US Army Corps of Engineers
Rock Island District

SPRINGFIELD SUPPLEMENTAL WATER SUPPLY PROJECT
SCOPING REPORT
Sangamon County, Illinois

Prepared for:
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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).

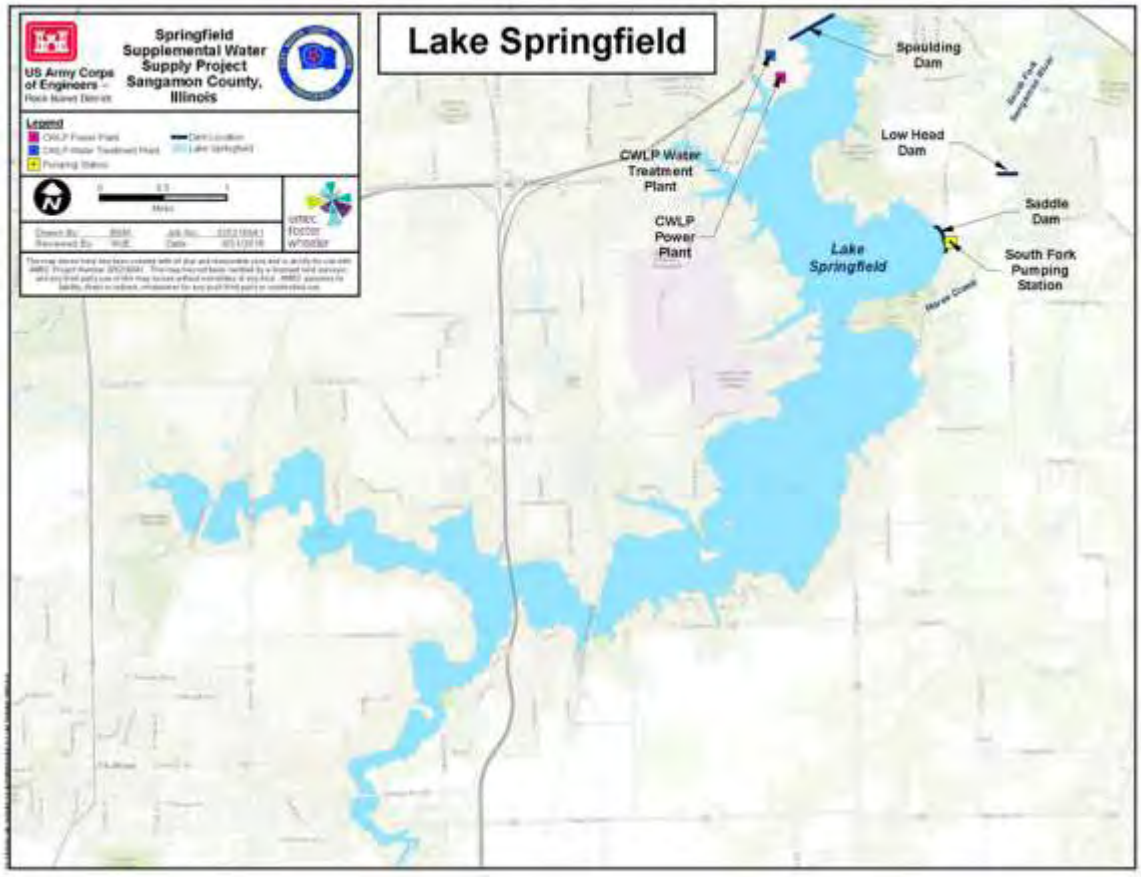

Figure 1. Lake Springfield

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.

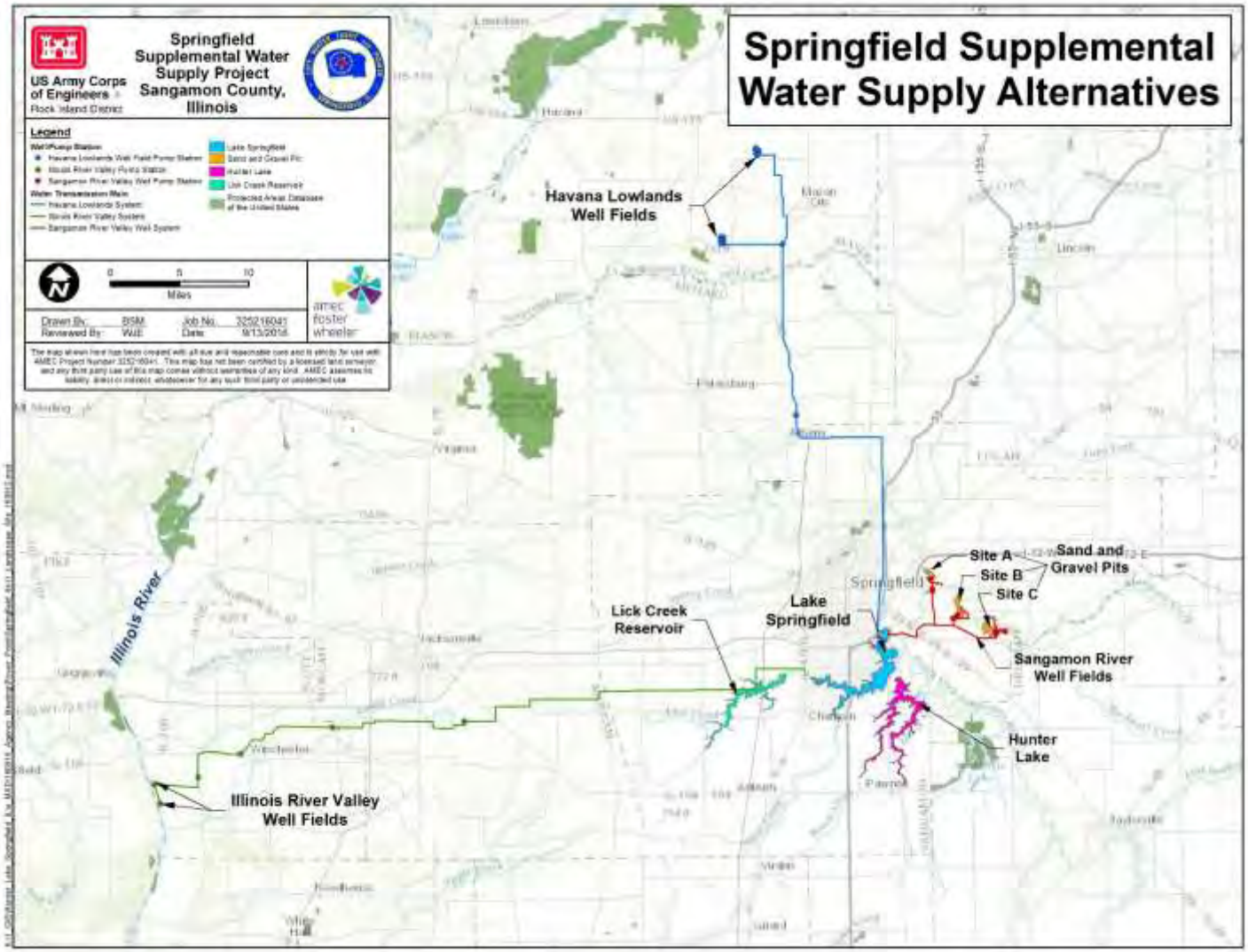

Figure 2. Springfield Supplemental Water Supply Alternatives

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
    - Industrial Water Use
    - Wholesale Customers
    - Power Plant Water Use
    - Water Conservation
- Project Alternatives
    - No Action
    - Well Field and Pipeline Alternatives
    - New Reservoirs

- Other Existing Reservoirs
- Dredging of Lake Springfield
- Gravel Pits
- Diversion from Sangamon River
- Combination of Alternatives

- Concerns Related to Environmental Resources
  - Water Quality
  - Habitat Alteration
  - Recreation
  - Economic Impacts
  - Flooding
  - Displacement of Residences and Businesses
  - Agriculture
  - 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:

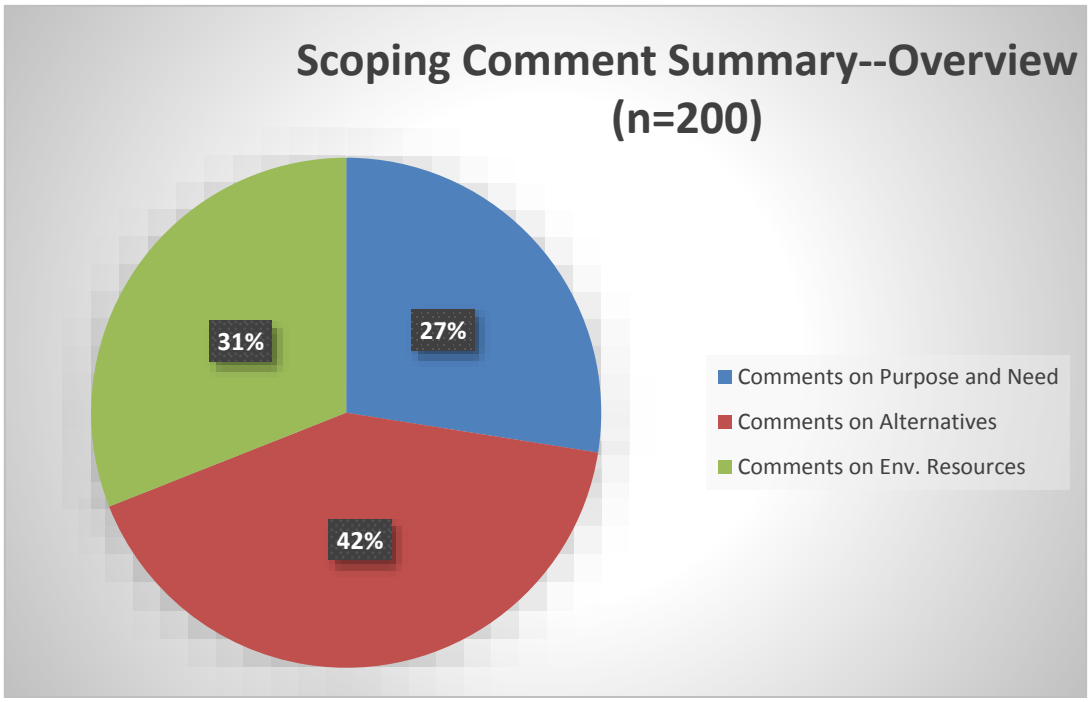

Figure 3. Overview of Scoping Comments Received

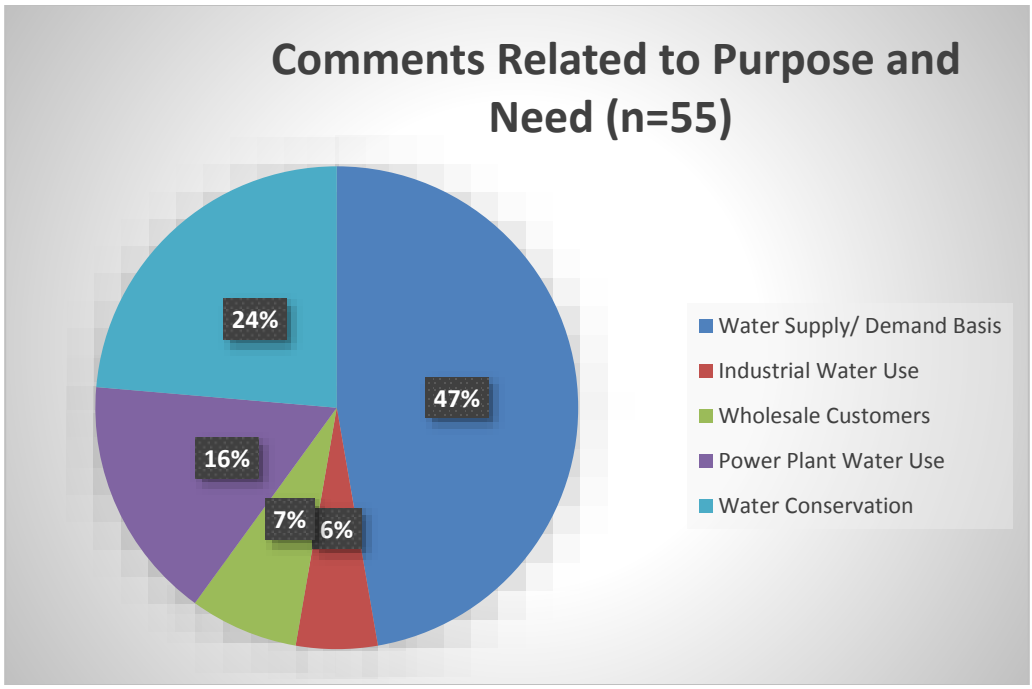

Figure 4. Summary of Comments Related to Purpose and Need

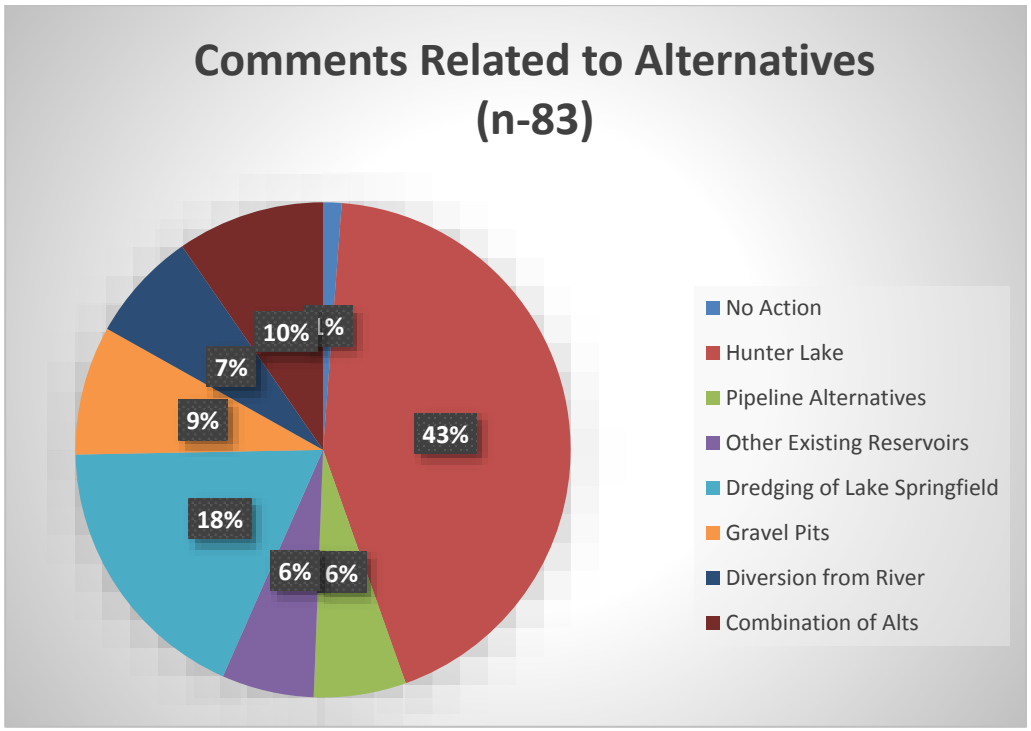

Figure 5. Summary of Comments Related to Alternatives Under Consideration

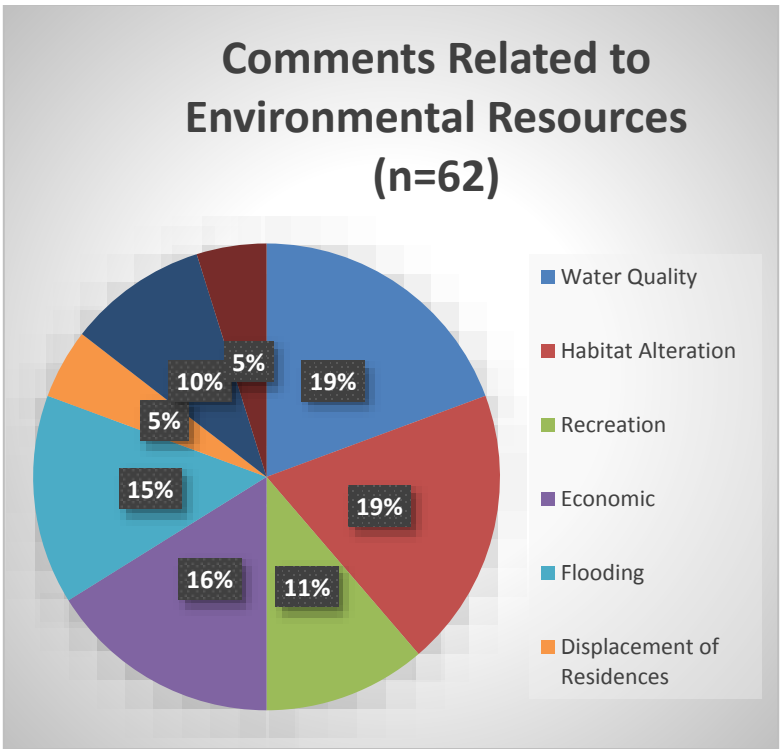

Figure 6. Summary of Comments Related to Environmental Resources

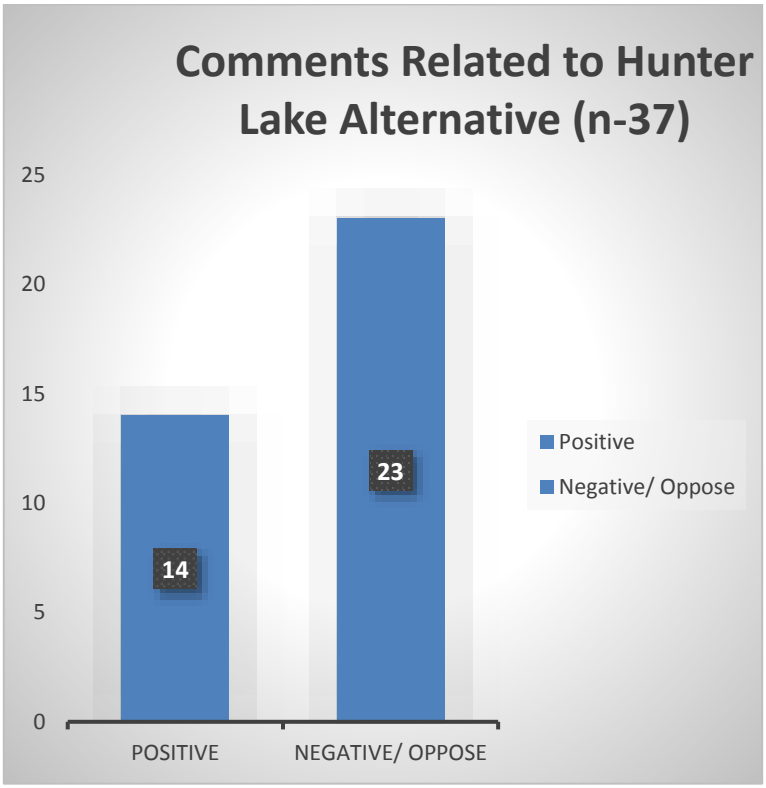

Figure 7. Summary of Comments Related to the Hunter Lake Alternative

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 non-potable (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.

- 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 (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.

- 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

- 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*).

2) ***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*).

16) ***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 (*Commenter*s: *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*).

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 (C*ommenters: 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: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Wednesday, September 14, 2016 10:41 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: FW: [EXTERNAL] Springfield Supplemental Water Supply Comments
Attachments: 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

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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 HIll Road
Rochester IL 62563
217-498-8235

Marchaterre, Martin

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 15, 2016 10:33 AM
To: Kelley, James C Jr CIV USARMY CEMVR (US)
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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

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-----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?

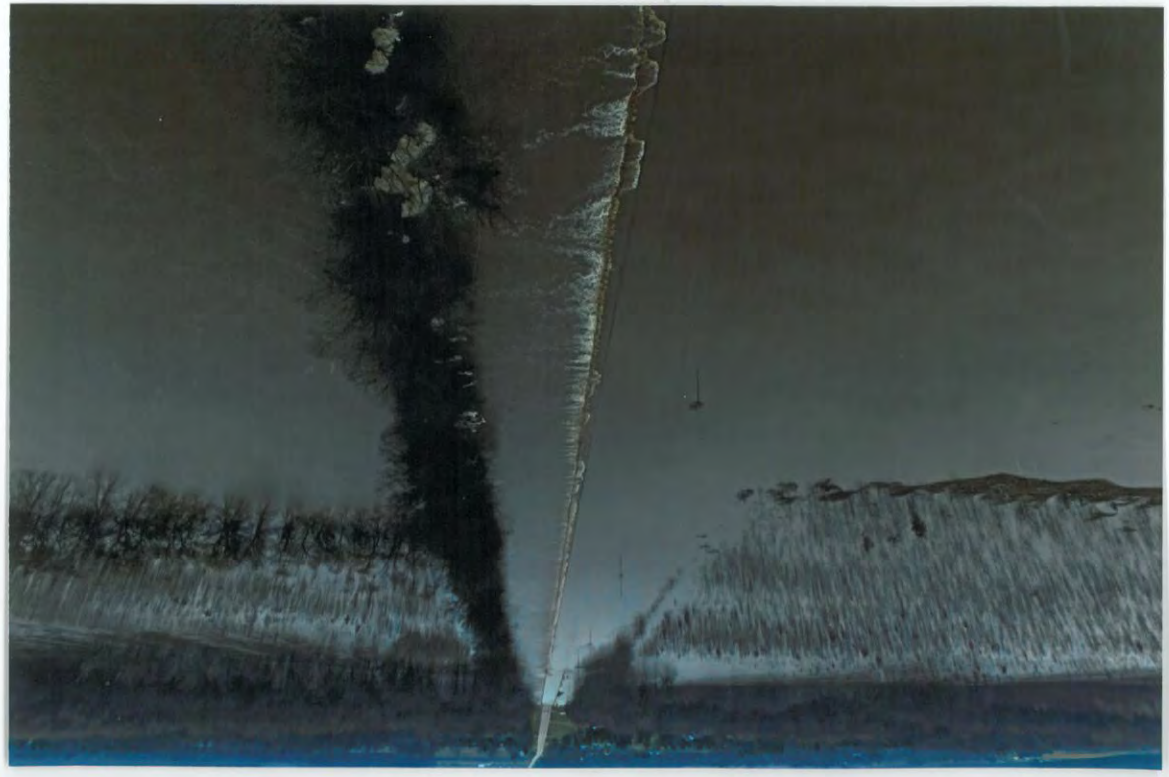
Wouldn't a more diversified option or a little water from many sources being able to be pumped into the water system, rather than going into lake 1 and then processed be a safer option?

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


ROAD
CLOSED
ROAD
CLOSED



From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 01, 2016 10:01 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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: Kelley, James C MVR <James.C.Kelley@usace.army.mil>
Sent: Wednesday, August 17, 2016 11:35 AM
To: Elzinga, William J; Meckes, Ted; Marchaterre, Martin
Subject: 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: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 01, 2016 9:46 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Friday, August 26, 2016 4:00 PM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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?

What is the depth of hard pan / bedrock under lake Springfield?

Why has CWLP NOT conducted minimal sediment removal each year or at least during low lake levels?

Thank You

Don Cloyd

Chatham IL

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Friday, August 26, 2016 3:57 PM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: FW: Scoping Comments on City of Springfield, IL- City Water Light and Power Section 404 Permit Application for Hunter Lake
Attachments: 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.

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 –OO95 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.

Subsiquent 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 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 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 2ND WATER SUPPLY

Starting from the North Fork of the Sangamon River area and moving to Springfield. The 2nd 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 1/10th 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

From: CEMVR-CC MVR
Sent: Thursday, September 01, 2016 2:21 PM
To: Kelley, James C MVR
Subject: 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?

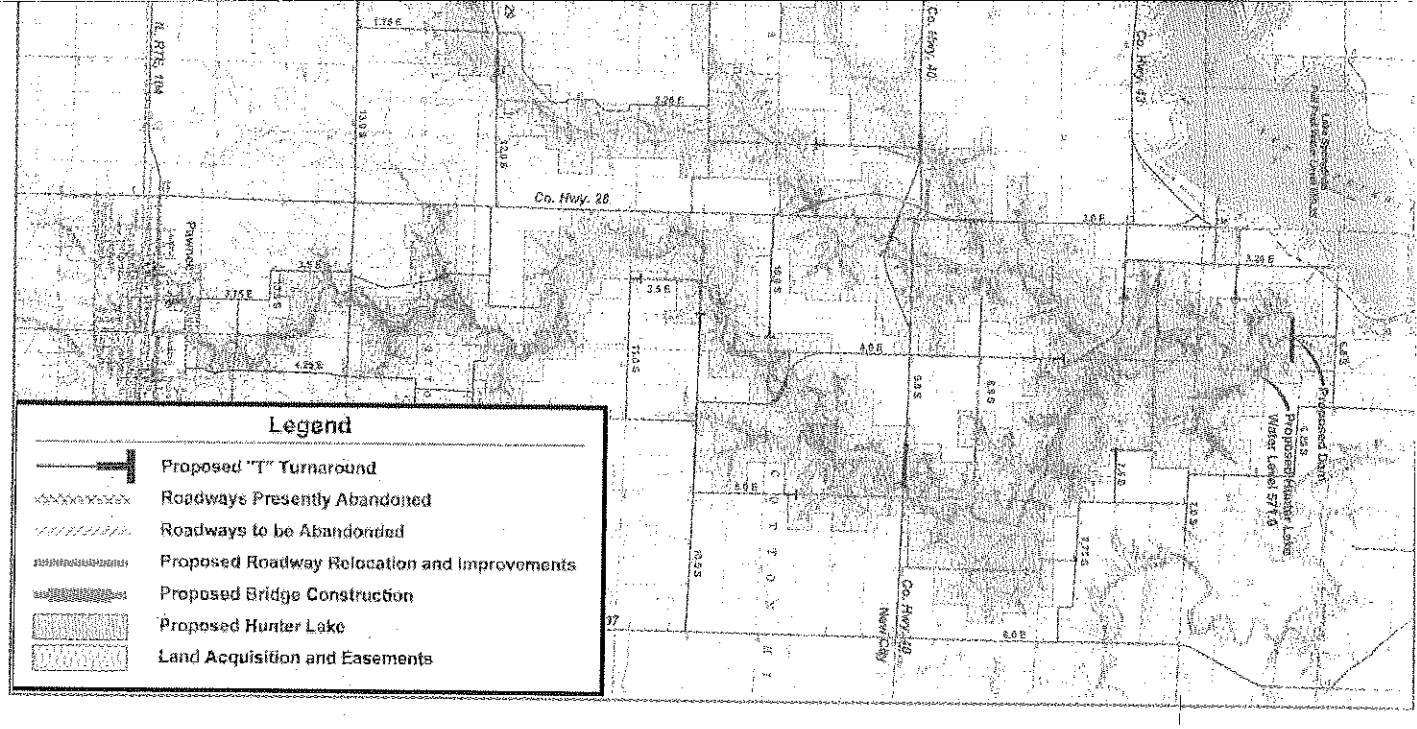
I am against Hunter Lake, mostly because CWLP keeps making us pay for expensive projects promising to return rates afterwards and never does. But I do think water supply issues are important.

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, less 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

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 repotted 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 ro move, meaning the city could still hire people living outside the city.

Hanauer's reasoning ignores the fact that the cost of moving into the city within the 12 months would offset any additional beuefits which a person might get by switching jobs unless a person is unemployed, which would be extremely rare for those living outside the city. The percentage of people living outside the city applying for the city jobs would be extremely low. Therefore, these residency requirements do help the east side.

Vinod Gupta
Springfield

ROUND UP FOR THE HOMELESS

It is almost unfathomable that unless we see a minor miracle, on Friday, Jnly 1, we'll start our second straight year without a state budget.

Those hardest hit by our elected officials' dereliction of their most basic duty are

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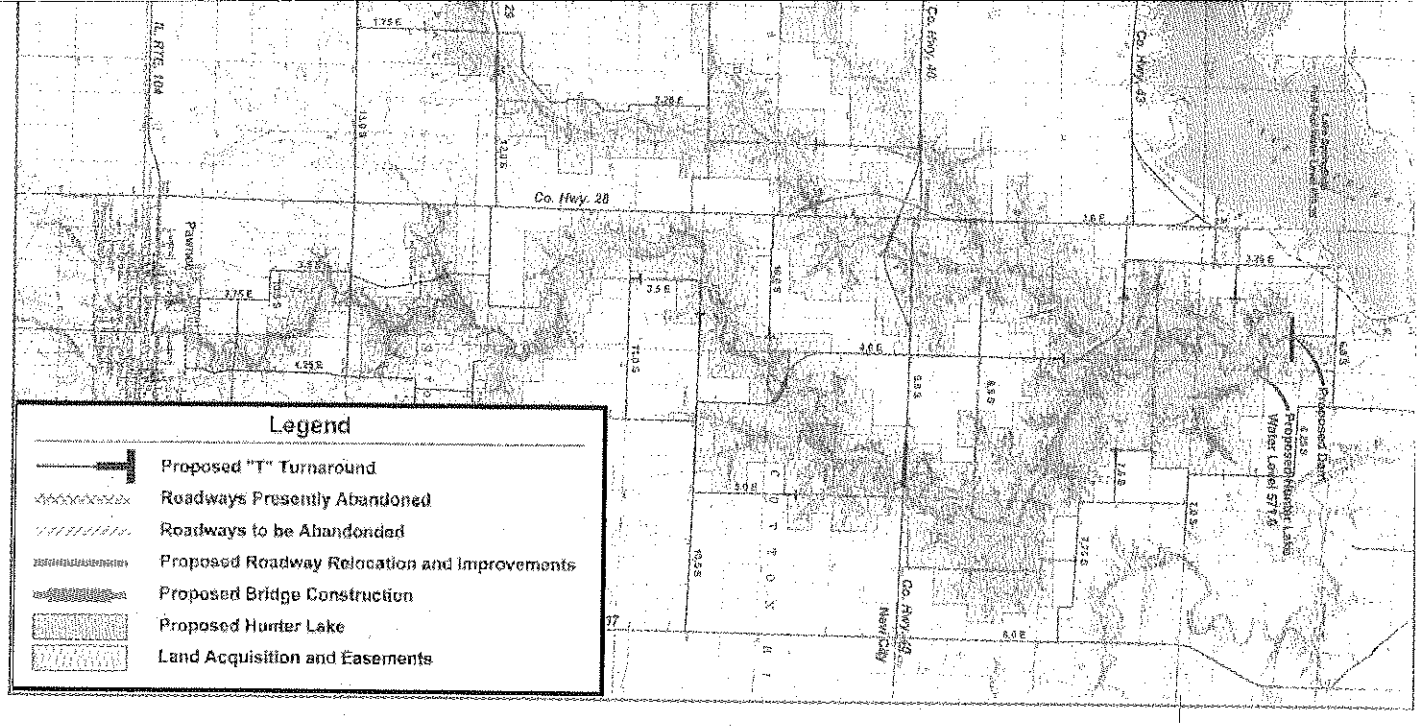

Insectpoem #9

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

LETTERS

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Pleasant Plains

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From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Friday, August 26, 2016 4:02 PM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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 Dickey

ADDRESS: 520 S. Second, Apt. 514

CITY / STATE: Springfield, IL ZIP: 62701

PHONE: (217) 522-5344 E-MAIL: none

COMMENTS:

I want to start out by saying I am wanting to be open-minded about all of the potential alternatives for increasing the water supply for Springfield. But I do not have any knowledge about the impact / ramification and cost of all the different alternatives. I do have the following thoughts:

1. Several of the alternatives involve a lot of pipes to carry water from where it is obtained to the city — only difference in some are really long and some are relatively shorter. That concerns me as I really don't want to see lengthy piping to get water to Springfield.
2. A long time ago the city decided it wanted a second lake to increase its water supply — and I believe in being supportive of that decision.
3. But I also think that if a lake is to be used — it needs to be dredged periodically. As part of approving whatever alternative is deemed best — the city should be required to dredge the current lake periodically. Something like: once the accumulation reaches a certain level, dredging to restore water capacity would be required. You could establish multiple locations in lake for measuring — if one area in lake reach the silt level but other areas don't — only the one area would have to be dredged. (continued on page 2)

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

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PLEASE PRINT:

NAME: Jim Dickey (page 2)

ADDRESS: _____

CITY / STATE: _____ ZIP: _____

PHONE: _____ E-MAIL: _____

COMMENTS:

3. (continued) I don't know the feasibility of putting barriers in the upper lake to keep most silt in one area of the lake – which would reduce the amount of lake area which would have to be dredged. It is something to look into. (But because silt has been building up throughout the lake – it would need full dredging even if a barrier can be put in.)

4. While I support the second lake, a condition of approval would be requiring dredging of it when silt reaches certain levels.

Right now it appears there is no requirement which would make the city dredge the current lake (and new lake) – so it can get away with not dredging as long as possible. I think that needs to change – the city has to recognize that if it uses a lake – it needs to dredge periodically and has to plan for it.

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PLEASE PRINT:

NAME: Sue Doubet

ADDRESS: 77 Horseshoe

CITY / STATE: Springfield, IL ZIP: 62702

PHONE: 217/546 9641 E-MAIL: s.ubet@comcast.net

COMMENTS:

I have always been in favor of a second Lake
More now Than ever. Factors That now apply are
Parts of the U.S. have been in drought for years.
Practices like Fracking contaminate ground water.
The world and U.S. populations are growing
and also The demand for clean water.
The U.S. is criss-crossed with buried pipelines,
Some 100 years old, containing crude oil, refined oil
or N.G. Cracks in old pipe and accidents to
pipelines create Threats To ground water Supplies

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cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

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PLEASE PRINT:

NAME: MIKE GOLOASICH

ADDRESS: 2513 CHAPEL HILL RD.

CITY / STATE: SPFLD IL ZIP: 62702

PHONE: 217.787.1432 E-MAIL: ONZEROTILS@ONZEROTILS.COM

COMMENTS:

- WHERE DOES TAYLORVILLE GET ITS WATER SUPPLY? WOULD BE,
WHAT AREAS ~~WERE~~ SERVED BY LICK CREEK RESERVOIR?
- WHERE DOES CHAMPAIGN/URBANA GET ITS WATER SUPPLY?

IT WOULD HELP IF THE MAP WOULD HAVE DELINEATED THE EXISTING FROM THE PROPOSED ELEMENTS.

WHY DOES THE MAP NOT SHOW THE AREAS UNDERGROUND WATER?

IT WOULD SEEM THAT IT WOULD BE POSSIBLE TO CONNECT THE EXISTING LAKE @ KINCAID TO THE SOUTH FORK OF THE SANGAMON RIVER WHICH THEN CONNECTS TO LAKE SPFLD.

THX.

You may also submit comments electronically at:
cemvr-odpublic.notice@usace.army.mil
or
http://supplementalwater.cwlp.com

COMMENT FORM

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PLEASE PRINT:

NAME: Ann Graffagna
ADDRESS: 4981 Smith Rd
CITY / STATE: Pleasant Plains IL ZIP: 62677
PHONE: 217-652-6694 E-MAIL: atg62677@aol.com

COMMENTS:

I would like to know about dredging Lake Springfield. How much capacity would we get back by dredging & how much would it cost.

~~What has been the~~
Over the last 40 years what has been water usage in Springfield?

What are the deepest and shallowest levels that will be created by HunterDam?

Is there a topigraphical map of the area of the proposed lake?

How many people will be displaced?

Thank you!
Ann Graffagna

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 01, 2016 9:47 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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> " <cemvr-odpublicnotice@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 Il 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. Need for Supplemental Water

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. The lack of demand data 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.

B. The lack of any attempt at or study of true water conservation, including use 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. The lack of sufficient yield data for Lake Springfield. 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.[1] 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

[1] 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.

means of water recycling. 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. The use of unsupported demand projections to justify Hunter Dam. 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. The use of outdated information without scientific studies of the effect of climate change models. 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. Need for Recreation

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. Need for "Economic Development."

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. Alternatives to Hunter Dam

A. Introduction. 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. Conservation: see above, Section II (1) (A) and (B).

C. Water recycling: see above, Section II (1)(D).

D. Power plant restructuring, closure, or partial closure. 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.

[2] 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. Restoration of existing capacity in Lake Springfield. 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.[3] 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

[3] 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.[4] The City's own studies show that the potential drought yield of the gravel pits is approximately 9 MGD. [5] 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.[6]

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.

---

[4] CWLP Dispatch, September/October 2013.

[5] See, Potential Yield of the Gravel Pits in the Sangamon River Valley, Layne Hydrology, August 2, 2013, p. 12 available at http://www.cwlp.com/water/GravelPitYieldStudy2013.pdf.

[6] 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. Combining alternatives

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. Agricultural lands

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.[7] 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.[8] The City should prepare a cost-benefit analysis of lost opportunity from historic sites.

D. Creation of extensive mud flats

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[7] See http://www.sancohis.org/OLDER%20FILES/trace.htm; "Barely a Trace," Sangamon County Historical Society.

[8] 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. Conclusion

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

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: Ron Howell
ADDRESS: 1210 E Washington St., #902
CITY / STATE: Spfld IL ZIP: 62703
PHONE: 217 5538206 E-MAIL:

COMMENTS:

Nothing at this meeting suggests any justification for an additional water source. The people most in favor of this construction are obviously those who will draw a salary from it. Also, the sole function of the unnecessary reservoir, "recreational use," is almost wholly inappropriate for a mid-western community of largely state & hospital workers

Today marks the rainiest August in history, we are throwing water over the dam.

Fiyally, it is long past time for CWLP to come clean with an audit of their present "Hunter Lake" holdings, including land values including appreciation, rental properties, long-term capital gains. And then begin the process of divesting these holdings and returning the profits to the lawful owners - the taxpayer.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

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: Julie Hulvey
ADDRESS: 916 S. Third St
CITY / STATE: Springfield IL ZIP: 62703
PHONE: 217-622-1154 E-MAIL: julazul@gmail.com

COMMENTS:

At 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.

I have grown up in Springfield + enjoyed Lake Springfield since childhood. However, when the city refers to the Hunter Lake project as "Lake Springfield 2" I wonder whether their plans also include selling tracts of land to future home-builders. This needs to be made clear. ~~There is also questionable that~~ The recreational opportunities 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

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cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

would need to be periodically drawn down, would negatively affect recreation.

With many other possible 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 Hulvey
916 S Third
Springfield 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)

(Please tape)

I'm too 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 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: FW: [EXTERNAL] Springfield Supplemental Water Supply Project SEIS
Attachments: 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: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Wednesday, August 24, 2016 12:39 PM
To: Kelley, James C Jr CIV USARMY CEMVR (US)
Cc: Lenz, Gary W CIV USARMY CEMVR (US); Elzinga, William J; Meckes, Ted
Subject: 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

GREENE & BRADFORD, INC.
3501 Constitution Drive
Springfield, IL 62711
(217) 793-8844
(217) 793-6227 Fax
www.greeneandbradford.com

Memorandum

Date: 9/14/2016

Project: Springfield Supplemental Water Supply Project - SEIS

To: 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.

USGS	Watershed Gauge	Watershed Area, sq. miles	7-Day 10-Year Low Flow			100-Year Flow		
			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

800+ gpm Wells

- 800.0–1000.0
- 1100.0–1200.0
- 1250.0–1400.0
- 1550.0–1575.0
- 2000.0–2000.0

Salt Creek Withdrawal Site

- Salt Creek Pumping Station 2

CWLP System Connection

- CWLP

Sangamon River Withdrawal Sites

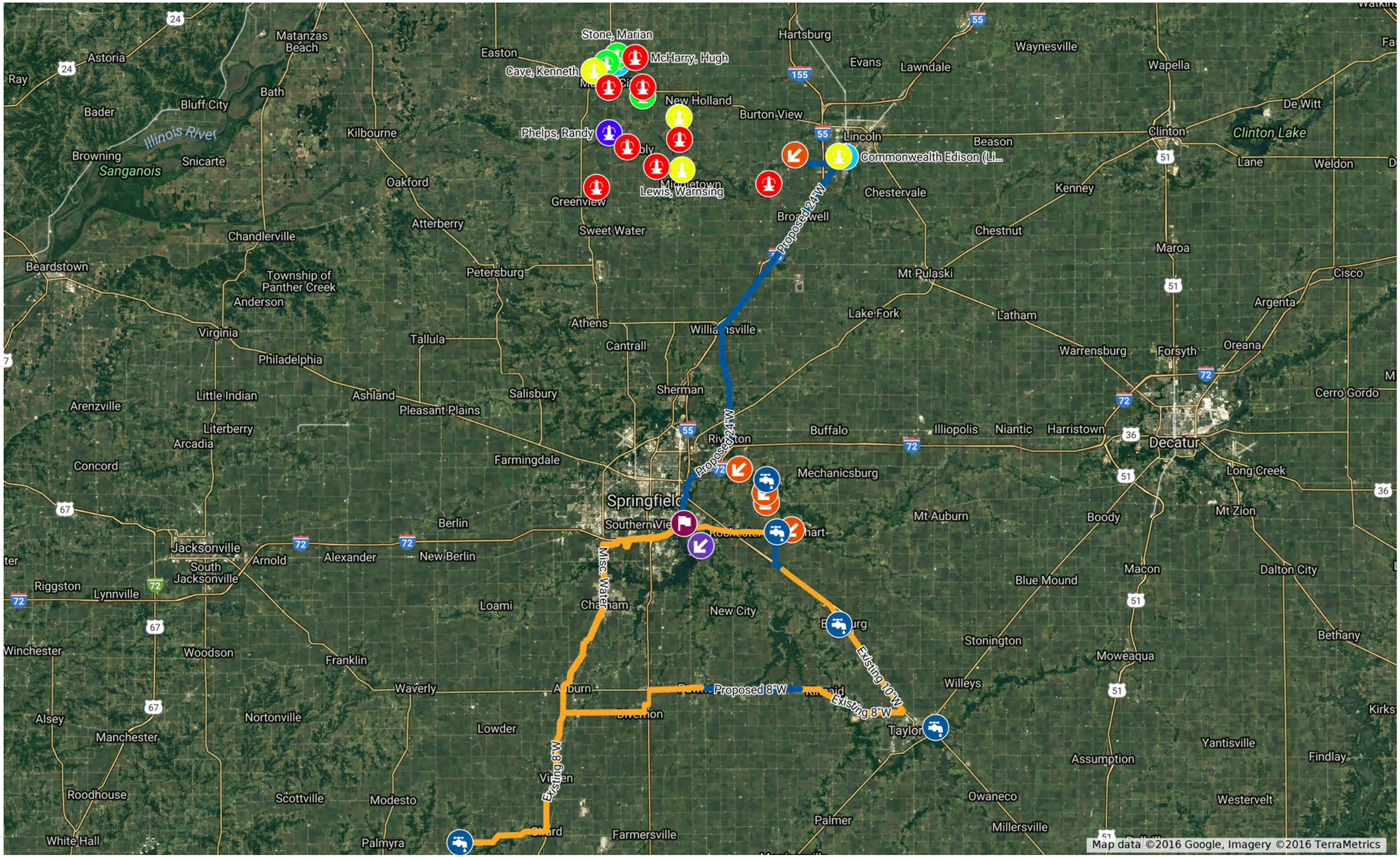
- Clear Lake Pit
- Builders Sand & Gravel Pit
- Builders Sand & Gravel Pit
- Buckhart Sand & Gravel Pit
- S. Fork of Sangamon River

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: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 15, 2016 10:34 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: FW: [EXTERNAL] Re: Springfield Supplemental Water Supply
Attachments: 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
>

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: JOSEPH E. MCMENAMIN

ADDRESS: 1300 PINE VALLEY COURT

CITY / STATE: SPRINGFIELD, IL ZIP:

PHONE: 217-201-2956 E-MAIL: JOEFORWARD7@AOL.COM

COMMENTS:

1. WATER DEMAND HAS BEEN FLAT FOR 40 YEARS.
2. THE CITY IS FINANCIALLY STRESSED.
3. OUR RESIDENTS ARE FINANCIALLY STRESSED WITH SIGNIFICANTLY RAISED CWLP RATES THE PAST 10 YEARS.
4. THE CITY HAS OTHER SUBSTANTIAL NEEDS AND PRIORITIES INCLUDING COMPLIANCE WITH SEWER ADMINISTRATIVE ENFORCEMENT.
5. EVENTUALLY THE CITY CWLP WILL RETIRE OUR EDEST ELECTRIC GENERATION PLANTS. THIS WILL REDUCE WATER DEMAND.
6. WE NEED TO FIND WAYS TO GET ALONG WITHOUT LAKE II

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 15, 2016 10:33 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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.

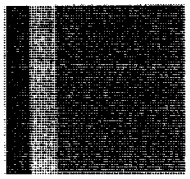
- the impact of ever more shaded home lawns in ever maturing subdivisions obviating the need for summer watering.

- 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~~ below 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,

Don Mohler

Don Mohler

COMMENT FORM

Springfield Supplemental Water Supply Project
Supplemental Environmental Impact Statement
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PLEASE PRINT:

NAME: John M Myers

ADDRESS: 1005 N. 7th St

CITY / STATE: Springfield IL ZIP: 62702

PHONE: (217) 544 5003 E-MAIL: jmyers1951@gmail.com

COMMENTS:

See attached letter

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

– Jim Kelley

JOHN M. MYERS, P.C.
ATTORNEY AT LAW

1005 North Seventh St.
Springfield, Il 62702

Phone: 217-544-5003
E-mail: jmyers1951@gmail.com

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

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,

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.

6. Lastly, the Village has a concern regarding elevations proposed for this new lake. 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 2? 2016

Mr. James Kelley, Project Manager
U.S. Army Corps of Engineers
Rock Island District
Clock Tower Building
Post Office Box 2004
Rock Island, Il 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 5th 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,

Gary M. Alexander

Gary M. Alexander

High School Office
810 4th Street
Pawnee, IL 62558
217 625-2471

FAX 217 625-2251

www.pawneeschools.com

Grade School Office
810 4th Street
Pawnee, IL 62558
217 625-2231

COMMENT FORM

Springfield Supplemental Water Supply Project
Supplemental Environmental Impact Statement
Open House Public Scoping Meeting

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PLEASE PRINT:

NAME: MIKE GOLOASICH

ADDRESS: 2513 CHAPEL HILL RD.

CITY / STATE: SPFLD IL ZIP: 62702

PHONE: 217.787.1432 E-MAIL: ONZEROTILS@ONZEROTILS.COM

COMMENTS:

- WHERE DOES TAYLORVILLE GET ITS WATER SUPPLY? WOULD BE,
WHAT AREAS ~~WERE~~ SERVED BY LICK CREEK RESERVOIR?
- WHERE DOES CHAMPAIGN/URBANA GET ITS WATER SUPPLY?

IT WOULD HELP IF THE MAP WOULD HAVE DELINEATED THE EXISTING FROM THE PROPOSED ELEMENTS.

WHY DOES THE MAP NOT SHOW THE AREAS UNDERGROUND WATER?

IT WOULD SEEM THAT IT WOULD BE POSSIBLE TO CONNECT THE EXISTING LAKE @ KINCAID TO THE SOUTH FORK OF THE SANGAMON RIVER WHICH THEN CONNECTS TO LAKE SPFLD.

THX.

You may also submit comments electronically at:
cemvr-odpublic.notice@usace.army.mil
or
http://supplementalwater.cwlp.com

COMMENT FORM

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PLEASE PRINT:

NAME: DR. JACK PAXTON

ADDRESS: 716 S. BROADWAY AVE

CITY / STATE: URBANA, IL ZIP: 61801

PHONE: 819-0667 E-MAIL: JAX@UCSD.EDU

COMMENTS:

THIS PROJECT DOES NOT DEMONSTRATE A NEED FOR SUPPLEMENTAL WATER. IT SEEMS TO ME THAT CONSERVATION OF WATER AND ELECTRICITY SHOULD BE EMPHASIZED! THE ENVIRONMENTAL IMPACTS SEEM TO FAR EXCEED BENEFITS FROM THIS PROPOSED PROJECT.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

PRAIRIE RIVERS NETWORK
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
Cemvr-odpublicnotice@USACE.army.mil
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*

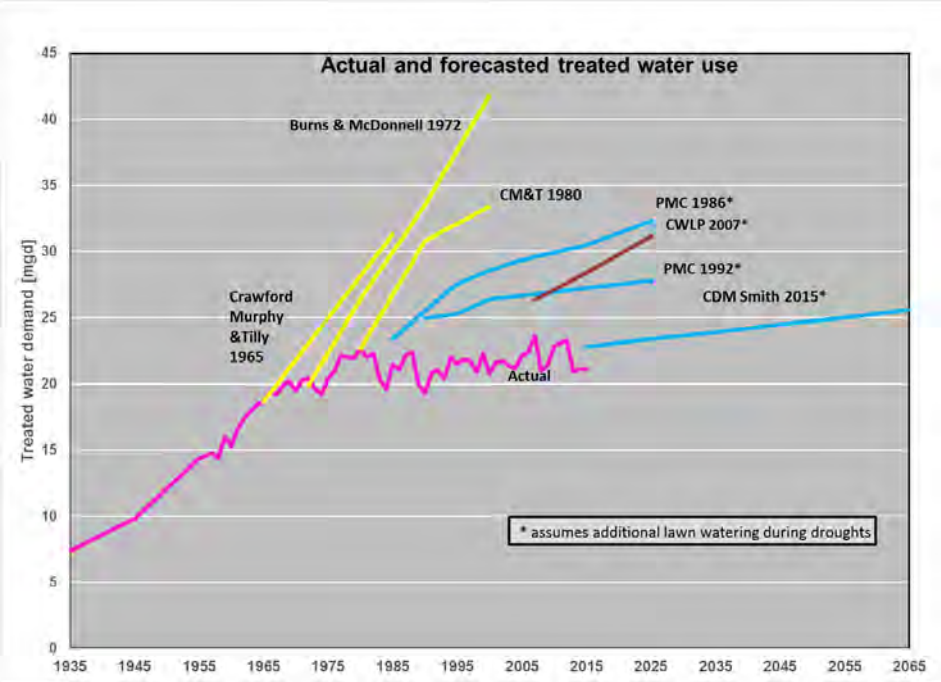
water availability, the City is at risk of not meeting demands (both existing and future) for commercial and residential water use, and for industrial water supply (power plant operation and condenser cooling). Under projected drought conditions the estimated water deficit (demand minus yield) is currently 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:

1. 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 water-consuming 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 43rd

in 2000-2010 and 44th 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 sediment-impaired 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 re-estimated 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,

Carol C. Hays
Executive Director

REFERENCES

EPA, 2008 National Efficiency Standards and Specifications for Residential and Commercial Water-Using Fixtures and Appliances, https://www3.epa.gov/watersense/docs/matrix508.pdf

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, https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf

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 Seelbach

ADDRESS: 3425 Cash River Rd

CITY / STATE: Springfield IL 62711 ZIP:

PHONE: E-MAIL: seelbachgene@gmail.com

COMMENTS:

I believe firmly that it would be far more cost effective to use a combination of gravel pits, wells and possibly some dredging of Lake Springfield (which should be done anyway 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 this area. Chatham (where the growth is) has their own water supply. I don't know the date but I suspect that water usage is not growing quickly. Also, the previous City Council purchased a gravel pit. What happened as a result?? Also, many local farmers will go out of business if Hunter Lake is built. The environmental impact will be far more negative than positive as many many miles of small creeks will be underwater. I Recommend that the Army Corps does NOT issue a permit to build Hunter Lake.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 01, 2016 9:47 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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>

SIERRA CLUB
ILLINOIS CHAPTER

ILLINOIS CHAPTER
70 East Lake Street • Suite 1500 • Chicago, IL 60601

tel: 312.251.1680
fax: 312.251.1780
web: illinois.sierraclub.org

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.

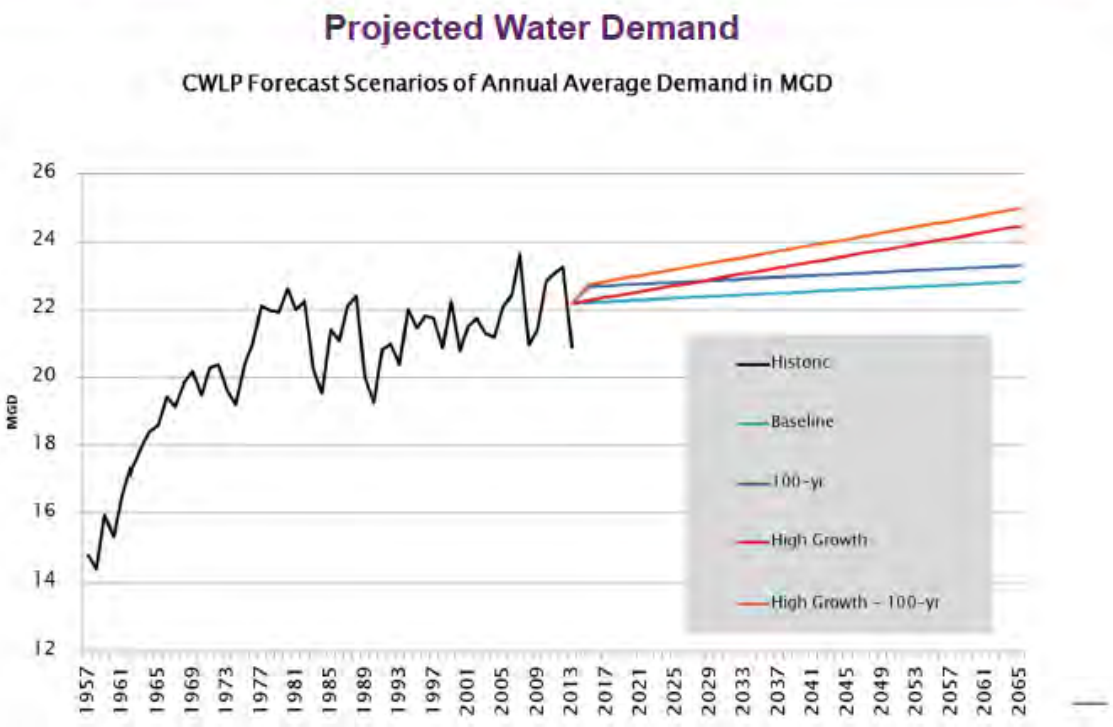
Other associated regional needs have also been identified that may potentially be addressed by the City's proposed project. Specifically, the following regional needs are also recognized:

- 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/00000823.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 http://supplementalwater.cwlp.com/Documents.aspx)- 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



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 http://www.springfieldcityclerk.com/Images/Adobe-PDF-Document-icon-48.png) 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.synapse-energy.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 https://www.epa.gov/coalash/coal-ash-rule) 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 http://www.cwlp.com/electric/generation/EnvironmentalComplianceStudy.pdf) 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 http://www.epa.illinois.gov/Assets/iepa/public-notices/2015/cwlp/public-notice.pdf) 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 https://www.americanrivers.org/conservation-resource/small-streams-wetlands/)

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 https://www.fws.gov/midwest/endangered/mammals/nleb/index.html) 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 https://www.dnr.illinois.gov/conservation/IWAP/Pages/MeasuringProgress.aspx) 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.

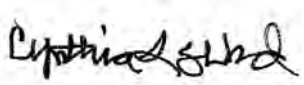
Ducks Unlimited updated the National Wetlands Inventory for Illinois in 2010. These new data should be included in the assessment of project impacts on wetlands. (See https://www.dnr.illinois.gov/conservation/IWAP/Documents/SWGReports/T-52-%20D1%20Updating%20Nat'l%20Wetlands%20Inventory.pdf)

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,



Cindy Skrukrud
Clean Water Program Director
Sierra Club, Illinois Chapter

Cindy.skrukrud@sierraclub.org
312-251-1680 x110

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: STEVE STEWART

ADDRESS: 2716 TIMBER POINTE

CITY / STATE: SPRINGFIELD, IL ZIP: 62702

PHONE: 217-525-1940 E-MAIL: STEVE-STEWART5177@gmail.com

COMMENTS:

#1) The Springfield area needs a supplemental water source, in addition to Lake Springfield.

#2) Supplemental water source is like life insurance - it is an investment to protect family and provide for future needs. I pay for life insurance and haven't died - yet - but I will someday. Hunter Lake or one of the other alternatives is there for when another big drought happens - and it will someday.

#3) I'm glad to see the study being done. After it is complete, it is time to decide and implement.

#4) My grandparents invested #1 to build Lake Springfield. It is time for our generation to invest in a supplemental water supply. This lets Springfield grow and be a place where our grandkids can find work and raise families.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Wednesday, August 24, 2016 12:39 PM
To: Kelley, James C Jr CIV USARMY CEMVR (US)
Cc: Lenz, Gary W CIV USARMY CEMVR (US); Elzinga, William J; Meckes, Ted
Subject: 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

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 quickly 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
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Virginia, IL 62691
taylorccc@gmail.com
217-458-2842 home/office
217-248-2842 mobile

Chandlerville Mayor Levels Charge

Angry Gardner Denies Runoff Caused Floods

By BOB ESTILL

"I could care less where the damn water's going."

That was the angry response from Springfield Utilities Com. Hugh Gardner when pressed 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 sunny with highs in the middle 50s. Tonight will be fair and again quite cool with lows in the lower 30s. Sunday will be partly sunny and warmer with highs around 60.

Precipitation probabilities:
5 per cent today and 5 per cent tonight
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
Temperatures one year ago: High: 58 Low: 52

Airport Temperatures

11 a.m.	58	7 p.m.	53
Noon	59	8 p.m.	49
1 p.m.	58	9 p.m.	48
2 p.m.	57	10 p.m.	45
3 p.m.	57	11 p.m.	43
4 p.m.	57	Midnight	41
5 p.m.	55	1 a.m.	41
6 p.m.	55	2 a.m.	40

"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 gallons 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.

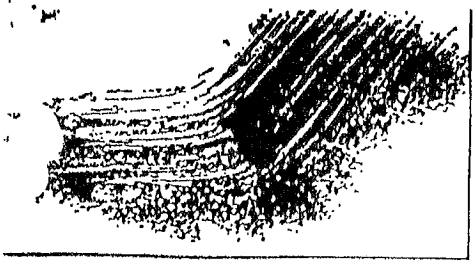
Atterberry said that if the problem continues, they will have to file some form of legal complaint against Springfield but wasn't certain what form it would take.

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 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

COMM. HUGH GARDNER



ht hundred gallons an hour pours over Spaulding Dam spillway.

CWLP workers sandbag pumps in the sub-basement of the Lakeside Power Plant. The fou 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

ake Springfield reached record els Tuesday, and utility workers ambled to keep the city's water pply intact as rising water threated to shut down vital pumps.

t 10 p.m., the lake level was hold- at 564.5 feet above sea level. The evious record level occurred Dec. 1982, when the lake crested at 564. t, said Tom Skelly, water division nager for City Water, Light and wer.

All four of the floodgates at Spauld- Dam were wide open Tuesday al- ing 800 million gallons of water 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 around the city. But Skelly said t only enough to supply the cit 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 ar

See LAKE on pa

High water

Rain raises Lake Springfield to a record level

April 12, 1994: 564.5 ft.
Dec. 2, 1982: 564 ft.
normal: 560 ft.*

*above sea level

Illinois State Journal - Register
April 13, 1994

atrick Quinn hasn't decided if he go, this afternoon. to bring political reform to the go... with little downstate support.

Opening dam gates spilling water downriver

by BILL BUSH 9/28/93
STAFF WRITER

City Water, Light and Power officials said Monday they understand the frustration that flooding downriver of Lake Springfield has caused to residents of lowlying areas, but the utility can't do much about it.

"It's something that we can't avoid if we are to continue to pass through what nature dumps in the watershed," said CWLP spokesman Les Pauly. "And we've been doing that for quite some time."

Heavy rains last week in Lake Springfield's 265-square-mile watershed — southwest of the lake and basically bordered by New Berlin on the north, Waverly on the west, Virden to the south and Divernon on the [illegible] — have once again pushed the South Fork of the Sangamon River over its banks.

CWLP officials have no choice but to open up the Spaulding Dam floodgates when the water reaches 6 inches above the lake's full-pool level of 560 feet about sea level, Pauly said. If the gates aren't opened, CWLP risks flooding the basement of the Lakeside Power Plant, which houses the pumps that provide Springfield residents their drinking water, he said.

The lake was at full pool, about 1.6 feet above average for September, when the storms began last week, said Tom Skelly, CWLP water division manager. Within a couple hours, the lake water level had risen a half-foot, 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 [illegible] erside homeowners') floodi[illegible] er," Skelly acknowledged, "help us fine tune this a little b[illegible] essence, the same situation is be there when we see the la[illegible] come up, and especially whe[illegible] got such extreme events l[illegible] was."

Illinois State Journal - Register

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.

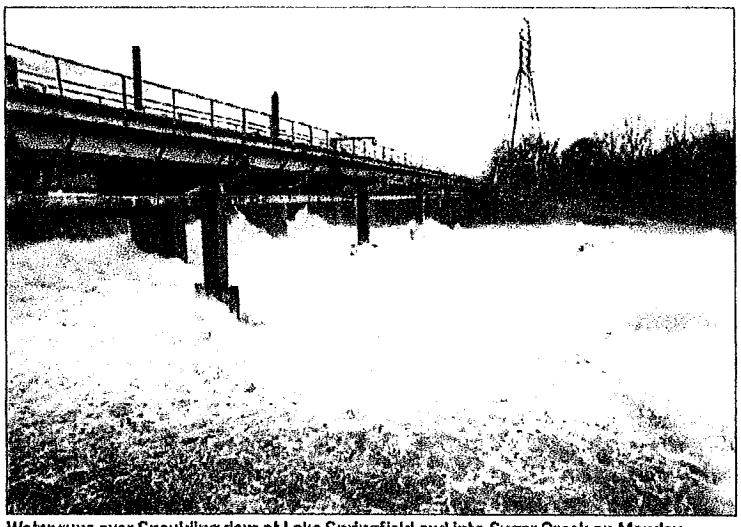
In Kincaid, 15 to 20 homes were surrounded by water along Illinois 104 near the South Fork River, according to the Christian County officials.

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 than 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 airport's 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. RICH SAAL/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 County.

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 outage 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 Talntor 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, city 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 Buedel and The Associated Press contributed to this report. Contact Jason Nevel: 788-1521, jason.nevel@sj-r.com, twitter.com/JasonNevelSJR.

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: FRANK A. TURESKIS

ADDRESS: 800 OVERLOOK DRIVE

CITY / STATE: GLENARM, ILLINOIS ZIP: 62536

PHONE: 217-483-3669 E-MAIL: TURESKISFM@COMCAST.NET

COMMENTS:

I'VE SEEN THE DROUGHT 1953-1955 AND THE 15' SUGAR CREEK FLOW UNDER THE LAKE BRIDGE ON HWY 66 (NOW 55). ALL THE LAND THAT WAS FLOODED BEFORE THE DROUGHT WAS NOTHING BUT A DESERT. IF HADN'T BEEN FOR THE PEOPLE IN THE EARLY 1930's WE WOULDN'T HAVE HAD THE WATER WE HAD. SINCE THE 1950's THE POPULATION 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 HUNTER LAKE WILL PROVIDE QUALITY WATE FOR THE AREA FAR INTO THE FUTURE. THE LAKE WILL PROVIDE NEEDED RECREATION 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.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

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PLEASE PRINT:

NAME: Dave Varner

ADDRESS: 2553 Miami Trl

CITY / STATE: Springfield ZIP: 62707

PHONE: 563-271-8154 E-MAIL: davidmvarner@gmail.com

COMMENTS:

Alternative 1

No Action is not really an alternative

Dredging Lake Springfield should be done regardless

Building Hunter Lake is the best alternative, especially considering the land is mostly purchased

I guess I am surprised the land was purchased 30+ years ago & we are ~~now~~ now just looking at an EIS what if it fails? Does the city have a backup plan to use this land?

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cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

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PLEASE PRINT:

NAME: ED VESELING

ADDRESS: 2400 CAHOKIA DRIVE

CITY / STATE: SPRINGFIELD, IL ZIP: 62702

PHONE: 217-522-9379 E-MAIL: ECV2400@YAHOO.COM

COMMENTS:

I AM A FIRM BELIEVER IN PLANNING FOR THE FUTURE. ALTHO I AM 75 YEARS OF AGE I WANT MY GRANDCHILDREN TO HAVE A STABLE FUTURE 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 OIL WELL FRACKING, ETC WE CANNOT GUARANTEE THAT WELLS WOULD PROVIDE SAFE WATER. WE ARE SEEING AQUIFERS CONTAMINATED ALREADY.

WE SHOULD PROVIDE A SOLID SOLUTION FOR OUR FUTURE 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

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

5 Pickering Lane, Springfield, Illinois 62712 Tel: 217 620-1018 Fax: 217 585-2703 e-mail:pjwagner62@comcast.net

Before the
US Army Corps of Engineers
Rock Island District

In the Matter of	)	
	)	Public Scoping Comment Period
Section 404 Permit Application	)	Ending September 14, 2016
City of Springfield, Illinois	)	
Supplemental Water Supply Project	)	
	)	

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 [1] 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.

[1] 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"[2]. 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." [3].

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

[2] Springfield Supplemental Water Supply Project, Supplemental Environmental Impact Statement, Information Packet, Wednesday August 24, 2016 at page 3.
[3] Id. at page 2.

damaging environmental alternative.[4] 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) Reliance on approximately 760 private marginal land leaseholders to maintain the shoreline. 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) Reliance on private parties to enforce violations of its own Lake Springfield Land Use Plan. 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) Elimination of Lake Springfield recreational opportunities due to lack of funding. The most visible example of this is the City's closure of Lake Springfield Beach due to financial hardship.

4) Reliance on approximately 760 private marginal land leaseholders to maintain the Lake Springfield depth and water capacity. The City has failed year-after-year to provide any resources for maintenance dredging. When this policy is questioned, the City claims

[4] 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 clean-up, 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) Capping Lake licensing fees for high-horsepower large displacement boats. 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) Marketing and exporting water to outside entities. The City continues to seek to market and export water to outside entities.[5] 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.

[5] 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.[6] 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 20th 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

[6] Id. 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

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 Sep 2016

Peter J. Wagner
Wagner Consulting LLC
5 Pickering Lane
Springfield, Illinois 62712
(217) 620-1018

Date

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: Sheila Walk

ADDRESS: 1035 N. 3rd St.

CITY / STATE: Spfld., IL ZIP: 62702

PHONE: 217-744-0660 E-MAIL: sheilawalk@hotmail.com

COMMENTS:

I believe that our current water supply is sufficient. Even during the extreme drought of three years ago, the city did not experience a shortage.

If another or a back-up supply is needed, I prefer options other than a second lake. If more water is needed now, then I prefer dredging the existing lake.

I do not favor putting more land under water or changing the flow of existing streams. I do favor preserving habitats.

I appreciate every day the quality and safety of our public water supply, and I'm proud to live in a city that has a municipally-owned utility.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Friday, August 26, 2016 4:00 PM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, September 08, 2016 11:12 AM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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

--

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

COMMENT FORM

Springfield Supplemental Water Supply Project
Supplemental Environmental Impact Statement
Open House Public Scoping Meeting

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PLEASE PRINT:

NAME: Bonnie Wright
ADDRESS: 3405 Cash River Rd.
CITY / STATE: Springfield, Ill. ZIP: 62711
PHONE: 217-652-2476 E-MAIL: buildsand@comcast.net

COMMENTS:

There are many alternatives to Hunter Lake. Here are a few to make huge changes for Lake Springfield:

Use all of these in conjunction with another lake:

(1) Use gravel pits as a part of the water solution. Simulation of the impact on the aquifers isn't as effective as actually pumping all the pits.

(2) Dredge Lake Springfield!! Decatur has done it and has tremendously impact on their volume.

(3) Water conservation incentives to business and homes.

(4) Use the new generator ~~as~~ instead of the old one which uses more water to clean and cool its engine.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

COMMENT FORM

Page 2 -
Bonnie Wright
3405 Cash River.
S'field, Ill. 62711

Springfield Supplemental Water Supply Project
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PLEASE PRINT:

NAME: _____

ADDRESS: _____

CITY / STATE: _____ ZIP: _____

PHONE: _____ E-MAIL: _____

COMMENTS:

Under the Daulin administration, the purchase of gravel pits for our supplemental water source was approved by the city counsel. Where is their research and reasoning? Apparently they did not agree with building Hunter Lake either.

I talked to a young man tonight who was telling me about his livelihood being threatened - his farm would be under water. A fertilizer company of 5 generations would have their office/home torn down. Not necessary if dredging gravel pits, conservation used in combination at Lake Springfield.

The Army Corp should not approve this Hunter Lake proposal - damage to the environment and plant life and many natural species in the area.

You may also submit comments electronically at:
cemvr-odpublicnotice@usace.army.mil
or
http://supplementalwater.cwlp.com

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Tuesday, September 20, 2016 8:50 AM
To: Kelley, James C Jr CIV USARMY CEMVR (US)
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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: Deizman, Paul <Paul.Deizman@Illinois.gov>
Sent: Wednesday, August 24, 2016 9:50 AM
To: Meckes, Ted
Subject: 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 re-forested 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 $o.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

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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), state-threatened 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.

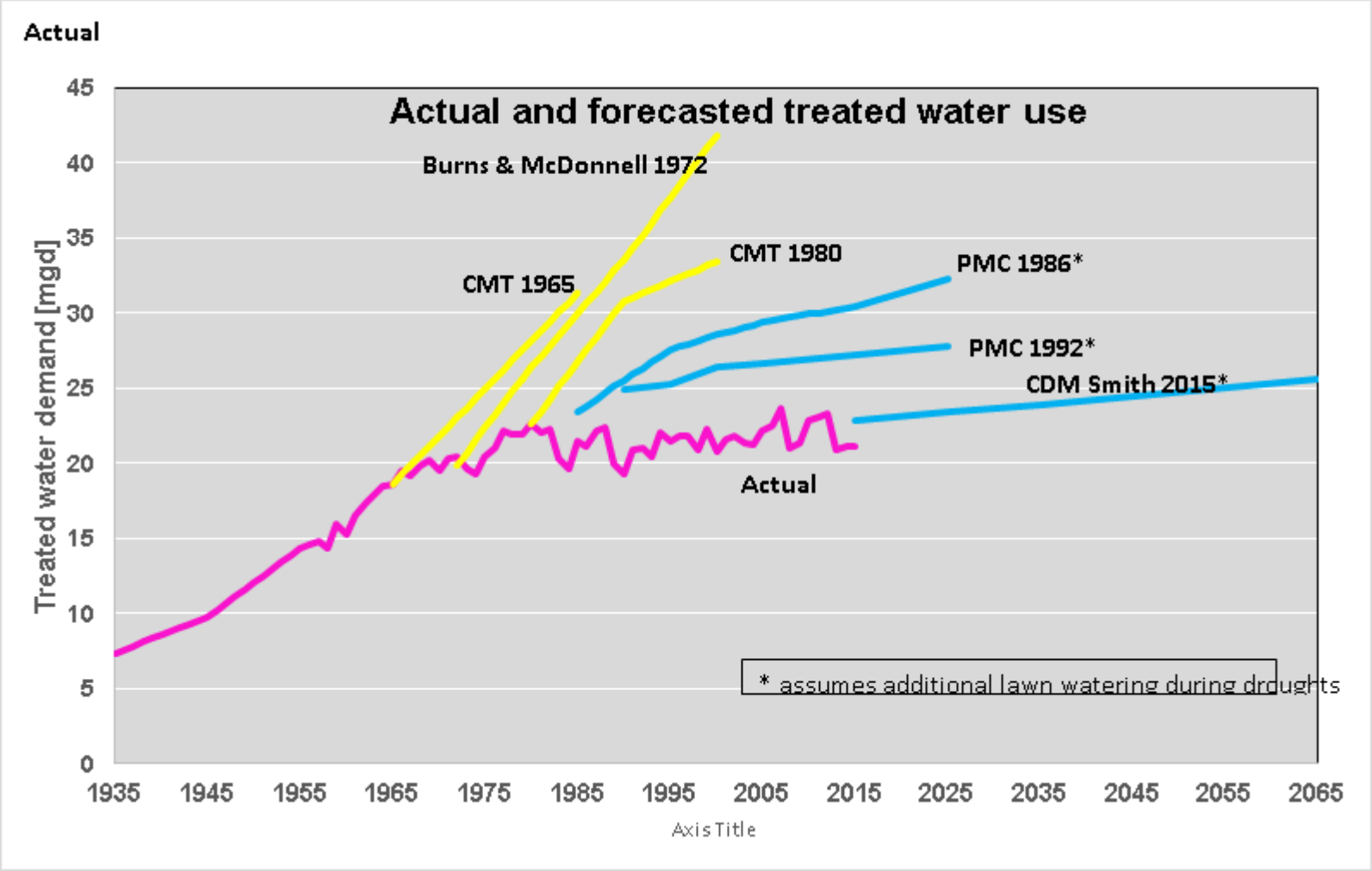
Thank you for the opportunity to comment. Please contact me if you have questions regarding this review and we look forward to further coordination on this project.

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: http://wwx.inhs.illinois.edu/files/8513/6191/1289/Sangamon_mussels.pdf


Actual
Actual and forecasted treated water use
Burns & McDonnell 1972
CMT 1965
CMT 1980
PMC 1986*
PMC 1992*
CDM Smith 2015*
Actual
* assumes additional lawn watering during droughts
Treated water demand [mgd]
45
40
35
30
25
20
15
10
5
0
1935
1945
1955
1965
1975
1985
1995
2005
2015
2025
2035
2045
2055
2065
Axis Title

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Thursday, August 25, 2016 1:00 PM
To: Kelley, James C Jr CIV USARMY CEMVR (US)
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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
http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

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

Illinois Historic
Preservation Agency

1 Old State Capitol Plaza, Springfield, IL 62701-1512

www.illinoishistory.gov

FAX 217/524-7525

SURVEY REQUEST

SEP 12 2016

Sangamon County
Springfield
COERI-CEMVR-OD-P-2016-95
New construction, supplemental water supply - Hunter Lake - CWLP

PLEASE REFER TO: IHPA LOG #009082916

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:JSP

Enclosure

From: CEMVR-OD Public Notice <CEMVR-ODPublicNotice@usace.army.mil>
Sent: Friday, August 26, 2016 3:59 PM
To: Kelley, James C MVR
Cc: supplementalwater@cwlp.com; Marchaterre, Martin
Subject: 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

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 PM
To: Marchaterre, Martin; Elzinga, William J; Meckes, Ted
Cc: Jones, Donna M MVR; Lenz, Gary W (Ward) MVR
Subject: FW: EMAIL ROUTING FOR PN: 2016-0095, REPLY TO JAMES C. KELLEY
Attachments: 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.

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

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

CEMVR-OD-P-2016-0095

Section: 404

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**

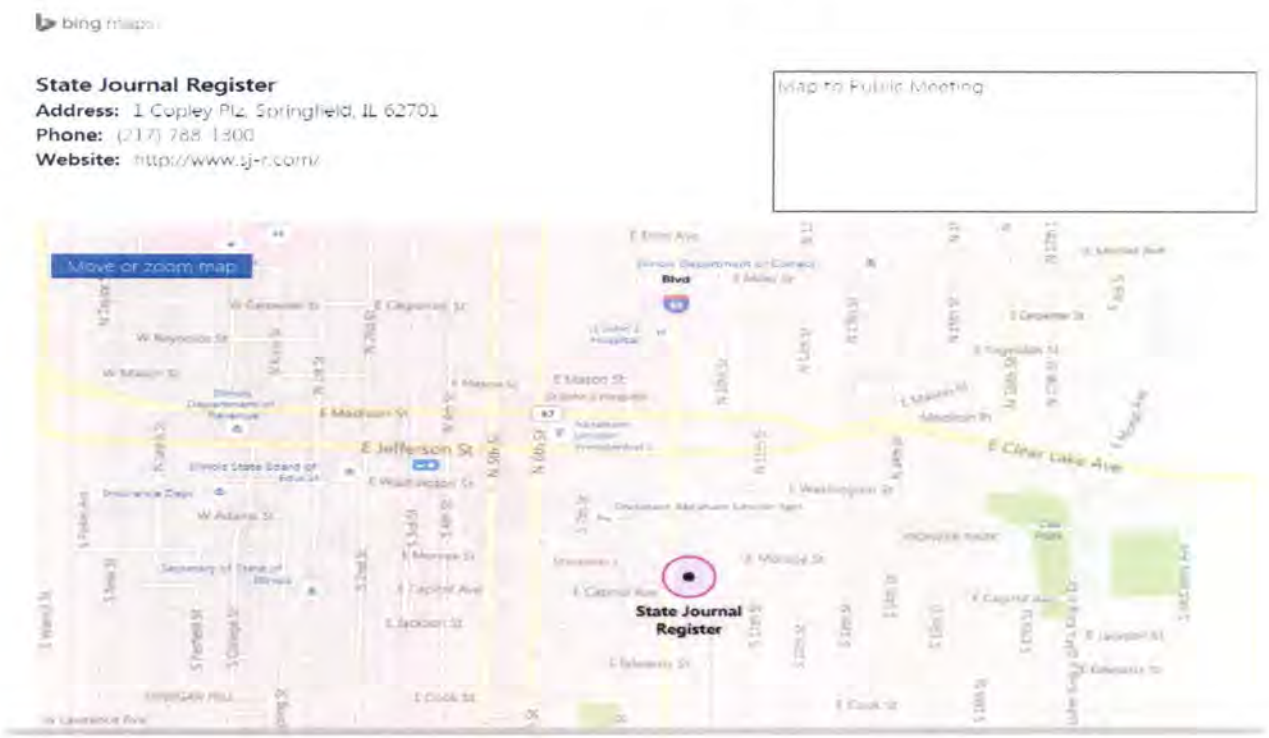
A public scoping meeting will be held on August 24, 2016 from 5:00 – 8:00 p.m. at the State Journal-Register, 1 Copley Plaza, Springfield, IL. The public is invited to submit comments on the scope of this SEIS no later than the date identified in the "Dates" section of this notice. After the Corps prepares 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 cemvr-odpublicnotice@usace.army.mil. For additional information contact: Mr. James Kelley, Ph. **(309/794-5373)**.

Attach
Map

James Kelley
Project Manager
Illinois/Missouri Section
Regulatory Branch



REQUEST TO POSTMASTERS: Please post this notice conspicuously and continuously until the expiration date specified at the top of page 1.

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

OCT 04 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 (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 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[1]. 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[2]. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website[3]. 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).

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[1] 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

[2] Ibid, p. 11 and p. 16.

[3] 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[4] (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

CC's (via email):
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

[4] http://www.globalchange.gov/