before Springfield changed its strategy for pumping from Horse Creek intake (upstream of South Fork Sangamon dam) –

previously, pumping would wait until water in Lake 1 dropped 2 feet below normal; now it is pumped to keep Lake 1 full, as stated in the FEIS. Thus, these simulated water quality results likely underestimate the drawdown from the proposed Hunter Reservoir, so may well overestimate the water quality.

The ISWS report seems to indicate that the water quality standard for dissolved oxygen will be met at the surface level in the lake under drought and drawdown scenarios. These conclusions are questionable as the model was run with data measured once every month through a one-year period (ISWS December 1997, p. 7). In order to accurately study, quantify and predict changes in levels of dissolved oxygen in a defined section of river, changes in oxygen production and oxygen consumption rates throughout the 24-hour daily cycle as well as seasonal cycles must be acknowledged. This is not possible with the type of data used in the HEC-5Q model that provides the basis for the ISWS report. In nutritionally enriched and productive streams, photosynthetic activities of algae and macrophytes can cause great swings in oxygen concentrations on a diurnal basis. Until dissolved oxygen levels in both Horse and Brush Creeks are sampled with greater frequency, including diurnal periods and over a longer time period to capture several seasonal cycles, it is not clear that the dissolved oxygen standard will not be violated by the proposed project.

Impacts on existing aquatic resources need to be properly assessed.

The impact of the project on the current functions provided by the headwater streams Brush Creek and Horse Creek must be properly evaluated. Their value should be evaluated based on the structural and functional contributions they make to their downstream communities. (See *Where Rivers Are Born* at <u>https://www.americanrivers.org/conservation-resource/small-streams-wetlands/</u>)</u>

Section 4.1.5.1 of the 2000 FEIS recognized the functional and habitat changes that generally result from stream impoundment:

Impounding a stream leads to major changes in available aquatic habitats, and, therefore, quantitative and qualitative changes in the phytoplankton and periphyton flora are expected; phytoplankton densities would increase. The habitat of the project area would change from a small stream, littoral habitat to primarily a limnetic habitat due to the large volume of open water that would be created by the impoundment. This would result in a decline of several littoral zooplankton species and an increase in populations of limnetic species. The relative abundance of littoral versus limnetic species would depend upon shoreline development.

The impacts of these population changes, including impacts on predator species populations and potential disruptions in the food chain, must be further evaluated and described in greater detail.

With regard to impacts on fish, the 2000 FEIS states:

In general, impoundments have a negative impact on native stream fishes. With the conversion from free-flowing to lake-like conditions, those species that require flowing water, well-oxygenated gravel/sand riffles for egg deposition, or other natural stream attributes are usually reduced in numbers or eliminated...A

few species, including the bluntnose minnow, bullhead minnow, quillback, tadpole madtom, and blackstripe topminnow, would decrease in numbers of individuals and several species, such as central stoneroller, striped shiner, redfin shiner, hornyhead chub, bigmouth shiner, sand shiner, suckermouth minnow, creek chub, white sucker, pirate perch, and Johnny darter, would not survive and reproduce in the lake... Not only will the species composition change with the development of this reservoir, but species diversity will decrease as well.

These impacts must be considered and evaluated for each alternative. In addition, it is likely that fish populations have experienced changes over the last 16 years. A current assessment of the fish species that would be impacted and the expected changes to their populations must be included in the SEIS.

At the public hearing on the Illinois EPA's 401 Certification for the project, held on December 3, 2008, The Friends of the Sangamon Valley raised concerns about impacts to a diverse mussel bed found downstream of the proposed dam site including dry down impacts while the lake is being filled and scouring impacts after the lake is filled. (Transcript at p. 45) This is an issue that needs to be investigated and addressed.

Proposed mitigation plans must be of a level of detail so as to be able to assess the ecological and water quality function they provide.

When we reviewed the plans for this project in January 2009, the discussions of wetland and stream mitigation in the 2000 FEIS, 2008 404 Public Notice, 2008 401 Antidegradation Assessment, and May 10, 2001 Revised Mitigation Proposal contained no information on the ecological and water quality functions provided by the wetlands and streams that will be destroyed, and no evidence that the proposed mitigation sites and mitigation measures will provide equivalent functional performance. Mitigation plans for the Hunter Lake reservoir and any other alternatives studied need to be of sufficient detail that their function can be assessed.

## Impacts on other natural and cultural resources must be considered.

The 2000 FEIS identifies 2,705 acres within the proposed reservoir footprint as forest, representing 34.7% of the project area. The 2009 notice of a draft 404 permit for the lake project stated 1,526 acres of forest would be inundated by the lake. Critical habitat for the federally-threatened northern long-eared bat which is found in Illinois will be lost. (See <a href="https://www.fws.gov/midwest/endangered/mammals/nleb/index.html">https://www.fws.gov/midwest/endangered/mammals/nleb/index.html</a>) These animals roost during the summer in cavities or in crevices of both live trees and dead trees. They feed on moths, flies, leafhoppers, caddisflies, and beetles in the understory of forested areas. Summer surveys for bats, including the northern long-eared bat and the federally-endangered Indiana bat whose summer range includes Sangamon County, should be conducted.

The Eastern prairie fringed orchid (Platanthera leucophaea) is listed as a federally-threatened species found in Sangamon County. Do any of the alternatives being studied impact this species?

A heron rookery northwest of Zion Cemetery was confirmed by IDNR in 1999. What is the status of that rookery and how would it be impacted by the reservoir construction? The project area should also be resurveyed for peregrine falcon and bald eagle nests.

The 2000 FEIS states that the Illinois Historic Preservation Agency concurred that there are 117 historic properties in the proposed Hunter Lake area and require further investigation. What is the status of that investigation and their potential designation on the National Register of Historic Places? The Illinois State Museum Society determined three cemeteries will be impacted by the reservoir construction. What is their status?

The proposed reservoir would flood an area filled with hundreds of sites of Native American and pioneer occupation. This includes the Edwards Trace, an ancient highway that has seen buffalo, Native American and pioneer migration. Nearly 800 sites of prehistoric and pioneer occupation have been identified. Among the cultural artifacts that would be submerged are the cabin sites of the first settlers in Sangamon County and the still-standing historic Pensacola Tavern, built in the 1830s and the site where Stephen Douglas gave a presidential campaign speech in 1860.

Economic and safety impacts on other communities, individuals and entities must be considered. At the hearing that the Illinois EPA held on this project on held on December 3, 2008, a number of issues were raised about the costs of additional projects that would need to be undertaken if the proposed reservoir were to be built. These need to be addressed in the SEIS along with indirect and cumulative impacts on public safety and cost of public services.

The project includes the removal of three wastewater treatment plant discharges from the Hunter Lake watershed. Rerouting the effluent to the Springfield Metro Sanitary District via pipeline is proposed. Yet the details of this part of the project have not been worked out and concerns have been raised about the economic impact on the entities which own and manage these facilities and which determine costs to their customers, including the Virden Sanitary District and the Village of Pawnee.

The proposed project plan also lists potential sanitary sewer service for 460 residences along the proposed pipeline as a benefit. Yet the potential cost to the residents of these homes has not been addressed.

The cost of relocating the Rockies Express natural gas pipeline that crosses the project site does not appear to have been addressed.

Historically, underground mining for coal was conducted near the towns of Pawnee and Divernon and east towards Taylorville. Has the impact of existing mine voids on the reservoir project been assessed?

The impacts of road closures on police, fire and ambulance services in terms of public safety and increased travel times and fuel cost must be addressed.

The 2000 FEIS states that 60 farm units would be displaced by the project, and 3,781 acres of farmland would be taken out of production. The SEIS should also address the indirect impacts on

farm production in the area, such as increased travel times and fuel costs due to road closures.

Lastly, land which the City of Springfield has purchased and set aside for the reservoir is currently generating \$300,000 in revenue for the city, which will be lost if the project is constructed. This needs to be factored into the cost of the project.

## There is new information that must be taken into account since the 2000 FEIS was prepared.

The northern long-eared bat mentioned above was just listed as threatened under the Endangered Species Act on April 2, 2015. The evaluation of the impacts of the project must take into account this new designation. The disease white nose syndrome continues to reduce populations of this species, and could result in a future endangered designation.

In 2005, Illinois released its Comprehensive Wildlife Conservation Plan—the Illinois Wildlife Action Plan which lays out the Species in Greatest Need of Conservation in our state. The draft 2015 Illinois Wildlife Action Plan Implementation Guide is now also available. (See <a href="https://www.dnr.illinois.gov/conservation/IWAP/Pages/MeasuringProgress.aspx">https://www.dnr.illinois.gov/conservation/IWAP/Pages/MeasuringProgress.aspx</a>) This is another example of new information or new circumstances that need to be addressed. The SEIS must analyze potential impacts of Hunter Lake and other alternatives considered on the species identified in this plan.

Ducks Unlimited updated the National Wetlands Inventory for Illinois in 2010. These new data should be included in the assessment of project impacts on wetlands. (See <a href="https://www.dnr.illinois.gov/conservation/IWAP/Documents/SWGReports/T-52-%20D1%20Updating%20Nat'l%20Wetlands%20Inventory.pdf">https://www.dnr.illinois.gov/conservation/IWAP/Documents/SWGReports/T-52-%20D1%20Updating%20Nat'l%20Wetlands%20Inventory.pdf</a>)

The Illinois Endangered Species Protection Board last revised the *Illinois List of Endangered and Threatened Species* in 2014. It should be reviewed and potential impacts on listed species should be thoroughly investigated, including with new site surveys. There are 15 species listed for Sangamon County. New surveys, especially for species that are known from the area, including Kirtland's water snake and loggerhead shrike, should be conducted.

#### \*\*\*\*\*

In summary, we recommend that an updated Purpose and Need Statement be developed and the public be given an opportunity to comment on the statement and its underlying assumptions. Following that, the SEIS must evaluate all reasonable alternatives that meet the stated purpose and need and must thoroughly consider the impacts of building Hunter Lake on the human environment, including impacts on water quality and existing aquatic resources as well as cumulative impacts on other natural and cultural resources. The SEIS must also thoroughly consider how the proposed alternatives impact the safety of and place costs on other communities, individuals and entities. The consultants preparing the SEIS need to seek out and evaluate new information that has become available since the 2000 FEIS was prepared.

Sincerely,

Cything sund

Cindy Skrukrud Clean Water Program Director Sierra Club, Illinois Chapter

Cindy.skrukrud@sierraclub.org 312-251-1680 x110

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

## **PLEASE PRINT:**

NAME: STEVE STEWAR	?~	
ADDRESS: 2716 TIMBER	POINTO	5
CITY / STATE: SPRINGFIELD	, IL	ZIP: 62702
PHONE: 217-525-1940	E-MAIL:	STEVE-STEWART5177@gmail.com

**COMMENTS:** # ~~) ~₽ arou ond  $\sim \rho$ You may also submit comments electronically at: cemvr-odpublicnotice@usace.army.mil or

http://supplementalwater.cwlp.com

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Wednesday, August 24, 2016 12:39 PM Kelley, James C Jr CIV USARMY CEMVR (US) Lenz, Gary W CIV USARMY CEMVR (US); Elzinga, William J; Meckes, Ted FW: [EXTERNAL] COMMENTS/QUESTIONS FOR WEDNESDAY NIGHT MEETING IN SPRINGFIELD, IL

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: maureen s [mailto:suhadolls@yahoo.com] Sent: Tuesday, August 23, 2016 4:19 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] COMMENTS/QUESTIONS FOR WEDNESDAY NIGHT MEETING IN SPRINGFIELD, IL

How many toilets in Springfield are older than the latest federal efficiency standards? How do you know? (same question for faucets, shower heads, dishwashers, clothes washers). Can you send me the data?

Why don't you allow hunting in all the publicly-owned forest land you bought in the 1970s and 80s? (tillable land is rented to farmers)

When, if ever, is the beach going to re-open? Why can't you clean up the water? Will Hunter Lake be any cleaner?

How much will DNR spend to maintain and operate fishing and other recreational access to Hunter Lake? Is that committed funds?

Why can't you buy wholesale power during spring and fall months (when it is cheap) to save water during droughts, or when the lake level falls below the power plant intake?

\* Isn't CWLP studying future options for old units at the city's power plant? What would those options mean in terms of water savings and meeting future needs? Shouldn't that be figured out before the city spends more money on the Hunter Lake project?

\* Why can't CWLP simply tell people to quit watering lawns and golf courses during a drought?

\* Why can't they supply a few millions gallons to Chatham and Riverton, and take all 9 million from the gravel

pits?

- \* Aren't those gravel pits like 10 feet from the river? Why can't they use the river?
- \* What streams and wetlands will be destroyed by the project?

Thank you!

Maureen S.

Comments on Hunter Lake August 24, 2016

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I'm Charles Taylor, a farmer along the Sangamon River in Cass County. I am also a commissioner in the Clear Lake Special Drainage District and in the Jobs' Creek Drainage District.

I would suggest that before the Corps grant a permit for Hunter Lake, that Springfield agrees to work with the Corps to better regulate water releases from the existing Lake Springfield.

Over the decades Springfield has often been accused by those downstream of dumping water during large rain events. After the 1943 flood there was a successful suit against Springfield by Sangamon River bottom farmers who's levees were topped by excessive releases of water.

We usually find that after the Lake Springfield water level rises during large rains, the gates are opened to protect the city pumps. With all of the sophisticated weather forecasting equipment now in use, why can't some water be released before it rains?

The lake does not appear to be managed in a way that allows the incoming water to be simply "passed through". Instead it appears that the lake is allowed to raise and then it is dumped as guickly as possible. This dump causes a huge wave to go down the river overtopping levees.

If the lake gets overfull, why does the level have to be immediately quickly lowered all the way to normal pool stage?

The Sangamon had a record crest in Chandlerville in January. It seems that the major floods are occurring more frequently (for a variety of reasons). We all need to do everything possible to reduce flood crests as much as possible.

The Corps has much more experience in lake management than does the city of Springfield. Two lakes will cause twice the problems for those of us downstream. The Corps needs to be a full partner in the management of the Springfield lakes. (See attached)

Thank you

Charles Taylor

Charles Taylor 19466 Chandlerville Rd Virginia, IL 62691 taylorccc@gmail.com 217-458-2842 home/office 217-248-2842 mobile



By BOB ESTILL I could care less where the damn water's point. That was the angry response from Springfield Utilities Com. Hugh Gardner when aressed to answer charges that the billions of gallons of water released from Lake Springfield was responsible for flooding of Chandlerville near the Sangamon River.

"That's not my problem: that's their problem." Gardner thundered.

# Weather

Springfield and central Illinois: Today will be mostly sumy with highs in the middle 50s. Tohight will be fair and again quite cool with lows in the lower 30s. Sunday will be partly sumy and warmer with highs around 60. Precipitation probabilities: 5 per cent today and 5 per cent tonight

Per cent would and a per cent tonigr Forecast: High 55 Low 34

Sunrise: 5:03 a.m. Sunset: 6:50 p.m.

Yesterday's reading until 6 p.m.:

High: 62 at 3:30 p.m. Low: 46 at 5 a.m. Precipitation: none

l'emperatures one year ago: High: 58 Low: 52 Airport Temperatures

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"I don't care what the people at Chandlerville say; my concern is with Lake Springfield." Gardner contended the lake run-off was not going to Chandlerville but at the same time said "I don't known where the water's going."

Between last Friday and Monday, when there was a possibility the lake power plant would flood. 6.7 billion gallons of water were released from Lake Springfield – only 600 million galhons less than Springfield's water customers use each year.

That's the fact that has convinced Chandlerville Mayor Wayne Atterberry that Springfield is responsible for their flooding problems. He said they had their "worst time" Tuesday night.

"They turned so much water loose up there, it doesn't have a chance to get away; it's got to come down here." he said.

"They do that when they're at flood stage and that's when we're at flood stage and that's the problem. We definitely get in trouble everytime they have a big flood. Then they turn the water loose. It has to hurt us. It can't be any other way.

Atterberry said that if the problem continues. they will have to file some form of legal complaint against Springfield but wasn't certain what form it would take.

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The Chandlerville mayor did say he hadn't asked Springfield to cut down on its discharge because ''I didn't figure it would do any good.'' Atterberry said they have had problems

COMM. HUGH GARDNER

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with the Springfield run-off before but didn't have any proof of just how much water was Gardner

Continued on Page 2, Col. 1







.ht hundred gallons an hour pours over Spaulding Dam spillway.

CWLP workers sandbag pumps in the sub-basement of the Lakeside Power Plant. The for pumps pull in water from Lake Springfield and send it through the filtration system.

# WLP protects water pumps from rising Lake Springfiel

#### **MIKE MATULIS**

#### FF WRITER

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.ake Springfield reached record els Tuesday, and utility workers ambled to keep the city's water ply intact as rising water threated to shul down vital pumps.

At 10 p.m., the lake level was holdat 564.5 feet above sea level. The tvious record level occurred Dec. 1982, when the lake crested at 564 it, said Tom Skelly, water division inager for City Water. Light and wer.

All four of the floodgates at Spauld-¿Dam were wide open Tuesday alving 800 million gallons of water



HOCVE SEA 'BYE per hour to flow over the dam into Sugar Creek and eventually enter the rain-swollen Sangamon River.

Despite the Niagara Falls-like scene at the dam, the lake continued rising at about 2 inches per hour

throughout Tuesday, CWLP spokesman Les Pauly said the water was still rising at about an inch an hour Tuesday evening until about 8 p.m. when the lake apparently crested.

The serious problems began when the lake shot past the 562 foot level about 8 a.m. Tuesday, allowing it to flood the lower levels of the Lakeside Power Plant.

CWLP workers immediately began a sandbagging operation to-protect four pumps responsible for pulling water out of the lake and sending it through the filtration plant.

The pumps are in a sub-basement of the Lakeside plant. Skelly said that if the rising water took them out, the city would be left with less th day's supply of water.

About 13 million gallons of wa stored in wells and in elevated i around the city, But Skelly said t only enough to supply the city eight hours. "If those pumps that take

through the plant go down, the goes down." said Skelly, "So the thing that we could do at that po to take water that we've alr treated that's in storage and fe through the distribution system; However, Pauly reported Tuesday that sandbag levees at

See LAKE on pa

Clinois State Journal - Regista april 13, 1994

atrick Quinn hasn't decided if he go, this afternoon.

(...)

Construction and a stability of the state of

to bring political returns to the sore

milli little uvmisture suppor

# Dpening dam gates spilling water down

IV BILL BUSH 9/28/93 TAFF WRITER

City Water, Light and Power offiials said Monday they understand he frustration that flooding downrivr of Lake Springfield has caused to esidents of lowlying areas, but the itility can't do much about it.

"It's something that we can't avoid f we are to continue to pass through vhat nature dumps in the waterhed," said CWLP spokesman Les auly, "And we've been doing that or quite some time."

Heavy rains last week in Lake springfield's 265-square-mile waterhed - southwest of the lake and baically bordered by New Berlin on he north, Waverly on the west, Vir-

n the south and Divernon on the - have once again pushed the jouth Fork of the Sangamon River over its banks.

CWLP officials have no choice but o open up the Spaulding Dam floodsates when the water reaches 6 inchis above the lake's full-pool level of )60 feet about sea level, Pauly said. If he gates aren't opened, CWLP risks flooding the basement of the Lakeside Power Plant, which houses the pumps that provide Springfield resilents their drinking water, he said.

The lake was at full pool, about 1.6 leet above average for September, when the storms began last week, aid Tom Skelly, CWLP water division manager. Within a couple hours, the lake water level had risen a halffoot, representing 700 million gallons of water. CWLP began lowering dam gates about 4 p.m. Wednesday.

"We (had) a phenomenal amount of water that passed through the lake," Skelly said. "And it was in the order of about 11 billion gallons, which equates to about 67 percent of the lake's volume.

"So, if you can imagine the whole lake out there, ... over half the pool of the entire Lake Springfield passed through there during the entire storm event.'

Four of the five dam gates were opened to lower the lake level and prevent water from spilling over the earthen parts of the dam, Skelly said. One gate was under repair and couldn't be opened, another was dropped eight feet, two others six feet and a fifth five feet. By Monday, all the gates were up except one, which was open four feet, Skelly said.

"The policy that we have at the city is to try to balance the in-flow with the out-flow at the lake, so what water comes in, we try to pass that downstream, because we can't flood people upstream any more than we can flood people downstream," he said.

CWLP can't predict exactly how much rain is going to fall during a given storm, meaning it can't prepare for rain by dropping the lake level to allow the lake to absorb floodwater. But a system that should be installed by December will allow the utility to monitor upstream levels, giving officials about a day's warning of extent water is rising.

"But that would just start erside homeowners') floodi er." Skelly acknowledged. \* help us fine tune this a little b essence, the same situation is be there when we see the la come up, and especially whe got such extreme events l was."

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# Springfield State Journal Register Springfield State Journal-Register 12/29/2015 Main

#### (3-12\_29\_15\_sjr\_\_\_5.pdf.0) Page 5

#### WEATHER From Page P1

dropped between 3 and 6 inches of rain in Sangamon and surrounding counties over a three-day period.

As the rain moved out of the region, temperatures dropped into the 30s, where they were expected to remain the rest of the week, according to The National Weather Service.

#### Springfield avoids the worst

Springfield was hit hard by the storm, which brought more than 4 inches of rain, road flooding, wet basements and about 3,500 people losing power. But it was worse to the east and farther north in Illinois.

In Kincaid, 15 to 20 homes were surrounded by water along Illinois 104 near the South Fork River, according to the Christian County officials.

Curtin said in Mosquito Township, located in northeast Christian County, he encountered 8 inches of standing water on his way to feed the cows Monday morning.

Flooding was reported throughout Christian County, causing emergency crews to barricade roads. There were also numerous reports of vehicles getting stuck. "It's unprecedented in my tenure to have this much rain," said Mike Crews, emergency services director for Christian County.

In the Tri-County area surrounding Peoria, where the temperatures have been lower, freezing rain and wind caused several Ameren Illinois power poles and lines to topple, leading to more than 40,000 power outages as of Monday afternoon.

In Chicago, where freezing rain was coating the area, airports canceled more rhan 400 flights and had delays up to 45 minutes. Some of the United Airlines flights between O'Hare International and Abraham Lincoln Capital airports were among those canceled on Monday, according to the Springfield airports website.



Water runs over Spaulding dam at Lake Springfield and into Sugar Creek on Monday. Although CWLP has had one gate open for weeks, additional gates were opened Sunday to keep lake levels safe. See more photos at www.sj-r.com. RCHS/AL/THE STATE JOURNAL REGISTER

Several roads were temporarily closed throughout the state due to flooding. For an updated list of closed state routes, visit bit.ly/idotclosures.

The State Emergency Operations Center in Springfield was activated Monday morning in response to the storm.

State resources used so far include water pumps and hoses to Calhoun County; barricades for road closures in the Metro East area; sandbags and plastic for the Big Muddy Levee in Jackson County; and pumps and hoses for Schuyler Comuty.

#### Losing power

Crews for City Water, Light and Power remained busy throughout the day Monday restoring power to homes across the city. About 2.400 people lost power overnight Sunday, and another 1,100 people lost power around 10:15 a.m. as the storms continued to pummel the region.

Sustained wind speeds of 30 to 35 slammed central Illinois, with gusts up to 50 mph, according to the National Weather Service. A 46 mph wind gust was recorded at the airport at 8 a.m. Monday.

CWLP said the overnight ontage was caused when several power poles and a tree came down at the substation near Amos and

Carpenter streets. The second outage affected customers in the northern part of the city in the area around Peoria and Thintor roads and other roads that lead to Abraham Lincoln Capital Airport.

#### Sangamon County flooding

David Butt, director of the Sangamon County Office of Emergency Management, said the county fared pretty well considering the magnitude of the storm,

A total of 4.37 inches of rain fell at the Springfield airport between Saturday morning and 6 p.m. Monday, according to the weather service. Daily precipitation records were set both Sunday and Monday in Springfield.

The National Weather Service forecast the Sangamon River to crest at 27.1 feet the highest total since June 2008. The river would have to go up another 3 feet to cause serious flooding, Butt said.

Butt credited planning and city and county officials being proactive as the reason why things weren't worse.

After major floods in 1996 and 2002, clty and county officials took advantage of a federal disaster program that allowed homes damaged by floods to be purchased and turned

into green space, Butt said. The Sangamon County Regional Planning Commission also been instrumental in not allowing new homes to be built on flood plains, Butt said.

"There are reasons why we stand here better in 2015 than we were 20 years ago when we had rain events," Butt said.

#### Cold, snow possible this week

A more traditional feel to a central Illinois December returns today, when the high temperature in Springfield is expected to reach only 34. The weather service is calling for a 20 percent chance of snow after midnight today and a 30 percent chance during the day on Wednesday.

The rest of the week is expected to be free from precipitation, but it will be even colder. On New Year's Eve in Springfield, the expected high temperature is 29 degrees, with a low of 16. New Year's Day will reach a high of around 26.

--Information from GateHouse Media Illinois'Matt Bucdel and The Associated Press contributed to this report. Contact Jason Nevel: 788-1521, jason.nevel@ sj-r.com, twitter.com/ JasonNevelSJR,

December 29, 2015 Powered by TECNAVIA

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## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

## PLEASE PRINT:

NAME: _ FRANK A. TURE	<u>ESKIS</u>	
ADDRESS: 800 OVERLOOK	DEIVE	
CITY / STATE: GLENARM, IL	LAUDIS	ZIP: <u>62536</u>
PHONE: 217-483-3669	E-MAIL:	TURESKISTEM & COMPAST, NET

### COMMENTS:

IVE SEEN THE PROVGHT 1953-1955 AND THE 15 CREEK FLOW UNDER THE LAKE BRIDGE ON HWY 66 (NOW 55). ALL THE LAND THAT WAS FLOODED REFORE THE DROUGHT WAS NOTHING BUT A DESERT IF HADN'T BEEN FOR THE PEOPLE IN THE EARLY 1930; WOULDN'T HAVE HAD THE WATER WE. HAD. SINCE THE 1950'S THE POPOLATION IN AND AROUND SPRINGFIELD HAS INCREASED AND SO HAS WATER AND RECREATION ETC. THE REASON WE BUILT LAKE SPRINGFIELD WAS BECAUSE OF THE POOR QUALITY OF WATER COMING OUT OF THE SANGAMON RIVER \$ WELLS, ADDING HUNTERLAKE WILL PROVIDE QUALITY WATE FOR THE AREN FAR INTO THE FUTURE. THE LAKE WILL PROVIDE NEEDED RECREHIDING AND NATURE GROWTH. I LIVE ALONG SUGAR CREEK AND I SEE FAMILIES, INDIVUALS COME UP AND DOWN THE CREEK ALL THE TIME, IF WE INTEND TO MAINTAIN OR GROW THE COMMUNITY, WE NEED TO PLAN AND IMPLEMENT HUNTER LAKE FOR THE FUTURE

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

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PLEASE PRINT:	
NAME: Cave Vaner	
ADDRESS: 2552, Almin, Tr	
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You may also submit comments electronically at: cemvr-odpublicnotice@usace.army.mil or http://supplementalwater.cwlp.com

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## **PLEASE PRINT:**

NAME:	Ð	VESELIA	16-				
ADDRESS:	2400	O CAHOK	NA .	DRIVE			
CITY / STATE:	SPR	INGPIELD,	72		ZIP:	62702	
PHONE: _Z	17-522	<u>-9379</u> E	-MAIL:	ECV240	T a YAHOT	, COM	

## COMMENTS:

IAM A FIRM BELIEVER IN PLANNING FOR THE FUTORE. ALTHO I AM 75 YEARS OF AGE I WANT MY GRANDCHILDREN TO HAVE A STABLE EVTURE IN THE SPRINGFIELD AREA.

CONSIDERING THAT THE CITY OWNS A HIGH PERCENTAGE OF THE PROPERTY REQUIRED FOR HUNTER LAKE AND ALL THE ADVANTAGES THAT THE LAKE WOULD PROVIDE FOR ALL AREA RESIDENTS IT WOULD SEEM TO BE THE BEST SOLUTION

WITH ALL THE GROUND WATER CONTAMINATION WE ARE SEEING TODAY FROM CIL WELL FRACKING, ETC WE CANNOT GUARANTEE THAT WELLS WOULD PROUDE SAFE WATER, WE ARE SEEING TARIFERS CONTAMINATED ALCEADY,

WE SHOULD PROVIDE A SOLID SOLUTION FOR OUR EUTURE CITIZENS

You may also submit comments electronically at: cemvr-odpublicnotice@usace.army.mil or http://supplementalwater.cwlp.com

## Wagner Consulting LLC

A Veteran-Owned and Operated Management Consulting Firm



DEGEOWE SEP 1 5 2016 By\_\_\_\_\_

September 12, 2016

Mr. Jim Kelly Rock Island District US Army Corps of Engineers PO Box 2004 Clock Tower Building Rock Island, IL 61204-2004

Re: CWLP - City of Springfield Supplemental Water Supply Project

Dear Mr. Kelly:

Enclosed for your consideration are comments for the Scoping Comment Period ending September 14, 2016.

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Peter J. Wagner Principal Wagner Consulting LLC



*Enclosed*: STATEMENT IN OPPOSITION TO THE CITY OF SPRINGFIELD, ILLINOIS' SUPPLEMENTAL WATER SUPPLY PROJECT

## Before the US Army Corps of Engineers Rock Island District

In the Matter of	)
	)
Section 404 Permit Application	)
City of Springfield, Illinois	)
Supplemental Water Supply Project	
	)

Public Scoping Comment Period Ending September 14, 2016

## STATEMENT IN OPPOSITION TO THE CITY OF SPRINGFIELD, ILLINOIS' SUPPLEMENTAL WATER SUPPLY PROJECT

Wagner Consulting LLC, Hereby Submits This Statement In Opposition To The City Of Springfield, Illinois' ("City's") Supplemental Water Supply Project ("Hunter Lake Project") that it submitted in support of development and construction of the Hunter Lake alternative as described in its August 24, 2016 Information Packet ("Packet").

## INTRODUCTION

Wagner Consulting LLC is a veteran-owned and operated consulting firm based in Springfield, Illinois. The firm's founding member is Peter J. Wagner, a lifelong Springfield <sup>1</sup> resident and Lake Springfield patron. Since 2010, Mr. Wagner has been a lessee of Springfield where he is based on Lake Springfield marginal land. Mr. Wagner is familiar with the history of Lake Springfield, including the management and financial issues affecting Springfield's Lake and the potential for such issues to negatively impact Springfield's management of the proposed Hunter Lake Project.

<sup>&</sup>lt;sup>1</sup> Mr. Wagner was away from Springfield for certain periods of time while pursuing post-graduate studies and during his US Armed Forces service.

## THE CITY'S PROPOSAL

The City proposes development and construction of the Hunter Lake Project as its "preferred alternative"<sup>2</sup>. In support of its Project, the City projects with a 50% probability that Lake Springfield will not meet expected water demands in event of a year 2065 drought, due to:

- Commercial and residential use within the City;
- Contractual obligations incurred through City water marketing sales to other communities;
- Current fossil fuel power plant demand for water in the event of continuous operation;
- Increased water supply to support regional economic development; and
- Increased demand for regional outdoor recreational fishing and hunting opportunities.

Finally, while it is the proponent of the above-stated objectives, the City states that it will evaluate all reasonable alternatives for development of a supplemental water supply "for municipal, commercial, and industrial customers." <sup>3</sup>.

### THE US ARMY CORPS OF ENGINEERS' SECTION 404 EVALUATION CRITERIA

The Clean Water Act Section 404, along with certain inter-agency memoranda of understanding between the Corps, the US Environmental Protection Agency, and the US Department of Interior provide the Corps guidance that contemplates a number of factors in evaluating a permit application. Among these is the obligation to use the least

<sup>&</sup>lt;sup>2</sup> Springfield Supplemental Water Supply Project, Supplemental Environmental Impact Statement, Information Packet, Wednesday August 24, 2016 at page 3.

<sup>&</sup>lt;sup>3</sup> ld. at page 2.

damaging environmental alternative.<sup>4</sup> Also as a general principal, the applicant should use sound and reasonable assumptions when seeking permission from the Corps.

## THE CITY'S WATER SUPPLY MANAGEMENT AND FINANCIAL DEFICIENCIES

Springfield's water supply from Lake Springfield has been negatively impacted by a number of financial and managerial deficiencies over past decades. Further, the City has been unable to raise revenues through water rates. Accordingly, the City's inability to allocate adequate resources has contributed to a number of deficient management practices at Lake Springfield. These include:

1) <u>Reliance on approximately 760 private marginal land leaseholders to maintain the</u> <u>shoreline.</u> This is a result of the City's inability to raise water rates to its 147,000 water customers to share the cost of this maintenance.

2) <u>Reliance on private parties to enforce violations of its own Lake Springfield Land</u> <u>Use Plan.</u> The City's policy allows wealthy leaseholders to engage in harmful and unlawful land use practices absent other private parties engaging in costly litigation to mitigate or correct such violations.

3) <u>Elimination of Lake Springfield recreational opportunities due to lack of funding.</u> The most visible example of this is the City's closure of Lake Springfield Beach due to financial hardship.

4) <u>Reliance on approximately 760 private marginal land leaseholders to maintain the</u> <u>Lake Springfield depth and water capacity.</u> The City has failed year-after-year to provide any resources for maintenance dredging. When this policy is questioned, the City claims

<sup>&</sup>lt;sup>4</sup> Clean Water Act Section 404 (b)(1).

that it does not raise adequate revenues from marginal land leases to undertake dredging.

5) Reliance on volunteers to maintain Lake Springfield green spaces and parks.

The willingness of the Lake Springfield community to engage in mowing, park cleanup, and branch collection and hauling is admirable and should be encouraged. However, the City's increased reliance on such charity brings into question its ability to adequately support maintenance of the *additional* proposed Lake.

6) <u>Capping Lake licensing fees for high-horsepower large displacement boats</u>. The City implements a graduated watercraft licensing fee based on engine horsepower ("hp") up to 100 hp. The City potentially encourages large displacement boats on Lake Springfield. For example, the lake fee for a 32 ft. 450hp boat is the same as a 100hp 16 ft. boat.

7) <u>Marketing and exporting water to outside entities.</u> The City continues to seek to market and export water to outside entities.<sup>5</sup> This practice places additional unnecessary pressure on its Lake Springfield water supply and could make the City more vulnerable to water shortages.

The City's ongoing failure to recognize and address its financial and managerial problems and its deficient water supply management not only imperil the long-term sustainability for its Lake Springfield water supply, but cast doubt on the City's ability to develop, manage, and maintain *another* lake as proposed to the Corps.

<sup>&</sup>lt;sup>5</sup> Springfield Supplemental Water Supply Project, Supplemental Environmental Impact Statement, Information Packet, Wednesday August 24, 2016.

## THE CITY'S PROJECT PROPOSAL FAILS TO MEET THE SECTION 404

## **EVALUATION CRITERIA AND USES UNSOUND ASSUMPTIONS**

The City's Project proposal relies on unrealistic residential and commercial demand increase assumptions, speculative water marketing outcomes, flawed operational life span for its power plants, imprudent regional economic development objectives, and a misplaced focus on providing regional fishing and hunting opportunities.<sup>6</sup> None of the City's objectives are consistent with the public interest in providing a safe least-cost reliable water supply for City residents, businesses, and community facilities with the least possible environmental damage.

First, the City assumes that commercial and residential water demand within the City will increase in 2065 even in light of conservation and assumed small rates of increase in population. The City cannot accurately project City commercial and residential water consumption trending up into year 2065. In fact, the City presents no evidence, absent outside water market sales speculation, that incremental increases in commercial and residential customers within the City will create its projected 2065 11.3 million gallon per day deficit.

Second, the City is basing a "need" for a supplemental water supply on actively marketing and exporting water during a drought. Notwithstanding the City's unsound proposal, this proposed practice is highly speculative and runs counter to the Springfield public interest.

Third, the City's projections rely on the unrealistic assumption that its coal-fired power plant fleet dating back to the mid 20<sup>th</sup> century, not only will be in service through 2065, but also will be operating at full capacity in off-peak demand conditions. It offers no

<sup>6</sup> ld. at page 2.

evidence or plan that supports extending the service life of this fleet into 2065, while continuing to rely on speculative power-marketing and production assumptions.

Fourth, as stated in the Second point above, the City's proposal to support uncertain economic development activity outside of Springfield follows the City's imprudent pattern of using Springfield utilities for outside speculation. This practice is potentially quite harmful as stated above, and runs counter to the City's public interest.

Last, the City's stated "need" to provide a regional fishing and hunting ground is in fact unnecessary. While the City touts its ceremonial support from the Illinois Department of Natural Resources as a possible asset, the reality is that the State, including the Department, continues to struggle financially to operate its own facilities. In fact, it has been widely reported that the State has outstanding water, sewer, and power debt to the City which exceeded a million dollars at one point. It is unreasonable for the City to make such a proposal while the State continues to be in arrears with the City. Ultimately, the City has utterly failed to show how any public interest for the City could outweigh the cost of fulfilling this "need".

In light of Springfield's failed management and its financial difficulties, it is unlikely to meet the Section 404 criteria or comply with applicable regulations in its development, construction and management of Hunter Lake. The fact that the City's has chosen Hunter Lake as its "preferred alternative" is further evidence Springfield lacks adequate managerial capability. City management's "preferred alternative" clearly focuses benefits away from Springfield, while incurring cost, risk, and causing regional environmental damage. Springfield's deficient management and financial weakness foretell of compliance problems with its proposed Hunter Lake Project. Ultimately the City 's Hunter

6 of 7

Lake alternative fails to address the essential public interest concerns of providing safe, reliable, least-cost water service to its residents with minimal environmental damage.

## CONCLUSION

For the above-stated reasons, Wagner Consulting LLC respectfully requests that the Corps DENY the City permission to develop and construct the Hunter Lake Project. In the alternative, the City should be required to take corrective action by undertaking an adequately-resourced Lake Springfield maintenance program to include total marginal land shoreline maintenance, maintenance dredging, and follow practices consistent with its own Land Use Plan and the public interests of its residents.

Respectfully Submitted,

12 SILP 2016

Date

Peter J. Wagner Wagner Consulting LLC 5 Pickering Lane Springfield, Illinois 62712 (217) 620-1018

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

## **PLEASE PRINT:**

NAME: Sheila Walk
ADDRESS: 1625 N. 34 SY.
CITY/STATE: $\int \mu f_0 d = IL$ ZIP: $\psi \ge 70 \ge$
PHONE: 217-744-0660 E-MAIL: shildwalk a hotmail, com
COMMENTS:
- I believe that our current water supply
is sufficient. Even during the extrance
chought of three years ago, to the city did
not experience a shortoge.
If another or a back-up supply is
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second lape. It more worth is needed
now, then tonsider & prefer dredging the
existing land.
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under water or changing the flow to
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You may also submit comments electronically at: cemvr-odpublicnotice@usace.army.mil or http://supplementalwater.cwlp.com From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Friday, August 26, 2016 4:00 PM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Hunter Lake Project

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: troyw0627 [mailto:troyw0627@gmail.com] Sent: Thursday, August 25, 2016 7:59 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Hunter Lake Project

To whom it may concern,

I believe that the project needed to have happened years ago. It is vital to Springfield and surrounding areas for recreation and leisure. Not to mention the amount of wet lands and prarie lands for water fowl, deer, pheasant and quail. Also, it will be taken care of by DNR. So it won't impact the taxpayers of Springfield. Please don't succumb to the Greenpeace/Sierra Club.

Troy M Williams 3116 Cascade Dr. Springfield, IL 62704 217-971-7467 From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, September 08, 2016 11:12 AM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] City of Springfield, Supplemental Water Supply

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Robert Wire [mailto:rdw1938@gmail.com] Sent: Wednesday, September 07, 2016 8:12 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] City of Springfield, Supplemental Water Supply

### Gentlemen,

I was unable to attend the meeting held on August 24, 2016 because I was on vacation in Michigan.

However, if I had been in town I surely would have been in attendance. It would have been my endeavor to speak or write in favor of the Hunter Lake option. In fact I was under the impression that Hunter Lake has been the selected option by the City of Springfield since Mayor Langfelder became Mayor, and perhaps before that. Never the less, Lake Springfield is 80 years old and the lake has been an important asset all these years and will continue to be in the future. However, during drought years I have observed low lake levels and have participated in water conservation measures several times during my 50 years as a resident. Water conservation is not an economic development tool, it a serious detriment to the growth of Springfield and the surrounding area.

I am convinced that the proposed Hunter Lake is by far the best secondary water source and the project should be implemented in a expedited fashion. Should another drought occur before the completion of the Hunter Lake, I fear that our great Capital City will suffer a serious economic set back, not easy to recover from.

In conclusion, approve the study that is currently in progress, that I am confident will show that Hunter Lake is needed for water supply, additional recreation and to supplement the condenser cooling water for three of the city's four electric power plants.

Sincerely, Robert D.Wire

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Robert D. Wire PH 217-529-4436 Cell 217-341-8057 e-mail rdw1938@gmail.com <mailto:rdw1938@gmail.com> 317 Harbor Point Place Springfield, IL 62712

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

#### **PLEASE PRINT:**

NAME: Bonnie River RA ADDRESS: CITY / STATE: Springfi ZIP: build sand a comcast. net PHONE: 217 -652-E-MAIL: **COMMENTS:** There are many alternatives to Hunter Lake. Here are a few to make huge changes for Lake Springfield: Use gravel pits as a part of the water solution. Simulation of the impact on the aquifers isn't as effective as pumping all Springfield !! ecatur has lone, it and has fremendously Unlunne CR conservation incentives to business homes. He the new generator as instead of the old thich uses more watch to clean and cool You may also submit comments electronically at: its engine. one which cemvr-odpublicnotice@usace.army.mil

Page 2 -Bonnie Wright 3405 Cash River S'Freld, III 62711

## Springfield Supplemental Water Supply Project Supplemental Environmental Impact Statement Open House Public Scoping Meeting

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## PLEASE PRINT:

NAME:			
ADDRESS:			
CITY / STATE:		ZIP:	
PHONE:	E-MAIL:		

## COMMENTS:

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You may also submit comments electronically at: cemvr-odpublicnotice@usace.army.mil or

http://supplementalwater.cwlp.com

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Tuesday, September 20, 2016 8:50 AM Kelley, James C Jr CIV USARMY CEMVR (US) supplementalwater@cwlp.com; Marchaterre, Martin FW: [EXTERNAL] Comments on Hunter Lake Project

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: irir13243546@gmail.com [mailto:irir13243546@gmail.com] Sent: Friday, September 16, 2016 4:52 PM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] Comments on Hunter Lake Project

Thank you for the opportunity to submit comments on this matter and for all of the efforts by the Army Corp of Engineers, the City of Springfield, and their consultants to explore this matter to date. I have several comments provided below.

1) Before any options for making additional water supply are considered, it is critically important to first establish an accurate water demand estimate. The materials prepared to date that have been shared with the public on the future demand for water for Springfield do not appear to be based on a current, rigorous, realistic, and impartial estimate. To decide whether an investment of this magnitude should be considered at all it is first necessary to establish a clear and compelling need. Such an estimate should rely on actual water demand use and use growth, and a realistic assessment of the population growth in Springfield proper (the municipality that is exclusively paying for any water expansion). Springfield proper is largely a services-based economy and the service sector is expected to grow faster than other industries that might use water more intensively. Any expansion of the water supply needs to be clearly justified given its potentially significant cost, environmental impact, impact on current property owners in the affected areas, and the significant opportunity cost that such a project presents given Springfield's pressuring financial burdens and obligations in areas other than water supply.

2) Materials prepared by the City suggest but do not rigorously determine that the City faces a significant drought every Century. The consultants performing the review should examine historical time series rainfall data and use appropriate, rigorous, and modern statistical analysis and simulation techniques that are designed to estimate the probability of rare events. An expenditure of this magnitude demands a rigorous, current, and data-driven assessment. I also suggest that this analysis and the data used for it a) be peer reviewed and 2) be made available to the public to allow others to assess its accuracy, rigor, and validity.

3) A large investment in additional water supply could be warranted if critical and life sustaining services could reasonably be expected to be interrupted, but is not justified to avoid prudent water conservation efforts. The dry spells

occurring during the past 20 years had no such impact and required only limited conservation efforts (ie, temporary restrictions on the frequency of sprinkler use, car washes, etc.). The City's materials discussing the 1950's drought fail to mention whether critical services and life sustaining services were interrupted as a result of water shortages during that time period. A major financial investment of this magnitude and one with large environmental impacts should not be made to avoid periodic inconvenience.

4) Additional research and study is needed to fully and rigorously understand the cost, benefits, drawbacks, and impacts of alternatives to Hunter Lake, including more fully understanding what cities the size of Springfield in the midwest currently do. Few such cities appear to build multiple lakes "just in case." It would be beneficial to more fully understand the strategies used by other cities and determine our true gaps relative to other communities.

5) During the forum in August, city officials indicated that during a drought, Springfield, with the addition of Hunter Lake, would be the back up water supply for other communities in the region. Is it necessary or advisable for Springfield and the taxpayers within its city limits to exclusively bear the burden of supplying water to these other communities? If that is an obligation the city chooses to assume, the city should establish that other communities will be expected to pay a premium water rate to partially compensate Springfield taxpyers for the large investment they will be making to expand its water supply to accommodate these other communities.

6) It is critical that a thorough and rigorous review of the alternatives (and the identification and assessment of new alternatives) is performed. It appears that the focus and investments that has already been made on Hunter Lake has caused the other alternatives to be inadequately considered.

7) An independent, comprehensive, and rigorous investment of the full cost of each alternative should be made. The cost analysis should include opportunity costs (for example, the 2016 market value of property already owned by the city for the Hunter Lake project) and not just the cost of future costs to be incurred.

8) The City of Springfield appears to have spent little time researching dredging as an option to increase the water supply. Major dredging has not been performed on Lake Springfield in decades and city appears not to have seriously considered or researched dredging practices or costs in recent years. In contrast, dredging is being used by the city of Decatur at a cost far lower than the cost of Hunter Lake (ie, the realistic future cost plus the opportunity cost of current land holdings, per above). Lake Springfield will be requiring dredging soon regardless, and a dredging effort would increase the water supply and address Lake Springfield's current challenges in one project. This alternative could be dramatically more cost effective overall.

9) As the Corp reviews this proposal, its should consider consulting with its offices around the midwest to identify how other communities are addressing their water needs. Its expertise and experience serving other communities would provide a broader perspective that would be beneficial.

10) At this time, based on the discussions and arguments about Hunter Lake, and the lack of data, comparisons, and research presented, the Corp should view this project carefully and with an expectation that the city needs to make an effective, compelling, and evidence-based case for Hunter Lake, one that clearly demonstrates a need based on a realistic possibility of serious consequences, such as the interruption of critical and life sustaining services.

Again, I would like to thank officials from the Army Corp of Engineers, the City of Springfield, and their consultants for considering these comments and for their hard work on these issues to date.

# Appendix C

# Agency/Tribal Comments Received During the Scoping Period

(August 15, 2016 through September 14, 2016)

# Appendix C

# DRAFT

# Agency/Tribal Comments Received During the Scoping Period

(August 15, 2016 through September 14, 2016)

## **List of Commenters**

IDNR – Deizman, Paul IDNR – Grider, Nathan IDNR – Nelson, Daniel IHPA – Leibowitz, Rachel Miami Tribe of Oklahoma – Hunter, Diane (Tribal Historic Preservation Officer) Osage Nation – Hunter, Andrea (Tribal Historic Preservation Officer) USACE – Heddelsten USEPA – Westlake, Kenneth From: Sent: To: Subject: Deizman, Paul <Paul.Deizman@Illinois.gov> Wednesday, August 24, 2016 9:50 AM Meckes, Ted Comments for you

## Ted:

I write you as a fan of Springfield CWPL and your water which is excellent. As an IDNR Forester I was asked a few years ago by CWPL officials to walk all the timber in the Hunter Lake footprint so the Mayor was able to answer questions and make decisions with good information due to loggers knocking on the City's door. My results were not to harvest timber in the footprint now because if it never becomes a lake the land should have a comprehensive forest management plan (which the USDA Forest Service and our DNR have guidelines to share). Yes there is timber value there of course but not like a logger might claim. Your value is in the volume not any specific trees or groves or champion walnuts but in large numbers of average ,decent timber trees over the entire property. When the lake is for sure then harvesting all the merchantable timber is a great revenue for the City before the real dirt-work begins. I can discuss more. I wrote the following to arm you for possible environmental questions. I always had a gut feeling that if people point to 1000 acres of forest disappearing for a lake (which is a fair trade environmentally anyway – as in a wash) then plant 1000 acres on the land surrounding the new lake. We would not want to compact or grade those acres if they are to be reforested but if some are they could be deep chiseled and disked and seeded to a specific cover crop.

See my letter below and good luck at the meeting tonight:

## Hunter Lake – Comments by Paul M. Deizman, City Resident and Resource Professional - August 2016

Springfield Illinois has excellent drinking water. No alternatives like wells could match the quality of water a managed lake can provide. As a picky water consumer and as a natural resource professional I am in favor of Hunter Lake.

Lakes are always great for the environment if they are designed properly and lakes keep downstream rivers and lakes (and the Gulf of Mexico) cleaner. Though many may point to the loss of forest and habitat as the cut and flooded forest land becomes a lake I contend and have suggested to a former CPWL official that the leased farmland be reforested to match the acres lost in the lake footprint or near so. Though swimming may or may not be an option (I am in favor of swimming with enforced diaper, swimsuit, sanitary rules) the parks and recreation aspect of re-foresting 1000 acres surrounding the lake or as many acres as the City can afford is outstanding and I think would be a huge hit and get cheers from public.

I am a professional forester and can further advise on the process of a guaranteed successful reforestation that can make farmland into real native forest that can be used as forest with trails, picnic areas, etc. which are easy to establish as the forest is first planted with seedlings. If good planting work with successful seedling survival is followed by a few simple cultural practices the fields will look like young native forests in a few years and trees over head in 10 years. At that point you can't see through it very far in the summer. In 15-20 years a farm field can be a thick native forest with trees a 4-10 inch diameter and beginning to tower overhead.

I am not a lake expert but an environmental and forest expert I try to be. If you want a 400 acre block of forest as a natural area or future park .... I say simply get 400 acres of farmland; hire a forester (after consulting the local DNR Service Forester for a short list of the best reforestation contractors in this area or that work in Illinois); and plant it plus care for it by controlling weeds (safe mild herbicides), and assure full stocking survival, for the first 3 seasons and let it grow. Most reforestations fail due to poor stock, poor planting (which hammers survival rate) and/or abandonment. On our soils here if grasses take over, especially if stocking survival is too low, a planting can fail to become a forest. I can tell in growing season 1, 2 and/or 3 what the success will be.
If you want to re-forest areas around the lake I can help you succeed. Prairies too but forests in the long run residents use and appreciate 100x more. The cost of reforestation seedlings (400-800/ac), planting them (150/ac) and competing vegetation control (50/ac) is about \$800 (600+150+50) an acre then another 50/ac for 2 more years of competing vegetation control. Seedlings can be \$0.50 each or over a dollar so I am using the 75 cents rate planting 750 seedlings an acre. If large areas are done I can see the seedling price low and the planting cost low where the price may end up at \$500 an ace versus \$1000. Cheaper contractors are not better in general. Experts with experience are needed.

Thank you and hope these ideas comments help. Paul

*PS:* If you do want to manage the forests in the Hunter Lake footprint (\*because the Lake is 100 years or 30 years off or won't happen) we can refer you to a list of local, reputable professional consulting foresters – or possibly DNR foresters could take that on depending how serious you are about following a forest management plan. The thing about plans is the forest management Objectives – and that process could be simple or more like a public input ordeal.

Paul

Paul M. Deizman, CF Illinois DNR - Division of Forest Resources Forest Inventory, Utilization & Marketing - State Forest Programs 1 Natural Resources Way Springfield, Illinois 62702

paul.deizman@illinois.gov 217-782-3376 DNR Desk 217-785-2438 DNR Fax w/cover 217-685-4306 DNR Cell

http://www.dnr.illinois.gov/conservation/Forestry

www.callB4Ucut.com 1-888-244-1706



Illinois Department of **Natural Resources** 

One Natural Resources Way Springfield, Illinois 62702-1271 www.dnr.illinois.gov

Bruce Rauner, Governor

Wayne A. Rosenthal, Director

September 30, 2016

James Kelley Regulatory Branch, U.S. Army corps of Engineers Rock Island District Clock Tower Building P.O. Box 2004 Rock island, IL 61204-2004

# **RE: Springfield Supplemental Water Supply Project County: Sangamon**

Dear Mr. Kelley:

The Illinois Department of Natural Resources (Department) has received the request for scoping comments to aid in preparation of the draft Supplemental Environmental Impact Statement (SEIS) for the Supplemental Water Supply Project proposed by the City of Springfield (City). The project alternatives being considered include:

- No action,
- Development of a new water supply reservoir (Hunter Lake),
- Sangamon River Well Fields & Sand and Gravel Pits,
- Havana Lowland Well Fields,
- Illinois River Well Fields,
- Lick Creek Reservoir,
- Dredging of Lake Springfield,
- \* Or a combination of the above alternatives.

The purpose of the SEIS is to update supporting data where needed, review the purpose and need, evaluate alternatives, and assess impacts of the reasonable alternatives. Measures to avoid and minimize harm will also be developed as part of the study. The Department offers the following comments for consideration in the SEIS for each alternative:

# No Action

The Department has no comments specific to this alternative.

# Development of a new water supply reservoir (Hunter Lake)

The proposed Hunter Lake reservoir would be generally located southeast of Lake Springfield in Sangamon County. The lake would be approximately 3,000 acres in size within a complex of approximately 7,795 acres of mostly upland wildlife conservation areas and lentic aquatic habitat. Hunter Lake would be formed by damming Horse Creek and Brush Creek. Aside from

water supply needs, the Department recognizes the opportunity to cooperate with the City to provide recreational opportunity in the form of picnicking, hiking, camping, fishing, hunting, and boating at the proposed Hunter Lake. The Department understands that the City owns the majority of property necessary to build Hunter Lake at this time. According to the Environmental Impact Statement (EIS) dated November 2000), Hunter Lake was the applicant's preferred alternative prior to the need for an SEIS being determined by the U.S. Army Corps of Engineers on December 17, 2010.

State protected natural resources of potential concern regarding the Hunter Lake project include the state-threatened Kirtland's snake (*Clonophis kirtlandi*; potentially occurring throughout project area), state-threatened mudpuppy (*Necturus maculosus*; records in South Fork Sangamon River) state-endangered smooth softshell (*Apalone mutica*; records in Sangamon River), statethreatened barn owl (*Tyto alba*; records in Pawnee and at Lake Springfield) and an unusual concentration of freshwater mussels downstream of the proposed dam beginning at the Horse Creek and South Fork Sangamon River confluence. Records from 1999 also occur in the proposed project area for bird rookeries, stemming from previous environmental impact reviews for the proposed Hunter Lake. The Department understands a bat survey was recently completed in the project area and the final report is pending.

Stream surveys of Horse and Brush Creek were conducted by the Department's Fisheries Division between 1981 and 2008. Four surveys of Horse Creek and five surveys of Brush Creek produced an average of 14 native fish species per sample. Index of biotic integrity scores in 2003 and 2008 ranged from 23 to 34 out of 60 possible points. The scores indicate low to moderately low stream fish community ratings and are representative of current stream fishery conditions.

The Department reviewed the "Freshwater Mussels of the Sangamon River" report dated December 19, 2012 (Price *et al.* 2012) in which Brush Creek was surveyed. No freshwater mussels were collected during the survey at the sample location located in the upper reaches of the stream. Although the upper reach of Horse Creek was not sampled, the results would likely be comparable to the upper reaches of Brush Creek given the similarity of the two watersheds. Records suggest a significant mussel bed is located downstream at the Horse Creek and South Fork Sangamon River confluence. It is not known how far this bed extends up Horse Creek. Impacts to this mussel bed should be considered and avoided or minimized in coordination with the Department.

If the Hunter Lake alternative is pursued, the Department requests survey efforts are conducted in the project area by a qualified biologist for state-listed mudpuppy, Kirtland's snake, and smooth softshell. Please note; the most favorable time to conduct a mudpuppy survey is December through early March. Depending on the survey results, Incidental Take Authorization (ITA) may be necessary for some of these species if this project is selected. Be advised, the ITA process would take at least four months to complete and requires efforts to avoid, minimize, and mitigate adverse impacts to state-listed animal species.

An updated bird census survey should also be conducted in the project area to determine species present and any species or rookeries of special concern. An updated wetland delineation should

also be performed along with a discussion of how the City will meet wetland and stream mitigation requirements.

A survey of the downstream mussel bed extending to the confluence of Horse and Brush Creek would also help to inform the Department of appropriate avoidance and minimization measures that would be necessary to conserve the bed. Discussion should be included in the SEIS of impacts to the downstream mussel bed and potential avoidance and minimization measures. Bypass flow during critical low-flow periods may be necessary while Hunter Lake is filling to avoid impacts to the mussels. Best Management Practices (BMP's) for sediment and erosion control to minimize impacts to downstream aquatic resources should be discussed. The SEIS should also discuss specific operations of Hunter Lake discharges and measures taken in this regard to avoid impacts to downstream aquatic resources, i.e. discharge frequency, drawdowns, and water quality of the discharge.

The SEIS should discuss the disposition of trees in the lake footprint and the amount to be removed/harvested, left for habitat, and potential water quality and habitat effects of such forest management practices at the proposed lake.

## Sangamon River Well Fields & Sand and Gravel Pits

The proposed Sangamon River well fields and gravel pits for use as a supplemental water supply for the City are generally located immediately east of Springfield in the Sangamon River floodplain. Easements would be necessary to construct the wells and estimated 75 miles of pipeline.

Depending on the scope of this project and specific waterline routes, some protected natural resources may be impacted. They include the Carpenter Park Nature Preserve, state-threatened Kirtland's snake (potentially occurring throughout project area), state-threatened mudpuppy (records in the Sangamon River) state-endangered smooth softshell (records in Sangamon River), state-endangered northern harrier (*circus cyaneus*; record at gravel pit), and state and federally-listed bat species (may occur in forested areas).

The Department would need to review detailed project information to determine potential adverse impacts to these protected species and lands. Detailed field surveys for these species may be necessary in areas of potential habitat. However, the Department anticipates adverse impacts could be avoided or minimized during the consultation process with our Division of Ecosystems and Environment (DEE) if this alternative is selected. The SEIS should include a discussion of potential impacts to these protected natural resources. A wetland delineation should also be performed if this project alternative is pursued further.

## Havana Lowland Well Fields

The Havana Lowland well fields would be generally located west of Mason City in Mason County. A pipeline would run generally south to Athens, and then to Springfield. Easements would be necessary to construct the wells and roughly 50 miles of pipeline.

The Havana Lowlands contain abundant records for state-threatened Illinois Chorus frog (*Pseudacris illinoensis*) that may likely be affected by the project. Other state-listed species of

potential concern include state-threatened Hall's bulrush (*Schoenoplectus hallii*; records in Havana Lowlands), ironcolor shiner (*Notropis chalybaeus*; records in Havana Lowlands), starhead topminnow (*Fundulus dispar*; records in Havana Lowlands), ornate box turtle (*Terrepene ornate*; records in Havana Lowlands), and state and federally-listed bat species (may occur in forested areas). The Carpenter Park Nature Preserve also occurs near the pipeline route.

The Department would need to review detailed project information to determine potential adverse impacts to these protected species. Detailed field surveys for these species may be necessary in areas of potential habitat. The Department anticipates ITA would likely be necessary for some of these species occurring in the Havana Lowlands if this project is selected. The SEIS should include a discussion of potential impacts to these protected natural resources. A wetland delineation should also be performed if this project alternative is pursued further.

# **Illinois River Well Fields**

The Illinois River Well Fields would be generally located southwest of Winchester in Scott County with a pipeline route to Springfield, generally located south of the I-72 corridor. Easements would be necessary to construct the wells and roughly 50 miles of pipeline.

The Illinois River floodplain contains abundant records for state-threatened Illinois Chorus frog. Other species of potential concern in this area include the state and federally-threatened decurrent false aster (*Boltonia decurrens*) state-threatened ornate box turtle, state-threatened regal fritillary (*Speyeria idalia*), and state-endangered bent milk vetch (*Astragalus distortus*). State-listed species potentially occurring in the pipeline route include heart-leaved plantain (*Plantago cordata*), bunchflower (*Melanthium virginicum*), loggerhead shrike (*Lanius ludovicianus*) Franklin's ground squirrel (*Poliocitellus franklinii*), short-eared owl (*Asio flammeus*), Kirtland's snake, and state and federally-listed bat species may occur in forested areas along the pipeline route.

The Department would need to review detailed project information to determine potential adverse impacts to these protected species. Detailed field surveys for these species may be necessary in areas of potential habitat. The Department anticipates ITA would likely be necessary for some of the species occurring in the Illinois River floodplain if this project is selected. The SEIS should include a discussion of potential impacts to these protected natural resources. A wetland delineation should also be performed if this project alternative is pursued further.

# Lick Creek Reservoir

The Lick Creek Reservoir would be approximately 2,000 acres in size within approximately a 5,555 acre complex and generally located just west of Chatham in Sangamon County. Aside from water supply needs, the Department recognizes the opportunity to cooperate with the City to provide recreational opportunity in the form of picnicking, hiking, camping, fishing, hunting, and boating at the Lick Creek Reservoir. However, the Department understands that the City has no property holdings in the Lick Creek area to facilitate a new lake at this time and there are significant concerns with flooding neighboring landowners if this lake were constructed.

State listed species of concern in the project area include heart-leaved plantain, Franklin's ground squirrel, short-eared owl, Kirtland's snake, and state and federally-listed bat species may occur in forested areas where the reservoir would be located. State-listed mudpuppies could occur in Lick Creek, but the Department has no recent records in the immediate vicinity. Records do indicate a rookery in the Lick Creek Reservoir area that may be affected.

Recent mussel survey results from the upper reaches of Lick Creek found no significant mussel population present (Price et al. 2012). However, no data is available for lower reaches of Lick Creek and a more thorough survey effort would be necessary if this alternative is selected.

Stream surveys of Lick Creek were conducted by the Department's Fisheries Division in 1981 and 2003. The 1981 sample produced 11 native fish species. The 2003 sample produced 10 native species and an Index of Biotic Integrity score of 19, indicating a low stream community resource rating.

The Department would need to review detailed project information to determine potential adverse impacts to these protected species. Detailed field surveys for listed species may be necessary in areas of potential habitat, including a more detailed mussel survey of Lick Creek. The Department anticipates adverse impacts to state-listed species could be avoided or minimized during the consultation process with our DEE. An ITA may be necessary for some of these species depending on survey findings. The SEIS should include a discussion of potential impacts to these protected natural resources. A wetland delineation should also be performed if this project alternative is pursued further.

# **Dredging of Lake Springfield**

This alternative would involve mechanical or hydraulic dredging of the existing Lake Springfield. Sites for dredge material disposal would need to be identified. Depending on the location of dredging and disposal areas, protected natural resources may be adversely affected. Species of potential concern regarding a dredge project at Lake Springfield include Kirtland's snake, Franklin's ground squirrel (records in Springfield area), state-endangered black-crowned night-heron (*Nycticorax nycticorax*; record at Lake Springfield), state-threatened barn owl (*Tyto alba*; record at Lake Springfield), and state and federally-listed bat species. Records for bald eagle nesting also occur at Lake Springfield. This species is federally protected under the Bald and Golden Eagle Protection Act.

The Department would need to review detailed project information to determine potential adverse impacts to these protected species. Detailed field surveys for these species may be necessary in areas of potential habitat. The Department anticipates adverse impacts could be avoided or minimized during the consultation process with our DEE if this alternative is selected. An ITA may be necessary for some of these species depending on survey findings. A wetland delineation should also be performed if this project alternative is pursued further.

# **Other Items of Concern:**

On September 22, 2016, the U.S. Fish and Wildlife Service announced in the Federal Register the finding that the rusty patched bumble bee (*Bombus affinis*) warrants listing as threatened or endangered under the federal Endangered Species Act. When listed, the species will

automatically become state-listed under the Illinois Endangered Species Protection Act (520 ILCS 10/7). This species is known to occur in Central Illinois historically. Given the Springfield Supplemental Water Supply Project may likely be constructed after listing of this species is finalized, impacts to this species should be considered in the SEIS and field surveys to determine presence or absence may be necessary.

Once an alternative is selected, the City should engage directly with the Department's Office of Water Resources on permit needs to ensure compliance with the Rivers, lakes, and Streams Act (615 ILCS 5). The City should also engage in formal consultation with the Department's DEE pursuant to Title 17 Illinois Administrative Code Part 1075. The Department recommends continued coordination with us during development of the SEIS to avoid critical errors and omissions.

Thank you for the opportunity to comment. Please contact me if you have questions regarding this review and we look forward to further coordination on this project.

hotem Side

Nathan Grider Division of Ecosystems and Environment 217-524-0501

cc: Mayor Jim Langfelder – City of Springfield Ted Meckes – CWLP Kristen Lundh – USFWS Dan Heacock - IEPA Bill Elzinga – Amec Foster Wheeler Director's Office – IDNR Office of Water Resources – IDNR Office of Resource Conservation – IDNR Office of Land Management - IDNR

## References

Price A.L., S. A. Bales, D. K. Shasteen. 2012. Freshwater Mussels of the Sangamon River. Illinois Natural History Survey. Available at: <u>http://www.inhs.illinois.edu/files/8513/6191/1289/Sangamon\_mussels.pdf</u>

## Actual



From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Thursday, August 25, 2016 1:00 PM Kelley, James C Jr CIV USARMY CEMVR (US) supplementalwater@cwlp.com; Marchaterre, Martin FW: Hunter lake study

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at <a href="http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey">http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey</a>

From: Nelson, Daniel [mailto:Daniel.Nelson@illinois.gov]
Sent: Thursday, August 25, 2016 9:22 AM
To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Subject: [EXTERNAL] Hunter lake study

I agree with a diversion scheme from the river. And take this opportunity to see if we can't get Lake Springfield cleaned up so we at least can swim and boat in it without getting sick! It is the most underappreciated resource in Springfield whereas it could be a great economic engine for tourism and recreation.

## **Daniel T. Nelson**

Legal Counsel Illinois Department of Natural Resources One Natural Resources Way Springfield, Illinois 62702-1271

Phone: (217) 782-0179 Fax: (217) 782-7616

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# SURVEY REQUEST

IHPA LOG #009082916

1 Old State Capitol Plaza, Springfield, IL 62701-1512

www.iHinoistoryogov

Sangamon County PLEASE REFER TO: Springfield COERI-CEMVR-OD-P-2016-95 New construction, supplemental water supply - Hunter Lake - CWLP

September 7, 2016

James Kelley US Army Corps of Engineers, Rock Island Dist. District Engineer, ATTN: OD-P Clock Tower Building, P.O. Box 2004 Rock Island, IL 61204-2004

Dear Mr. Kelley:

Thank you for requesting comments from our office concerning the possible effects of the project referenced above on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

While the project area was surveyed the methodology is no longer meets our standards. Additionally the area has been allowed to become overgrown and relocating known site may prove difficult. Accordingly, a Phase I archaeological reconnaissance survey to locate, identify, and record all archaeological resources within the project area will be required. This decision is based upon our understanding that there has not been any large scale disturbance of the ground surface (excluding agricultural activities) such as major construction activity within the project area which would have destroyed existing cultural resources prior to your project. If the area has been heavily disturbed prior to your project, please contact our office with the appropriate written and/or photographic evidence.

The area(s) that need(s) to be surveyed include(s) all area(s) that will be developed as a result of the issuance of the federal agency permit(s) or the granting of the federal grants, funds, or loan guarantees that have prompted this review. In addition to the archaeological survey please provide clear photographs of all structures in, or adjacent to, the current project area as part of the archaeological survey report.

Enclosed you will find an attachment briefly describing Phase I surveys and a list of archaeological contracting services. THE IHPA LOG NUMBER OR A COPY OF THIS LETTER SHOULD BE PROVIDED TO THE SELECTED PROFESSIONAL ARCHAEOLOGICAL CONTRACTOR TO ENSURE THAT THE SURVEY RESULTS ARE CONNECTED TO YOUR PROJECT PAPERWORK.

If you have further questions, please contact Joe Phillippe at 217/785-1279.

Sincerely,

Rachel Leibowitz, Ph.D. **Deputy State Historic Preservation Officer** 

RL:ISP

Enclosure

For TTY communication, dial 888-440-9009. It is not a voice or fax line.

From: Sent: To: Cc: Subject: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Friday, August 26, 2016 3:59 PM Kelley, James C MVR supplementalwater@cwlp.com; Marchaterre, Martin FW: CEMVR-OD-P-2016-0095

Donna M. Jones, P.E. Chief, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309/794-5371

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Diane Hunter [mailto:dhunter@miamination.com] Sent: Friday, August 26, 2016 7:28 AM To: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil> Subject: [EXTERNAL] CEMVR-OD-P-2016-0095

Dear Mr. Kelley:

Aya, kikwehsitoole. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

The Miami Tribe offers no objection to the above-mentioned project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, as this site is within the aboriginal homelands of the Miami Tribe, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966, or by email at dhunter@miamination.com <mailto:dhunter@miamination.com> to initiate consultation.

The Miami Tribe requests to serve as an interested party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter Tribal Historic Preservation Officer Miami Tribe of Oklahoma P.O. Box 1326 Miami, OK 74355



8 2016

# TRIBAL HISTORIC PRESERVATION OFFICE

Date: October 5, 2016

File: 1617-1180IL-10

RE: USACE, Rock Island District, CEMVR-OD-P-2016-0095, City of Springfield-City Water, Light & Power, Springfield Supplemental Water Supply Project, Sangamon County, Illinois

Rock Island District James Kelley Clock Tower Bldg, P.O. Box 2004 Rock Island, IL 61204-2004

Dear Mr. Kelley,

The Osage Nation Historic Preservation Office has received notification and accompanying information for the proposed project listed as USACE, Rock Island District, CEMVR-OD-P-2016-0095, City of Springfield-City Water, Light & Power, Springfield Supplemental Water Supply Project, Sangamon County, Illinois. The Osage Nation requests a copy of the Draft Environmental Impact Statement (EIS) for review and comment.

In accordance with the National Historic Preservation Act, (NHPA) [54 U.S.C. § 300101 et seq.] 1966, undertakings subject to the review process are referred to in 54 U.S.C. § 302706 (a), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Osage Nation has a vital interest in protecting its historic and ancestral cultural resources. The Osage Nation anticipates reviewing and commenting on the Draft Environmental Impact Statement for the proposed USACE, Rock Island District, CEMVR-OD-P-2016-0095, City of Springfield-City Water, Light & Power, Springfield Supplemental Water Supply Project, Sangamon County, Illinois.

Should you have any questions or need any additional information please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

Andrea A. Hunter, Ph.D. Director, Tribal Historic Preservation Officer

From:Kelley, James C MVR <James.C.Kelley@usace.army.mil>Sent:Tuesday, August 30, 2016 4:47 PMTo:Marchaterre, Martin; Elzinga, William J; Meckes, TedCc:Jones, Donna M MVR; Lenz, Gary W (Ward) MVRSubject:FW: EMAIL ROUTING FOR PN: 2016-0095, REPLY TO JAMES C. KELLEYAttachments:PN 2016-0095 NOI-SEIS.pdf

FYI-I received the following comment from our District engineering office.

Jim Kelley Project Manager, Illinois/Missouri Section Regulatory Branch Rock Island District Corps of Engineers 309-794-5373 309-794-5191(fax)

In order to assist us in improving our service to you, please complete the survey found at http://corpsmapu.usace.army.mil/cm\_apex/f?p=regulatory\_survey

-----Original Message-----From: Heddlesten, Anthony D MVR Sent: Tuesday, August 30, 2016 11:31 AM To: Kelley, James C MVR <James.C.Kelley@usace.army.mil> Cc: St. Louis, Paul F MVR <Paul.F.St.Louis@usace.army.mil> Subject: FW: EMAIL ROUTING FOR PN: 2016-0095, REPLY TO JAMES C. KELLEY

Jim -

From a flood control perspective, it would be nice if there was some review done in terms of reservoir routing and how could this facility be used to minimize effects on our downstream entities. As there are Federal PL84-99 projects below the dam (Mason Menard is the closest to my knowledge) I would be interested in seeing how this could affect them and the other adjacent districts. If there is any chance they could use their reservoir for their purposes and also benefit the downstream communities, it could be a huge win for the region.

ADH o.309.794.5886 c.309.429.0348

-----Original Message-----From: Anderson, Heather L MVR Sent: Tuesday, August 23, 2016 2:36 PM To: Heddlesten, Anthony D MVR <Anthony.D.Heddlesten@usace.army.mil> Subject: FW: EMAIL ROUTING FOR PN: 2016-0095, REPLY TO JAMES C. KELLEY

-----Original Message-----From: Cole, Charlene MVR Sent: Tuesday, August 23, 2016 2:09 PM To: Ross, James S MVP @ MVR <James.S.Ross@usace.army.mil>; DeHaan, Henry C MVR <Henry.C.DeHaan@usace.army.mil>; Klingman, Jon A MVR <Jon.A.Klingman@usace.army.mil>; St. Louis, Paul F MVR <Paul.F.St.Louis@usace.army.mil>; Heinold, Thomas D MVR <Thomas.D.Heinold@usace.army.mil>; Cox, Michael D MVR <Michael.D.Cox@usace.army.mil>; Rose, Jeffrey W MVR <Jeffrey.W.Rose@usace.army.mil>; Zerbonia, Michael P MVR <Michael.P.Zerbonia@usace.army.mil>; Scott, Mary T MVR <Mary.T.Scott@usace.army.mil>; Jackson, Stuart P MVR <xStuart.P.Jackson2@usace.army.milx>; Anderson, Heather L MVR <Heather.L.Anderson@usace.army.mil>

Cc: Kelley, James C MVR <James.C.Kelley@usace.army.mil> Subject: EMAIL ROUTING FOR PN: 2016-0095, REPLY TO JAMES C. KELLEY

FOR REVIEW/COMMENTS

DATE: AUGUST 15, 2016

SUSPENSE: SEPTEMBER 9, 2016

SEND ALL COMMENTS TO: James.C.Kelley@usace.army.mil

x5373 OD-PE

SUBJECT: Internal Review of Permit Application CEMVR-OD-P-2016-0095

1. REVIEWERS: Please EMAIL all comments as appropriate regarding the subject permit application/item. More detailed information may be available for review in OD-PE. If you require more information to provide adequate comments, please contact the POC named above. Also note the suspense date and return your comments to the PM'S EMAIL ADDRESS by that date. If you do not respond to OD-PE by the suspense date, we will assume you have no comment/input, and will proceed with the permit decision as such.

James.C.Kelley@usace.army.mil Regulatory Branch OD-PE Operations Division This purpose of this public notice is to solicit comments on the proposed project.



**PUBLIC NOTICE** 

US Army Corps of Engineers Rock Island District

Applicant: City of Springfield-City Water, Light & Power

Date: August 15, 2016 Expires: September 14, 2016 Section: 404

CEMVR-OD-P-2016-0095

Notice of Intent to Prepare a Draft Supplemental Environmental Impact Statement (SEIS) for the Springfield Supplemental Water Supply Project Notice of Scoping Meeting-Public Meeting-August 24, 2016

1. Applicant. City of Springfield, City, Water, Light & Power, 800 East Monroe, Springfield, Illinois 62757.

2. Project Location. IL-New City and Pawnee USGS quad sheets in Sangamon County, Illinois.

3. **SUMMARY**: The United States Army Corps of Engineers (Corps) intends to prepare a Supplemental Environmental Impact Statement (SEIS) to address the proposed Springfield Supplemental Water Supply Project (previously referred to as the Proposed Water Supply Reservoir Hunter Lake) in Sangamon County, IL. The Corps, working in conjunction with the City of Springfield, Office of Public Utilities, also known as the City Water, Light & Power (City), prepared an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969 [42 USC §§ 4321 *et. seq.*] that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. A final EIS was prepared and published in November of 2000. The Final EIS was published in the Federal Register on November 24, 2000; however, no Record of Decision was issued.

The City has conducted an updated water demand analysis that demonstrates a sustained need for additional water supply to meet current and future demands. In accordance with Council on Environmental Quality (CEQ) regulations specified in 40 CFR § 1502.9, the Corps in conjunction with the City are initiating the preparation of an EIS supplement.

#### **4 SUPPLEMENTARY INFORMATION:**

#### Background

The City operates an integrated water supply, purification, transmission, and distribution system. The City's service area encompasses approximately 100 square miles with more than 52,600 service connections and a population of about 147,000. The City's current source of water is Lake Springfield that was constructed in the 1930s. The lake serves as the water source for its drinking water supply and the cooling water supply for the City's coal-fired power generating station. As a result of drought conditions in 1953-1955, the City constructed a movable low head dam across the South Fork of the Sangamon River to supplement the Lake Springfield water supply during low lake levels. On July 26, 1989, the City submitted a joint permit application for construction of Hunter Lake Reservoir to the Corps and the Illinois Environmental Protection Agency (IEPA). A Notice of Intent to prepare a Draft EIS for the construction of the Hunter Lake Reservoir was published by the Corps in the Federal Register on October 31, 1989. A final EIS was published in 2000 and the construction of the Hunter Lake Reservoir was identified as the preferred alternative.

On December 17, 2010, the Corps provided a letter to the City formally determining the need for a SEIS. The Corps identified areas in the SEIS where information should be updated, such as water demand analysis, threatened and endangered species bat surveys, wetland delineations, programmatic agreement related to cultural resources, water quality anti-degradation analysis, and mitigation plans.

#### 5. Project Need

Based on an analysis of the storage and capacity, the Illinois State Water Survey had determined that Lake Springfield is an inadequate supply system with a 50% probability of not meeting expected water supply demands. Under conditions of reduced water availability the City is at risk of not meeting demands (both existing and future) for commercial and residential water use, and for industrial water supply (power plant operation and condenser cooling). Under projected drought conditions the estimated water deficit (demand minus yield) is currently 8.2 million gallons per day (MGD), whereas future deficits (year 2065) are projected at 11.3 MGD.

Other associated regional needs have also been identified that may potentially be addressed by the City's proposed project. Specifically, the following regional needs are also recognized:

- Increased demand for regional outdoor recreational areas that provide additional fishing and hunting opportunities
- Provide supplemental water supply for adjacent communities
- · Increased water supply to support regional economic development

#### 6. Proposed Action

The proposed Federal action is the issuance of a permit by the Corps pursuant to Section 404 of the Clean Water Act in support of the development of the selected water supply alternative. The Corps is neither a proponent nor an opponent of the City's supplemental water supply project. The City is the project proponent and will evaluate all reasonable development of a supplemental water supply for municipal, commercial, and industrial customers.

#### 7. Alternatives

In accordance with requirements of CEQ regulations 40 CFR § 1502.14, and the provisions of Section 404(b)(1) of the Clean Water Act, the SEIS will evaluate all appropriate and reasonable alternatives to the proposed project. The SEIS will review all alternatives previously assessed in the FEIS and will include an analysis of reasonable alternatives consisting of the following:

- No Action Alternative,
- · Development of a new water supply reservoir,
- · Development of groundwater well systems with associated pump stations and pipelines,
- Use of other existing surface water reservoirs.
- · Dredging of Lake Springfield.

Details of the other alternatives under consideration may be viewed at: http://supplementalwater.cwlp.com

Consideration of conservation measures is inherent in the City's on-going objectives to optimize the efficiency of it water supply systems and is therefore inherent in each of the alternatives under evaluation.

#### 8. Scoping Process

The Corps is furnishing this notice to: 1) advise other Federal and state agencies, affected Tribes, and the public of the proposed project; 2) announce the initiation of a 30-day scoping period; and 3) obtain suggestions and information on the scope of issues and alternatives to be included in the Draft SEIS. The Corps invites comments from all interested parties to ensure the full range of issues related to the permit request is addressed and that all significant issues are identified.

The SEIS will provide updated supporting data where needed, review the purpose and need, evaluate alternatives, and assess impacts of reasonable alternatives resulting from the development of a supplemental water supply system for the city. Potentially affected resources include: agricultural land, threatened and endangered species, wildlife, water resources, wetlands and floodplains; forested areas, transportation, recreation and potentially historic properties. Preliminary measures to minimize harm will be developed as part of this study. The public's views on the scope of the alternatives that should be addressed in the SEIS will also be considered in the preparation of the SEIS.

#### 9. Public Participation

A public scoping meeting will be held on August 24, 2016 from 5:00 – 8:00 p.m. at the State Journal-Register, 1 Copley Plaza, Springfield, IL. The public is invited to submit comments on the scope of this SEIS no later than the date identified in the "Dates" section of this notice. After the Corps prepares a draft of the SEIS, the Corps will release it for public comment. The Corps anticipates holding a public meeting in Springfield after release of the draft SEIS during the public comment period. Meeting details will be posted on the City of Springfield's website and published in local newspapers. The release of the Draft SEIS is anticipated for the first quarter of 2017, which will also coincide with the issuance of the complete permit application public notice for the preferred alternative.

11. DATES: Comments must be received on or before September 14, 2016

12. **Reply to the Corps of Engineers**. Written comments should be sent to: ATTN: Regulatory Branch, U.S. Army Corps of Engineers, Rock Island District, Clock Tower Building, Post Office Box 2004, Rock Island, Illinois 61204-2004. Comments may also be submitted to <u>cemvr-odpublicnotice@usace.army.mil</u>. For additional information contact: Mr. James Kelley, Ph. <u>(309/794-5373)</u>.



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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

OCT 0 4 2016

REPLY TO THE ATTENTION OF: E-19J

James Kelley U.S. Army Corps of Engineers – Rock Island District Clock Tower Building P.O. Box 2004 Rock Island, Illinois 61204

## RE: Notice of Intent to prepare a Draft Supplemental Environmental Impact Statement for the Springfield Supplemental Water Supply Project (previously referred to as the Proposed Water Supply Reservoir Hunter Lake); Sangamon County, Illinois

Dear Mr. Kelley:

The U.S. Environmental Protection Agency has reviewed the Federal Register (FR) Notice dated August 15, 2016, proposing the U.S. Army Corps of Engineers' (USACE) intention to initiate the preparation of a Supplemental Draft Environmental Impact Statement (SDEIS) to address the proposed Springfield Supplemental Water Supply Project (previously referred to as the Proposed Water Supply Reservoir Hunter Lake) in Sangamon County, IL. This process is being undertaken in conjunction with the City of Springfield, Office of Public Utilities, also known as the City Water, Light & Power (City). This letter provides our scoping comments on the Federal Register notice pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The City operates an integrated water supply, purification, transmission, and distribution system. The City's service area encompasses approximately 100 square miles with more than 52,600 service connections and a population of about 147,000. The City's current source of water is Lake Springfield, a reservoir constructed in the 1930s; it serves as the City's drinking water supply and the cooling water supply for the City's coal-fired power generating station. As a result of drought conditions in 1953-1955, the City constructed a movable low head dam across the South Fork of the Sangamon River to supplement the Lake Springfield water supply during low lake levels.

On July 26, 1989, the City submitted a joint permit application to USACE and the Illinois Environmental Protection Agency (IEPA) for a Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification (WQC) for construction of the proposed Hunter Lake Reservoir. A Notice of Intent to prepare a Draft EIS (DEIS) for the construction of the Hunter Lake Reservoir was published by USACE in the Federal Register on October 31, 1989. USACE, in conjunction with the City, prepared a DEIS that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. The DEIS was published in April 1999. A Final EIS (FEIS) was published in November 2000 identifying the construction of the Hunter Lake Reservoir as the preferred alternative; however, a final decision document (Record of Decision) was not issued.

Between 2000 and 2010, negotiations continued between the City and USACE/IEPA regarding the status of the application for IEPA Section 401 WQC and the USACE Section 404 permit. On December 17, 2010, USACE sent a letter to the City formally stating that a Supplemental EIS was needed, due to the age of the FEIS, changes that occurred since publication of the FEIS, and the age of some of the supporting data. USACE identified areas where information should be updated, such as water demand analysis, threatened and endangered species bat surveys, wetland delineations, the programmatic agreement related to cultural resource impacts, water quality anti-degradation analysis, and mitigation plans. USACE also withdrew the City's application for a 404 permit at that time, due to the additional information needs and lack of activity on the project.

In accordance with requirements of CEQ regulations 40 CFR 1502.14, and the provisions of Section 404(b)(1) of the Clean Water Act, the SDEIS will evaluate all appropriate and reasonable alternatives to the proposed project. The SDEIS will review all alternatives previously assessed in the FEIS, and will include an analysis of reasonable alternatives consisting of the following:

- The No Action Alternative;
- Development of a new water supply reservoir;
- Development of groundwater well systems with associated pump stations and pipelines;
- Use of other existing surface water reservoirs; and
- Dredging of Lake Springfield

The SDEIS will provide updated supporting data where needed, review the purpose and need, evaluate alternatives, and assess impacts of reasonable alternatives resulting from the development of a supplemental water supply system for the City. Consideration of conservation measures is inherent in the City's ongoing objectives to optimize the efficiency of it water supply systems and is therefore inherent in each of the alternatives to be evaluated.

The FR notice asks for suggestions and information on the scope and significance of issues and alternatives to be addressed in the preparation of the SDEIS. EPA appreciates the opportunity to have met with USACE, the City, and other state regulatory agencies on September 16, 2016, in Rock Island, to discuss this project. EPA's scoping comments on the forthcoming SDEIS are grouped by subject and are as follows.

## PURPOSE AND NEED / DEVELOPMENT OF PROJECT ALTERNATIVES

• EPA recommends that the forthcoming SDEIS identify and substantiate the purpose and need for the proposed project as well as the preferred alternative. The project purpose and the project need statements for the proposed action should be clear and concise. After underlying problems have been identified and substantiated, the alternatives identified to solve the underlying problems should then be identified and explained. The no-action

alternative and all action alternatives that would satisfy the substantiated purpose and need and are determined to be reasonable should be carried forward and fully studied in the SDEIS. The document should identify any alternatives considered but dismissed from further consideration, and should provide elimination criteria and clear explanations for their elimination.

During the September 16, 2016, interagency meeting, City officials explained how Springfield is in need of a secondary source or water, and provided information on how Lake Springfield is utilized as a secondary source by other communities, even though Springfield itself does not have a secondary water source. Water demands have changed over the years, and demand estimates for current and future forecasts should take into account the reasonable and expected users, including future wholesale water demands.

- Although several preliminary action alternatives have been identified and proposed to the public and on the project website, EPA expects that the SDEIS will evaluate hybrids of these various reasonable alternatives, that may include combinations of one or more identified alternatives that pass a screening for fatal flaws.
- The No Action Alternative should include and discuss operational changes made since 2000 (publication of the FEIS) to Lake Springfield, including investigations for and elimination of leaks and areas of supply loss.
- The City indicated that water restrictions were imposed on customers in 1988, 2000, and 2012. These restrictions did not include surcharges for high usage, or restrictions on watering (times of day/allowing for watering on specific days based on even or odd addresses, etc.). EPA suggests that such conservation measures, which are common in other parts of Illinois, be investigated as additions to the No Action Alternative due to their value for water conservation.
- One of the issues identified in the past about the proposed Hunter Lake reservoir was the size as proposed, and whether or not it needed to be as large as proposed. As the SDEIS is developed, USACE should be evaluating a proposed Hunter Lake reservoir's size, meaning that several variations of a Hunter Lake alternative (differing sizes) may be considered reasonable and feasible.
- A new water supply reservoir is likely to propose significant impacts to aquatic resources and wetlands, and require issuance of an Individual Clean Water Act Section 404 permit for proposed discharges of dredged or fill materials to Waters of the United States. As USACE is well aware, issuance of a Section 404 permit approval is contingent upon a project complying with Clean Water Act Section 404(b)(1) guidelines. These guidelines are summarized as follows:
  - Least Environmentally Damaging Practicable Alternative There must be no practicable alternative to the proposed discharge (impacts) which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;

- No Violation of Other Laws The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
- No Significant Degradation The project must not cause or contribute to significant degradation of Waters of the United States; and
- Minimization and Mitigation of Adverse Impacts -- The project must include appropriate and practicable steps to avoid impacts to regulated Waters of the United States. Where impacts are unavoidable, a project must demonstrate how impacts have been minimized. Compensatory aquatic resource mitigation is required to offset unavoidable, minimized impacts to aquatic ecosystems.

The SDEIS should take into account whether each reasonable alternative is, in fact, the Least Environmentally Damaging Practicable Alternative.

• As this project proceeds under NEPA, environmental impacts and costs for all viable and reasonable alternatives to be carried forward should be thoroughly analyzed in the SDEIS. Project costs should include estimated costs of mitigation, including mitigation siting, preparation of mitigation plans, land and easement acquisition, mitigation construction costs, and monitoring and adaptive management plans.

## THREATENED AND ENDANGERED SPECIES/CRITICAL HABITAT

• While tree-dwelling bats such as the Indiana bat and the Northern Long Eared bats need to be surveyed for, EPA and other agencies also have concerns about the potential presence of cave dwelling bats (such as the little brown bat). There has been a precipitous fall in the numbers of these bats and tri-color bats, even though they are not a listed species. EPA recommends, when analyzing the potential impacts to bats associated with each reasonable alternative, that USACE be looking for impacts to suitable habitat in addition to critical or essential habitat.

#### **RESPONSE TO COMMENTS RECEIVED**

• It is likely that USACE received comments on the 2000 FEIS. More recently, a public scoping meeting for the SDEIS was held on August 24, 2016. Written comments from the public were received at this meeting. Other scoping comments have been received by the USACE via the web or email. It is also expected that USACE received comments during the public comment period of the Federal Register notice. EPA recommends that the forthcoming SDEIS, via an appendix, summarize all public comments received on both the 2000 FEIS and for the current preparation of the SDEIS. EPA recommends that all comments be responded to in the SDEIS as well. The format utilized in the FEIS to respond to agency and public comments, and corresponding responses to those comments) was extremely efficient and easy to read. EPA suggests that this format be utilized in the SDEIS to respond to comments received.

• The City's consultant, Amec Foster Wheeler, prepared a Public Scoping Meeting Summary Memorandum (dated September 15, 2016), which summarized attendance and comments received on the project. EPA recommends that the forthcoming SDEIS address all of these listed concerns and questions.

## WATER QUALITY

- For years, Lake Springfield has been listed on Illinois EPA's (IEPA) Clean Water Act Section 303(d) list of impaired waterbodies as it does not meet state Water Quality Standards (WQS). The 2016 Illinois 303(d) list identifies total phosphorous, total suspended solids, and dissolved oxygen as causes of impairment for Lake Springfield. IEPA has continually raised concerns over the years that the water quality in the proposed Hunter Lake reservoir will exceed or match nutrient concentrations in Lake Springfield, which have been noted as excessive. IEPA has noted, as far back as 1999, that evaluation of the causes of the nutrient enrichment in the Hunter Lake basin will be required, and that identification of the sources and possible approaches to control nutrient loading will also be required for the Section 401 WQC review. Evaluations should be undertaken in sufficient detail as to indicate the measures necessary, if even possible, to reduce the nutrient levels to concentrations that will not result in impaired water quality and biological conditions. These concerns were reiterated by IEPA during the September 16, 2016, meeting; it is unclear if IEPA can issue Section 401 WQC for a project proposing creation of a new waterbody or reservoir that would, from the inception of its existence, not meet state WQS. EPA recommends that USACE and the City continue to have open discussions with IEPA on this issue. If it is determined that a new reservoir such as Hunter Lake would not be able to meet state WQS from its creation (thereby increasing the uncertainty that IEPA can issue 401 WQC), USACE will need to determine if pursuing the creation of Hunter Lake is in fact a reasonable alternative that should be studied further in the SDEIS.
- Many of the regulatory agency's comments on the FEIS included recommendations that the Hunter Lake alternative (and to expand on this, any new alternative proposing a new reservoir) not be finalized until a comprehensive watershed management plan is developed. EPA recommends that the SDEIS discuss whether or not watershed management plans (WMPs) have been completed for the watersheds in which each reasonable alternative is proposed. Details on the status of those WMPs, and how they have been folded into the development of each alternative, should be analyzed in the SDEIS.

## PROJECT TRANSPARENCY

• A major concern during review of the DEIS and FEIS was the lack of detail provided in support of analysis of critical environmental issues. In many instances, readers were referred to supporting materials from outside sources rather than having that information available directly within the document. While incorporation by reference is not necessarily discouraged, due to the length that this project has been ongoing, its complexity, and the amount of information that has changed since its inception, EPA encourages USACE and the City to ensure that as much information is included with the SDEIS as possible. This can be

easily accomplished by including reference documents as appendices to the SDEIS, which is EPA's recommendation.

## **MITIGATION**

- Any alternatives that propose new impoundments of a free-flowing stream or river propose irreversible or irretrievable commitment of resources and a permanent conversion of lotic ecosystems (flowing waters) to lentic ecosystems (still waters). Since the publication of the FEIS, mitigation expectations and requirements have changed significantly. Replacement in kind of lost resources (linear footage of streams or rivers; acreage of wetland) is expected. Previous mitigation commitments, such as outright acquisition of existing free flowing streams to be protected, still result in a net loss of lotic ecosystem. The SDEIS should take into consideration the ability to mitigate for resources to be damaged, destroyed, harmed, or permanently converted into a different type for each action alternative proposed. Furthermore, mitigation should also take into consideration the temporal loss of specific resources; as an example, the loss of forested wetlands takes decades to mitigate, as the definition of a forested wetland is dependent on tree height and diameter of trees at breast height. The ability (or inability) to provide adequate mitigation for resources to be impacted by an alternative may result in determination that an alternative is in fact not a reasonable alternative.
- EPA recommends that as the SDEIS alternatives are developed, and as discussions for mitigation progress, that all relevant Federal and state regulatory agencies be given the opportunity to review and comment on all proposed mitigation plans prior to release of a Final SEIS.

## **CLIMATE CHANGE AND GREENHOUSE GASES (GHGs)**

 Final guidance has been published by the Council on Environmental Quality (CEQ) for Federal Agencies to consider the impacts of their actions on global climate change in their NEPA reviews<sup>1</sup>. Consistent with CEQ's Guidance, the EPA recommends that, in the SDEIS, USACE estimate the direct and indirect GHG emissions caused by the proposal and each alternative, and provide a qualitative summary of the impacts of climate change<sup>2</sup>. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website<sup>3</sup>. These emission levels can serve as a basis for comparison of the alternatives with respect to GHG impacts.

EPA recommends that the SDEIS identify and consider measures to avoid or reduce GHG emissions associated with the proposal, including identification and implementation of reasonable alternatives and practicable mitigation opportunities, and disclose the estimated GHG reductions for each action alternative (see CEQ Final guidance, p.18).

<sup>&</sup>lt;sup>1</sup> Final Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (finalized on 8/1/2016); available at:

https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/nepa\_final\_ghg\_guidance.pdf <sup>2</sup> Ibid, p. 11 and p. 16.

<sup>&</sup>lt;sup>3</sup> https://ceq.doe.gov/current developments/ghg-accounting-tools.html

Consistent with the CEQ Final guidance (p.20), EPA recommends that the SDEIS describe potential changes to the affected environment that may result from climate change, including an assessment of the potential for climate change to exacerbate the environmental impacts of the proposed action. Including future climate scenarios, such as those provided by the U.S. Global Change Research Program<sup>4</sup> (USGCRP), in the SDEIS would help decision makers and the public consider whether the proposal includes appropriate resilience and preparedness measures for the impacts of climate change (such as increased intensity and frequency of storm and flood events, as well as drought) as well as provide context for the impacts of the proposal.

In addition to looking at the direct impacts of the project's alternatives, CEQ regulations (Section 1502.16) instruct agencies to consider other effects that are reasonably foreseeable; this should include the potential effects of climate change. The SDEIS should make clear whether commitments have been made to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts.

We appreciate the opportunity to provide scoping comments, and we look forward to reviewing the SDEIS document it is released for public comment. When released, please send a hard copy and a CD to the EPA Region 5 office. If you have any questions about this letter, please contact the lead NEPA reviewer for this project, Ms. Liz Pelloso, PWS, at 312-886-7425 or via email at pelloso.elizabeth@epa.gov.

Sincerely,

Kenneth A. Westlake, Chief NEPA Implementation Section Office of Enforcement and Compliance Assurance

<u>CC's (via email):</u> Kristen Lundh, USFWS Keith Shank, IDNR Nathan Grider, IDNR Thaddeus Faught, IEPA Dan Heacock, IEPA Rachel Leibowitz, IHPA Bill Elzinga, Amec Foster Wheeler Marty Marchaterre, Amec Foster Wheeler Ted Meckles, Springfield City Water Light and Power

<sup>&</sup>lt;sup>4</sup> http://www.globalchange.gov/