

MANAGEMENT PLAN
FOR LEAST TERN AND PIPING PLOVER NESTING
ON THE SHORE OF LAKE McCONAUGHY

INTRODUCTION

On July 29, 1998, The Central Nebraska Public Power and Irrigation District (Central) was issued a license by the Federal Energy Regulatory Commission (FERC) to operate Project No. 1417. Article 421 requires that Central file with FERC a plan to manage the land and shorelines of the project within two years of license issuance. As part of this plan Central is to evaluate the need for and include measures as appropriate to address the protection of least tern (*Sterna antillarum*) and piping plover (*Charadrius melodus*) nesting sites at Lake McConaughy. Article 421 in part states:

“The plan shall also include, at a minimum, an evaluation of the need for, and measures as appropriate to address: (a) protection of least tern and piping plover nesting sites at Lake McConaughy similar to programs existing at the time of license issuance, which include limited fencing to exclude livestock from nesting areas and public education efforts;...”¹

The Land and Shoreline Management Plan addresses this requirement in section 5.E.2.b by calling for the creation of this separate Management Plan. This Management Plan identifies the measures to be undertaken by Central to protect piping plover and least tern (“the species”) nesting areas at Lake McConaughy and to manage other activities at the lake to minimize disturbances to the species and their habitat during their breeding, nesting and young rearing periods.

This Plan details the nature and scope of Central’s activities under its FERC license, not all of which can or should be carried out in every year, as conditions vary from year to year. For Central to carry out many of the measures identified in this Plan, it is currently required under Endangered Species Act regulations promulgated by the United States Fish and Wildlife Service and regulations promulgated by the Nebraska Game and Parks Commission under The Nebraska Non-Game and Endangered Species Conservation Act that Central apply for and receive permits to work with endangered species as defined under those acts. The applications for these permits require detailed information regarding the individual measures within the scope of the FERC Plan that will be carried out that year. Under this Management Plan, the licensee, in consultation with and with the approval of the agencies, retains the flexibility to choose among the FERC-approved management activities those that are appropriate for that year. The licensee also retains the flexibility in carrying out the management activities of this Management Plan to use whatever methodologies may be approved by the resource agencies in that year. Nothing in this Management Plan prohibits Central from participating in habitat research efforts

¹ A description of the efforts “similar to programs existing at the time of license issuance” can be found in the attached report filed with the USFWS in November 1998.

with the agencies on Central's land which could eventually lead to Central and the agencies petitioning FERC to modify this Management Plan.

HABITAT PROTECTION

Central's "Land and Shoreline Management Plan" (SMP), submitted to FERC July 27, 2000, and this Management Plan seek to integrate the continuing widespread recreational use of Project lands and shorelines with protections for threatened piping plovers and endangered interior least terns (endangered species) that are seasonally present. As a primary protection tool, the SMP identifies as "Species Protection Zones" (SPZ) areas at Lake McConaughy that are known to have been used frequently in the past for nesting by piping plovers and least terns. Central may also, under Section 5.E.1 of the SMP, designate additional areas as permanent or temporary SPZs where there is documented use of the area by threatened, endangered or sensitive species, conflicts between public use, recreational activities, residents, or development and the species of concern, and/or a resource agency has requested the designation for an area.

Section 5.E.1 of the SMP sets forth the protections available under the SPZ designation, which may be applied to all or part of an SPZ consistent with this Management Plan. While it is understood that general recreational activities will continue as set forth in the SMP, Central may, without notice to the public, restrict any or all activities on all or part of an SPZ to protect threatened and endangered species or their habitat. If normally acceptable general recreational activities disturb the species in the area, Central will, after consultation with the appropriate agencies, restrict access or activities as necessary to an area large enough to prevent disturbance. This Management Plan provides broad guidance regarding the types and extents of restrictions that are generally anticipated, but it is consistent with the SMP and this Management Plan for different or wider restrictions to be substituted if Central, with the approval of the resource agencies, concludes that such restrictions are necessary. Within SPZ's, special reviews and restrictions on Permits to Construct in an SPZ required under the Land and Shoreline Management Plan provide additional protections beyond the scope of this Management Plan.

Although the SPZ's identified in the SMP provide protections where terns and plovers are known to frequently nest, the species are also known to nest occasionally outside of the SPZ's. The SMP provides for temporary or permanent SPZ designation of these areas. The SMP also provides for the designation, without prior public notice, of temporary Land Use Classifications for "Day Use Areas" (restricting overnight camping) and "Non-motorized Vehicles Areas." These management tools were developed in the SMP, in part, to immediately protect areas used by endangered species from intense or disturbing recreational activity. These classifications, defined in Section 4A of the SMP, may be imposed at any time to protect endangered species or their habitat. These temporary classifications may be used within SPZ's as well as in areas not designated as SPZs, to permit immediate protection of endangered species no matter where they nest. When Central implements those restrictions it will immediately:

- Post signs identifying the use restriction and specifying the reason for closure and the time period involved.

- Notify the resource agencies and any adjacent lessee(s) that the area has been established; publish notice of the designation in local papers and post notice at NGPC's park entrances.

Regardless of whether the species nest inside or outside of the SPZ's, however, the Management Plan requires protection measures for the species and habitat where they nest as described below.

PRE-NESTING SEASON MEASURES

Because the species do not use exactly the same place for nesting each year and because the width and the nature of the beaches at Lake McConaughy is quite ephemeral, it is neither prudent nor effective to initiate many protection measures until the species actually choose nest sites. Additionally, as described below, certain habitat measures may be undertaken under unusually high lake levels to provide alternative nesting habitat that would not otherwise be necessary.

In years when there is a prediction of Lake McConaughy filling to its maximum elevation, Central will monitor lake elevations and the predicted rise of the lake for the period associated with the species nesting. Under these conditions, Central will maintain two restricted-access "beach" areas above elevation 3270 as potential nesting habitat. Central will provide and maintain these areas if they are approved by the agencies as part of the annual endangered species permitting process. Presently these areas are located near No-Name Bay and Little Thunder Bay. Regardless of lake elevations or predicted fill, because of its frequent use in the past, access to a third, less typical nesting area located in the parking lot of Martin Bay Swimming Area will also be restricted to protect potential nesting sites. Consistent with the protection strategies of the SMP, other areas may be substituted for those identified above with the concurrence of the U.S. Fish and Wildlife Service and the Nebraska Game and Parks Commission. The restricted areas will be designated temporary SPZs.

Prior to the nesting season, when reservoir fill is predicted, access to the designated areas will be restricted using "psychological fencing" such as brightly colored twine, or other identification and/or fencing materials agreed to by Central and the resource agencies. The "beach" areas will be maintained free of vegetation and covered with gravel. A clay dam constructed in 1997 to hold water for the nesting birds within the Martin Bay Swimming Area will be maintained within the restricted area as necessary depending on lake levels. Restricted areas will be posted with signs warning the public of endangered species use of the area and stating that access is prohibited, dogs must be leashed in the area, and stating any other restrictions that Central and the resource agencies determine are necessary based on the site and/or experience. As described below, temporary Land Use Classifications may be used in immediately adjacent areas to provide further protections when tern and plover nesting occurs in the habitat areas.

NEST SITE MANAGEMENT

1. Survey and Monitoring

District personnel will survey the shore of Lake McConaughy on a weekly basis starting in mid-to late April and continue until all of the young least terns and piping plovers have fledged, typically around the first week in August. Least tern and piping plover nest sites will be identified, mapped, and then monitored weekly until the chicks are fledged and/or are lost. This information will be provided to the agencies as part of the annual monitoring report under Article 423.

2. Nest-Site Protection

Variations in the levels and methods of protecting specific nest sites are expected in different locations and at different times because of the variable nature of the species nesting patterns and the wide variations in topography and recreational use in different areas of the Lake McConaughy shoreline. Central intends that variations on the description below will be typical of the nest site protection afforded under this Management Plan. Central will apply the variations of the management strategy that are approved or required by the annual endangered species permits required by the agencies.

Access to identified nests and nesting areas will be restricted with “psychological fencing” or other types of identification and/or fencing materials agreed to by Central and the resource agencies during the annual permitting process to identify the nest site to the public and/or to protect the site from intrusion. As necessary, buoys or other markers may be employed in the water to prevent boaters from entering an area frequented by the species. Typically the area enclosed for an individual nest is expected to be approximately 200 square feet, but actual dimensions will be determined taking into account site characteristics, locations of neighboring nests, research requirements and experience. Restricted areas already designated or within SPZ’s, will be posted with signs warning the public of endangered species use of the area and stating that access is prohibited, dogs must be leashed in the area, and stating any other restrictions that Central and the resource agencies determine are necessary based on the site and/or experience. Isolated nests or nesting areas outside of designated SPZ’s will be designated as temporary SPZ’s and noticed and treated as described for existing SPZ’s.

Beyond the confines of the restricted-access area around nesting sites, beach areas adjacent to the restricted-access nesting areas will be signed to alert boaters that endangered species may be in the area. Approaches to the beach in remote areas will be marked along the high banks and on fence posts to alert people that endangered species may be in the area or that use restrictions may be in force within the area. Additional or substitute warning signs and restrictions may be selected in consultation with the resource agencies on a site-specific basis based on factors such as topography, accessibility, nesting patterns, anticipated recreational use of the area, the potential for human or animal disturbance, and experience. Any additional restrictions on recreational use adjacent to fenced nest sites, including restrictions on access from the water, will be

instituted using temporary Land Use Classifications for SPZs, "Day Use Areas" or "Non-motorized Vehicles Areas."

In addition to protecting nest sites from access or disturbance, if the lake is rising, the elevation of each nest will be compared regularly to the projected maximum elevation of Lake McConaughy. If it appears the nest will be inundated by rising water levels prior to the projected hatching date of the eggs, and there is a good probability the nest can be successfully moved, with the prior approval of the agencies, the nest will be moved to a higher elevation using the Knaggs-Britch Method². Nests will not be moved if it appears that by moving the nest, the nest would be exposed to additional risks such as predation or human activity. In those cases nests will be left in the hopes that, if the nest is inundated, the adults will renest in a more suitable location earlier (renesting is generally more successful the earlier the birds renest) than if the nest had been moved.

PUBLIC EDUCATION

Ultimately, the effectiveness of any plan to protect endangered species and their habitat depends upon public awareness and acceptance. To this end Central has implemented a number of educational programs to increase public awareness of piping plover and least tern use of Lake McConaughy.

Signs: Central will place large informational signs at boat ramps and beach access points explaining the natural history of the birds and showing pictures of both species. Additional signs will be used as described above to alert recreational users that endangered species may be present in an area, to warn people to keep out of an area or to identify that certain activities are prohibited.

Literature: Central has prepared fliers with information about both species and makes those fliers available to the public free of charge. Fliers are distributed at the NGPC entrances to Lake McConaughy as well as at boat ramps and in boxes attached to the informational signs around the lake. The fliers include instructions on how to report the sighting of least terns and piping plovers, and how to report any disturbances or destruction of nests that the public may observe. The fliers also describe barriers (such as "psychological" fencing) and associated restrictions intended to protect the birds from human disturbance.

Programs: Central personnel familiar with the biology of the birds and the management Plan are available upon request to give public presentations. Additionally, Central may also periodically give programs at the Martin Bay nesting area.

² Peyton, Mark M., A Method for Moving Piping Plover Nests on Reservoir Shorelines, Proceedings of the Platte River Basin Ecosystem Symposium, 28-30 (1997).

ENFORCEMENT

While this Management Plan requires Central to take steps to provide warning and notice to the public, and to place restrictions on activities by members of the public where they could potentially harm the species, Central has no law enforcement jurisdiction to enforce these provisions of this Plan. Duly authorized law enforcement agencies, including the U.S. Fish and Wildlife Service and the Nebraska Game and Parks Commission that leases most of the lands around Lake McConaughy, are relied upon to prosecute violations by the public of restrictions imposed under the Management Plan to protect the species as part of their statutory obligations to prosecute violations of the Endangered Species Act and/or the Nebraska Non-Game and Endangered Species Conservation Act. To facilitate such prosecution, Central's employees or its agents will take the following actions when they observe any violation of the restrictions imposed by this Management Plan or any other action or activity they believe may be in violation of either the Endangered Species Act or the Nebraska Non-game and Endangered Species Conservation Act.

Central personnel will:

1. Attempt to get the license numbers and descriptions of vehicles or persons involved.
2. Notify the local Nebraska Game and Parks Commission Conservation Officer and the area Special Agent for the United States Fish and Wildlife Service as quickly as possible.
3. Notify Central's Kingsley Dam Superintendent who in turn will notify Central's Senior District Biologist or Environmental Resources Manager or their designee who will notify, by phone, the U.S. Fish and Wildlife Office in Grand Island and the Nebraska Game and Parks Commission Office in Lincoln.
4. Document the incident and prepare a report.
5. Provide the agencies with a copy of their report.
6. Cooperate with the agencies in any action or proceeding which may result from Central's report.

As agency and Central personnel involved with this Plan change, or any other time enforcement concerns arise in the annual meetings with FWS and NGPC regarding annual endangered species permitting, Central will arrange a meeting with law enforcement representatives from the FWS and NGPC to discuss procedures related to enforcement actions.

REPORTING

Every three years Central will prepare a report on activities under this Management Plan pursuant to Article 421 and as set forth in the SMP. This report will be prepared in consultation with the U. S. Fish and Wildlife Service and the Nebraska Game and Parks Commission as outlined in the SMP.

As a practical matter, the resource agency endangered species permitting processes require annual reporting to those agencies on permitted activities and any associated

species monitoring. A copy of the annual endangered species plan approved by the agencies in issuing their annual permits, and of the year-end reports required under those permits, will be provided to FERC as attachments to the annual report on monitoring required as part of Central's obligations under Article 423 of its license.

AGENCY REVIEW

Prior to each new nesting season, and in conjunction with preparing its annual endangered species permits and meetings related to annual planning under the FERC approved Article 423 Monitoring Plan, Central will meet with representatives of the USFWS and NGPC to discuss the anticipated conditions at Lake McConaughy and obtain their concurrence regarding the appropriate management activities and methodologies included in the endangered species permit for the upcoming year.