# **RECREATION USE**

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## LIST OF ATTACHMENTS

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- B NEBRASKA GAME AND PARKS COMMISSION LEASE AGREEMENT
- C IN-PERSON RECREATION USE SURVEY
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- F FIELD OBSERVATION FORM
- G TELEPHONE RECREATION USE SURVEY

#### STUDY 8.0 RECREATION USE

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 October 31 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 use study, which will include components of both a recreation user survey and a creel survey, to gather data regarding existing recreation use, including that of anglers, of Project facilities. The data collected from this study 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 conflicting land uses and activities.

In the District's Proposed Study Plan (PSP) (Loup Power District, March 27, 2009), the contents of this study were divided between Study 8.0, Recreation User Survey, and Study 9.0, Creel Survey. These studies resulted from the following agency study requests:

- 1. In a letter dated February 10, 2009, FERC submitted a recreation user study request to the District (see Attachment A).
- 2. During the July 17 and August 12, 2009, Recreation/Land Use/Aesthetics Workgroup conference calls, the Nebraska Game and Parks Commission (NGPC) requested that the District perform one open-water fishing season creel survey of Project fisheries.

July 2009

During the May 11, 2009, Recreation, Land Use, and Aesthetics Study Plan Meeting, it was determined that the goals and objectives of Study 8.0, Recreation User Survey, and Study 9.0, Creel Survey, as presented in the PSP could be more efficiently accomplished by combining the two studies into one Recreation Use study. This combined study would be used to gather data from anglers and non-angler recreation users simultaneously. The resulting study plan and associated activities are detailed herein.

#### 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 use study is to determine the public awareness, usage, perception, and demand of the Project's existing recreation facilities (including fisheries), to determine if potential improvements are needed, and to develop a Recreation Management Plan to address existing and future recreation needs.

The objectives of the recreation use study are as follows:

- 1. To measure usage of Project recreation facilities, including fisheries.
- 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, including fisheries, and identify the impact of Project operations on recreation experiences.
- 5. To determine what species anglers are targeting and catching, including catch rates.
- 6. To collect data for use in the preparation of a Recreation Management Plan for the District's facilities.

#### 2. 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 the Federal Power Act and its operating 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 use study 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."

Lastly, NGPC manages the state's publicly accessible fisheries, including Project fisheries, for productive sport fishing via its state fishing regulations. The NGPC 2009 Nebraska Fishing Guide lists the following fish species as being accessible to anglers in Project fisheries (NGPC, 2009):

- Loup Power Canal and Loup River carp, channel and flathead catfish, freshwater drum
- Lake Babcock bullhead, carp, channel and flathead catfish
- Lake North carp, channel catfish, crappie, freshwater drum, walleye

Historically, NGPC actively stocked Project fisheries, including walleye in Lake North. Currently, NGPC has no regular stocking programs in Project waters; however, on June 3, 2009, NGPC stocked 34,840 sauger in the Loup Power Canal (NGPC, June 3, 2009).

#### 3. 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 its 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.

# 3.3 Nebraska Creel Survey Guidance and Methodologies

NGPC produced the *User's Guide for Nebraska Creel Surveys* to provide guidance and methodologies to both NGPC staff and outside interests on how to design and perform creel surveys in Nebraska (NGPC, April 30, 1992). The User's Guide includes an introduction to creel surveys, information on survey design and planning, instructions for conducting on-site creel surveys, and information on data analysis. The guidance and methodologies from this User's Guide provide the basis for the proposed methodology discussed in Section 6 of this Study Plan.

# 3.4 General Information on Project Fisheries

NGPC performed a detailed creel survey on Project fisheries in 1996 and 1997 (NGPC, June 1997 and April 1998). Generally, NGPC-collected data suggests that Project fisheries are healthy and receive substantial angling use.

In addition to the NGPC creel survey, the following general information concerning Project fisheries is known:

Central to the District's fishing opportunities is the Loup Power Canal. The canal is approximately 35 miles long, has approximately 70 miles of shoreline (not including the 10 miles of shoreline surrounding Lake Babcock and Lake North), and is fully accessible to the public via access roads on both sides. The public access roads allow for fishing opportunities, specifically for carp, channel and flathead catfish, and freshwater drum, along the canal's length. The canal's most productive fishing opportunities occur at the Outlet Weir, siphons, Settling Basin, and in the tailwaters below the Monroe and Columbus powerhouses (NGPC, 2009).

- Lake North Park is the District's most popular recreation area and provides unrestricted boat access to the 200-acre Lake North, another important Project fishery that contains carp, channel catfish, crappie, freshwater drum, and walleye. Lake North Park features 2 miles of beaches and two boat ramps.
- Lake Babcock Park (aka Loup Park) provides fishing access to the 600-acre Lake Babcock, which contains bullhead, carp, and channel and flathead catfish. At Lake Babcock, boats are restricted to 5 miles per hour with no wake, and no boating is allowed during waterfowl hunting season (NGPC, 2009).
- Project-related fishing opportunities also exist at Powerhouse Park and Tailrace Park, which provide fishing opportunities immediately downstream of the Columbus Powerhouse and at the confluence of the Tailrace Canal with the Platte River, respectively. Headworks Park also provides fishing access to small lakes, the Loup Power Canal, and the Loup River.

#### 4. PROJECT NEXUS

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

The following Federal regulations require that recreational resources, including fishing opportunities, 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)).
- With regard to FERC relicensing, the Code of Federal Regulations (CFR) states that "recreation studies should be designed to identify current and future recreational needs and how those needs can be best met" (FERC, April 2004).

#### STUDY AREA AND STUDY SITES

Almost all of the 5,200 acres within the Project Boundary are open and accessible for public recreation. Although non-angling recreation use will be documented along the entire Loup Power Canal, special emphasis will be applied to the following recreation areas:

- 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

The creel survey will span the length of the Loup Power Canal and will include Lake Babcock and Lake North. Although the survey generally will not include data collection associated with anglers on the Loup River or the lower Platte River, the survey will capture angler counts and interviews of those anglers fishing immediately adjacent to either the Diversion Weir on the Loup River or the Outlet Weir on the Platte River.

In its February 10, 2009, study request, FERC asked that the recreation use survey also include the Loup Lands Wildlife Management Area (WMA) and the Loup River bypass reach (see Attachment A). The District is not including these sites in the survey for the following reasons:

- Loup Lands Wildlife Management Area The District leases the area known as Loup Lands WMA to NGPC. Under the lease terms, NGPC is responsible for preparing the management plan for the WMA, controlling access, performing maintenance, and carrying out other management activities in a manner similar to that of other WMAs (see Attachment B). In addition, NGPC has gone on record (at the May 11, 2009, Recreation, Land Use, and Aesthetics Study Plan Meeting) as being opposed to the inclusion of the Loup Lands WMA in the proposed recreation survey.
- Loup River bypass reach The Loup River bypass reach downstream of the Headworks is not within the Project Boundary. With few minor exceptions, all property on both sides of the Loup River bypass reach is privately owned and controlled from the Project Headworks downstream to City Park in Columbus. Under Nebraska law, only the actual water in a river belongs to the state of Nebraska and is open for public use. The entire

riverbed, including banks, beaches, islands, and exposed sandbars, is private property. Any public activity, including recreation, involving contact with these properties is subject to state trespass laws. Therefore, legal public recreation in the Loup River bypass reach is essentially limited to occasional float trips during high-flow periods. The majority of legal recreation use on the Loup River bypass reach is non-public and limited to the riparian land owners or those who have obtained permission from the land owners. Because of existing private property laws, the opportunities for public recreation (or even for conducting recreation use surveys) are extremely limited in the Loup River bypass reach.

Additional discussion related to the exclusion of these areas was initiated during the May 11, 2009, Recreation, Land Use, and Aesthetics Study Plan Meeting. A summary of these discussions, including the support of NGPC on the exclusion of both areas, is provided in Section 7 of this recreation use study.

#### 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;"  $18 \ CFR \ \S 5.11(d)(5)$ 

The collection of recreation use data that will be used to develop a Recreation Management Plan for the District involves a multi-pronged effort, including a creel survey. Data will be collected through observations and in-person surveys at recreation facilities and Project fisheries. In addition, infrared counts of recreation trail use and a telephone survey of area residents will also be used. The tasks associated with data collection and development of the Recreation Management Plan 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.

Surveys will be conducted on four weekend days and six weekdays per month from May 1 to October 31, 2010, including one summer holiday (Memorial Day, Independence Day, or Labor Day). Prior to the survey period, and in conjunction with NGPC, the District will establish a survey schedule for the season to ensure that all locations are visited and randomly surveyed at differing times during the day.

#### Task 2 Data Collection

Data will be collected through in-person surveys (recreation use and creel surveys), field observations, trail counts, and a telephone survey.

In-person Surveys – Recreation Use Survey

Survey proctors, dispatched in teams of two, will visit recreation areas within the Project Boundary at varying times during the day on four weekend days and six weekdays per month from May 1 to October 31, 2010. When feasible (during off-peak use periods), survey proctors will attempt to interview all recreation users. During peak use periods, when it is not practicable to interview all users, one proctor will count all users (in association with the field observation activity listed below), while the other proctor interviews as many users as possible within a reasonable time period. This method will allow an overall understanding for the amount of use during the period and will provide the percentage of users interviewed. Survey proctors will provide a standard introduction to survey participants that explains the purpose of the survey, how the information will be used, and who will receive the information. General demographic questions will be asked at the conclusion of the survey to provide information for comparison to regional statistics.

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 length of the recreation use survey has been 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 to 10 minutes to complete. The District's In-Person Recreation Use Survey is provided in Attachment C. The National Park Service and FERC's recreation specialist provided input on the wording and development of the survey questions.

In-person Surveys – Creel Survey

Prior to initiation of the In-Person Recreation Use Survey provided in Attachment C, survey proctors will ask anglers to answer questions consistent with the NGPC Fisheries Division's Creel Survey Interview Form (see Attachment D). Data collected during creel survey interviews will focus on targeted species, catch rates, and overall angler perception. All creel survey activities (counts and interviews) will be conducted from shore

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<sup>&</sup>lt;sup>1</sup> Informed consent standards require those responding to be 19 years or older (in Nebraska, the age of majority is 19). Information about recreation use of persons under the age of 19 will be gathered via questions related to other members of the group being interviewed.

Angler interviews will be conducted concurrent with angler counts and will be coded according to Project location. When feasible, survey proctors will make every effort to interview anglers at the completion of their trip. Anglers will be asked to complete both the standard NGPC Creel Survey Interview Form and the Project-specific Recreation Use Survey to provide information relevant to management of Project fisheries as well as development of a Recreation Management Plan for the District. The combined survey information will determine angler species preference, angler expectations and needs, and the overall perception of Project fisheries. Details related to angler interviews are shown in the Creel Survey Interview Form, provided in Attachment D.

Instantaneous angler counts (counting all anglers in a 2-hour time period) will not be conducted; however, the direction in which angler counts are performed will alternate between surveys (for example, Survey 1 should be performed east to west, Survey 2 should be performed west to east, and so forth) to ensure that survey proctors are not at the same location at the same time of day for each survey. Angler counts will be coded by location so that angler pressure on specific areas of the Project can be documented. Details related to angler counts are shown in the Creel Survey Count Form, provided in Attachment E.

#### Field Observations

Field observations will be conducted at the Project's recreation areas on the same days as the in-person surveys. Observations will include spot counts for various recreation activities as well as other relevant information. A sample Field Observation Form is provided in Attachment F.

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 from May to 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 the Project's recreational opportunities. Based on county populations, the desired sample size is approximately 400. A sample Telephone Recreation Use Survey is provided in Attachment G.

# 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). Explanations as to why study methodology differs from this request are as follows:

- Year Round Surveying The Project recreation facilities are open to the
  public from May 1 to October 31 and at other times, weather permitting.
  To determine if significant recreation usage occurs between November 1
  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 mail 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 1 to October 31, 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. With regard to the creel survey, angler effort, catch, and angler success will be determined. 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 collected and analyzed during the recreation use study and Study 10.0, Land Use Inventory, as well as recreation facility inventory data (including barrier-free

access) collected during preparation of the District's Pre-Application Document (PAD) will be used in the development of a Recreation Management Plan for the District. The Recreation Management Plan will include compiled findings from the studies to provide a framework for provision of future recreation facilities. The plan will also provide recommendations for enhancement of existing recreation facilities in order to meet existing and future recreation demands as well as mitigation measures for identified conflicting land uses and activities.

# 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.

On December 19, 2008, during preparation of Study 8.0, Recreation User Survey, for the PSP, a conference call meeting of the 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 during preparation of the PSP.

During preparation of Study 9.0, Creel Survey, for the PSP, the District worked cooperatively with NGPC staff to use existing NGPC guidance and methodologies for creel surveys. Specifically, the NGPC Fisheries Division in Norfolk, Nebraska, provided detailed information that was incorporated and referenced in that study plan. Furthermore, NGPC produced the survey schedule, field count form, and field interview form as provided in the PSP.

The District presented an overview of the goals, objectives, and activities associated with Study 8.0, Recreation User Survey, and Study 9.0, Creel Survey, at the Study Plan Meeting held on April 21, 2009; no comments were received at this meeting related to the Recreation User Survey or Creel Survey. Additionally, the District conducted a separate meeting on May 11, 2009, to discuss the specifics of studies related to recreation, land use, and aesthetics (studies 8.0, 9.0, and 10.0), which was attended by representatives from FERC, National Park Service, NGPC, Columbus Area Recreational Trails, Nebraska Off-Highway Vehicle Association, and Platte County Convention and Visitors Bureau. At the May 11 meeting, several study plan revisions were suggested. The following summarizes the primary items of discussion and notes how they are addressed in this Revised Study Plan:

1. Consistent with its February 10, 2009, study request, FERC expressed concern that the recreation user survey as described in the PSP did not include the Loup Lands WMA. During the meeting, both the District and NGPC expressed that including the WMA in the survey was unnecessary because NGPC holds a long-term lease on the property; in this lease, NGPC is designated as the responsible party for all management and maintenance

- activities within the WMA. NGPC restated this opinion in its June 26, 2009, email to the District concerning comments on the PSP (NGPC, June 26, 2009). Based on these factors, the District maintains its position to exclude the Loup Lands WMA from the scope of this revised study.
- 2. Consistent with its February 10, 2009, study request, FERC expressed concern that the recreation user survey as described in the PSP did not include the Loup River bypass reach. During the meeting, both the District and NGPC expressed that including the bypass reach in the survey was unnecessary because previous creel surveys conducted on the bypass reach in 1996 and 1997 by NGPC indicate very little recreation use (NGPC. June 1997; NGPC, April 1998). Although not available to FERC prior to the May 11, 2009, meeting, the District e-filed both NGPC documents (NGPC, June 1997; NGPC, April 1998) with FERC on June 17, 2009. Additionally, NGPC confirmed that 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 use survey. Based on these factors, the District maintains its position to exclude the Loup River bypass reach from the scope of this revised study.
- 3. Consistent with its February 10, 2009, study request, FERC inquired about the need for year-round use surveys, but went on to state that the crucial element of the survey is the ability to estimate use and that any survey duration that could facilitate accurate use estimates would be acceptable. Because District facilities are generally open from May 1 to October 31 and the majority of recreation use occurs within this period, the District maintains that limiting surveys to the May 1 to October 31, 2010, period is appropriate. Additionally, the District has tailored the recreation use survey to determine if significant recreation use occurs between November 1 and April 30 by including a question about year-round usage. If survey findings indicate significant recreation facility use outside of the initial survey period, expansion of the survey period will be considered.
- 4. Multiple agencies indicated that Study 8.0, Recreation User Survey, and Study 9.0, Creel Survey, as presented in the PSP could be combined into one comprehensive survey. The consensus was that combining these surveys would result in increased survey efficiencies. The Revised Study Plan, as submitted, demonstrates the District's proposal to combine these surveys. Notable changes resulting from survey combination are as follows:

- The creel survey no longer includes an instantaneous count. Instead, anglers will be counted as they are encountered with no qualification for specified time intervals.
- As detailed in Study 8.0, Recreation User Survey, in the PSP, the recreation user survey was to be conducted on two weekdays and two weekend days per month. In order to comply with NGPC's standard creel survey schedule/frequency, this revised recreation use survey, which includes both the recreation use and creel surveys, will be conducted on six weekdays and four weekend days per month (the same schedule/frequency proposed for Study 9.0, Creel Survey, in the PSP).
- As detailed in Study 9.0, Creel Survey, in the PSP, the creel survey was to be conducted from May through September 2010. In order to maintain consistency with the schedule/frequency proposed in Study 8.0, Recreation User Survey, in the PSP, this revised recreation use study will involve recreation use and creel surveys from May 1 through October 31, 2010.
- Multiple agencies felt that the goal of 300 in-person surveys (detailed in Study 8.0, Recreation User Survey, in the PSP as the number of surveys necessary to establish statistical significance using the annual use estimate of 150,000) was too low. As a result, no goal is specified in this Revised Study Plan. It is the District's intent to survey as many people as possible during the survey periods, and it is anticipated that greater than 300 in-person surveys will be conducted.
- All meeting attendees agreed that the survey of Nebraska Off-Highway Vehicle Association (NOHVA) members, as described in Study 8.0, Recreation User Survey, in the PSP, was not necessary and that it may skew survey results by targeting a group of recreation users with similar interests. As a result, the NOHVA survey is no longer proposed in this Revised Study Plan.
- Following the May 11 meeting, the FERC recreation specialist provided specific comments on the wording and development of the recreation use survey. These comments have been largely incorporated into the survey included in Appendix C.

The discussion from the May 11 meeting was documented in a transcript, which is available on the District's relicensing website (http://www.loup.com/relicense/html/agencymeetingsresources.html).

## 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 §5.11(b)(3)

# 8.1 Reports and Supporting Documentation

There are three intended work products of the recreation use study, as follows:

- 1. General Recreation Use Report documenting 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.
- 2. Creel Survey Report documenting angler effort (trips, counts, and hours expended), catch (number, length, and frequency by species), and success (catch per unit effort).
- 3. Recreation Management Plan outlining District plans for enhancing existing recreation facilities and meeting future recreation demands as well as identifying mitigation measures for noted for conflicting land uses and activities.

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

# 8.2 Adoption of Work Products by Other Studies or Parties

NGPC actively manages Project fisheries through the implementation and enforcement of fishing regulations. It is anticipated that NGPC will incorporate creel survey findings into its data library and may use these findings to modify existing fishing regulations specific to Project fisheries.

#### LEVEL OF EFFORT AND COST

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

It is estimated that the recreation use study, including the development of a Recreation Management Plan, will cost approximately \$340,000. This work will be completed by qualified planners, scientists, District staff, and clerical staff.

The surveys will consist of roaming surveys in which all activities are performed from shore; therefore, no watercraft or specialized equipment will be required.

#### 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 survey work will occur between May and October 2010. The Recreation Use study report will be available in the fourth quarter of 2010.

Preparation of the Recreation Management Plan will begin upon completion of this Recreation Use Study 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.

In addition, the District will prepare a consolidated Initial Study Report for Studies 1.0 through 12.0 that describes progress and results (as appropriate) for each study. In accordance with the District's Process Plan and Schedule, the Initial Study Report will be available in August 2010, and a study meeting will be held within 15 days, per 18 CFR §5.15(c)(2). An Updated Study Report will be available in August 2011 to provide information on progress and results for second season studies (as needed).

#### 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.
- Loup Power District. March 27, 2009. Loup River Hydroelectric Project, FERC Project No. 1256, Proposed Study Plan.
- NGPC. April 30, 1992. *User's Guide for Nebraska Creel Surveys*. NGPC Fisheries Division.
- NGPC. June 1997. Angler Use and Fish Community Dynamics in the Middle Loup and Loup River Basins and Sherman Reservoir. Annual Progress Report (March November 1996). Fisheries Division.

- NGPC. April 1998. Angler Use and Fish Community Dynamics in the Middle Loup and Loup River Basins and Sherman Reservoir. Annual Progress Report (March November 1997). Fisheries Division.
- 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. 2009. 2009 Nebraska Fishing Guide: Regulations and Public Waters. Lincoln, NE. Available online at www.ngpc.state.ne.us/fishing/guides/fishguide/FishGuide.pdf.
- NGPC. June 3, 2009. Fish Stocking Reports. Available online at http://www.ngpc.state.ne.us/fishing/guides/fishguide/FGfindstock.asp.
- NGPC. June 26, 2009. Email from Mr. Frank Albrecht, NGPC, to Project Distribution. Loup Power District FERC Relicensing Study Plan Information.

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 15<sup>th</sup> 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 4<sup>th</sup>, 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, 2<sup>nd</sup> 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

ý

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

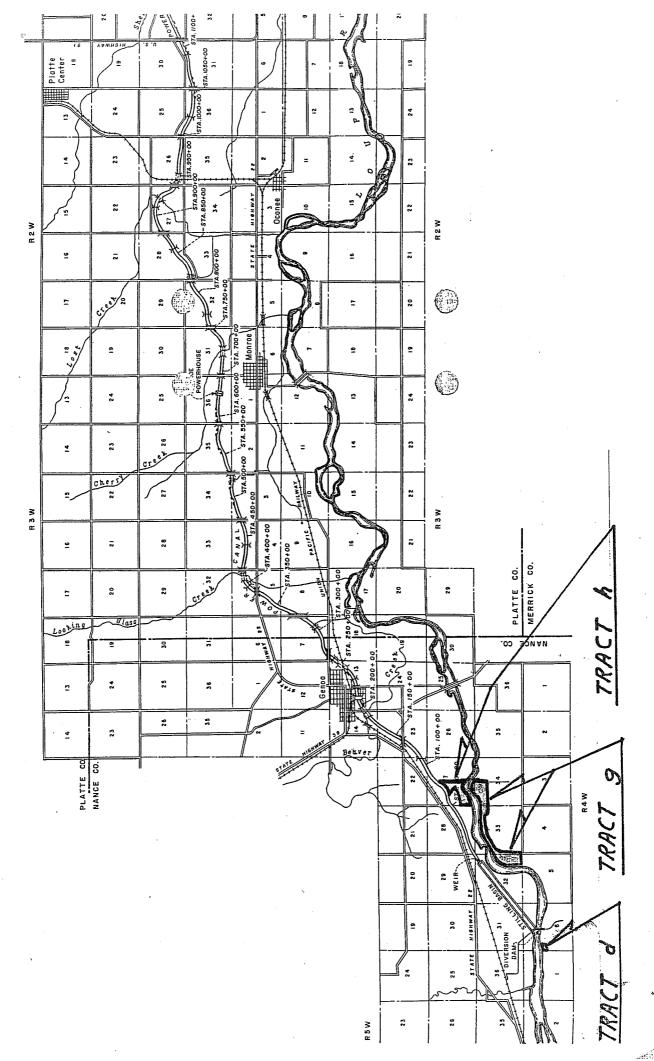
I OUP RIVER PUBLIC POWER DISTRICT

ATTEST:

DATE: 10/1/03

NEBRASKA GAME AND PARKS COMMISSION

By ILL I relea



MAP LOCATION

Attachment C – In-Person Recreation Use Survey

# In-Person Recreation Use Survey

Survey	Location:				
Date:					
Time:					
1.	How many are in your party today?				
	The state of the party to any.				
2.	How long did it take you to travel here today?				
3.	If you plan to or have stayed overnight, how many nights will/did you stay? Where will/did you stay?				
	☐ Tent at developed campground	# of nights			
	☐ Tent at undeveloped campground	# of nights			
	□ RV/Trailer	# of nights			
	□ Other	# of nights			
4.	Over the last 12 months, how many times have you visited this Loup Power District recreation facility?				
	Weekly				
	Several times a month				
	Once a month				
	2 to 3 times per year				
5.	Over the last 12 months, how many times have you visited other Loup Power District recreation facilities?				
	Weekly				
	Several times a month				
	Once a month				
	2 to 3 times per year				

6.	What months do you type	What months do you typically use this Loup Power District recreation facility?					
	January	May	September				
	February	June	October				
	March	July	November				
	April	August	December				
7.	What months do you typically use other Loup Power District recreation facilities?						
	January	May	September				
	February	June	October				
	March	July	November				
	April	August	December				
9.		• 100	participated in or plan to participate in ict facility. [Mark all that apply.]				
	□ Camping		☐ Jet Skiing				
	☐ Hiking		☐ Water Skiing				
	□ Biking		☐ Non-Motorized Boating				
	Which trail?		☐ Wildlife/Scenic Viewing				
4	☐ Walking/Running		☐ Organized Event				
	Which trail?		☐ Picnicking				
	☐ Fishing from Shore		☐ Relaxing/Hanging Out				
	☐ Fishing from Boat		☐ Children's Playground				
			☐ Off-Highway Vehicles				
	☐ Motorized Boating		☐ Other				

10. What recreation ac Loup Power Distri	nonths at this							
□ Camping	☐ Camping				☐ Jet Skiing			
$\square$ Hiking	<ul><li>☐ Hiking</li><li>☐ Biking</li></ul>			<ul><li>□ Water Skiing</li><li>□ Non-Motorized Boating</li></ul>				
$\square$ Biking								
Which trail?	Which trail?			☐ Wildlife/Scenic Viewing				
□ Walking/Runnir	☐ Walking/Running			☐ Organized Event				
Which trail?				☐ Picnicking				
☐ Fishing from Sh	☐ Fishing from Shore			☐ Relaxing/Hanging Out				
☐ Fishing from Bo	☐ Fishing from Boat			☐ Children's Playground				
☐ Swimming				☐ Off-Highway Vehicles				
☐ Motorized Boating				□ Other				
11. Please give a gener District recreation	_	or the fa Good	cilities you  Average	u have used at th Below Average	is Loup Poor	Power  Not Applicable		
Campgrounds				D				
Trails								
Shoreline Fishing Area								
Swimming Beach								
Boat Ramps								
Picnic Area		9						
Children's Playground								
Off-Highway Vehicle Parl	k 🗆							
Restroom Facilities								
Parking Lot								
If you indicated any facilit	ty as "Poor	." please	e explain:					

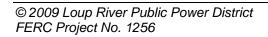
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12.	Were there any activities that conflicted with your recreation activities?  If so, please indicate the activity.					
	□ Yes					
	Please explain:					
	□ No					
13.	Please indicate how you.	important tl	he following o	outdoor recre	eational opport	unities are to
		Very Important	Important	Neutral	Unimportant	Very Unimportant
Camp	ing					
Hiking	g					
Biking						
Walking/Running						
Trails						
Fishin	ıg					
Swim	ming					
Motor	rized Boating					
Jet Sk	iing					
Water	Skiing					
Non-N	Motorized Boating					
Wildli	ife/Scenic Viewing					
Picnic	eking					
Relax	ing/Hanging Out					
Childr	ren's Playground					
Off-H	ighway Vehicles					
	₹					

14. Please identify any other activities or facilities that are currently not available that you feel would enhance your recreation experience at Loup Power District facilities.

- 15. Can you tell me the ages of the people in your party today?
- 16. What is your zip code?

Thank you for your participation!



Attachment D – Creel Survey Interview Form

## 93)

## NEBRASKA GAME AND PARKS COMMISSION FISHERIES DIVISION

# 

CATEGORY 2 — ANGLER INFORMATION           14 15         16         17 18 19 20         21 22 23 24         25 26 27 28         29         30 31 32         33         34 35 36 3           No. of 1 = Bank Fishing Anglers 2 = Boat Start Time 3 = loe Time Fished 5 = Poor         Time Fished Time Fished 5 = Poor         Time Fished 5 = Poor         Time 5 = Poor	ock 5         Block 6         Block 7         Block 8         Block 9         Block 10         Block 11           22-26         27-31         32-36         37-41         42-46         47-51         52-56           IFORMATION	M)  Solution (1997)  ASED INFORMATION	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29-32 33-36 ×3  75 200 230 255 280 305 330 355 380 405 430 455 480 510 530 560 565 610 635 660 685 710 735415 840-915 ×91  75 200 230 255 280 305 330 355 380 405 430 455 480 510 530 560 565 710 735415 840-915 ×91  75 200 230 255 280 305 330 35 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 23 54 55 56 57 56 59 60 61 62
Ö	RY 3 — SUPPLEMENTAL / USER DEFINED  1 Block 2 Block 3 Block 4 Block 5	ED INFORMATION	9 10 11 230 255 280 250 255 280 250 251 25 29 20 21 22 29

Attachment E – Creel Survey Count Form

### Nebraska Game and Parks Commission Fisheries Division

### **CREEL SURVEY COUNT FORM**

33-229/rev.2-92

CATEG	ORY 1	- GENI	ERAL INF	ORM/	ATION			
	AKE ODE	LAKE SECTION	MO DAY DATE	YR	START POINT	CLERK INITIALS	SUPPLEME	NTAL / USER DEFINED
CATEG	ORY 2	– cour	VT INFOF ANGLER CO	MATIC	N			WEATHER RATING (EFFECT ON ANGLERS)
TIME		# BANK ANGLERS	# BOA		# BOAT ANGLERS		NGLER JNTS	1 = NO ADVERSE EFFECT 2 = POSSIBLE EFFECT 3 = ADVERSE EFFECT
,								
COMMENTS	<del></del>							
<del></del>								
			<u> </u>				_	
CATEGO	RY 3 -	- SITE IN	VFORMA	TION	-			
Water Temp, (F)	1 = BEL 2 = NOF	VATER LEVEL OW NORMAL RMAL OVE NORMAL	* WAT TURBI (SECCH	DITY	ICE CONDITIO 1 = SAFE 2 = UNSAF 3 = MARG	ONS 1 = 2 = 3 =	G. RATING SCARCE MODERATE ABUNDANT EXCESSIVE	DOM. VEG. TYPE  1 = SUBMERGENT  2 = EMERGENT  3 = FLOATING  4 = COMBINATION

Attachment F – Field Observation Form

### **Field Observation Form**

(Specific activities/observation categories will vary by location. A table will be created for each study site identified in Section 5 of this recreation use study.)

Date:

Location:

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

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

Attachment G – Telephone Recreation Use Survey

### **Telephone Recreation Use 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 5 minutes.

1.	Are you aware of any of the following recreation facilities provided by Loup Power District?						
	YES	NO					
			Headworks Park				
			Headworks OHV	Park			
			Lake Babcock Pa	rk (sometimes called L	oup Park)		
			Lake North Park				
			Columbus Power	house Park			
			Tailrace Park				
			Two Lakes Trail				
			Bob Lake Trail				
			Robert White Tra	il			
IF YE	ES:						
2A.				ur household visited on ious 12 months? The f	e or more of the Loup Power acilities are:		
	[Mark	YES at	nswers]				
	□ He	adwork	s Park	How many times?	In which months?		
	□ Не	adwork	s OHV Park	How many times?	In which months?		
	☐ Lake Babcock Park (sometimes called Loup Park)			How many times?	In which months?		
		ke Nort	h Park	How many times?	In which months?		
	<ul><li>Columbus Powerhouse Park</li><li>Tailrace Park</li></ul>			How many times?	In which months?		
				How many times?	In which months?		
	$\Box$ Tw	o Lake	s Trail	How many times?	In which months?		
	□ Во	b Lake	Trail	How many times?	In which months?		
	□ Ro	bert Wh	nite Trail	How many times?	In which months?		

777	TITO
14	VL

3A.	Why do you choose to use Loup Power District recreation facilities? Choose all that apply.						
	☐ Location – close to home						
	☐ Provide the facilities we need						
	☐ Don't know where other facilities are located						
	☐ Facilities are safe						
	☐ Facilities are w	ell maintai	ned				
	☐ Facilities are from	ee					
	□ Other						
4A.	I am going to list the rating of excellent,					-	
		Excellent	Good	Average	Below Average	Poor	Not Applicable
Camp	grounds						
Trails							
Shore	line Fishing Area				D		
Swim	ming Beach						
Boat 1	Ramps						
Picnic	e Area						
Child	ren's Playground						
Off-H	lighway Vehicle Parl	k 🗆					
Restro	oom Facilities						
Parkii	ng Lot						

Is there any specific location you would like to comment on?

5A.	I'm going to list outdoor recreational opportunities. I'd like you to rate how
	important they are to you as very important, important, neutral, unimportant, or very
	unimportant.

	Very Important	Important	Neutral	Unimportant	Very Unimportant
Camping					
Hiking					
Biking					
Walking/Running					
Trails					
Fishing					
Swimming					
Motorized Boating					
Jet Skiing					
Water Skiing					
Non-Motorized Boating					
Wildlife/Scenic Viewing					
Picnicing					
Relaxing/Hanging Out					
Children's Playground					
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.	•
II.	110	

3B.	Why have you or members of your household not used Loup Power District recreation facilities in the last year? Choose all that apply.						
	☐ Location – too fa	ar from home	e				
	☐ Do not provide t	the facilities	we need				
	☐ Too busy/not int	erested in re	creation				
	☐ Don't know where the facilities are located						
	☐ Facilities do not have the right equipment						
	☐ Facilities are not	t safe					
	☐ Facilities are not	t well mainta	ined				
	☐ Other (please ex	plain					
	•						
4B.	I'm going to list recimportant they are tunimportant.						
		Very Important	Important	Neutral	Unimportant	Very Unimportant	
Camp	ing						
Hiking	9						
Biking	g						
Walki	ng/Running						
Trails							
Fishin	g						
Swim	ming						
Motor	ized Boating						
Jet Sk	iing						
Water	Skiing						
Non-N	Motorized Boating						
Wildli	fe/Scenic Viewing						
Picnic	king						
Relax	ing/Hanging Out						
Childr	en's Playground						
Off-H	ighway Vehicles						

<end></end>	>
IF NO:	
2C.	In which outdoor recreational activities do you or members of your household regularly participate?
	□ Camping
	□ Hiking
	□ Biking
	□ Walking/Running
	□ Fishing
	□ Swimming
	☐ Motorized Boating
	☐ Jet Skiing
	□ Water Skiing
	□ Non-Motorized Boating
	□ Wildlife/Scenic Viewing
	□ Picnicking
	☐ Relaxing/Hanging Out
	☐ Children's Playground
	☐ Off-Highway Vehicles (OHV)
	☐ Do not participate in outdoor recreation activities
	Other
If resp	onse is NO, 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 outdoor recreational opportunities, and I'd like you to rate how important they are to you as very important, important, neutral, unimportant, or very unimportant.

	Very Important	Important	Neutral	Unimportant	Very Unimportant
Camping					
Hiking					
Biking					
Walking/Running					
Trails					
Fishing					
Swimming					
Motorized Boating					
Jet Skiing					
Water Skiing					
Non-Motorized Boating					
Wildlife/Scenic Viewing					
Picnicking					
Relaxing/Hanging Out					
Children's Playground					
Off-Highway Vehicles					

<*END*>

Demographic Information

- Gender
- Ethnicity
- Age
- Income
- Zip Code