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Via Electronic Filing

October 22, 2008

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Subject: Loup River Hydroelectric Project
FERC Project No. 1256
Pre-Application Document Revision

Dear Secretary Bose:

With a letter dated October 16, 2008, Loup River Public Power District (Loup Power District or District) electronically filed its Pre-Application Document (PAD) with its Notice of Intent to file an Application for New License for the Loup River Hydroelectric Project, FERC Project No. 1256.

Transmitted herewith is a revision to Section 6 of the PAD – Preliminary Issues and Studies Lists. Pages 6-12 and 6-13 of the PAD should be deleted and replaced with the attached pages 6-12A and 6-13A. The changes to the text of these two pages are highlighted and underlined and noted with a revision date of October 22, 2008. Two courtesy copies of the revision are being sent to FERC and also distributed to the original distribution list for the PAD. Additionally, the revised pages have been inserted into the electronic version of the PAD on the District's relicensing website: www.loup.com/relicense and a note has been added to the site indicating the revision date for Section 6.

Respectfully submitted,

Neal D. Suess
President/CEO
Loup Power District

Attachments: Revised PAD pages 6-12A and 6-13A
Distribution List

SECTION 6

PRELIMINARY ISSUES AND STUDIES LISTS

SECTION 6 PRELIMINARY ISSUES AND STUDIES LISTS

"Based on the resource description and impacts discussion required…; the pre-application document must include with respect to each resource area identified [in 18 CFR §5.6(d)(3)], a list of: (i) [i]ssues pertaining to the identified resources; (ii) [p]otential studies or information gathering requirements associated with identified issues; (iii) [r]elevant qualifying Federal and state or tribal comprehensive waterway plans; and (iv) [r]elevant resource management plans." 18 CFR §5.6(d)(4)

During preparation of the PAD, the District held a series of meetings with stakeholders—including resource agencies, non-governmental organizations, Project workgroups, and the general public—to identify initial issues, concerns, and questions potentially related to operation of the Project (see Appendix A for the Summary of Contacts). The District carefully considered each of the issues identified as well as input from agencies and other stakeholders. Based on available existing information, the District determined which issues require further study or information gathering, which issues can be addressed with existing information, and which issues are not related to Project relicensing.

Section 6.1 summarizes the initial list of potential issues, concerns, and questions identified during the stakeholder meetings by the primary resource area affected. Section 6.2 lists and briefly describes proposed studies or information-gathering efforts to address these issues. Section 6.3 describes the identified issues that the District believes can be resolved with available existing information or that are not related to Project relicensing and provides discussion as to why no formal study is necessary.

Correspondence with resource agencies regarding Project issues, concerns, and questions as well as summaries from agency and public meetings are included in Appendix A.

6.1 RESOURCE ISSUES

Resource agencies, non-governmental organizations, and the public identified a number of potential issues, concerns, and questions related to Project operations and the environment in which the Project exists. Many of these issues are interrelated and apply to more than one resource area. The majority of issues were primarily related to potential impacts on river ecology, fisheries, and threatened and endangered species and their habitat. For many of the issues, no information was provided that indicated a direct effect from the Project, and no information has been identified to indicate no effect. At several of the agency meetings, it was noted that the issues identified were initial concerns and that as agencies get a better understanding of Project operations and available resource information, some concerns may be determined to be irrelevant and some may have merit and require further investigation. In addition, as new information is gathered and evaluated as a result of proposed studies, new issues or

concerns may be identified. The following subsections summarize the key issues identified to date by primary resource area. The entities who identified the issue are listed in parentheses.

Geology and Soils

- Reduced peak flows in the Loup River bypass reach may affect sandbar development. (USFWS, NGPC)
- Sediment-deprived flow resulting from Project dredging operations at the Settling Basin may affect sandbar formation, riverine habitat, and threatened or endangered species habitat in the Platte River. (USFWS, NGPC)
- Does "clear" water released from the Tailrace Canal cause channel bed, bar, and bank degradation in the Platte River? (USGS)
- Hydrocycling may affect sandbars and other riverine habitat in the Platte River, which may affect threatened or endangered species. (USFWS, NGPC)
- Dredging and discharge activities at the Settling Basin may affect piping plover and interior least tern nesting activities on the North Sand Management Area (North SMA). (USFWS, NGPC)
- Dredging and discharge activities may cause entrapment, entrainment, and mortality of fish. (USFWS, NGPC)
- Can Lake Babcock and Lake North be dredged to provide improved aesthetics and utilization for recreation? (Public)

Water Resources

- Flow depletion on the Loup River below the point of diversion at Genoa may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)
- Reduced flows in the Loup River bypass reach may increase human disturbance, which may affect nest initiation and/or abandonment for piping plovers and interior least terns. (USFWS, NGPC)
- Flow depletion on the Loup River above the point of diversion at Genoa may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)
- Reduced flows in the Loup River bypass reach may have resulted in a narrower channel, which may affect flooding of adjacent property. (Public)

- Flow depletion on the Platte River system from evaporative losses and irrigation withdrawals from the Loup Power Canal may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)
- Hydrocycling may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)
- Changes in water temperature resulting from reduced flows in the Loup River bypass reach may affect habitat, aquatic species, and threatened or endangered species. (USFWS, NGPC, USGS)
- Changes in water temperature resulting from reduced flows in the Loup River bypass reach may affect bacteria levels in public water wells. (NHHS)
- Changes in water temperature resulting from hydrocycling may affect habitat, aquatic species, and threatened or endangered species in the Platte River. (USFWS, NGPC, USGS)
- Intermittent flows released from the Tailrace Canal into Lost Creek may affect aquatic resources. (USFWS)
- What are the sources of water quality impairments in the Loup Power Canal and regulating reservoirs associated with PCB, E. coli, pH, and nutrient levels? (USFWS)
- Changes in sediment and discharge in the Loup River bypass reach may affect the development of ice jams on the Loup River and reduce scouring of sandbars that is beneficial for threatened or endangered species habitat. (USFWS)
- Does the amount of water diverted (or not diverted) into the Loup Power Canal affect the formation of ice jams? (NDNR)

Several issues were raised relative to water rights and are considered a subset of water resources issues:

- How is just compensation (compensation to the District from irrigators to replace lost power) calculated for irrigation use upstream of the point of diversion and for irrigation use from the Loup Power Canal? (NDNR)
- Why does Loup Power District allow irrigation from the Loup Power Canal? Loup Power District appears to operate as an irrigation district. (NDNR)
- What would Loup Power District do if an irrigator requests water from the Loup River bypass reach? (NDNR)

- Would increased irrigation upstream of the point of diversion (requiring subordination of Loup Power District's water right) adversely affect Loup Power District's ability to produce power and economic viability? (NDNR)
- Does Loup Power District need a storage permit for Lake Babcock and Lake North? (NDNR)
- Loup Power District has entered into agreements to provide water to others (NGPC & farmers along Lost Creek east of the Tailrace Canal) for uses other than power production, which is not authorized under the District's water right. (NDNR)
- Irrigators expressed concern that relicensing will affect their ability to exercise their water right from the Loup Power Canal. (Public)
- Does operation of the Loup Power Canal affect channel migration of the Loup River bypass reach, resulting in less land for some property owners and more for others? (Public)

Fish and Aquatic Resources

- Do reduced flows in the Loup River bypass reach resulting from Project operations affect hydraulic habitat connectivity and distribution? (USGS)
- Is the Diversion Weir at the Project Headworks a barrier to fish passage? (NGPC)
- Do low flows resulting from hydrocycling cause stranding and possible mortality of fish? (USFWS, USGS)

Wildlife and Botanical Resources

- Does operation of the Project (hydrocycling and sediment) affect vegetation species composition and distribution? (USGS)
- Power lines associated with the Project may affect migratory birds (collisions). (USFWS)

Wetlands, Riparian, and Littoral Habitat

- Reduced flows in the Loup River bypass reach may result in degradation or loss of wetlands. (USFWS)

Rare, Threatened, and Endangered Species

Nearly all of the issues noted under Geology & Soils and Water Resources are related to potential effects on threatened and endangered species, specifically the piping plover, interior least tern, and pallid sturgeon, and are not repeated here.

- The North American river otter historically inhabited the Loup River and has recently been released upstream. Possible impacts of Project operations on this species are unknown. (NGPC)

Recreation and Land Use

- Does the Project provide adequate recreation opportunities? Are additional facilities needed? (NPS)
- Have the recreational components of the Project been maintained and enhanced during the Project period? (USFWS)
- Is adequate access provided to recreational resources? (NPS)
- Are there any adjacent land uses that are in conflict with the Project? (NPS)
- Can the Lake North fishery be improved through the installation of jetties? (NGPC)

Aesthetic Resources

No issues were identified regarding aesthetic resources.

Cultural Resources

- The Project is considered eligible for listing on the National Register of Historic Places (NRHP) and should be nominated. (Nebraska SHPO)
- A programmatic agreement (PA) is needed to establish protocols for compliance with Section 106 of the National Historic Preservation Act (NHPA). (Nebraska SHPO)
- A cultural resources management plan (CRMP) is needed to establish protocols for communication with the Nebraska SHPO regarding District operations that may affect cultural resources. (Nebraska SHPO)

Socio-Economic Resources

- Hydrocycling at the Columbus Powerhouse provides an economic benefit related to power production and energy costs for the entire state of Nebraska, and this operational flexibility should be maintained. (NPPD)

Tribal Resources

Issues of potential concern to tribes recognized as having a potential interest in the Project are considered privileged and are included in the privileged section of the PAD.

6.2 PROPOSED STUDIES

After carefully considering all of the potential issues, concerns, and questions raised by the participants during the initial consultation process, the District developed a preliminary list of proposed studies. As discussed in Section 6.1, above, the issues identified were initial concerns, and as agencies get a better understanding of Project operations and available resource information, some concerns may be determined to be irrelevant and some may have merit and require further investigation. In addition, as new information is gathered and evaluated as a result of proposed studies, new issues or concerns may be identified. Of the initial issues, some are specific in nature, and studies were designed to address these specific concerns. These studies and their goals are as follows:

- Fish Sampling – Determine the species abundance, composition, and distribution of sport fisheries in the Loup Power Canal.
- Fish Passage – Determine if the Diversion Weir is a barrier to fish movement upstream.
- Recreational User Survey – Determine the public awareness, usage, and demand of the Project's existing recreational facilities to determine if potential improvements are needed.
- Creel Survey – Determine the status of Project fisheries and how the fisheries are used by anglers.
- Land Use Inventory – Determine specific land use of properties that abut the Project Boundary to identify potential conflicts and/or opportunities.
- Section 106 Compliance – Programmatic Approach – Achieve NHPA Section 106 compliance through a programmatic, ongoing relationship between the District and the Nebraska SHPO.

Other issues are more complex and interrelated: specifically, those dealing with Loup and Platte river processes and ecosystems. Discussions with resource agencies identified that the first step in addressing many of these interrelated concerns is to gain an understanding of the effects of the Project on certain physical parameters of the environment. These studies will provide a valuable basis for all parties to better understand and appreciate the complex natural environment in which the Project is located. These studies and their goals are as follows:

- Sedimentation – Determine if Project operations materially affect sediment transport within the Loup River bypass reach and the Platte River downstream of the Tailrace Canal.
- Hydrocycling – Determine the effect of Project operations on the sub-daily hydrograph and stage of the Platte River downstream of the Tailrace Canal.

- Water Temperature in the Platte River – Determine if Project operations materially affect water temperature in the Lower Platte River.
- Water Temperature in the Loup River Bypass Reach – Determine if Project operations materially affect water temperature in the Loup River bypass reach.
- Flow Depletion in the Loup River Bypass Reach – Determine the effect on riverine habitat of reduced flows in the Loup River bypass reach resulting from Project operations.

The intent of these studies is not to evaluate the Project's effect on a specific resource, such as habitat, migration or breeding patterns, or food sources. The intent is to use existing information to the extent possible and, where necessary, supplement with data collected during the study phase to evaluate the physical, measurable effects of the Project on riverine characteristics. Based on the findings of these studies, the level or magnitude of the physical change will be compared against a baseline and/or Project alternative. The comparison of the existing conditions to a baseline and/or a Project alternative will be performed in coordination with resource agencies through NEPA and/or Section 7 of the ESA. The determination of effect based on this comparison may identify the need for resource-specific evaluations. The level or magnitude of the physical change will be evaluated in coordination with the appropriate resource agencies to determine the effects on resources and the need for resource specific evaluations.

Although the District proposes to perform the listed studies for the above-mentioned purposes, this should not be interpreted as an acknowledgement at this point in time that Project operation has any negative impact on the environment. In fact, the District anticipates that in several instances, study results may demonstrate that Project operation has little or no incremental effect.

Data and information gained from performing the proposed studies should prove useful in determining the following:

- What the existing conditions are
- Why some of the expressed issues and concerns may prove to be unwarranted
- Why some expressed issues and concerns may be completely unrelated, or only marginally related, to Project operation
- Whether additional studies may be needed
- What type of additional studies may be needed
- Where mutually agreeable PM&E measures may be possible
- Whether operational alternatives should be investigated

Table 6-1, below, lists the studies proposed by the District to provide additional information to address issues, concerns, and questions raised by resource agencies and other stakeholders. Following the table, a narrative describes the goal of each study, the reason for conducting the study, and the study methodology.

The studies proposed by the District will provide a better understanding of how Project operations may affect water resources, sediment, and other issues related to river ecology and habitat. Depending on the initial results, these studies may need to be revised or expanded or additional studies may be required to better understand the effects of the Project.

Table 6-1. Proposed Studies

Study No.	Proposed Study	Study Goal
1.0	Sedimentation	Determine if Project operations materially affect sediment transport within the Loup River bypass reach and the Platte River downstream of the Tailrace Canal.
2.0	Hydrocycling	Determine the effect of Project operations on the sub-daily hydrograph and stage of the Platte River downstream of the Tailrace Canal.
3.0	Water Temperature in the Platte River	Determine if Project operations materially affect water temperature in the Lower Platte River.
4.0	Water Temperature in the Loup River Bypass Reach	Determine if Project operations materially affect water temperature in the Loup River bypass reach.
5.0	Flow Depletion in the Loup River Bypass Reach	Determine the effect on riverine habitat of reduced flows in the Loup River bypass reach resulting from Project operations.
6.0	Fish Sampling	Determine the species abundance, composition, and distribution of sport fisheries in the Loup Power Canal.
7.0	Fish Passage	Determine if the Diversion Weir is a barrier to fish movement upstream.
8.0	Recreational User Survey	Determine the public awareness, usage, and demand of the Project's existing recreational facilities to determine if potential improvements are needed.
9.0	Creel Survey	Determine the status of Project fisheries and how the fisheries are used by anglers.
10.0	Land Use Inventory	Determine specific land use of properties that abut the Project Boundary to identify potential conflicts and/or opportunities.
11.0	Section 106 Compliance – Programmatic Approach	Achieve NHPA Section 106 compliance through a programmatic, ongoing relationship between the District and the Nebraska SHPO.

Study No. 1.0, Sedimentation

Goal – Determine if Project operations materially affect sediment transport within the Loup River bypass reach and the Platte River downstream of the Tailrace Canal relative to a baseline or alternative condition.

Reason for Study – Sediment transport is a factor in sandbar formation, aquatic and terrestrial habitat creation and maintenance, bank erosion, and channel aggradation/degradation. Additionally, sediment transport may be a factor in ice jam formation and associated flooding.

Methodology – The proposed methodology for this study is as follows:

1. Develop a sediment budget from existing data.
2. Conduct a specific gage analysis using existing USGS data.
3. Determine rate of aggradation/degradation from existing cross section data.
4. Review existing ice information in the vicinity of the Project.

Study No. 2.0, Hydrocycling

Goal – Determine the effect of Project operations on the sub-daily hydrograph and stage of the Platte River downstream of the Tailrace Canal relative to a baseline or alternative condition.

Reason for Study – Hydrocycling affects Platte River stage and discharge on a sub-daily basis. Resource agencies have indicated that changes in stage and discharge are thought to be factors in creation and maintenance of riverine habitat, including piping plover, interior least tern, and sturgeon habitat. Additionally, changes in stage and discharge may affect fish mobility.

Methodology – The proposed methodology for this study is as follows:

1. Utilize existing (15-minute increment) NDNR and USGS gage data to evaluate the hydrograph during Project operations and compare against baseline or alternative hydrographs.
2. Utilize existing hydraulic model information from USACE and other agencies to evaluate change in stage during Project operations and compare against baseline or alternative hydrographs.
3. Utilize existing hydraulic model information from USACE and other agencies to evaluate change in stage during Project operations and compare against the effective or dominant discharge.

Study No. 3.0, Water Temperature in the Platte River

Goal – Determine if Project operations materially affect water temperature in the Lower Platte River relative to a baseline or alternative condition.

Reason for Study – Water temperature is thought to be a spawning and migration cue of pallid sturgeon.

Methodology – Analyze water temperature, ambient temperature, and flow data from existing USGS Gage 06805500 on the Platte River at Louisville.

Study No. 4.0, Water Temperature in the Loup River Bypass Reach

Goal – Determine if Project operations materially affect water temperature in the Loup River bypass reach relative to a baseline or alternative condition.

Reason for Study – Water temperature is a factor in fish mortality.

Methodology – Collect and analyze water temperature, ambient temperature, and Loup River flow data at the Diversion Weir and at USGS Gage 06793000 on the Loup River near Genoa. Water temperature sensors would be established at the Diversion Weir and USGS Gage 06793000.

Study No. 5.0, Flow Depletion in the Loup River Bypass Reach

Goal – Determine the magnitude of flow reduction in the Loup River bypass reach resulting from Project operations relative to a baseline or alternative condition.

Reason for Study – Diminished flows related to Project operations may affect riverine habitat distribution, including piping plover and interior least tern habitat and fisheries habitat.

Methodology – The proposed methodology for this study is as follows:

1. Use existing gage data to determine flow frequency and flow duration curves for current Project operations and baseline or alternative operations.
2. Evaluate frequency of effective or dominant discharge events.
3. Utilize existing hydraulic model information from USACE and other agencies to evaluate change in stage during Project operations and compare against baseline or alternative hydrographs.

Study No. 6.0, Fish Sampling

Goal – Determine the species abundance, composition, and distribution of sport fisheries in the Loup Power Canal.

Reason for Study – To determine the health of the sport fishery population in the Loup Power Canal.

Methodology – NGPC will conduct sampling along representative sections of the canal. The District will provide assistance regarding access to the canal.

Study No. 7.0, Fish Passage

NGPC requested a tagging study to determine if fish are able to traverse the Diversion Weir to reach areas upstream. The District is proposing a study of the physical parameters of flow at the Diversion Weir and Sluice Gate Structure to analyze the frequency, stage, and velocity of flows to determine if a reasonable pathway exists for fish movement upstream of the point of diversion.

Goal – Determine if the Diversion Weir is a barrier to fish movement upstream.

Reason for Study – Fish movement upstream and downstream of the point of diversion is considered important for a healthy fishery.

Methodology – Evaluate hydraulic flow, velocity, and stage parameters at the Diversion Weir to determine if reasonable pathways and opportunities exist for fish movement.

Study No. 8.0, Recreation User Survey

Goal – Determine the public awareness, usage, and demand of the Project's existing recreational facilities to determine if potential improvements are needed.

Reason for Study – Provide information for use in developing a recreation plan for Project facilities.

Methodology – Use recreational user interviews and survey cards to determine the following:

1. Type of use
2. Frequency of use
3. Most commonly used facilities
4. Distance traveled
5. Needed improvements

Study No. 9.0, Creel Survey

Goal – Determine the status of Project fisheries and how the fisheries are used by anglers.

Reason for Study – Provide information for use in developing a recreation plan for Project facilities.

Methodology – Use established NGPC creel survey methodologies to perform a creel survey spanning one open-water fishing season to determine the following:

1. Target species
2. Catch rates
3. Angler needs and expectations
4. Overall angler perception of Project fisheries

Study No. 10.0, Land Use Inventory

Goal – Determine specific land use of properties that abut the Project Boundary to identify potential conflicts and/or opportunities.

Reason for Study – There may be existing land uses that conflict with Project operations or public recreation opportunities. There may also be opportunities for increased or improved access to Project facilities. This information will be useful for development of a recreation plan for the Project.

Methodology – The proposed methodology for this study is as follows:

1. Use existing land use GIS layers to determine existing land use, and verify these findings via on-site survey.
2. Interview adjacent landowners of potentially conflicting land uses to determine if they have comments or concerns regarding existing Project operations or recreational uses.

Study No. 11.0, Section 106 Compliance – Programmatic Approach

Goal – Achieve NHPA Section 106 compliance through a programmatic, ongoing relationship between the District and the Nebraska SHPO.

Reason for Study – The entire Project is considered to be a historic district eligible for listing on the NRHP. Reasonable measures should be taken to protect this historic resource.

Methodology – The programmatic approach will involve a series of agreement and management documents, including preparation of the following:

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1. A documentation package for the Project property, including an inventory of possible contributing and non-contributing aboveground

resources and digital photographs shot to NPS photographic standards of the aboveground resources. A 2007 published history of the Project will also be included in the documentation package to provide a detailed narrative history of the property.

2. A PA describing the protocols for FERC Section 106 compliance among FERC, the Nebraska SHPO, and the District (and the Advisory Council on Historic Preservation, if necessary).

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3. A CRMP to outline how the District and the Nebraska SHPO will communicate on an issue-specific basis, including descriptions of maintenance and operation activities requiring communication with the Nebraska SHPO.

Table 6-2 lists all of the resource issues identified by resource agencies, non-governmental organizations, and the public and lists the studies proposed to provide information relative to each issue. Issues for which a formal study is not proposed are noted with a dash (-). Study No. 6.0, Fish Sampling, is being performed by NGPC to gather data regarding species abundance, composition, and distribution of sport fisheries in the Loup Power Canal. Although this study is not related to a specific resource issue, the information gathered may be relevant to issues identified. Section 6.3 provides information relative to issues not proposed for formal study.

Table 6-2. Resource Issues and Proposed Studies

Resource Section	Issue	Proposed Study No.
Geology & Soils	Reduced peak flows in the Loup River bypass reach may affect sandbar development. (USFWS, NGPC)	5.0
Geology & Soils	Sediment-deprived flow resulting from Project dredging operations at the Settling Basin may affect sandbar formation, riverine habitat, and threatened or endangered species habitat in the Platte River. (USFWS, NGPC)	1.0
Geology & Soils	Does "clear" water released from the Tailrace Canal cause channel bed, bar, and bank degradation in the Platte River? (USGS)	1.0
Geology & Soils	Hydrocycling may affect sandbars and other riverine habitat in the Platte River, which may affect threatened or endangered species. (USFWS, NGPC)	2.0
Geology & Soils	Dredging and discharge activities at the Settling Basin may affect piping plover and interior least tern nesting activities on the North Sand Management Area (North SMA). (USFWS, NGPC)	-
Geology & Soils	Dredging and discharge activities may cause entrapment, entrainment, and mortality of fish. (USFWS, NGPC)	-

Resource Section	Issue	Proposed Study No.
Geology & Soils	Can Lake Babcock and Lake North be dredged to provide improved aesthetics and utilization for recreation? (Public)	-
Water Resources	Flow depletion on the Loup River below the point of diversion at Genoa may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)	5.0
Water Resources	Reduced flows in the Loup River bypass reach may increase human disturbance, which may affect nest initiation and/or abandonment for piping plovers and interior least terns. (USFWS, NGPC)	5.0[a]
Water Resources	Flow depletion on the Loup River above the point diversion at Genoa may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)	-
Water Resources	Reduced flows in the Loup River bypass reach may have resulted in a narrower channel, which may affect flooding of adjacent property. (Public)	5.0
Water Resources	Flow depletion on the Platte River system from evaporative losses and irrigation withdrawals from the Loup Power Canal may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)	-
Water Resources	Hydrocycling may affect habitat, aquatic species, and threatened or endangered species habitat and food supply. (USFWS, NGPC)	2.0
Water Resources	Changes in water temperature resulting from reduced flows in the Loup River bypass reach may affect habitat, aquatic species, and threatened or endangered species. (USFWS, NGPC, USGS)	4.0
Water Resources	Changes in water temperature resulting from reduced flows in the Loup River bypass reach may affect bacteria levels in public water wells. (NHHS)	-
Water Resources	Changes in water temperature resulting from hydrocycling may affect habitat, aquatic species, and threatened or endangered species in the Platte River. (USFWS, NGPC, USGS)	3.0
Water Resources	Intermittent flows released from the Tailrace Canal into Lost Creek may affect aquatic resources. (USFWS)	-
Water Resources	What are the sources of water quality impairments in the Loup Power Canal and regulating reservoirs associated with PCB, E. coli, pH, and nutrient levels? (USFWS)	-
Water Resources	Changes in sediment and discharge in the Loup River bypass reach may affect the development of ice jams on the Loup River and reduce scouring of sandbars that is beneficial for threatened or endangered species habitat (USFWS)	1.0 & 5.0

Resource Section	Issue	Proposed Study No.
Water Resources	Does the amount of water diverted (or not diverted) into the Loup Power Canal affect the formation of ice jams? (NDNR)	-
Water Resources	How is just compensation (compensation to the District from irrigators to replace lost power) calculated for irrigation use upstream of the point of diversion and for irrigation use from the Loup Power Canal? (NDNR)	-
Water Resources	Why does Loup Power District allow irrigation from the Loup Power Canal? Loup Power District appears to operate as an irrigation district. (NDNR)	-
Water Resources	What would Loup Power District do if an irrigator requests water from the Loup River bypass reach? (NDNR)	-
Water Resources	Would increased irrigation upstream of the point of diversion (requiring subordination of Loup Power District's water right) adversely affect Loup Power District's ability to produce power and economic viability? (NDNR)	-
Water Resources	Does Loup Power District need a storage permit for Lake Babcock and Lake North? (NDNR)	-
Water Resources	Loup Power District has entered into agreements to provide water to others (NGPC & farmers along Lost Creek east of the Tailrace Canal) for uses other than power production, which is not authorized under the District's water right. (NDNR)	-
Water Resources	Irrigators expressed concern that relicensing will affect their ability to exercise their water right from the Loup Power Canal. (Public)	-
Water Resources	Does operation of the Loup Power Canal affect channel migration of the Loup River bypass reach, resulting in less land for some property owners and more for others? (Public)	-
Fish & Aquatic Resources	Do reduced flows in the Loup River bypass reach resulting from Project operations affect hydraulic habitat connectivity and distribution? (USGS)	5.0[b]
Fish & Aquatic Resources	Is the Diversion Weir at the Project Headworks a barrier to fish passage? (NGPC)	7.0
Fish & Aquatic Resources	Do low flows resulting from hydrocycling cause stranding and possible mortality of fish? (USFWS, USGS)	2.0
Wildlife & Botanical Resources	Does operation of the Project (hydrocycling and sediment) affect vegetation species composition and distribution? (USGS)	1.0 & 2.0[c]

Resource Section	Issue	Proposed Study No.
Wildlife & Botanical Resources	Power lines associated with the Project may affect migratory birds (collisions). (USFWS)	-
Wetlands, Riparian, & Littoral Habitat	Reduced flows in the Loup River bypass reach may result in degradation or loss of wetlands. (USFWS)	5.0
Rare, Threatened & Endangered Species	The North American river otter historically inhabited the Loup River and has recently been released upstream. Possible impacts of Project operations on this species are unknown. (NGPC)	-
Recreation & Land Use	Does the Project provide adequate recreation opportunities? Are additional facilities needed? (NPS)	8.0 & 9.0
Recreation & Land Use	Have the recreational components of the Project been maintained and enhanced during the Project period? (USFWS)	-
Recreation & Land Use	Is adequate access provided to recreational resources? (NPS)	8.0
Recreation & Land Use	Are there any adjacent land uses that are in conflict with the Project? (NPS)	10.0
Recreation & Land Use	Can the Lake North fishery be improved through the installation of jetties? (NGPC)	-
Cultural Resources	The Project is considered eligible for listing on the National Register of Historic Places (NRHP) and should be nominated. (Nebraska SHPO)	11.0
Cultural Resources	A programmatic agreement (PA) is needed to establish protocols for compliance with Section 106 of the National Historic Preservation Act (NHPA). (Nebraska SHPO)	11.0
Cultural Resources	A cultural resources management plan (CRMP) is needed to establish protocols for communication with the Nebraska SHPO regarding District operations that may affect cultural resources. (Nebraska SHPO)	11.0
Socio-Economic Resources	Hydrocycling at the Columbus Powerhouse provides an economic benefit related to power production and energy costs for the entire state of Nebraska, and this operational flexibility should be maintained. (NPPD)	-

Notes:

[a] Human disturbance, such as the use of off-highway vehicles (OHVs) on sandbars on private property, is beyond the control of the District. The District and NOHVA have posted signs at the boundary of the Headworks OHV Park indicating that OHV use outside the park in the river bed is trespassing. No formal study related to human disturbance is proposed. However, Study No. 5.0, Flow Depletion in the Loup River Bypass Reach, will determine the effect of reduced flows on riverine habitat in the bypass reach resulting from Project operations. Information from this study will provide information relative to the extent of exposed sandbars that may result from reduced flows, which may in turn lead to increased human disturbance of these areas.

[b] During discussions with resource agencies, it was determined that this issue is a sub-issue related to hydrocycling and flow effects. The results of Study No. 5.0, Flow Depletion in the Loup River Bypass Reach, will provide information relative to the effect of reduced flows on hydraulic habitat connectivity and distribution and will help determine if additional studies are needed.

[c] During discussions with resource agencies, it was determined that this issue is a sub-issue related to hydrocycling and sedimentation. The results of Study No. 1.0, Sedimentation, and Study No. 2.0, Hydrocycling, will provide information relative potential effect of Project operations on species composition and distribution and will help determine if additional studies are needed.

6.3 RESOURCE ISSUES NOT REQUIRING FORMAL STUDY

Resource issues identified in Table 6-2, above, that either can be resolved with available existing information or are outside the purview of the FERC relicensing effort are listed below and are followed by narrative as to why no formal study is necessary.

Dredging and discharge activities at the Settling Basin may affect piping plover and interior least tern nesting activities on the North Sand Management Area (North SMA).

The District has been working with USFWS, NGPC, and the Tern and Plover Conservation Partnership since 1984 to protect piping plover and interior least tern nesting activities on the District's North SMA. In addition, Preferred Rocks of Genoa, which began sand removal operations at the North SMA in 2006, has also been cooperating with the District and the Tern and Plover Conservation Partnership to protect these species. In conjunction with USFWS and NGPC, Preferred Rocks of Genoa has developed an adaptive management plan to protect and enhance nesting activities of piping plovers and interior least terns at the North SMA (see Appendix G).

Dredging of the Settling Basin occurs 24 hours per day from ice-out in the spring until approximately June 1. The District has an informal agreement with USFWS, NGPC, and the Tern and Plover Conservation Partnership to cease dredging operations in the spring to protect the nesting habitat of the piping plover and interior least tern at the North SMA. The mechanism for the District to cease dredging is based on the return of the birds and signs that the birds have started to nest. The Tern and Plover Conservation Partnership or USFWS survey team closely observes the birds, looking for nesting behavior. When nesting has been identified, the District is notified and

dredging stops as soon as possible, with particular care given to the location of the nests.

At the North SMA, appropriate District and Preferred Rocks of Genoa personnel are trained to recognize piping plovers and interior least terns and constantly monitor the area for the presence of the birds and their nests. In addition, the District allows members of the Tern and Plover Conservation Partnership to perform weekly surveys of the North SMA during the critical nesting period for these species. The Tern and Plover Conservation Partnership has worked closely with the District to direct birds to more suitable nesting habitat in a designated "bird management area" and away from dredging activity by use of mylar flagging and windrowing. When District or Tern and Plover Conservation Partnership personnel identify a piping plover or interior least tern nest, the nest is flagged so that the District can monitor dredging operations to ensure that nests are not inundated with dredge material prior to ceasing dredging operations. If the nests are likely to be affected by dredging activities, the District constructs berms to protect nests from dredging discharge. To date, the Tern and Plover Conservation Partnership personnel have not witnessed any overcovering of nests at this site. The District resumes continuous dredging activities after all nests are clear and the birds have migrated away from the area, usually around mid-August. Dredging activity normally continues until just before ice-in. Table 6-3, below, lists the beginning and ending dates for dredging activities for the last 6 years.

Table 6-3. Historic Dredging Dates

Activity	2008	2007	2006	2005	2004	2003
Begin spring dredging	March 20	April 16	March 30	March 31	April 21	March 24
End spring dredging	June 3	June 22	June 8	June 3	June 7	June 3
Begin fall dredging	August 11	August 16	August 21	August 24	August 26	August 28
End fall dredging		November 5	November 1	November 11	November 8	November 3

Based on the information provided by the District and the Tern and Plover Conservation Partnership, USFWS has concurred with the District recommendation that no formal studies are needed regarding dredging activities and overcovering of nests. However, USFWS noted that continued improvement for the species may be possible through the adaptive management plan.

Dredging and discharge activities may cause entrapment, entrainment, and mortality of fish.

The District and Tern and Plover Conservation Partnership staff have observed small fish discharged onto the North SMA during dredging activities. Initial discussions with resource agencies identified this as a potential issue for study; however, during subsequent discussions, specifically the August 19, 2008, agency meeting, it was determined that there are no indications that dredging activities affect fisheries in the Loup Power Canal system. In addition, it was noted that the discharged fish provide a good food source for the interior least terns nesting on the North SMA; therefore, entrainment and entrapment of fish resulting from dredge operations may not be an issue.

Based on the lack of evidence of negative effects on Project fisheries and the noted benefit to interior least terns, no formal studies are proposed related to potential impacts of dredge operations on fish.

Can Lake Babcock and Lake North be dredged to provide improved aesthetics and utilization for recreation?

The District has previously investigated the possibility of dredging Lake Babcock and found it to be impractical due to cost and environmental issues; therefore, no formal studies of additional dredging are proposed. As part of the proposed recreational use survey, the District will evaluate the need for additional recreational opportunities associated with the Project.

Flow depletion on the Loup River above the point of diversion at Genoa may affect habitat, aquatic species, and threatened or endangered species habitat and food supply.

This issue is outside the purview of the relicensing effort. Nebraska water law uses a priority and preference system to determine order of use for water. Priority is typically based on date of application, and preference is based on type of use. Under Nebraska's water preference system, domestic and agricultural water use outranks water used for industrial and power generation purposes. Therefore, although the District has the senior water right in most cases, it cannot prevent consumptive uses upstream of the point of diversion for water uses with a higher preference.

During discussions with resource agencies, agencies also raised the possibility that the District could sell its water right in the future. This idea requires speculation on a future action that is contrary to the District's stated intention for continued operation of the Project under the new license: to continue to operate the Project as it has for the past 70 years, which includes maintaining its water right of 3,500 cfs. Based on this intention, speculation that the District would sell its water right at some future time is not reasonably foreseeable and is not relative to Project relicensing.

Flow depletion on the Platte River system from evaporative losses and irrigation withdrawals from the Loup Power Canal may affect habitat, aquatic species, and threatened or endangered species habitat and food supply.

Annual water volume on the Platte River is minimally affected by the operation of the Project. The District diverts water from the Loup River at the Headworks and allows the water to flow along the Loup Power Canal and through the Monroe and Columbus powerhouses into the Tailrace Canal and finally returns the water to the Platte River. The District does not withdraw any water from the canal.

The District developed an annual water budget for the Loup Power Canal by reviewing gage and irrigation records and by estimating evaporation, seepage, and other consumptive uses. The generalized results of the water budget analysis are as follows (see Section 5.2.2, Flows, for details of the analysis):

- Water Diverted into Power Canal ~ 1.095 million acre-feet/year
- Water flowing from Tailrace Canal into Platte River ~ 1.107 million acre-feet/year
- Power Canal Evaporation ~ 2,600 acre-feet/year
- Irrigation from Power Canal ~ 1,990 acre-feet/year
- Local drainage inflows into Power Canal ~ 850 acre-feet/year
- Lost Creek Flood Control Channel (surface runoff) ~ 1,600 acre-feet/year

Annual seepage from the Loup Power Canal is estimated at 4 to 5 percent of the total flow based on gage records and power production records; however, it is presumed that much of this seepage is intercepted by the Lost Creek Flood Control Channel and returned to the Loup Power Canal, as indicated by nearly identical gage records at the point of diversion and the Tailrace Canal (8th Street).

The issue of flow depletion on the Platte River resulting from irrigation from the Loup Power Canal is outside the control of the District and is not relevant to relicensing. The District allows irrigators who have a valid water right from the State of Nebraska to access the Loup Power Canal to pump irrigation water based on the water preference system established by Nebraska state law, which gives higher preference to water used for irrigation over water used for power production. The District is legally bound to honor such water rights and thus has no ability to reduce or stop the use of water from the Loup Power Canal for irrigation purposes.

Based on this analysis, it was determined that the District has no effect on flow depletions in the Platte River; therefore, no formal studies are proposed.

Changes in water temperature resulting from reduced flows in the Loup River bypass reach may affect bacteria levels in public water wells.

A "Total Coliform History Report" for the public water supplies for Genoa and Monroe was reviewed to identify occurrences of exceedance of the maximum contaminant level (MCL) for E. coli and total coliform. The records of monthly sampling for these locations date back to January 1999. In that time frame, Genoa's water supply exceeded the MCL for total coliform once (in October 2005), and Monroe's water supply exceeded the MCL for total coliform once (in May 2004) (Nebraska Department of Health and Human Services, September 2008). Neither of these exceedances appears to be related to increased water temperature in the Loup River bypass reach; therefore, no formal studies related to potable water quality are proposed at this time.

Intermittent flows released from the Tailrace Canal into Lost Creek may affect aquatic resources.

As part of the USACE Lost Creek Flood Control Project, Lost Creek flows east of the Lost Creek Ditch are collected in the Lost Creek Flood Control Channel. The Lost Creek Flood Control Channel drains into the Tailrace Canal immediately downstream of the Columbus Powerhouse before discharging into the Platte River. Lost Creek flows not captured in the Lost Creek Ditch and the Lost Creek Flood Control Channel are conveyed through a siphon under the Tailrace Canal and continue east to Schuyler, Nebraska, where they discharge into the Platte River.

The District has a gate in the Tailrace Canal at the Lost Creek siphon that allows it to maintain flow and prevent the siphon invert from becoming blocked with sediment. In addition, the District has an agreement with adjacent landowners to provide water in Lost Creek at such times as the landowners may desire water. This includes landowners east of the Tailrace Canal whose lands are traversed by Lost Creek. This agreement was part of initial Project construction in 1935 and provides flow in Lost Creek, which is beneficial for aquatic resources. Further, based on historical observation, flows from the Tailrace Canal into Lost Creek are typically less than the flows that enter the Tailrace Canal from the Lost Creek Flood Control Channel. Flows entering the Tailrace Canal from the Lost Creek Flood Control Channel are not part of the District's water appropriation for power generation.

What are the sources of water quality impairments in the Loup Power Canal and regulating reservoirs associated with PCB, E. coli, pH, and nutrient levels?

Review of existing water quality data identified the following water quality concerns:

- PCBs have been detected in tissue samples of fish sampled in the Loup Power Canal, resulting in a consumption advisory for fish caught in Segment LP1-21800 of the Loup Power Canal (see Section 5.2.5, Water Quality).

- Elevated levels of E. coli have occasionally been sampled in Lake Babcock and segments of the Loup Power Canal.
- Lake North was listed in the NDEQ 2006 Integrated Report as impaired for pH and nutrients.

The District is not proposing any water quality studies related to these issues based on the following:

- NDEQ sampling in 1993 detected PCB levels slightly above maximum consumption levels in fish caught near the U.S. Highway 30 bridge over the Tailrace Canal. The source of the PCB contamination is unknown. NDEQ has not identified a point source or a responsible party. Subsequent NDEQ testing in 2003 of fish samples from the canal indicated non-detectable PCB levels.
- The District believes that the elevated E. coli levels are the result of local drainage inflows carrying contaminants during storm events. NDEQ agrees that the source of the contamination is likely to be an outside source. The District has provided information to NDEQ regarding possible external sources that result in E. coli entering the Loup Power Canal, Lake Babcock, and Lake North during storm events.

Does the amount of water diverted (or not diverted) into the Loup Power Canal affect the formation of ice jams?

During discussions with resource agencies, NDNR noted that the District's flow diversion (or change in diversion) during cold weather may affect ice jams. NDNR cited a USACE report published after the March 1993 flood on the Loup River (USACE, July 1994). The USACE report indicated that the effect of the District's operation on ice jams is unknown. The report recommended a future study to evaluate the impact of the District's operation on ice conditions downstream. Subsequent to discussions with resource agencies, NDNR requested a formal study of the possible contribution of the District's operation on formation of ice jams.

The District monitors flows during cold weather and stops diverting water into the canal when frazil ice is present to prevent an ice jam in the Loup Power Canal, which could cause flooding of adjacent developed areas, including Genoa and Columbus.

The NDNR request for a study does not provide enough information to define the goal, reasons for study, and methodology for the District to conduct a study; therefore, no formal studies are proposed at this time. The District will continue to discuss this issue with NDNR to determine study needs.

How is just compensation (compensation to the District from irrigators to replace lost power) calculated for irrigation use upstream of the point of diversion and for irrigation use from the Loup Power Canal?

Although NDNR has identified this as a relicensing issues, the District believes that this issue is outside the purview of the relicensing effort. The compensation agreements between the District and irrigators are immaterial to relicensing. The District has entered into interference agreements for payment of just compensation over the last 70 years under various scenarios. The amount of payment for water varies under these agreements depending on where the irrigator takes their water (that is, from the Loup Power Canal or upstream of the point of diversion) and depending on when the agreement was reached. In some cases, the payment from the irrigator does not cover the District's cost to replace the lost power. The District is in the process of re-evaluating these agreements with respect to just compensation. The District will work with NDNR separately, outside of the relicensing process, to provide additional information regarding these agreements.

Why does Loup Power District allow irrigation from the Loup Power Canal? Loup Power District appears to operate as an irrigation district.

Although NDNR has identified this as a relicensing issues, the District believes that this issue is outside the purview of the relicensing effort. The District is in the business of producing hydroelectric power, supplying electrical power to a four-county area (Boone, Nance, Platte, and Colfax counties), and improving and promoting economic development in the area, as evidenced by their mission, which is stated on their website (LPD, 2008):

- "To provide reliable electric services to our customers at rates that are fair, reasonable and non-discriminatory, and to bring to our customers the rewards of an efficient and prudent business operation."
- "To improve and promote the economic development in our area."
- "To make maximum use of the water of the Loup River to generate power."

The District is not engaged in business as an irrigation district. The District allows irrigators who have a valid water right from the State of Nebraska to access the Loup Power Canal to pump irrigation water based on the water preference system established by Nebraska state law, which gives higher preference to water used for irrigation over water used for power production. The District does not guarantee the supply of water for irrigation and has agreements with each irrigator stating such:

> "The Loup District assumes no responsibility for the supply of, or continuity of flow of, water in the canals, tailraces, or its reservoir, nor for its division or determination of priorities in its use between Irrigator and other similar irrigators.

> Further, - the Loup District assumes no responsibility for maintaining at any particular elevation the water surface in any part of its canals, tailraces, or reservoir."

The District allows public access to nearly the entire Loup Power Canal, including access for irrigators who take water from the canal. Irrigators who have to cross private property to access the canal are required by the District to have an access easement for crossing said private property.

What would Loup Power District do if an irrigator requests water from the Loup River bypass reach?

The District honors the preference system for water rights as established by Nebraska state law. In the event that additional water rights with a higher preference are granted downstream of the point of diversion, the District would honor those rights by reducing the amount of flow diverted into the Loup Power Canal. The District would enter into an agreement with said water rights holders regarding compensation to the District for the loss of water to generate power.

Would increased irrigation upstream of the point of diversion (requiring subordination of Loup Power District's water right) adversely affect Loup Power District's ability to produce power and economic viability?

Although NDNR has identified this as a relicensing issues, the District believes that this issue is outside the purview of the relicensing effort; it requires speculation on a future action that is not reasonably foreseeable. Furthermore, the District honors the preference system for water rights as established by Nebraska state law. In the event that additional water rights with a higher preference are granted upstream of the point of diversion, the District would enter into an agreement with said water rights holders regarding compensation to the District for the loss of water to generate power. Further, the intermittent use of water for irrigation occurs only during a few months of the year; it will always be feasible and economically viable to operate the Project to generate power during other times of the year.

Does Loup Power District need a storage permit for Lake Babcock and Lake North?

The District ponds water for purposes of regulating sub-daily flow to the Columbus Powerhouse. As discussed in Section 4.3.1, Reservoir Storage, the District does not store water for longer than 24 hours and thus does not need a storage permit under Nebraska state law.

Loup Power District has entered into agreements to provide water to others (NGPC & farmers along Lost Creek east of the Tailrace Canal) for uses other than power production, which is not authorized under the District's water right.

Previously, on occasion, the District has voluntarily reduced the amount of flow diverted into the Loup Power Canal to provide additional flow in the Loup River

bypass reach during hot weather to prevent fish kills based on a request from NGPC. Under Nebraska state law, the District is not required to take their entire appropriation whenever it is available. Therefore, providing minimum flows to the Loup River bypass reach is not an unauthorized action.

The District also allows water from the Tailrace Canal, which has already been used to generate power, to enter Lost Creek to provide water for cattle and other agricultural purposes based on an agreement that was part of initial Project construction. Further, based on historic observation, flows from the Tailrace Canal into Lost Creek are typically less than the flows that enter the Tailrace Canal from the Lost Creek Flood Control Channel, which are not part of the District's water appropriation for power generation.

Irrigators expressed concern that relicensing will affect their ability to exercise their water right from the Loup Power Canal.

The District's stated intention for relicensing is to continue operating the Project as it has for the past 70 years; including allowing irrigators with valid water rights from the State of Nebraska to pump water from the Loup Power Canal.

Does operation of the Loup Power Canal affect channel migration of the Loup River bypass reach, resulting in less land for some property owners and more for others?

Erosion and accretion are natural occurrences caused by the flow of a river. Erosion is the wearing away of the land surface by water, wind, ice, or other geologic agents, while accretion is the increase of land by gradual deposit of water borne solid materials. The extent of erosion and accretion depends on various channel characteristics and flows in the river.

The Loup River bypass reach is a sand-and-gravel-bed channel that displays braided and meandering characteristics. The river bed of a braided system is typically divided into a series of channels by islands and sandbars while a meandering system is characterized by a series of alternating changes in channel direction, or bends. Both conditions are formed by natural erosion and accretion. Because erosion and accretion are natural occurrences, the District cannot control these processes; therefore, no formal studies are proposed.

Power lines associated with the Project may affect migratory birds (collisions).

There are no transmission lines associated with the Project; therefore, no studies are proposed regarding power lines and migratory bird collisions or mortality. All power produced at the Monroe and Columbus powerhouses is sold at the on-site substations to NPPD. NPPD has an easement for transmission lines on District property.

The District does own and maintain extensive overhead distribution voltage lines to serve customers throughout its four-county service area. However, none of these lines are directly associated with the Project.

The North American river otter historically inhabited the Loup River and has recently been released upstream. Possible impacts of Project operations on this species are unknown.

At this time, the North American river otter is not known to inhabit the rivers, creeks, and streams in the immediate vicinity of the Project, nor is it known to inhabit the Loup Power Canal. During discussions with resource agencies, it was determined that no formal studies are needed regarding the North American river otter.

Have the recreational components of the Project been maintained and enhanced during the Project period?

The Project provides multiple recreational opportunities for the public. Over the past 70 years, the District has developed, maintained, and improved these resources using their own funds as well as through partnerships with other public and private entities. These resources are available to the public free of charge. The Loup Power Canal provides excellent aquatic habitat for recreational fish species and is one of the best fishing locations in the area.

The current status of the Project's recreational facilities is discussed in Section 5.7, Recreation and Land Use. In addition, a recreational use survey is proposed to identify additional recreational needs and opportunities.

Can the Lake North fishery be improved through the installation of jetties?

During discussions with resource agencies, NGPC noted their interest in working with the District outside of the relicensing process to identify potential fishery improvements for Lake North. Therefore, the District will work with NGPC outside of the relicensing process to discuss and potentially implement improvements that NGPC has successfully implemented in other state and Natural Resources District lakes. Specific items that may be analyzed include the potential effectiveness of brush piles (or other fish attractors) to improve catch rates, jetty installation to remedy existing shoreline erosion problems, and improved angler access.

Hydrocycling at the Columbus Powerhouse provides an economic benefit related to power production and energy costs for the entire state of Nebraska, and this operational flexibility should be maintained.

The economic evaluation of the Project for the license application will include a determination of the economic value of power production from the Project. Therefore, formal economic studies are not proposed.

6.4 COMPREHENSIVE WATERWAY PLANS

In accordance with Section 10(a)(2)(A) of the Federal Power Act (FPA), FERC is required to consider the extent to which a project is consistent with Federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project (16 USC 803(a)(2)(A)).

On April 27, 1988, FERC issued Order No. 481-A (revising Order No. 481, issued on October 26, 1987), establishing that FERC will accord FPA Section 10(a)(2)(A) comprehensive plan status to any Federal or state plan that meets all of the following criteria:

- Is a comprehensive study of one or more of the beneficial uses of a waterway or waterways.
- Specifies the standards, the data, and the methodology used.
- Is filed with the Secretary of FERC.

In FERC's *List of Comprehensive Plans*, four comprehensive plans for the State of Nebraska are currently listed (FERC, April 2008). The three following plans are directly related to the Platte River:

- Platte River Report Management Joint Study. July 20, 1990. Biology workgroup final report. Denver, Colorado.
- U.S. Fish and Wildlife Service. July 20, 1990. Endangered resources in the Platte River ecosystem: description, human influences and management options. Department of the Interior, Denver, Colorado.
- U.S. Fish and Wildlife Service. May 15, 1987. Fish and wildlife resources of interest to the U.S. Fish and Wildlife Service on the Platte River, Nebraska. Department of the Interior, Grand Island, Nebraska.

6.5 RESOURCE MANAGEMENT PLANS

In addition to the three FERC-identified plans listed in Section 6.4, Comprehensive Waterway Plans, above, the following plans, which are not directly related to a project-applicable waterway, are also listed in FERC's *List of Comprehensive Plans* (FERC, April 2008):

- Nebraska Game and Parks Commission. June 1980. State Comprehensive Outdoor Recreation Plan (SCORP). Lincoln, Nebraska.
- ECONorthwest. August 2006. Natural Resources Amenities and Nebraska's Economy: Current Connections, Challenges, and Possibilities. Eugene, Oregon.

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