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STUDY 8.0 RECREATION USER SURVEY

The Project is located in Nance and Platte counties, where water is diverted from the Loup River and routed through the 35-mile-long Loup Power Canal, which empties into the Platte River near Columbus. The Project includes various hydraulic structures, two powerhouses, and two regulating reservoirs. The portion of the Loup River from the Diversion Weir to the confluence with the Platte River is referred to as the Loup River bypass reach.

The District has an established policy of providing public access and recreational opportunities at the Project. This includes the Loup Power Canal, the two regulating reservoirs (Lake Babcock and Lake North), five major park and recreation areas, three developed trails, and one 485-acre wildlife management area leased to the Nebraska Game and Parks Commission (NGPC). The only areas within the 5,200-acre Project Boundary that are not accessible to the public are those that present safety or security concerns and those that have had significant vandalism issues.

The District estimates that the Project attracts 150,000 visitors annually. District parks are open to the public between May 1 and November 1 and at other times, weather permitting. The District's formal recreation areas are generally considered adequate for current demands, although some facilities approach or reach their carrying capacity during the peak holiday weekends of Memorial Day, Independence Day, and Labor Day.

The District is proposing a recreation user survey to gather data regarding existing recreational use of Project facilities. The data collected from this survey, in addition to data from Study 9.0, Creel Survey, and Study 10.0, Land Use Inventory, will be used in the development of a recreation management plan for District facilities. This recreation management plan will outline District plans for enhancing existing recreation facilities and meeting future recreation demands as well as identify mitigation measures for identified conflicts.

In a letter dated February 10, 2009, FERC submitted a recreation user study request to the District (a copy of this request is provided in Attachment A). The District has largely incorporated FERC's request into this study plan. Deviations from FERC's request are noted as appropriate in the following sections.

GOALS AND OBJECTIVES OF STUDY

"Describe the goals and objectives of each study proposal and the information to be obtained;" $18 \ CFR \ \S 5.11(d)(1)$

The goal of the recreation user survey is to determine the public awareness, usage, and demand of the Project's existing recreation facilities to determine if potential improvements are needed.

The objectives of the recreation user survey are as follows:

- 1. To measure usage of Project recreation facilities.
- 2. To document the types of recreation use occurring at Project recreation facilities.
- 3. To determine whether Project recreation facilities meet current demand.
- 4. To determine the public's perception and awareness of Project recreation facilities and identify the impact of Project operations on recreation experiences.
- 5. To collect data for use in the preparation of a recreation management plan for the District.

RELEVANT RESOURCE MANAGEMENT GOALS

"Address any known resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;" $18 CFR \S 5.11(d)(2)$

In addition to generating power, which is the primary purpose of the Project, the District has developed and maintains public recreation facilities. The District provides these facilities, free of charge, to comply with requirements of its FERC license and to demonstrate its commitment to the community as a public power district. These recreation facilities must safely meet the recreational demand of the area without impeding safe Project operations, endangering environmental resources, or unnecessarily detracting from the natural aesthetic appeal of the area. The recreation user survey will allow the District to determine whether it is fulfilling the recreation requirements of its license.

In addition, the Nebraska *State Comprehensive Outdoor Recreation Plan* (SCORP) guides the conservation and development of public outdoor recreation resources. The SCORP does not include any specific management goals for Project-related recreation facilities. However, the SCORP does provide the following goals related to recreation needs identified for Region 3, the region in which the Project is located (NGPC, 2006):

- "New facilities, including lodging, should be in regions where population is growing."
- "Region 3 should focus on new acquisition and development because of growing populations."

BACKGROUND AND EXISTING INFORMATION

"Describe existing information concerning the subject of the study proposal, and the need for additional information;" $18 \ CFR \ \S 5.11(d)(3)$

3.1 Existing Usage

In the PAD, the District estimates that 150,000 user visits are made to their recreation facilities annually. This estimate is based on informal observations by District personnel rather than formal user surveys or detailed record keeping. The survey outlined in this plan will provide more accurate and detailed user information to guide future decision-making for recreation facilities.

3.2 Nebraska State Comprehensive Outdoor Recreation Plan

NGPC's SCORP, which is updated every 5 years, provides an inventory of recreation facilities available in Nebraska (NGPC, 2006). As stated in Section 2, Relevant Resource Management Goals, above, the District's recreation facilities are located in Region 3, Northeast (NGPC, 2006). Region 3 includes 16 counties and has approximately 190,000 residents. In addition to the Project recreation facilities, other recreation areas available to the residents in the region include Outlaw Scenic Byway; Lewis and Clark Scenic Byway; portions of the Missouri River; wildlife viewing and hunting opportunities; canoe trails on the Upper and Lower Missouri River, Elkhorn River, and Cedar River; recreation facilities on the Missouri River and Niobrara River; and the 321-mile Cowboy Trail. State parks and recreation areas in the region include Ashfall State Historic Park, Niobrara State Park, Ponca State Park, Neligh Mills State Historic Site, Willow Creek Recreation Area, and Lewis and Clark State Recreation Area.

4. PROJECT NEXUS

"Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied;" $18 \ CFR \ \S 5.11(d)(4)$

The following Federal regulations require that recreational resources be evaluated in relation to operation of the Project:

- Federal Power Act (FPA) Section 4(e) states that "In deciding whether to issue any license..., the [Federal Energy Regulatory] Commission...shall give equal consideration to...the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality" (16 USC 797(e)).
- FPA Section 10(a)(1) states that "All licenses issued under this subchapter shall be on the following conditions: (a)(1) That the project adopted, including the maps, plans, and specifications, shall be such as in the

judgment of the [Federal Energy Regulatory] Commission will be best adapted to a comprehensive plan...for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including... recreational..." (16 USC 803(a)(1)).

STUDY AREA AND STUDY SITES

Almost all of the 5,200 acres within the Project Boundary are open and accessible for public recreation. Due to the size of the Project Boundary, key study sites have been identified for completing in-person surveys and spot counts (see Section 6, Proposed Methodology). These sites are as follows:

- Headworks Park parking areas, camp sites, picnic areas, identified fishing sites, and Headworks OHV Park
- Lake Babcock Park (aka Loup Park) parking areas, camp sites, picnic areas, shoreline, and in Lake Babcock
- Lake North Park parking areas, camp sites, picnic shelters, shoreline, and in Lake North
- Columbus Powerhouse Park parking area, picnic area, and identified fishing sites
- Tailrace Park parking area, identified fishing sites, and playground

In its February 10, 2009, study request, FERC asked that the recreation user survey also include the Monroe Powerhouse, areas along the Loup Power Canal and access roads, the Loup Lands Wildlife Management Area, and areas along the Loup River bypass reach (see Attachment A). The District has not included these sites in the survey for the following reasons:

- Monroe Powerhouse Fishing is the primary recreation use at the Monroe Powerhouse, and any other recreation uses are incidental to fishing. Fishing usage information will be gathered as part of Study 9.0, Creel Survey, that will also be conducted as part of the relicensing process.
- Loup Power Canal Fishing is the primary recreation use along and in the canal. As mentioned above, fishing usage will be surveyed as part of Study 9.0, Creel Survey.
- Loup Lands Wildlife Management Area The District leases the Loup Lands Wildlife Management Area to NGPC. Under the lease terms, NGPC is responsible for preparing a management plan for the area, controlling access, performing maintenance, and carrying out other management activities in a manner similar to that of other Wildlife Management Areas (see Attachment B). The District is not responsible for recreation facilities or activities in the Loup Lands Wildlife Management Area.

Loup River bypass reach – There are no public access points along the
Loup River bypass reach between the Diversion Weir and the Tailrace
Canal; thus, recreation use is limited to individuals with private access.
Because there are no public access points and land along the bypass reach is
privately owned, there are no locations from which to conduct a recreation
user survey.

PROPOSED METHODOLOGY

"A detailed description of the study and the methodology to be used;" $18\ CFR$ $\S 5.11(b)(1)$

"Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers any known tribal interests;" 18 CFR §5.11(d)(5)

The collection of recreation usage data that will be used to develop a recreation management plan for the District includes a multi-pronged effort. Data will be collected through in-person surveys at Project recreation facilities, field observations of recreational activities at Project recreation facilities, infrared usage counts of Project recreation trails, a telephone survey of residents, and a survey of Off-Highway Vehicle (OHV) users. The tasks associated with data collection and recreation management plan development are described below.

Task 1 Pre-Survey Activities

District representatives or District staff will act as survey proctors. All potential survey proctors will be trained on established protocols and standard practices for surveying. Prior to the survey period, District staff will establish a survey schedule for the season to ensure that all locations are visited and surveyed consistently.

Task 2 Data Collection

Data will be collected through in-person surveys, field observations, trail counts, a telephone survey, and a survey distributed in the Nebraska Off-Highway Vehicle Association (NOHVA) newsletter.

In-person Surveys

Surveys will be conducted at improved recreation areas (see Section 5, Study Area and Study Sites, above) on two weekdays and two weekend days per month as well as one summer holiday (Memorial Day, Independence Day, or Labor Day) from May 1 to November 1, 2010.

Survey proctors will visit sites at District-identified peak activity times, usually in the morning as recreation users are arriving or in the afternoon/evening as the users are leaving. Based on current annual use estimates of 150,000 visitors, approximately 300 completed surveys would be needed to achieve statistically valid responses.

To encourage participation in the survey, signs will be placed at the entry points to recreation facilities notifying users of the survey. Survey proctors will wear shirts indicating their affiliation with the District and will have identification prominently displayed. Respondents will be offered a small incentive for participation, such as a water bottle or snack item. In addition, the survey length was kept to a minimum to reduce the perceived inconvenience of completing the survey. Based on trials of the survey, it is estimated that each survey will take approximately 5 minutes to complete. The District's recreation user survey is provided in Attachment C. The National Park Service (NPS) was consulted during development of the survey questions.

Field Observations

Field observations will be performed at Headworks Park, Lake Babcock Park (aka Loup Park) and Lake Babcock, Lake North Park and Lake North, Columbus Powerhouse Park, and Tailrace Park on the same days as the in-person surveys. Field observations will be recorded during morning and afternoon peak times as well as throughout the day. Observations will include spot counts for various recreation activities as well as other relevant information. A sample field observation form is provided in Attachment D.

Field observations at Lake Babcock and Lake North will be completed from shore. As a result, the number and types of users may be an estimate rather than an exact count. Survey proctors, who will also conduct the field observations, will note whether the numbers recorded are exact counts or estimates.

Trail Counts

Infrared trail counters will be used along Two Lakes Trail, Bob Lake Trail, and Robert White Trail between May and October 2010. These counters will allow for counting both pedestrians and bicyclists.

Telephone Survey

A telephone survey of residents in Nance and Platte counties will be conducted using professional phone surveyors to determine the general awareness and perception of Project recreational opportunities in the area. Based on county populations, the desired sample size is approximately 400. A sample telephone survey is provided in Attachment E.

Survey in the Nebraska Off-Highway Vehicle Association (NOHVA) Newsletter

During the FERC scoping process, members of NOHVA expressed a great deal of interest in the Headworks OHV Park. To address this interest and reach a large recreation user group, this group will be surveyed via a short survey distributed in the NOHVA newsletter. A sample OHV user survey is provided in Attachment F.

FERC Study Request

In its February 10, 2009, study request, FERC outlined a recreation user survey that included year-round surveying and field observations, mechanical counters at established recreation sites, and a mail survey of area households (see Attachment A). Explanation of why study methodology differs from this request follows:

- Year Round Surveying The Project recreation facilities are open to the public from May 1 to November 1 and at other times, weather permitting. To determine if significant recreation usage occurs between November 2 and April 30, the in-person survey includes a question about year-round usage. If survey findings indicate significant recreation facility usage outside of the initial survey period, expansion of the survey period will be considered.
- Mechanical counters The District has not included mechanical vehicle counts at recreation areas because similar information is being collected via field observation and parking lot counts. Further, the information collected via mechanical counters would not necessarily be reflective of actual recreation counts due to District operations activities that use a common entrance at Headworks Park.
- Mail Survey The District proposes a telephone survey of residents in Nance and Platte counties to determine general awareness and perception of its recreation facilities rather than a mailed survey. Due to the cost of printing and postage and relatively low response rates of mailed surveys, a telephone survey was determined to be the most efficient survey method to reach area residents

Task 3 Data Analysis

Field data, with the exception of telephone surveys, will be collected from May through October 2010. Survey responses and field observations will be recorded and analyzed. Based on the data collected, annual usage, average weekday usage, average weekend usage, and peak weekend usage for each recreation facility will be determined. From these numbers, the percent of capacity at which all Project recreation facilities are operating will be estimated. Descriptions of the user experiences with recreation facilities included in survey responses will be used to

determine whether Project recreation facilities meet user needs and to what degree. Narrative explanations of findings will accompany quantitative analyses.

Task 4 Recreation Management Plan

The data and analysis from this recreation user survey, Study 9.0, Creel Survey, and Study 10.0, Land Use Inventory, will provide information that will be used in the development of a recreation management plan for the District. The recreation management plan will compile findings from the surveys and inventory to provide a framework for future provision of recreation facilities. The plan will provide recommendations for enhancement of existing recreation facilities to meet existing and future recreation demands as well as mitigation measures for identified conflicts.

7. CONSULTATION WITH AGENCIES, TRIBES, AND OTHER STAKEHOLDERS

During preparation of the PAD, the District formed a Recreation/Land Use/Aesthetics Workgroup to discuss issues related to these topics. Numerous agencies with a potential interest in recreational activities were invited to participate in the workgroup. During preparation of this Recreation User Survey Study Plan, on December 19, 2008, a conference call meeting of this workgroup was held to discuss the recreation user survey and to help determine study needs. In addition, the National Park Service was consulted during development of the in-person survey questions. The District will continue to work with agencies to resolve any issues or concerns during the course of the study plan meetings prior to preparation of the revised study plan.

8. WORK PRODUCTS

"Provisions for periodic progress reports, including the manner and extent to which information will be shared; and sufficient time for technical review of the analysis and results;" $18 \ CFR \ \S 5.11(b)(3)$

There are two intended work products of the recreation user survey. The first is a study report that documents the level of use of Project recreation facilities and user experiences with the facilities as well as general awareness of the District's recreation facilities. The second is a recreation management plan that, together with data from Study 9.0, Creel Survey, and Study 10.0, Land Use Inventory, will outline District plans for enhancing existing recreation facilities and meeting future recreation demands as well as identify mitigation measures for identified conflicts.

Updates regarding the recreation user survey will be included in the study progress reports to be submitted to FERC in March 2010 and June 2010.

LEVEL OF EFFORT AND COST

"Describe considerations of level of effort and cost, as applicable." $18 \ CFR$ $\S 5.11(d)(6)$

It is estimated that the recreation user survey and recreation management plan will cost approximately \$320,000. This work will be completed by qualified planners, District interns, and clerical staff.

10. SCHEDULE

"A schedule for conducting the study;" 18 CFR §5.11(b)(2)

"The potential applicant's proposed study plan must also include provisions for the initial and updated study reports and meetings provided for in $\S 5.15$." 18 CFR $\S 5.11(c)$

The pre-survey activities are scheduled to begin in the first quarter of 2010, and the final Recreation User Survey Report is to be submitted in fourth quarter of 2010. Survey work will occur between May and October 2010.

Preparation of the recreation management plan will begin upon completion of this recreation user survey, Study 9.0, Creel Survey, and Study 10.0, Land Use Inventory. It is anticipated that a final recreation management plan will be completed in the second quarter of 2011.

11. REFERENCES

- 16 USC 797(e). Federal Power Act, Section 4(e). Issue of licenses for construction, etc., of dams, conduits, reservoirs, etc.
- 16 USC 803(a)(1). Federal Power Act, Section 10(a)(1). Modification of plans; factors considered to secure adaptability of project; recommendations for proposed terms and conditions.
- FERC. April 2004. "Handbook for Hydroelectric Project Licensing and 5 MW Exemptions from Licensing." Available online at http://www.ferc.gov/industries/hydropower/gen-info/handbooks/licensing_handbook.pdf.
- NGPC. 2006. State Comprehensive Outdoor Recreation Plan (SCORP): Assessment and Policy Plan, 2006-2010. Lincoln, NE. Available online at http://www.ngpc.state.ne.us/parks/programs/scorp/scorp.pdf.
- NGPC. April 30, 1992. *User's Guide for Nebraska Creel Surveys*. NGPC Fisheries Division.

Attachment A – FERC Recreation User Survey Study Request

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D.C. 20426 February 10, 2009

OFFICE OF ENERGY PROJECTS

Project No. 1256-029 – Nebraska Loup River Hydroelectric Project Loup River Public Power District

Neal Suess, President/CEO Loup Power District P.O. Box 988 2404 15th Street Columbus, Nebraska 68602

Reference: Staff comments on Loup River Hydroelectric Project Pre-

application Document and Study Request

Dear Mr. Suess:

Federal Energy Regulatory Commission (Commission) staff, after reviewing the Loup River Public Power District's (Loup Power District) Pre-Application Document (PAD) for the Loup River Hydroelectric Project (project) and the transcripts of our January 12 and 13, 2009, scoping meetings, have no comments on the PAD. We do have one study request at this time (attached in schedule A). Please note that staff may determine a need for additional studies or information upon receipt and review of scoping comments, study requests, and the applicant's proposed study plan.

If you have any questions, please contact Kim Nguyen at (202) 502-6105, or via e-mail at kim.nguyen@ferc.gov.

Sincerely,

Jennifer Hill, Chief Hydro West Branch 1

cc: Mailing List Public Files

Schedule A

Study Request #1

Recreation Use Within Project Boundary & Along Bypassed Reach

After reviewing the information provided in the PAD as well as the comments provided during the scoping meetings held on January 12 & 13, 2009, two information gaps have been identified. Current recreational use along the Loup River bypassed reach as well as use within the project boundary along the Loup Canal is not well documented. The extent of the information gap and relative scope of the study can be established during the study plan meetings after reviewing all available information.

The following study request addresses each of the seven study criteria as required in 18 C.F.R. §5.9(b):

 $\S5.9(b)(1)$ — Describe the goals and objectives of each study proposal and the information to be obtained.

The goal of this study is to determine the demand for and existing use of the recreational facilities provided at the following areas:

- 1) Headworks Park
- 2) Headworks Off Highway Vehicle (OHV) Park
- 3) Monroe Powerhouse
- 4) Lake North
- 5) Lake Babcock (Loup Park)
- 6) Powerhouse Park at the Columbus Powerhouse
- 7) Tailrace Park
- 8) Loup Lands Wildlife Management Areas
- 9) Along the bypassed reach of the Loup River
- 10) Within the Loup Canal
- 11) On the Loup Canal access roads

The objectives of the study are to:

- 1) Quantify existing recreation use levels at all locations identified above.
- 2) Document the types of recreational use occurring by season at each location.
- 3) Identify user perceptions regarding the operation and management of outdoor recreation facilities at each location.
- 4) Assess the impact of project operations on recreation experiences.
- 5) Document public awareness of existing recreation facilities.
- 6) Identify potential measures to alleviate any negative impacts as well as

to enhance existing recreational opportunities.

7) Develop a recreation plan for the project.

§5.9(b)(2) — If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied.

Not Applicable

 $\S5.9(b)(3)$ — If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study.

Sections 4(e) and 10(a) of the Federal Power Act require the Commission to give equal consideration to all uses of the waterway on which a project is located. When reviewing a proposed action, the Commission must consider the environmental, recreational, fish and wildlife, and other non-developmental values of the project, as well as power and developmental values.

Comments provided during the scoping process by representatives of the Nebraska OHV Associate indicate a strong interest in the continued provision of recreation facilities in general and specifically for off-road vehicle and camping opportunities in and around Headworks Park. In order to document existing use of the Headworks Park and other recreation amenities as well as to provide insight regarding the needs of recreationists at project facilities, a study of recreation use is relevant to the Commission's public interest determination.

It was also noted during the scoping process that no assessment of recreational use in the bypassed reach has been undertaken to date. To fully evaluate the project's impact on boating and fishing in the bypassed reach and to balance potential recreation enhancement opportunities with their costs, a study of recreation use is needed.

5.9(b)(4) — Describe existing information concerning the subject of the study proposal, and the need for additional information.

When comparing historic visitation as reported via Recreation Reports (Form 80) filed with the Commission to the more recent estimates made in the PAD, it appears that recreational use is increasing. The Form 80 also indicated that camping facilities were at 90% capacity without consideration of peak use and trails were at 85%. Since the submission of this document, trail mileage has been added to address capacity needs, but no additional campsites have been documented. Other facilities receiving high levels of use (70% capacity during non-peak weekends) included parks, playgrounds, picnic areas, tent/trailer/RV sites, and group camping areas. With the large increase is recreational visitors,

some of these facilities may be experiencing use levels that exceed their design capacity. To better understand the types of recreational use that occurs on Loup Power District's facilities, as well as to quantify that use, a visitor use study should be conducted.

Regarding the bypassed reach, no information was provided in the PAD regarding recreational use. During the public scoping meetings, it was noted that "people canoe and kayak on the bypass reach on a regular basis between Monroe and Columbus." The existing level of recreation use should be documented so that the information may be used to inform future management recommendations. Initially, existing hydrology data should be reviewed to identify daily flow levels in the bypassed reach. This information should be augmented with an assessment of local knowledge regarding existing recreational activity within the bypassed reach to ascertain a range of flow levels that facilitates recreational use. Depending upon the level of existing use as well as latent demand identified for recreation in the bypassed reach, a controlled flow study may be warranted.

§5.9(b)(5) — Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements.

Recreation has been identified as a legitimate project purpose by the Commission. Applicants are encouraged to develop recreation resources in such a matter that is "consistent with the needs of the area to the extent that such development is not inconsistent with the primary purpose of the project" (18 C.F.R. §2.7). The Loup Power District has established a precedent over the previous 80 years of providing a wide array of outdoor recreation opportunities. An assessment of the current level of recreational use should be conducted to provide Loup Power District personnel with the knowledge to manage the recreational components of the project efficiently and effectively over the life of the next license.

Project operation affects available instream flows for boating and fishing in the bypassed reach of the Loup River by diverting flows from the 31 mile reach between the headworks for the canal and the confluence of the Loup and Platte Rivers. No minimum instream flow has been established that meets the needs of all interested parties. An analysis of existing recreational use of the bypassed reach (canoes and kayaks) would help form the basis for determining the project's ability to enhance boating opportunities.

§5.9(b)(6) — Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field seasons(s) and the

duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge.

As stated in the PAD, the recreation user survey shall "determine the public awareness, usage, and demand of the project's existing recreational facilities to determine if potential improvements are needed." The most efficient way to count visitors to a recreation site is to install mechanical counters at an entrance to the parking lots at each facility. An infra-red beam counter will track hourly counts for each 24 hour time period up to one month. Data can be easily downloaded from the counter to a personal computer. Mechanical counters should be installed for 12 months in order to capture seasonal use variations.

In addition to the mechanical counts, a visitor intercept study should be conducted in order to determine use patterns at each recreational facility. Conducting an on-site study also would provide a method to validate the mechanical count numbers by tracking the number of vehicles that enter the park during the time period when onsite interviews are conducted. The group size encountered will also provide an estimate of the number of individuals entering the facility per car. Sampling visitors to each site should be stratified by day of the week and time of day to ensure that the spectrum of visitors to each site are included in the survey. Similar to the mechanical counters, interviews should be conducted over a 12 month period in order to capture seasonality.

The most appropriate method to assess public awareness would be to conduct a telephone or mail survey of potential users within the Loup Power District's service area. A one page questionnaire would inform the Loup Power District regarding public awareness of existing facilities and provide the opportunity to gather information from former users and potential users. This study would also allow an assessment of latent demand for additional recreation opportunities.

§5.9(b)(7) — Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

The cost for preparing the study plan, conducting the studies and preparing the report is estimated to be between \$90,000 and \$125,000. Three sub-studies would be conducted in order to gather all of the needed information: a visitor count study; a visitor intercept study; and a potential user study.

The first study would include the installation of mechanical counters (for a period of 12 months) at all established recreational sites within the project boundary [Headworks Park, Headworks OHV Park, Monroe Powerhouse, Lake

North, Lake Babcock (aka Loup Park), Powerhouse Park, Tailrace Park, and Loup Lands Wildlife Management Areas]. The count data would provide information on the distribution of use throughout the project boundary as well as document seasonal fluctuations in use. In addition to purchasing the counting devices, staff would need to learn how to operate and install them. On a monthly basis staff would need to download data from the counters and save it in a master data file. This portion of the study should cost between \$10,000 and \$15,000 depending upon the number of counters purchased and installed in the field.

Individuals pursuing recreational activities would be interviewed in the second study. A stratified sample of visitors (across days of the week and time of day) would be contacted over a 12 month period. While on site, the interview staff would also be responsible for counting the number of vehicles and people using the location during the sampling time frame. These numbers would be used to validate the mechanical counters. Visitors at the established recreation sites [Headworks Park, Headworks OHV Park, Monroe Powerhouse, Lake North, Lake Babcock (aka Loup Park), Powerhouse Park, Tailrace Park, and Loup Lands Wildlife Management Areas] would be sampled on two week days and two weekend days per month as well as on one summer holiday (Memorial Day, July 4th, or Labor Day). Disbursed recreationists using the canal or the canal banks would be sampled on a similar schedule by having interview staff drive the canal bank on scheduled days to contact visitors and count users and vehicles. Paddlers using the bypassed reach of the Loup River would be sampled during high water events at put-in or take-out locations. This study would provide information on visitor use patterns as well as user perceptions of facilities, operations strategies, and management regulations. This portion of the study should cost between \$60,000 and \$80,000 assuming that interviewing is done in pairs for safety reasons.

The final component of the study is a mail survey of households within the service area of the Loup Power District. Following the methods recommended by Dillman (2000), each household selected to participate in the mail study should be contacted multiple times to increase the chances of an individual completing and returning the survey. This portion of the study should cost between \$20,000 and \$30,000 assuming a desired sample size of 400 and a 20% response rate.

References Cited

Dillman, D. (2000). Mail and Internet Surveys: The tailored design method, 2nd Ed. John Wiley & Sons, New York, NY.

Form 80 (2003). Licensed Hydropower Development Recreation Report submitted by Loup Power District for the year 2002.

PAD (2008). Pre-application document submitted by the Loup Power District on October 16, 2008 for project number 1256.

Loup Power District (2009). http://www.loup.com/RECREATE.asp, accessed on January 26, 2009.

Attachment B – Nebraska Game and Parks Commission Lease Agreement

AGREEMENT COPY ON LOUP RIVER PUBLIC POWER DISTRICT LANDS

This agreement is made and entered into by and between the Loup River Public Power District (hereinafter called District) and the Nebraska Game and Parks Commission (hereinafter called Lessee) and becomes effective upon the date of the final signature. The agreement shall be in effect until April 15, 2014. After April 15, 2014, the agreement shall be null and void. The agreement can be terminated prior to April 15,

<u>Purpose</u>: The District has a number of plots of land under their ownership having high wildlife values. The purpose of this agreement shall be to provide for the establishment and administration of a program of assistance and cooperation in the development, management and enhancement of these wildlife lands in the Loup River Public Power District.

Land Tracts Involved and Management Needed: (Appendix I)

2014, by either party giving the other party thirty (30) days advance notice.

TRACT d

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Size: Approximately 10 acres (only that portion not in cropland & excluding existing duck blind)

<u>Legal Description</u>: The Northwest corner of a tract in the N1/2 of Section 6, T16N, R4W, lying south of the Loup River. Said 10 acres measuring approximately 650' south from the Loup River along the west line of said Section 6, thence approximately 200' east, thence north approximately 200', then east approximately 675', thence north to the road along the south side of the Loup River, thence west along said road to the place of beginning. The intent being to include only the area planted to trees.

Description: Planted timber area along south side of Loup River next to cropland.

Wildlife Potential: Excellent area for deer and game including pheasant and quail and furbearers including raccoon and coyote.

TRACT g

Size 330 acres

Legal Description: All land south and east of Loup River, Section 32, T17N, R4W. Part of the W1/2, Section 33, T17N, R4W. Part of NW1/4, NE1/4 and part of NE1/4 NE1/4, Section 33, T17N, R4W. Also N1/2NW1/4, Section 34, T17N, R4W. The area in Section 33, T17N, R4W lies west and north of the fence as now located on the east and south sides of the Loup River Public Power District dike.

Description: Timberland subject to frequent flooding. Loup River Public Power District cuts temporary piling and trees for riprap from this land.

Wildlife Potential: Excellent area for big game (particularly deer), upland game (particularly quail), small game and non-game.

Public access is available both to the land and to the river.

TRACT h

Size: Approximately 145 acres

Legal Description: All that part of W1/2 Section 27, T17N, R4W, south of the south right-of-way line of the Loup River Public Power District canal and north of the Loup River, except approximately 35 acres lying west of the state dike, "which runs northwest by southeast," and north of the timber line. This area being in the northwest corner of the above described tract.

Description: Two-thirds timberland and one-third pastureland. Contains old oxbows holding water year round. This land is north of the Loup River and subject to frequent flooding.

Wildlife Potential: Good waterfowl production potential as well as an excellent area for big game, upland game, small game, and non-game. Public access is available to land and to the Loup River.

Lessee Responsibilities That the Lessee will:

- a. Prepare a general management plan for all tracts and coordinate this with Loup.
- b. Fence all lands when necessary to exclude livestock.
- c. Accomplish wildlife enhancement practices on the areas, including planting of trees, shrubs, and grasses, control burning, etc.
- d. Persorm minor maintenance, including cleanup, fence repair, etc.
- c. Perform law enforcement activities, particularly those dealing with outdoor activities such as hunting, fishing and trapping.
- f. Post all lands with appropriate signs concerning public access,
- g. Review wildlife habitat management activities with LPD periodically.
- h. Pay for the costs of the above duties except when otherwise decided upon jointly by the Loup River Public Power District and the Game and Parks Commission
- Open all areas to public access (foot traffic only) year around for the purpose of hunting, fishing, trapping and hiking unless otherwise specified by both the District and the Lessee. All rifles, including .22 calibre, are prohibited in the leased areas.

District Responsibilities That the District will:

- a. Pay taxes and/or other assessments on the land.
- b. Review management activities with Game and Parks Commission periodically.
- c. Assist Game and Parks Commission in routine inspections for trespassing livestock, vandalism, etc., and advise Game and Parks Commission of any irregularities.
- d. Continue to handle major maintenance activities such as dike repair and renovation. The District is not committed to maintaining dikes and other existing land improvements which are not required now or in the future for proper operation of the hydraulic facilities.

It is agreed that the Lessee cannot assign or sublet the premises without authority from the District; that the premises will be used for fish and wildlife management purposes, including hunting and fishing; that the District reserves the right to enter upon the property, without liability to the Lessee, and make such use thereof as is necessary for proper maintenance, supervision and construction of its system; that the Lessee will maintain all fences thereon; that the Lessee will be responsible for control of noxious weeds in leased area. The District presently cuts trees from the leased areas for use in the District's maintenance programs. The District retains the right to cut trees in the leased areas, but will work with the Lessee in selecting the trees to be cut.

It is further agreed that the District is under no obligation to the Lessee to protect the leased premises from any hazards arising from flood or other casualty.

The Lessee agrees to indemnify and hold the District harmless from any and all claims by any person, including employees of the Lessee and employees of the District for damage to persons or property caused by and arising out of the use of this property by the Lessee.

This agreement is executed by the Loup River Public Power District and the Game and Parks Commission after due consideration at official meetings of each respective organization on the dates affixed beside their authorization and adoption thereof. Either party may withdraw from this agreement, by action of their respective Boards, for stated causes.

ATTEST:

DATE: 9/29/03

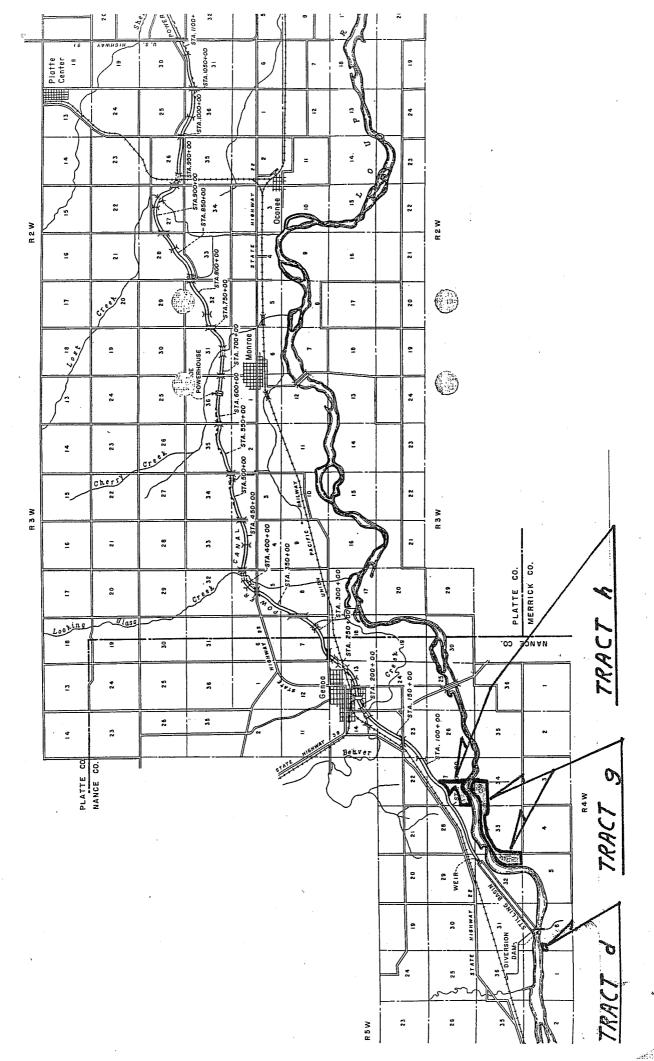
I OUP RIVER PUBLIC POWER DISTRICT

ATTEST:

DATE: 10/1/03

NEBRASKA GAME AND PARKS COMMISSION

By Il I relea



MAP LOCATION

Attachment C – In-Person Recreation User Survey

In-person Recreation User Survey

Su	rvey Location:					
Da	te:					
Tiı	ne:					
Zip	Code of Residence:					
1.	How many people are in	your party, includir	ng yourself?			
	18 years or older					
	Under 18 years	_				
2.	If you plan to or have sta How will/did you camp?	yed overnight, how	many nights will	/did you stay?		
	☐ Tent at developed	campground	# of nights _			
	☐ Tent at undevelope	ed campground	# of nights _	# of nights		
	□ RV/Trailer		# of nights _			
3.	Please estimate how man	y times per year yo	u visit this location	on for recreation purposes?		
	Weekly					
	Several times a	month				
	Once a month					
	2 to 3 times per	year				
4.	What months do you typ	ically use this locati	ion?			
	January	May		September		
	February	June		October		
	March	July		November		
	April	August		December		

5. Do you visit other locations in Nance or Platte counties for recreation purposes? If so,

which one(s)?

5.	Please indicate the activities that you have been [Mark all that apply.]	or will be participating in on this visit
	□ Camping	☐ Water Skiing
	☐ Hiking/Biking	☐ Non-Motorized Boating
	Which trail?	☐ Wildlife/Scenic Viewing
	☐ Fishing from Shore	☐ Organized Event
	☐ Fishing from Boat	☐ Picnicking, Informal Recreation
	☐ Swimming	☐ Children's Playground
	☐ Motorized Boating	☐ Off-Highway Vehicles
	☐ Jet Skiing	□ Other
7.	What recreation activities have you participated location? [Mark all that apply.]	in during the past 12 months at this
	□ Camping	□ Water Skiing
	☐ Hiking/Biking	☐ Non-Motorized Boating
	Which trail?	☐ Wildlife/Scenic Viewing
	☐ Fishing from Shore	□ Organized Event
	☐ Fishing from Boat	☐ Picnicking, Informal Recreation
	☐ Swimming	☐ Children's Playground
	☐ Motorized Boating	☐ Off-Highway Vehicles
	☐ Jet Skiing	☐ Other

8. Please rate the facilitie	8. Please rate the facilities you have used at this location.								
	Excellent	Good	Average	Below Average	Poor	Not Applicable			
Boat ramps									
Swimming beach									
Parking lot									
Campgrounds									
Restroom facilities									
Picnic area									
Children's playground									
Shoreline fishing area									
Trails									
Off-highway vehicle park				Ò					
If you indicated any fa 9. Were there any activiti					ias? If	'ao plooso			
indicate the activity.	ics that con	micica	with your i	cereation activit	105: 11	so, picase			
☐ Yes, other recrea	ation activi	ties							
☐ Yes, other non-r☐ No	ecreation a	ectivities	3						

10	Please	indicate	how	important	the	fol	lowing	recreational	opportunities	are to you
IU.	1 Icasc	marcate	110 00	mportant	uic	101	10 11 1115	recreationar	opportunities	are to you.

	Very Important	Important	Neutral	Somewhat Important	Not Important
Motor boating					
Jet skiing					
Water skiing					
Non-motorized boating					
Fishing					
Hiking/biking					
Wildlife/scenic viewing					
Swimming					
Trails			Ò		
Camping					
Picnic shelters/facilities					
Informal recreation					
Children's playground					
Off-highway vehicles					

11. Please identify any other activities or facilities that are currently not available that you feel would enhance your recreational experience.

Thank you for your participation!

Attachment D – Field Observation Form

Field Observation Form

(Specific activities/observation categories will vary by location. A table will be created for each key study site identified in Section 5 of this Recreation User Survey Study Plan.)

Date:

Location:

	Parking Area	Campground	Picnic Area	Playground	
Time and Weather					
Vehicles					
RV Campers					
Tent Campers					
Fishing from Shore					
Fishing from Boat					
Swimmers					
Picnickers			-		
Jet Skiers					
Water Skiers					
Canoeists					
Power Boaters		>			
Walkers/Hikers					
Wildlife Viewers					
Bicyclists					
Children's Playground					
Informal Recreation					
Other					
Comments/Observations					

Survey proctors should indicate whether the observations are estimates or actual counts.

Attachment E – Telephone Recreation User Survey

Telephone Recreation User Survey

Loup Power District (District) is applying to the Federal Energy Regulatory Commission to relicense its hydroelectric project near Genoa and Columbus, Nebraska, and is conducting a recreation user survey to determine use of the District's facilities. The survey will take approximately __ minutes.

- 1. Are you familiar with any of the following recreation facilities provided by Loup Power District?
 - Headworks Park
 - Headworks OHV Park
 - Lake Babcock Park (sometimes called Loup Park)
 - Lake North Park
 - Columbus Powerhouse Park
 - Tailrace Park
 - Two Lakes Trail
 - Bob Lake Trail
 - Robert White Trail

IF YES:

2A. Have you or any members of your household visited one or more of the facilities in the last year? The facilities are:

[Mark YES answers]

•	Headworks Park	How many times?
•	Headworks OHV Park	How many times?
•	Lake Babcock Park (sometimes called Loup Park)	How many times?
•	Lake North Park	How many times?
•	Columbus Powerhouse Park	How many times?
•	Tailrace Park	How many times?
•	Two Lakes Trail	How many times?
•	Bob Lake Trail	How many times?
•	Robert White Trail	How many times?

3A. Why do you choose to recreation facilities in	-				instead	l of other			
□ Location – close	e to home								
☐ Provide the faci	lities we no	eed							
□ Don't know wh	ere other fa	acilities	are located	d					
☐ Facilities are sar	fer								
☐ Facilities are be	tter mainta	ined							
☐ Facilities are fre	ee								
□ Other	□ Other								
4A.I am going to list the D use as excellent, good,						the ones you Not Applicable			
Boat ramps									
Swimming beach									
Parking lot									
Campgrounds									
Restroom facilities									
Picnic area									
Children's playground									
Shoreline fishing area		J							
Trails									
Off-highway vehicle park									
[If "Poor" for any above, s poor – can you explain?]	pecifically	ask, for	example,	you indicated th	at boat	ramps were			

5A.I'm going to list recreational opportunities for you, and I'd like you to rate how importa	ant
they are to you as very important, important, neutral, somewhat important, or not	
important.	

	Very Important	Important	Neutral	Somewhat Important	Not Important
Motor boating					
Jet skiing					
Water skiing					
Non-motorized boating					
Fishing					
Hiking/biking					
Wildlife/scenic viewing					
Swimming					
Trails					
Camping					
Picnic shelters/facilities					
Children's playground					
Informal recreation					
Off-highway vehicles					

6A.Please identify any other activities or facilities that are currently not available that you feel would enhance your recreational experience.

<*END*>

IF NO:

3B. Why have you or mem facilities in the last year	•		used Loup I	Power District	trecreation			
☐ Location – too far from home								
☐ Do not provide the facilities we need								
☐ Too busy/not interested in recreation								
☐ Don't know where the facilities are located								
☐ Facilities do not have the right equipment								
☐ Facilities are not safe								
☐ Facilities are no	☐ Facilities are not well maintained							
☐ Other (please ex	xplain							
4B.I'm going to list recreational opportunities for you, and I'd like you to rate how important they are to you as very important, important, neutral, somewhat important, or not important.								
	Very Important	Important	Neutral	Somewhat Important	Not Important			
Motor boating								
Jet skiing								
Water skiing								
Non-motorized boating								
Fishing								
Hiking/biking								
Wildlife/scenic viewing								
Swimming								
Trails								
Camping								
Picnic shelters/facilities								
Children's playground								
Informal recreation								
Off-highway vehicles								
<end></end>								

IF NO:

- 2C. In which outdoor recreational activities do you or members of your household regularly participate?
 - A. Camping
 - B. Hiking/Biking
 - C. Trails
 - D. Fishing
 - E. Motorized Boating
 - F. Jet Skiing
 - G. Water Skiing
 - H. Non-motorized Boating
 - I. Swimming
 - J. Off-Highway Vehicles (OHV)
 - K. Wildlife/Scenic viewing
 - L. Picnicking
 - M. Children's Playground
 - N. Informal Recreation
 - O. Do not participate in outdoor recreation activities

If response is O, conclude survey.

- 3C. Where do you currently participate in outdoor recreation activities?
- 4C. Why do you choose this/these locations for your recreation activities?

5C. I'm going to list recreational opportunities for you, and I'd like you to rate how important they are to you as very important, important, neutral, somewhat important, or not important.

	Very Important	Important	Neutral	Somewhat Important	Not Important
Motor boating					
Jet skiing					
Water skiing					
Non-motorized boating					
Fishing					
Hiking/biking					
Wildlife/scenic viewing					
Swimming					
Trails					
Camping					
Picnic shelters/facilities					
Children's playground					
Informal recreation					
Off-highway vehicles					

<*END*>

Attachment F - NOHVA Recreation User Survey

NOHVA Recreation User Survey

			,			
rel rec ask	icense its hydroelectric project creation user survey to determi	near Genoa and Columbune use of the District's fac survey about Headworks I	nergy Regulatory Commission to as, Nebraska, and is conducting a cilities. NOHVA members are Park. Please take a few minutes to			
Th	ank you.					
1.			one in your household used an elers, dirt bikes, or snow mobiles)			
2.	How many of those days wer	e at the District's Headwo	rks OHV Park?			
2a. What months of the year do you use Headworks Park and other recreation facilities?						
	January	May	September			
	February	June	October			
	March	July	November			
	April	August	December			

3. In what other places have you used an OHV for recreational purposes in the last 12 months?

	4a. Why do you prefer the place y	you use most often? Select all that apply.		
	\Box It is easy to get to.			
	☐ It has the best OHV facility	ies.		
	\Box There is no other place to i	ride.		
	\Box It is free to ride there.			
	□ Other			
5.	When you use Headworks Park, do you s	stay overnight? If yes, where do you stay?		
	☐ Nearby hotel/motel			
	□ RV/Trailer at District's campground			
 Tent at District's developed campground Tent at District's undeveloped campground 				
	□ Other			
6.	ticipate in when visiting Headworks Park. Ma			
	☐ Camping	☐ Water Skiing		
	☐ Hiking/Biking	☐ Non-Motorized Boating		
	Which trail?	☐ Wildlife/Scenic Viewing		
	☐ Fishing from Shore	☐ Picnicking		
	☐ Fishing from Boat	☐ Children's Playground		
	☐ Swimming	☐ Informal Recreation		
	☐ Motorized Boating	☐ Other		
	☐ Jet Skiing			

4. Where do you use OHVs most frequently for recreational purposes?

9. Please indicate how important the following recreational opportunities are to you.

	Very Important	Important	Neutral	Somewhat Important	Not Important
Motor boating					
Jet skiing					
Water skiing					
Non-motorized boating					
Fishing					
Hiking/biking					
Wildlife/scenic viewing					
Swimming					
Trails			Ò		
Camping					
Picnic shelters/facilities					
Informal recreation					
Children's playground					
Off-highway vehicles					

10. Please identify activities or facilities that are currently not available that you feel would enhance your recreational experience.