APPENDIX C

Agency and Tribal Coordination

Coordination Meetings held with Federal, State, and Local Government Agencies

Date	Agencies	Topics
June 15, 2016	City of Springfield, USACE, USFWS	Endangered Species Act and Bat Surveys
July 7, 2016	City of Springfield, IEPA, USACE	Project Kick-off Meeting, discussion of planning phases including scoping, data collection, draft EIS, alternatives analysis, technical studies, schedule, communications, and action items
September 16, 2016	City of Springfield, IDNR, IEPA, IHPA, USACE, USEPA, USFWS	Discussion of Springfield Supplemental Water Supply Project including timeline, purpose and need, alternatives, agency concerns, studies, mitigation planning, next steps.
November 1, 2016	City of Springfield, IEPA, USACE	Discussion of 401 Water Quality Certification for the project, watershed loading study, and antidegradation analysis.
December 5, 2016	City of Springfield, IDNR, USACE	IDNR input on state listed sensitive species, discussions with USFWS on T&E species.
March 8, 2017	City of Springfield, IEPA, USACE	Progress Meeting, basis for purpose and need, alternatives, Hunter lake configuration, permitting, cultural resources, public involvement, schedule, and action items.
October 27, 2017	City of Springfield, IDNR, USACE	Discussion regarding stream mitigation and LEDPA,
September 9, 2022	City of Springfield, IDNR, USACE	Overview of project and revised P&N, recreational facilities conceptual plan,
December 12, 2022	USACE, IHPA	Discussion of approach for updating Programmatic Agreement.
April 5, 2023	USACE, USFWS	Discussion of species currently listed as protected per the ESA and options for compliance.

Pawnee Community Unit School District #11

Creating a community of empowered learners in an Atmosphere of mutual respect and Trust!

Mr. Gary M. Alexander, Superintendent Mr. Tim Kratochvil, High School/Junior High Principal Mrs. Jennifer Loftus, Grade School Principal

August 22, 2016

AUG 25 2016

Mr. James Kelley, Project Manager U.S. Army Corps of Engineers Rock Island District Clock Tower Building Post Office Box 2004 Rock Island, II 61204

Dear Mr. Kelley,

I am writing this letter in response to a public notice I received on August 22, 2016. The public notice applicant was from the City of Springfield, City, Water, Light & Power. The project is a proposed Springfield Supplemental Water Supply Project previously known as Proposed Water Supply Reservoir Hunter Lake. This letter is to express the viewpoint of the Pawnee Community Unit District #11 school board and administration. The proposed project is a project that brings great concern for our school district. I attended a meeting held at the Pawnee Village board. During this meeting, representatives from Springfield presented information on the project. The concern the school has is we already have flooding issues caused by a creek that is located to the east of our property. I am starting my 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

Dary M. alelan

COMMENT FORM

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

Thank you for attending tonight's public scoping meeting. Your input and participation are important. Please take a few minutes to provide us with your comments, by completing this form here or mailing it to the address on the back. Attach additional pages if you would like to provide additional information. All comments received by September 14, 2016 will be included in the Supplemental Environmental Impact Statement.

PLEASE PRINT:
NAME: MIKE GOLDASICH
ADDRESS: 2513 CHAPPIN HUL PO
ADDRESS: 2513 CHAPEL HUL PO: CITY/STATE: SPEW IL 62702 ZIP: 62702
PHONE: 217. 727. 1432 E-MAIL: ONZEROTIS & ONZEROTIS. COM
COMMENTS:
· WHERE DOES TAYLORUME CHT ITS WATER SUPPLY ?
WHAT AREAS MINE STENIED BY LICK CREEK RESERVOIR?
WHAT AND SHAPED BY LICK CROSK RESERVOIR -
- WHERE DOES CHAMPAGN/URBANA GET ITS WATER SUPPLY?
If would HELP IF THE MAP WOND HAVE DELINGATION THE
EUSTING FROM THE PROPOSED ELEMENTS.
707070
WHY DOES THE MAP NOT SHOW THE TREAS UNDERGROUND WATER ?
VINIOL V
IT WOULD SEEM THAT IT WOUND BE POSSIBLE TO CONNECT THE
EXISTING LAKE @ KINGATE TO THE SOUTH FORK OF THE
SANDAMON MIVER WHICH THEN CONNECTS TO LAKE SPEND.
THX.

You may also submin comments electronically at: cemvr-odpublic otice@usace.army.mil

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:

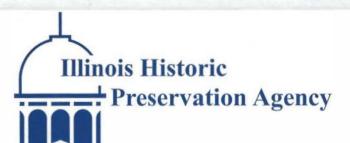
Aya, kikwehsitoole. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

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



SURVEY REQUEST

IHPA LOG #009082916

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

www.illinoistoryogov

SEP 1 2 2016

Sangamon County
Springfield

COERI-CEMVR-OD-P-2016-95

New construction, supplemental water supply - Hunter Lake - CWLP

September 7, 2016

James Kelley
US Army Corps of Engineers, Rock Island Dist.
District Engineer, ATTN: OD-P
Clock Tower Building, P.O. Box 2004
Rock Island. IL 61204-2004

Dear Mr. Kelley:

Thank you for requesting comments from our office concerning the possible effects of the project referenced above on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

PLEASE REFER TO:

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



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

noten Mise

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

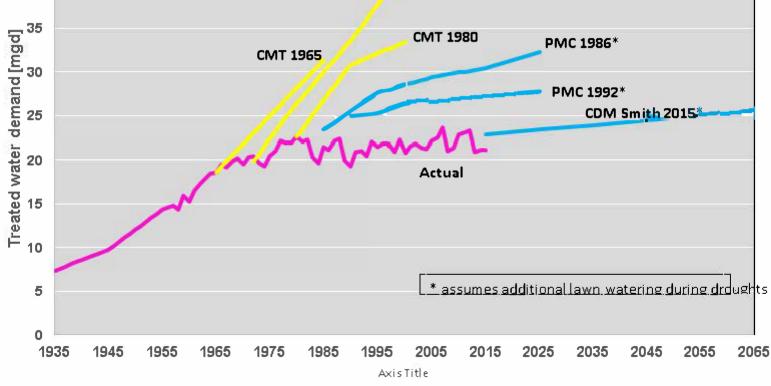
Actual and forecasted treated water use

Burns & McDonnell 1972

CMT 1980

PMC 1986*

PMC 1992*





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

OCT 0 4 2016

REPLY TO THE ATTENTION OF: E-19J

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

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

Dear Mr. Kelley:

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

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

On July 26, 1989, the City submitted a joint permit application to USACE and the Illinois Environmental Protection Agency (IEPA) for a Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification (WQC) for construction of the proposed Hunter Lake Reservoir. A Notice of Intent to prepare a Draft EIS (DEIS) for the construction of the Hunter Lake Reservoir was published by USACE in the Federal Register on October 31,

1989. USACE, in conjunction with the City, prepared a DEIS that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. The DEIS was published in April 1999. A Final EIS (FEIS) was published in November 2000 identifying the construction of the Hunter Lake Reservoir as the preferred alternative; however, a final decision document (Record of Decision) was not issued.

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

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

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

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

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

PURPOSE AND NEED / DEVELOPMENT OF PROJECT ALTERNATIVES

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

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

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

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

- No Violation of Other Laws The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
- o **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 WOS. 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 reviews¹. 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 change². Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website³. 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).

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 Program⁴ (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/





TRIBAL HISTORIC PRESERVATION OFFICE

Date: October 5, 2016 File: 1617-11801L-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



Miami Tribe of Oklahoma

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



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

July 23, 2021

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

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

Dear Mr. Kelley,

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

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

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

Respectfully,

Diane Hunter

Diane Hunter

Tribal Historic Preservation Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

August 5, 2021

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

VIA ELECTRONIC MAIL ONLY

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

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

Dear Mr. Kelley:

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

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

On July 26, 1989, the City submitted a joint permit application to USACE and the Illinois Environmental Protection Agency (IEPA) for a Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification (WQC) for construction of the proposed Hunter Lake Reservoir. A Notice of Intent to prepare a Draft EIS (DEIS) for the construction of

the Hunter Lake Reservoir was published by USACE in the Federal Register on October 31, 1989. USACE, in conjunction with the City, prepared a DEIS that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. The DEIS was published in April 1999. A Final EIS (FEIS) was published in November 2000 identifying the construction of the Hunter Lake Reservoir as the preferred alternative; however, a final NEPA decision document (Record of Decision) was not issued.

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

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

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

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

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

Sincerely,

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

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

CC's (via email, w/enclosures):

Kristen Lundh, USFWS Nathan Grider, IDNR Thaddeus Faught, IEPA Brian Koch, IEPA Darren Gove, IEPA CJ Wallace, IHPA

EPA Detailed Comments

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

PURPOSE AND NEED

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

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

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

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

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

DEVELOPMENT OF PROJECT ALTERNATIVES

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

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

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

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

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

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

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

RESPONSE TO COMMENTS RECEIVED

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

PROJECT TRANSPARENCY

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

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

OCT 0 4 2016

REPLY TO THE ATTENTION OF: E-19J

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

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

Dear Mr. Kelley:

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

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

On July 26, 1989, the City submitted a joint permit application to USACE and the Illinois Environmental Protection Agency (IEPA) for a Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification (WQC) for construction of the proposed Hunter Lake Reservoir. A Notice of Intent to prepare a Draft EIS (DEIS) for the construction of the Hunter Lake Reservoir was published by USACE in the Federal Register on October 31,

1989. USACE, in conjunction with the City, prepared a DEIS that evaluated a range of alternatives to provide supplemental water supply to meet a projected deficit in water availability. The DEIS was published in April 1999. A Final EIS (FEIS) was published in November 2000 identifying the construction of the Hunter Lake Reservoir as the preferred alternative; however, a final decision document (Record of Decision) was not issued.

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

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

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

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

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

PURPOSE AND NEED / DEVELOPMENT OF PROJECT ALTERNATIVES

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

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

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

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

- No Violation of Other Laws The proposed project must not cause or contribute to violation of state water quality standards or toxic effluent standards, and must not jeopardize the continued existence of federally-listed endangered or threatened species or their critical habitat(s);
- o **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 WOS. 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 reviews¹. 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 change². Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website³. 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).

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 Program⁴ (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):

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Ted Meckles, Springfield City Water Light and Power

⁴ http://www.globalchange.gov/