

## LAKE MCCONAUGHY LAKE OGALLALA MASTER PLAN

A D O P T E D : 10/21/2016





## ACKNOWLEDGEMENTS

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## INTRODUCTION

Lake McConaughy and Lake Ogallala state recreation areas are two of Nebraska's most popular state park areas. With more than 100 miles of shoreline and 40,000 acres of land and water, these areas provide tremendous recreational value to Nebraska. Located off of Interstate 80 near Ogallala, these parks are accessible within four hours of the Denver and Lincoln and Omaha metropolitan areas, which contributes to significant visitation every year. See Figure 1 for a location map of the areas within Nebraska. Lake McConaughy and Lake Ogallala receive most of their visitors between Memorial Day and Labor Day. The shoulder seasons for these parks – the periods between peak and off-peak seasons – are September through November and March through May.

Formed by Kingsley Dam in 1941, Lake McConaughy is the largest man-made reservoir in Nebraska. It lies on the southern edge of the Sandhills, which leads to beautiful, white sand beaches along the shores that provide a unique experience for lake visitors. Lake Ogallala was created in part from the void left by excavating soil to create Kingsley Dam and is fed from the deep waters of Lake McConaughy through an outlet structure near the base of the dam. The deep outlet structure allows for cooler water temperatures, which creates a different reservoir fishing experience. These two areas provide for some of the best boating and angling opportunities in the state.









### **HISTORY**

The creation of a large reservoir in south-central Nebraska for the purposes of irrigating cropland was first discussed in the 1880s. It wasn't until the 1930s, after a significant drought and the Great Depression, that state and federal officials and community leaders acted. Funding was approved by the Public Works Administration in 1935 and construction began in 1936. Kingsley Dam was completed and dedicated in 1941 and project operations began soon afterward.



The dam and reservoir are named for George P. Kingsley, a Minden, Nebraska banker, and Charles W. McConaughy, a grain merchant and mayor of Holdrege, Nebraska. The two were leading promoters of the project. Although neither lived to see the completion of the project, their leadership and perseverance eventually culminated in a public power and irrigation project that helped Nebraska become one of the nation's leading agricultural states.

Central Nebraska Public Power and Irrigation District (CNPPID), which was created in 1933, owns and operates Lake McConaughy and Lake Ogallala and controls the potential 1,740,000 acre-feet of water at maximum pool capacity. Lake Ogallala releases water into both the North Platte River and the supply canal operated by Nebraska Public Power District (NPPD). Lake levels fluctuate several feet daily since the reservoir is used as a holding pond for irrigation releases down the NPPD canal.

In 1979, CNPPID was approved to operate a hydroelectric plant in Kingsley Dam by the Federal Energy Regulatory Commission (FERC). Construction of the hydroelectric plant began in 1981 and was completed and online in 1984. At the time of Kingsley Dam's initial construction in 1933, the estimated lifespan of the dam was 50-100 years. However, with consistent maintenance and inspections by the FERC, officials now believe the dam could hold indefinitely.

In 1945, the Nebraska Game and Parks Commission (NGPC) began leasing portions of Lake McConaughy for public recreation. In 1959, NGPC signed the first of several long-term lease agreements with CNPPID for all lands adjoining both Lake McConaughy and Lake Ogallala. Initial developments included concrete boat ramps at Kingsley Dam and Otter Creek, camping at Otter Creek, beach camping on Omaha Beach, and the planting of approximately 7,000 trees by 1961. In the 1960s, boat ramps at Martin Bay, Lemoyne, and Eagle Canyon were completed. Camping was added at Lake Ogallala, Spring Park, and Eagle Canyon areas in the 1960s. In the 1970s, hundreds of paved camp pads were added to Lake Ogallala and Lake McConaughy, boat ramps were poured and extended at Sandy Beach, Arthur Bay, Martin Bay, Spillway Bay, and Lake Ogallala. Modern restrooms and shower facilities were added at several campgrounds, and a dump station was installed at Martin Bay. The 80s and 90s saw the installation of playground equipment at Cedar Vue, fish-cleaning stations at Martin Bay, Cedar Vue, and Lake Ogallala, renovations to shower houses, extensions of boat ramps that include the use of portable ramps due to low water, and campground upgrades for electrical. This is by no means a comprehensive list of all development at Lake McConaughy and Lake Ogallala that has occurred, but shows the methodical development of two areas that serve the public's outdoor recreation needs in western Nebraska.

#### **PLANNING PROCESS**

In October of 2015, the NGPC's Board of Commissioners directed staff to complete a master plan for Lake McConaughy and Lake Ogallala with the assistance of local entities and individuals that had a vested interest. This plan is intended to present solutions to problems that have been identified by park staff, an advisory committee, park users and interested citizens. The most prevalent issues include: lack of facilities for large crowds, heavy beach usage on weekends and holidays, law enforcement presence, and the protection of the threatened and endangered species that use the beaches. Solutions include additional infrastructure, staff and zoning concepts on the beaches.

The advisory committee represented concessionaires and local business owners, lake homeowners association, local volunteer fire and rescue personnel, economic development personnel from Keith County and the City of Ogallala, a state senator, Friends of Big Mac, the U.S. Fish and Wildlife Service (USFWS), CNPPID, and NGPC staff. The advisory committee created goals, tactics and development proposals for guiding the operation and advancement of the lakes into the future. NGPC hosted a public input session in Ogallala on June 1, 2016 to share the proposed goals and tactics, to solicit feedback, and to discuss the public's perception of what works well at the lakes, what is missing and what they see as the areas' challenges. See the development plan portion for more information on the public meetings held by NGPC regarding this plan.

NGPC's Planning and Programming Division did multiple interviews with a cross-divisional team to understand the management and challenges of the areas. Meetings were had with NGPC administration, CNPPID and the USFWS to discuss the difficulties and opportunities that Lake McConaughy has due to the threatened and endangered species that frequent the shorelines.

The plan was presented at a public meeting in Ogallala on August 4, 2016. At that meeting the public was able to look at all the development proposals, give feedback and ask questions of NGPC staff. Public comments were recorded and used to make changes to the plan to develop the final draft. Staff also presented the plan at two public Board of Commission meetings, seeking input and sharing with the Board all the public input that was received. After all of the comments were recorded and addressed the plan was vetted by NGPC's Parks, Wildlife, Fisheries, and Law Enforcement divisions, as well as CNPPID and USFWS. The plan was submitted to the NGPC Board of Commissioners for approval at the October 2016 meeting.

## CNPPID/NGPC PARTNERSHIP

The partnership between CNPPID and NGPC began in 1945 when NGPC began leasing portions of Lake McConaughy for the purpose of providing outdoor recreation. Since then, the partnership has expanded to include lease and management agreements for not only all of Lake McConaughy and Lake Ogallala, but also the following state recreation areas (SRA) and wildlife management areas (WMA): Gallagher Canyon SRA, Johnson Lake SRA, Clear Creek WMA, Box Elder Canyon WMA, Jeffery Canyon WMA, and Elwood Reservoir WMA. The amount of land and water in these areas that is open to the public for outdoor recreation totals almost 50,000 acres.

Both parties play a significant role in the operation and management of the lakes and their surrounding shoreline. CNPPID has a license agreement with the FERC for the operation of Kingsley Hydroelectric Dam. Part of the licenses requires CNPPID to have a Land and Shoreline Management Plan (LSMP); the current plan was completed and adopted in 2014 (See Appendix A for a copy of the Land and Shoreline Management Plan). The plan is used as a guide for CNPPID in making decisions regarding the future use of land, and as a baseline to evaluate development proposals and recreational needs. The plan is designed to help minimize land-use conflicts and improve CNPPID's ability to administer its land and environmental policies in a fair and consistent manner.

As a tenant, NGPC is also required to comply with the LSMP adopted by CNPPID. This is accomplished by facilitating an open dialog between the partners and working together on important initiatives such as the protection of threatened and endangered species and all recreational developments that occur. CNPPID has been involved in every step of the creation of this plan to ensure its conformance with their needs and desires for the area. Both parties have identical goals regarding the protection of the natural and cultural resources of the area and providing quality outdoor recreation for the general public. This partnership that was established more than 70 years ago is essential to effectively operate and manage the area.





## REGIONAL ANALYSIS

In order to best manage these recreation areas, an understanding of the regional ecology, recreational amenities, demographic information and economic data is needed. This information has a tremendous impact on the operation of the park areas because of the need for a good, local support system, workforce, and support facilities.

Lake McConaughy and Lake Ogallala are located on the border of two ecoregions, according to the "Nebraska Natural Legacy Project State Wildlife Action Plan," with the Sandhills Ecoregion to the north and the Shortgrass Prairie Ecoregion to the south. Both of these ecoregions are predominantly ranchland agriculture and irrigated cropland. There are numerous adjacent landowners ranging from large ranch tracts to small cabin lots and adjacent communities (Lewellen, Belmar, Martin and Lemoyne). Some cabin owners lease the land on which their cabin sit from CNPPID and some own acreages adjacent to the lake. Immediately west of Lake McConaughy is Clear Creek WMA, which is also owned by CNPPID but managed by NGPC's Wildlife Division to provide good riparian and wetland habitat and hunting opportunities.



#### ACCESS TO LAKE MCCONAUGHY AND LAKE OGALLALA

Lake McConaughy and Lake Ogallala's close proximity to the city of Ogallala and Interstate 80 has a significant impact on the two parks' usage. Ogallala provides access to additional goods and services, while the interstate provides good access for visitors. The local area uses the park and must supply a workforce large enough to adequately provide the labor to operate the areas. Ogallala has six hotels and motels, three grocery stores and more than 20 restaurants. All of which can be important to park users for the support facilities they need when frequenting the parks.

Numerous visitors come from the Denver area and eastern Colorado. This creates additional economic opportunities for the local communities. These visitors will have certain needs, such as gas and groceries, that can only be provided for by the community. According to a recent Statewide Outdoor Recreation Survey, a typical state recreation area draws most of its visitors from within a 60-mile radius. However, Lake McConaughy and Lake Ogallala draws visitors from a 210-mile radius. Lake McConaughy is able to draw from a larger area because of its size, its beaches and the fact that a visitor can camp right on the shoreline, which is not allowed at most lakes and reservoirs. These elements distinguish it from every other reservoir located within 500 miles. Due to its sheer size, it can also handle larger boats and more people than many of the other lakes and reservoirs in the region.

According to U.S. Census data, the 60-mile radius has a population of 74,673 and the 210-mile radius has a population of 4,589,290. Of those 4.5 million people, 3.6 million – or 80 percent -- are from metropolitan areas in Colorado (Denver, Fort Collins, Greeley and Boulder). This correlates with our visitor data, with approximately 75 percent of the public coming from the Colorado Front Range. See Figure 2 for a visual depiction of the 60-mile and 210-mile radii surrounding the lakes. The 60-mile radius is important to note because that is where the parks' local users and workforce is going to come from. A park of this size needs a large workforce to draw from so it can fill all of the needed temporary summer jobs. Ogallala is relatively small community for the size and visitation of Lake McConaughy and Lake Ogallala. This makes filling seasonal and full-time positions at the park more difficult than if it were located near a large population.



Several pieces of data derived from the American Community Survey completed by the United States Census Bureau will provide information on statistics such as income, workforce, industry and other demographic information to complete the regional representation.

Table 1 illustrates Ogallala's median household income as compared to the United States, Nebraska and Keith County. In the table, Ogallala's \$40,771 median household income lags behind all the other areas. This typically indicates the city has mostly service-related jobs with lower salaries. These jobs would directly compete with the jobs at the park areas, which are seasonal and, therefore, less attractive to workers. It also means Ogallala residents have less discretionary income to spend and need access to affordable recreation amenities.



### TABLE 1: MEDIAN HOUSEHOLD INCOME IN OGALLALA

Figure 3 illustrates 16 workforce industries in the Ogallala area and the percent makeup of those industries. The most important to Lake McConaughy and Lake Ogallala are the retail trade and accommodations and food service industries. These industries make up 21.1 percent of the industries in Ogallala and is inclusive of the workers at the park areas. This indicates that Lake McConaughy and tourism are dominant drivers of the local economy. Visitors want and need places to purchase supplies, groceries, and other goods while on vacation at the parks. They also want to be able to go into town and buy a nice meal at a restaurant or bar.

#### FIGURE 3: INDUSTRIES BY SHARE IN OGALLALA



Combining the data from Figure 3 and Tables 1 and 2, it shows that due to the short seasonal nature of the tourism industry in the region, it is not able to keep pace with average wages or income for the state or nationally. For Ogallala and Lake McConaughy to be more successful, NGPC and the community need to find ways to extend the tourist season and make the area a year-round destination.

#### **EXISTING RESOURCES WITHIN THE AREA**

Other regional attractions near Lake McConaughy and Lake Ogallala provide additional activities for visitors. These activities may extend visitors' stay or make it more enjoyable. These attractions consist of community parks, regional parks, trails, museums, historical sites and golf courses. These sites are important to note to avoid duplication of services and to identify cross-promotional opportunities. Table 2 represents the existing recreational amenities that provide opportunity to market the entire region. The desire for additional amenities was identified in the public meetings, so the recreational amenities may need to be better promoted so lake visitors understand the opportunities available within the region. Within 60 miles, there are several local amenities such as parks and trails available for visitors to frequent. Most of these amenities will not draw lake visitors to these communities that are "Pay to Play" activities, such as hunting, wildlife viewing and fishing that could draw lake visitors to extend their stays. There are also other state recreation areas and state historical parks that could be of interest to lake visitors. They are identified in Table 2.

NAME	LOCATION	ACTIVITIES P	UBLIC/PRIVATE
Ash Hollow State Historical Park and Museum	Big Springs/Lewellen	Hiking, Picnicking	Public
Bridgeport SRA	Bridgeport	Fishing, Boating, Swimming and Camping	g Public
Enders Reservoir SRA	Enders	Fishing, Boating, Swimming and Camping	g Public
Champion Lake SRA	Champion	Fishing, Boating and Camping	Public
Open Country Adventures	Imperial	Hunting and Shooting Range	Private
Rush Creek Adventures	Lisco	Hunting	Private
Riverview Lodge and Event Center	Lisco	Wildlife, Hunting and Birds	Private
Buffalo Bill State Historical Park and SRA	North Platte	Hiking, Fishing and Camping	Public
Lake Maloney SRA	North Platte	Fishing, Boating, Swimming and Camping	g Public
Bald Eagle Viewing Center	Ogallala	Wildlife Watching	Public
Sutherland Reservoir SRA	Sutherland	Fishing, Boating, Swimming and Camping	g Public
Spring Creek Hunting	Wauneta	Turley and Deer Hunting Property	Private
Nebraska Outdoor Experience	Arthur	Guided Hunts	Private

#### TABLE 2: REGIONAL RECREATION AREAS WITHIN 60 MILES OF THE LAKES

Heritage tourism is defined as the experience of visiting museums and historic sites that can complement the lake areas. Table 3 provides an overview of the museums and historical sites near the lakes that can provide additional opportunities and activities for lake visitors. Forging partnerships with these amenities may provide for additional economic stimulus to the local economies. It will be important to provide lake guests information about these activities and their locations so they can take advantage of these activities.

#### TABLE 3: MUSEUMS AND HISTORICAL SITES WITHIN 60 MILES OF THE LAKES

NAME	LOCATION	NOTES
Fort Sidney Complex	Sidney	Museum
Living Memorial Gardens	Sidney	War Memorial
Sidney Boot Hill Cemetery	Sidney	Cemetery
Pony Express Monument	Sidney	Monument
Depot Museum	Lodgepole	Antique/Historical Displays inside old Train Depot
Pioneer Trails Museum	Bridgeport	Museum
Log Cabin Museum	Dalton	Museum
Grant County Museum	Hyannis	Museum
Fort McPherson National Cemetery	Maxwell	Historical Museum
North Platte Cody Park	North Platte	Historical Museum
20th Century Veterans Memorial	North Platte	Veterans Memorial
Lincoln County Historical Museum	North Platte	History of West Central Nebraska
North Platte Area Children's Museum	North Platte	Museum
Fort Cody Trading Post	North Platte	Museum/Gift Shop
Front Street and Cowboy Museum	Ogallala	Museum
Boot Hill	Ogallala	Historical
Historical Society of Garden County	Oshkosh	Historical
O'Fallon's Bluff	Sutherland	Historical Landmark
Courthouse Museum	Arthur	Museum
McPherson County Historical Society	Tryon	Historical
Courthouse and Jail Rocks	Bridgeport	Historical Landmark
Chimney Rock	Bayard	Historical Landmark

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Bayside Golf Course photo coutesy of Nebraska Tourism

Table 4 showcases the golf courses within the vicinity of the lakes. Golf is a likely activity that guests of the lakes would participate in and partnerships should be forged to draw lake visitors to actively use these courses. Marketing to lake visitors about the golfing activities will be explored to bring additional economic stimulus to the area. See Goals Strategies and Tactics section.

#### TABLE 4: GOLF COURSES WITHIN 60 MILES OF THE LAKES

COURSE NAME	LOCATION	COURSE SIZE	NOTES
Bayside Golf Course	Lake McConaughy	18-hole	Public
Chappell Golf Course	Chappell	9-hole	Public
Courthouse and Jail Rock Golf Course	Bridgeport	9-hole	Public
Hillside Golf Course	Sidney	18-hole	Public
Imperial Country Club	Imperial	9-hole	Public
Indian Meadows Public Golf Course	North Platte	9-hole	Public
Lake Maloney Golf Course	North Platte	18-hole	Public
Oregon Trail Golf Course	Sutherland	18-hole	Public
Oshkosh Country Club	Oshkosh	9-hole	Public
Pelican Beaach Golf Course	Hyannis	9-hole	Public
Rivers Edge Golf Course	North Platte	18-hole	Public
West Wind Golf Course	Ogallala	18-hole	Semi-Private
Enders Lake Golf Course	Enders	9-hole	Public
Pheasant Run Golf Club	Grant	9-hole	Public

Figure 4 is a representation of the recreation amenities close to Lake McConaughy and Lake Ogallala, as discussed in Tables 2, 3, and 4. Included with these amenities are the WMAs operated by NGPC. There are 23 of these areas not included in the tables but are represented in Figure 4 and do present other recreational opportunities for visitors.

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Table 5 lists the other lodging opportunities available within 30 miles of Lake McConaughy and Lake Ogallala.These include hotels, motels, bed and breakfasts, lodges and campgrounds. The land area around the lakesmanaged by NGPC cannot accommodate all the visitors to the lakes and the lodging amenities below assistin filling the need for overnight accommodations. A travel distance of 30 miles was chosen because visitorsdo not want to drive further than to get to their recreational day- use activities.

#### TABLE 5 LODGING WITHIN 30 MILES OF THE LAKES

HOTEL/MOTELS	LOCATION
Quality Inn	Ogallala
Stagecoach Inn	Ogallala
Days Inn	Ogallala
Super 8	Ogallala
Rodeway Inn	Ogallala
HOUSE RENTALS/LODGES	LOCATION
American Sportsman Retreat	Lewellen
Cabin at the Cove	Admiral's Cove
The Dunes at Lake McConaughy	Lakeview
Forbes Cabin	Marina Landing
Twin Peaks Rentals	Lemoyne
Vogt's Lodge and Lure	Lemoyne
The Beach House	Martin Bay
Gander Inn Bed and Breakfast	Lewellen
Nancy B's Backyard Bunkhouse	Lewellen
Otter Creek Lodge	Otter Creek
Lewellen Lodge	Lewellen

CAMPGROUNDS	LOCATION
Admiral's Cove Resort	Lemoyne
Eagle Canyon Hideaway	Eagle Canyon
North Shore Lodge	North Shore
Oregon Trail Trading Post	Lewellen
Otter Creek Lodge	Otter Creek
Van's Lakeview	Lakeview
Cottonwood Grove	Keystone
Country View Campground	Ogallala
Sleepy Sunflower RV Park	Ogallala
Riverside Trailer Park	Brule
Days Inn RV Park	Paxton



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## EDUCATION/ INTERPRETATION

The objective of education and interpretation at state recreation areas is to enrich the lives of visitors and provide new opportunities to learn, which enhances their park stay. There is an opportunity to promote stewardship of natural resources, provide awareness, understanding and appreciation of the environment and make people aware of outdoor recreation opportunities. By providing education and interpretation, the lakes have the opportunity to provide better park experiences and, potentially, repeat visitors.

The Lake McConaughy Visitors/Water Interpretive Center houses the park offices, aquariums, 11 interactive displays that showcase the North Platte River Basin and the Ethel Abbott Theater, which seats 40 and features an automated control system. The center also houses an office for the CNPPID dam superintendent.

Education at Lake McConaughy is offered primarily by the Education Committee of the Nebraska Water Center Foundation. The Nebraska Water Center Foundation is a 501(c)(3) nonprofit organization that organizes fund-raising, grant writing, teacher trainings, and education days at the lakes. It also has an endowment that assists in the upkeep and replacement of displays at the Center. The Foundation has been instrumental in the design and construction of the Water Center and continues to play a large role in its operation and expansion. An effort is underway to raise funds to expand the Water Center and provide a meeting space to accommodate 300 people. This meeting space would allow for more educational opportunities and be available for rental as a meeting space and for events such as weddings, family reunions, conferences and other large gatherings.



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Quality environmental education asks participants to become active in their learning. In the nonformal arena - such as state recreation areas - environmental education has endless opportunities. NGPC has approved the hiring of a seasonal employee dedicated to education at Lake McConaughy and Lake Ogallala. The employee's responsibilities include coordinating educational workshops, family hikes and activities, and skills workshops such as archery, kayaking, fishing, and many other outdoor skills. The education specialist will work with other NGPC staff and the local community to put on larger events such as expos, Kites and Castles event, and new shoulder season activities to try to draw more visitors.

Expanding education programs will help create environmentally literate children and adults who make informed choices about the environment. Education and field trip offerings are also a way to increase park usage and expose more people to the lakes. By bringing more students into the park, it is likely they will come back with their family. There must be investment in staff and materials for educational programming to increase. Additional materials could include kayaks, archery equipment, fishing gear, skulls and pelts. Educational programing could include the history and operation of the dam, water quality, dipping for macroinvertebrates, the significance of the Platte River to Nebraska, and the threatened and endangered species in the area and why it is important to protect them.

## RECREATION AMENITIES

The recreational amenities at the lakes serve many different users. From camping, boating, fishing and day use, these lakes require major investments to serve the public's needs. Table 6 lists all the amenities currently at Lake McConaughy and Lake Ogallala, including 325 modern camping sites and primitive camping areas totaling approximately 2,500 acres. Most of the primitive camping areas are along the beaches at Lake McConaughy and vary in size depending upon the lake water level. There are 16 boat ramps with 11 docks and these fluctuate depending upon the water levels; some of the ramps are only accessible during high or typical water levels, while others are only accessible when the water is low. Fish-cleaning stations are located at Cedar Vue, Otter Creek, Martin Bay, and Lake Ogallala. There are approximately 40 public beach access areas managed by NGPC where the public can camp and recreate on the beach. The only dedicated



swimming beach is located at Lake McConaughy's Martin Bay. Figures 5 through 15 identify the existing recreational amenities at both lakes during an average water level year; some boat ramps and docks are extended during low water and inaccessible during high water. Because of the size of Lake McConaughy, the maps were divided into sections so that they could accurately depict the amenities available in various areas. There is overlap between some of the maps where some amenities appear on two maps due to the scales needed to accurately depict the areas. There are also areas that are not shown on a map but are still managed by NGPC. These were omitted because NGPC does not have amenities in those locations. Some of the most common amenities that can be found on the maps include the boat ramps, parking areas and restrooms.

AMENITY	SITES	NOTES
Camp Pads	296	Electric Sites
Camp Pads	29	Non-electrical
Primitive Camping	13 Acres	2,500 Acres
Shower Facilities	5	All at Lake McConaughy
Modern Restrooms	2	All at Lake McConaughy
Primitive Restrooms	35	Scattered Throughout Both Areas
Boat Ramps	16	Scattered Throughout Both Areas
Boat Docks	11	Scattered Throughout Both Areas
Fish Cleaning Stations	4	Cedar Creek, Martin Bay, Otter Creek and Lake Ogallala
Beach Access Points	40	Not Including Private Access
Swimming Access	1	Martin Bay
Shop Facilities	2	Support Facility for Operation/Management
Archery Range	1	South of Spillway Bay
Visitors Center	1	On the Southeast Side of the Dam

#### TABLE 6: RECREATION AMENITIES

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	Road
++	Rail Road
Δ	Campground
Ŭ	Water
<b>*</b>  †	Restroom
	Non-NGPC Property









	Road	<b>徐</b>	Scenic Viewpoint
-++	Rail Road	2	Non-NGPC Prop
	Boat Ramp		
LT/	Water		
Ρ	Parking		
-			

Figure 8: Lemoyne/North Shore





	Road	Ρ	Parking
+	Rail Road	••-	Playground
	Boat Ramp	₽₽,	RV Campground
Δ	Campground		
17	Water		Restroom
		*	Scenic Viewpoint
	Dump Station		Non-NGPC Property








	Road	Æ	Picnic Shelter
-++	Rail Road	•6-	Playground
Δ	Campground	÷,	RV Campgroun
$\Box$	Water	<b>Å</b> IÅ	Restroom
E.	Dump Station		Non-NGPC Pro
Ρ	Parking		





	Road	X	Fish Cleaning S
-++	Rail Road	Ρ	Parking
<b>1</b> /4	Boat Ramp	17	Picnic Shelter
Δ	Campground		
17	Water	ŧ I ŧ	Restroom
		<u>"</u>	Swimming
<b>E</b> .	Dump Station		Non-NGPC Pro





	Road	.,لا	Point of Interest
<b>-</b> A		*	Found of Interest
<b>K</b>	Archery	<b>₽</b>  ₽	Restroom
	Boat Ramp		Sailboat Lift
Ŭ	Water	ſ	Non-NGPC Property
$\boldsymbol{\mathbb{Z}}$	Maintenance Shop		
Ρ	Parking		

# Lake McConaughy Amenities

Figure 13: Spillway Bay





Δ	Campground

Water

٢2

Restroom

Non-NGPC Property

# Lake McConaughy Amenities

Figure 14: Ogallala Beach





## EXISTING OPERATIONS

The operating budget for Lake McConaughy and Lake Ogallala comes from NGPC's Parks, Wildlife, Fisheries, and Law Enforcement divisions. Parks is responsible for operating the recreation areas, which include land and concession administration, facilities management of both lakes and the visitor's center, staffing, education and programming, grounds and road management and boating and fishing access point maintenance. Fisheries' funding goes directly to fish stocking and some management and survey work. Wildlife funds go to managing Clear Creek WMA, along with some management of lands used for hunting on Lake McConaughy. Law Enforcement's funding goes to officers who enforce regulations at the lakes. All of these divisions have distinct responsibilities and financial contributions to the lakes. Each division's work is integral to the success of these areas. The funding that goes into the lake areas varies from year to year, depending on water levels, projects undertaken events at the lakes.



Parks' main expenditures are reflected in three categories: staff payroll, supplies, and utilities and service contracts, such as garbage and electrical service that are provided for visitors. Payroll is the largest part of the Parks Division's budget; with four full-time permanent staff, three 11-month temporary staff and approximately 35 seasonal employees. The utilities and services are the next largest budget item. This includes garbage contracts, property and liability insurance, repairs to equipment and facilities, campsite electricity, and communication costs. The supplies category is for office supplies, equipment parts, gas, construction materials, agricultural materials, and janitorial supplies.

Fisheries' budget toward the lakes consists primarily of funds for fish stocking programs. Lake McConaughy is stocked with walleye, white bass and wipers while Lake Ogallala is stocked with catchable rainbow trout and some tiger trout. The remainder of the budget goes toward payroll of the lakes' staff. This also includes temporaries who do survey and aquatic invasive species work. The Wildlife Division spends most of the budget that goes to Clear Creek WMA and the lakes on staffing and management of invasive species. It is difficult to quantify the budget for the Law Enforcement because personnel get shifted toward the lakes during the summer season. Most of the personnel come from other locations across the state, so their time, travel and other related expenses have not been captured within the budget below in Table 7. These expenses are significant; therefore, an effort will be made to quantify those expenses in the future.

Table 7 provides an overview of three divisions' annual expenditures. This table provides a snapshot in time of the 2015-2016 fiscal year's expenditures.

DIVISION	ACTIVITY	BUDGET
Parks	Staffing	\$362,314
Parks	Utilities/Service Contracts	\$215,339
Parks	Supplies	\$94,601
Fisheries	Fish Stocking	\$1,240,130
Fisheries	Staffing/Supplies	\$153,337
Fisheries	Research	\$100,000
Wildlife	Staffing and Management	\$95,000
TOTAL		\$2,260,721

#### TABLE 7: LAKE McCONAUGHY/LAKE OGALLALA OPERATING BUDGET

#### **PARKS**

Parks Division has the largest presence at these two lakes of any of NGPC's divisions. It is responsible for the operation and maintenance of all the recreation amenities and provides the most customer contact. Currently, there are four full-time permanent Parks Division staff members; one lead superintendent, two assistant superintendents, and a staff assistant that manage the lake areas. Their duties include land and concession administration, facilities and ground maintenance, visitor's services management, boating access maintenance, education and programming and overall supervision of seasonal staff. There are three full-time temporary staff members who work 11 months of every year. The positions are two superintendents and an office clerk. The duties of these employees include assisting in the supervision of seasonal employees, equipment and heavy machinery operation and repair, satellite area management and office management. The management of the lakes cannot be accomplished by these individuals throughout the year. Every summer season, starting in May, 30-40 seasonal employees are hired to assist in the office, mow, do facilities maintenance and grounds maintenance, man the kiosks and go around campgrounds and collection of fees from self-pay rangers.

The lakes use the Campground Host program, which is a program of volunteers who assist existing staff. They clean and restock restrooms, help with grounds work, pick up garbage around the campground, clean garbage out of the fire pits, and provide customer service by sharing information with visitors about area events, explaining camping rules and procedures, and other campground maintenance in exchange for a campsite. Usually hosts stay anywhere from one week to the entire summer, depending on their location. They provide approximately four hours per day, seven days a week for a total of 28 hours a week. The lakes have eight sets of campground hosts in any given year; two sets for four different campgrounds. The hosts usually are in place annually from May 15 to October 15. This equates to approximately 5,000 volunteer hours annually. Recently, campground host slots have not been completely filled due to recruitment and retention issues.

#### **DEFERRED MAINTENANCE**

NGPC has compiled a list of deferred maintenance projects at Lake McConaughy and Lake Ogallala. Deferred maintenance items are projects that have been identified on existing infrastructure that are needed to improve the functionality of the park area. The list is extensive and as of 2014, was priced to exceed \$14 million. During the implementation phase of this plan, the Parks Division will prioritize that list to correspond with the improvements needed for the development plan. Some of those projects that will be of higher priority include improvements to the main road from Martin Bay to Sandy Beach; campground improvements such

as upgraded electrical, new or refurbished restroom and shower facilities and upgraded camp pads to meet Americans with Disabilities Act (ADA) standards; and new restrooms in high-traffic areas. The deferred maintenance list was created prior to the development of this plan, so projects may drop off the list due to changes in management strategies.

#### **CONCESSIONAIRES**

Lake McConaughy has several concessionaires operating on park land to provide goods and services to park guests. Lake Ogallala does not have any concessionaires, but visitors use the Lake McConaughy concessionaires. These concessionaires, who are essential to providing an enjoyable experience for park guests, operate on either yearly permits or lease agreements, depending on the nature of their business. If the concessionaire has permanent infrastructure on NGPC-managed property, a lease is assigned for a specific period of time. Annual permits are issued when the concessionaire is providing a service for visitors and does not have permanent infrastructure on the property. Each concessionaire is charged a percentage of its income, ranging from 3.5 to 6 percent, to be paid to NGPC based on an agreed-upon amount. Income collected has increased each year since 2012, partly due to increasing the number of concessionaires working at Lake McConaughy. Table 8 depicts the income from concessionaires received since 2012. Figure 16 provides a map of the locations of all the concessionaires at the lakes.

#### TABLE 8: NGPC INCOME FROM CONCESSIONAIRES

YEAR	INCOME FROM CONCESSIONAIRES
2012	\$40,567.31
2013	\$41,429.03
2014	\$44,581.90
2015	\$48,318.43

#### Below is a list of all the concessionaires currently in operation:

- Admiral's Cove Resort operates on a permit providing rental of electric RV sites, watercraft launch and recovery, and placement of a private dock for public use in Lemoyne Bay.
- **Big Mac Parasailing** operates on a permit basis in Arthur Bay and provides parasailing, bait, tackle, boating accessories, lake and beach sundries, firewood, fuel, apparel, food, personal watercraft, boats, paddleboards, paddleboats, and Zorbs. Permittee also serves as a non-emergency disabled watercraft towing service for Lake McConaughy.
- **Eagle Canyon Hideaway** operates on a permit to operate and maintain a sports field, disc golf course, and an improved primitive camping area on the south side of the lake near the west end.
- **Glenwood Communications** operates on a lease at Lone Eagle, Little Thunder, and Cedar Vue campgrounds to provide wireless Internet access to visitors.
- **JC Cedarview** operates on a permit providing the placement of RVs with a tractor and launching of watercraft at Cedar Vue.
- **The Kite Ranch** operates on a permit in Arthur Bay to provide kiteboarding lessons, kiteboard rentals, camper placement services, towing of disabled and mired vehicles, input and output of watercraft in Lake McConaughy, and assists the superintendent with the towing and impoundment of property.
- **Kingsley Lodge** operates on a lease in Spillway Bay to provide for sale of food refreshments and related items, sporting goods, bait and related items, motorboat fuel and lubricants, camping and picnic supplies, and NGPC permits. Upon proper license or permit by NGPC, it can also conduct sale of boats and motors, service, watercraft repair and maintenance, transportation of passengers by boat for hire, watercraft and trailer dry storage, mobile homes and RV siterental, overnight camping site rental, vacation cabin rental, and rental of boats, motors and related items.
- Leuck Towing Service operates on a permit to provide camper placement services, towing of disabled or mired vehicles, input and output of watercraft in Lake McConaughy from the beach between West Theis Bay to Sandy Beach. This vendor will also aid the park superintendent with the towing and impoundment of property.
- North Shore Lodge operates on a lease to provide the sale of food refreshments and related items, sporting goods, bait and related items, motorboat fuel and lubricants, camping and picnic supplies, NGPC permits, boats and motors, service, watercraft repair and maintenance, transportation of passengers by boat for hire, watercraft and trailer dry storage, mobile homes and RV site rental, overnight camping site rental, vacation cabin rental, and rental of boats, motors and related items.

- Otter Creek Lodge operates on a lease to provide the sale of food refreshments and related items, sporting goods, bait and related items, motorboat fuel and lubricants, camping and picnic supplies, NGPC permits, boats and motors, service, watercraft repair and maintenance, transportation of passengers by boat for hire, watercraft and trailer dry storage, mobile homes and RV site rental, overnight camping site rental, vacation cabin rental, and boat rental, motors and related items.
- **Ski Patrol** operates in Martin Bay on a permit to provide the placement of camper trailers, towing of disabled or mired vehicles, rental of boats, motors and related items, launch and recovery of private boats, transportation of passengers by boat for hire, and the sale of motorboat fuel and lubricants.
- **Van's Lakeview** operates on a lease on the south side of the lake at Lakeview to provide the sale of food, refreshments and related items, sporting goods, bait and related items, motorboat fuel and lubricants, camping and picnic supplies, NGPC permits, boats and motors, service, watercraft repair and maintenance, transportation of passengers by boat for hire, watercraft and trailer dry storage, mobile homes and RV site rental, overnight camping site rental, the placement of a private dock for public use, and the rental of boats, motors and related items.





#### **MANAGEMENT CHALLENGES OF PARKS**

The Parks Division faces many challenges when operating and managing the two lakes. The native soils of the area, primarily sandy soils, provide excellent beaches for recreation, but cause difficulties regarding landscaping and building facilities. It is difficult to find native plants and landscaping materials that thrive in the soils and the plants that are in place require frequent maintenance and upkeep. When constructing new buildings, it is important to have good foundations. The soil types of the area create challenges and additional costs to construction. Maintenance of existing facilities also is problematic. Sand drifts onto the roads and camping areas during low-water periods. The sand must be cleaned off boat ramps daily during the drawdown season.

Water fluctuations provide operational demands that are challenging to deal with. A normal summer drawdown on the lake is usually 10-15 feet, but normal has become difficult to define. When the water fluctuates, it causes additional shoreline erosion, along with boat ramp and dock maintenance. Boat ramps and docks for all water levels are in place, but staff rarely can keep up with the demand when the water fluctuates. Dock maintenance is difficult due to the fluctuations and severe storm surges.

The size of the properties creates a number of management issues. Staff is consistently spread thin, making employee supervision, communication and oversight challenging. This can result in periods when maintenance and customer service is lacking. Regulation enforcement is a daily issue. Because of the size and the "camp anywhere" concept, it is difficult to educate visitors about where they can and cannot be. This leads visitors to creating their own trails and roads, which requires staff to perform additional duties to manage the area. There have been attempts to control traffic with a large increase of signage, minor fencing in areas and a designated swim beach at Martin Bay. These strategies are working, but, due to the size of the facility, it is difficult to put these types of actions in place throughout the lakes.

Lack of a temporary employment pool is a huge challenge for these areas. Ogallala's population has declined over the past 10 years, making hiring for temporary positions difficult. There is a severe shortage in employment pool for the areas. Temporary positions – which are 11-month employees – have been added to assist in daily operations, but the summer help is still a difficulty. Increased marketing and wage increases to attract employees have been undertaken with some positive outcomes. Continued efforts will need to be taken to be a marketable choice for summer employment.



Another management challenge is the regulatory compliance and oversight that must occur. This includes the partnerships with CNPPID, USFWS, Nebraska Department of Environmental Quality, Department of Natural Resources, Department of Health and Human Services, and the Department of Administrative Services. Each of these agencies requires specific permitting or regulations that must be followed when developing different amenities. For example, there are 26 drinking water wells on site and there is paperwork that must be completed for Health and Human Services to ensure the standards for these wells are met. While regulatory oversight is beneficial for the protection of natural resources, it is time consuming and requires a level of detailed supervision that takes the park superintendent away from other duties.

Because there are several concessionaires that must be managed, the park superintendent spends much time overseeing these activities. There are two different types of agreements that concessionaires have with NGPC: lease agreements and yearly permits. Each requires a different level of oversight and time to ensure the concessionaires provide the services agreed upon and the proper paperwork required to NGPC.

Continued efforts in maintaining the different types of partnerships is constant. It takes time to create good relationships with the county boards, city councils, tourism entities, friends groups, local citizens groups and others to try and meet the needs of the visitors and all that take an interest in the lakes. These partnerships are considered in all daily management decision. They weigh heavily on the local superintendents who manage the areas and the administration of NGPC.

#### LAW ENFORCEMENT AND EMERGENCY SERVICES

Law enforcement consists of NGPC conservation officers patrolling both the land and water at Lake McConaughy and Lake Ogallala. NGPC receives support from the Keith County Sheriff's Office, the Nebraska State Patrol, and USFWS Office of Law, but that support is not consistent and therefore is difficult to plan for. NGPC Law Enforcement currently has 46 field conservation officers and four boating officers for the state. The average patrol area for a conservation officer is 1,700 square miles.

There are three conservation officers in the vicinity of Lake McConaughy and Lake Ogallala. There is one boating officer there who covers all of western Nebraska. Two other field officers are assigned to cover Keith County but also work Arthur and Perkins counties. NGPC averages 2.77 officers working in Keith County year-round – 6 percent of the entire NGPC law enforcement workforce. Depending upon the crowd and weather conditions, approximately two additional officers are called on to assist over the weekends throughout the summer. During the Memorial Day, Independence Day, and Labor Day weekends, an additional six to nine officers are assigned to lake areas. As shown in Figure 17, the number of NGPC law enforcement personnel at the lakes has risen significantly since 2009, and NGPC law enforcement plans to hire an additional field officer for the area in 2017.

### FIGURE 17: NUMBER OF LAW ENFORCEMENT PERSONNEL



66 — Lake McConaughy/Lake Ogallala 2017-2037 Master Plan

NGPC law enforcement averages approximately 450 citations at Lake McConaughy and Lake Ogallala every year; this does not include citations from other law enforcement agencies. That accounts for about 12 percent of the total citations in the state by NGPC personnel, which is just slightly above Lancaster County which includes six park areas, several other wildlife management areas, and a primary class city with over 280,000 people living in the county. Keith County has a rate six times higher than any other county for controlled substance possession and minor in possession of alcohol in the state, based off NGPC citations. These numbers mean Lake McConaughy and Lake Ogallala are prone to violations and require additional law enforcement presence to maintain a family-friendly environment.

Another important segment of operating a park area is emergency services. There are four volunteer fire departments responsible for different sections of Lake McConaughy. Blue Creek Fire in the northwest, Keystone Lemoyne in the northeast, Ogallala in the southeast and Brule in the southwest. The Keystone Lemoyne Fire and Rescue provides service on the most heavily used areas and works all the on water emergencies. In 2015, it was called to the lake for 12 medical emergencies, 10 dive rescue emergencies, six fire calls, four injury accidents, and one vehicle fire. Statistics on NGPC specific calls were not available from the other fire departments at the time of this plan. A good working relationship with those that provide emergency services is essential for effective park management.



#### **MANAGEMENT CHALLENGES OF LAW ENFORCEMENT**

The Law Enforcement Division has a different set of management challenges than the Parks Division, although some overlap. Due to the size of the lake areas and the amount of visitors at the lakes at a given time (could be more than 100,000 people on a busy holiday weekend), there is a delay in response time to calls. It is difficult to have officers in the right place at the right time. The volume of calls for service that are dispatched from the Keith County Sheriff's Office, the Nebraska State Patrol and through contacts with the public in the field is high. Responding to these calls often prevents officers from conducting proactive enforcement efforts, such as checking fishing permits, bag and possession limits, leash law compliance and monitoring nesting sites. Public safety and all issues related to public safety are made a priority over fish and game issues.

For 4½ months of the year, the visitation volume at the lakes results in calls for service around the clock. That scheduled coverage with the three local officers is not possible. As a result, schedules are free floating in order to address as many issues as possible. During this same time period, officers from other locations are imported to the area to help augment manpower on weekends. Generally, on non-holiday weekends, it is an additional two officers that assist and on holiday weekends, it is an additional six to nine officers. The cost of importing this additional help is expensive in terms of travel time, meals and lodging. Besides the costs, imported officers are not as familiar with the area and current issues. When these officers are imported to the lake areas, that leaves a gap in coverage in their normal location and enforcement in those areas diminishes.

A large percentage of the visitors at the lakes are nonresidents. In 2015, 67 percent of the citations issues by conservation officers were to nonresidents. The violations committed by nonresidents requires 50 percent more time on each individual citation due to the fact that if there is a fee involved, it must be paid at that time, which requires officers to call this information into the county.

One challenge that Parks stated as a management issue was the no designated camping areas and Law Enforcement agrees that this is an issue as well, combined with a "party" atmosphere, which enhances the volume and severity of problems encountered by officers. Critical incidents or incidents involving large groups of people can tie up multiple officers for extended periods of time. Another management issue is tied directly to water fluctuations. Like Parks, when there is more beach area along the lakes, there are more management and enforcement issues. This requires additional officers' time to ensure the public's safety.



Because the lake is a popular boating destination, there are issues due to the reactionary enforcement that must take place. This includes response to calls for service on the water due to careless boat operation, boat accidents and boating related injuries. This precludes officers from doing proactive efforts such as safety checks for the proper boating equipment and proper registrations which impact revenue and the newly passed aquatic invasive species stamps which help protect water quality.

Other challenges that Law Enforcement deals with include language barriers, cultural differences and proximity of supervisory staff. The closest supervisor is located in North Platte, approximately 60 miles from the lake. While every effort is made to have a supervisor on staff at the lake during holiday weekends, this can leave an entire district without a supervisor. The volume of required scheduling and planning at this area can be difficult.

## NATURAL RESOURCES

The mission of NGPC is "Stewardship of the state's fish, wildlife, park, and outdoor recreation resources in the best long-term interests of the people and those resources." That means NGPC has a responsibility to balance the use of natural areas for recreation with the preservation of the natural resources for future generations. Preserving those natural resources includes monitoring and managing the fisheries within the two lakes, working with and managing for all wildlife species that might utilize the land surrounding and the water in both lakes, and implementing strategies to preserve and protect threatened and endangered species in the area.

#### **FISHERY**

After initial impoundment in the early 1940s, as with most new highly fertile reservoirs, McConaughy supported a broad spectrum, self-sustaining sport fishery consisting of cold-, cool- and warm-water game fish that included numerous panfish species. As the reservoir aged, the panfish numbers declined with the deterioration of submerged terrestrial structure and the reservoir environment became more suitable for open-water species such as walleye and white bass. These two species eventually have made up the majority of angler catch by total weight and number since the 1960s.

During the 1960s, McConaughy was identified as a two-story reservoir that supported cold- and warm-water species. The cold-water species were migratory McConaughy strain rainbow trout that genetically adapted to the unique reservoir environment over generations and provided a quality sport fishery.

Striped bass were stocked intermittently from the late 1960s through 1978, resulting in a large biomass of long-lived 16- to 18-year old fish from 20-50 pounds in weight. A following progressive decline in the rainbow trout fishery and numbers of adult gizzard shad, the primary prey fish, was attributed to striped bass predation. A staff moratorium on future striped bass stocking was subsequently implemented with 1978 being the last stocking year. Related to the severe decline in gizzard shad numbers, which impacted the majority of existing game fish species, a research project was implemented in 1978 in an effort to diversify and stabilize the prey base. Threadfin shad (*Dorosoma petenense*), emerald shiner (*Notropis atherinoides*), spottail shiner (*Notropis hudsonius*), rainbow smelt (*Osmerus mordaxa*) and alewife (*Alosa pseudoharengus*) were consecutively stocked into the late-1980s. Only alewife was able to successfully reproduce in significant numbers. The resulting very high density of adult alewife, with their efficient predatory feeding ability, caused a dramatic decline in large Claudoceran zooplankton (*Daphia pulex*) numbers, which were replaced by smaller Bosmina sp. and Copepod sp. With this change in the zooplankton community and the negative impact on natural recruitment of the primary game species, annual stockings of up to 1,500,000 fingerling walleye began

in 1992 and has continued through 2015. White bass and striped bass hybrid fingerlings were also stocked on alternating years.

Lake McConaughy has a premier walleye sport fishery that provides anglers quantity and quality catch. In terms of quantity, peak values from the 2004 May-October creel survey estimates 161,195 walleye were caught, with a harvest estimate of 86,990. In terms of quality, the most recent 2015 Master Angler statewide data shows that 15 of the 20 largest walleye recorded by weight came from McConaughy. Lake McConaughy made up 42 percent of the Master Angler walleye submitted in 2015.



Lake Ogallala has the unique characteristic of being a cool-water reservoir because it is fed from the base of Kinsley Dam, making the water temperatures much cooler than a typical reservoir. NGPC decided to take advantage of those cool-water temperatures and manage Lake Ogallala as a trout fishery. To do that, NGPC has chemically renovated the lake in 1969, 1997 and 2009 to eliminate rough fish species (common carp and white suckers). This is a management effort to improve stands of aquatic submergent vegetation and aquatic invertebrate numbers which enhance trout growth rates and body condition. The cost of chemical most recently in 2009 was approximately \$200,000. A number of different strains of rainbow, brown, cutthroat and tiger trout have been stocked with the strategy to utilize those that will provide the best growth performance and return to the angler.





At a normal full-pool elevation of 3,265 feet mean sea level, Lake McConaughy has a surface area of 30,600 surface acres, with 1,743,000 acre-feet of storage volume. During the period from 1941-2015, the average annual high elevation is 3,252.8 feet, with an average annual end-of-irrigation-season low elevation of 3,239.1 feet. Average annual drawdown during that period is 13.6 feet, with a maximum single-year drawdown of 32 feet in 1956. In 2004, the reservoir reached a new record low elevation of 3,197.6 feet, 67.4 vertical feet below normal full pool, as a result of below normal inflows and increased annual drawdowns from 2000 through 2004. Surface area at that elevation was 12,400 surface acres, with 340,200 acre-feet of storage volume. This was a dramatic 60 percent reduction from normal full pool surface area and even more severe 80 percent reduction in volume. The carrying capacity of sport fish in the reservoir at normal full pool, or near normal full pool, cannot be supported with those dramatic declines in area or volume. Attrition occurs both by increased natural and harvest mortality and by escapement out of the reservoir through water releases. At lower reservoir volumes a dangerous element also exists with the risk of massive fish die-offs related to poorer water quality conditions and associated toxic blue-green algae bloom related physical stress, as occurred in 1971.

Related to boater access, Lake McConaughy has a total of 16 NGPC ramps with two concessionaire ramps open to the public with different serviceable elevations. Only nine ramps are in service at normal full pool, but with progressively declining surface elevation some ramps fall out of service while others come into service. Below elevation 3,241 feet, no ramps provide bay protection from high wind events for loading boats. Only two ramps remain in service below 3,230 feet, with none remaining below 3,220 feet.

Figure 18 illustrates the fluctuating water levels of at Lake McConaughy over the past 74 years, as provided by CNPPID. A typical reservoir has a much more stable pool elevation. Since Lake McConaughy was built for irrigation, CNPPID must release water down the canal when irrigators request regardless of what that might



### FIGURE 18: LAKE POOL ELEVATIONS



do to the recreational capacity of the reservoir. These changing water levels make it difficult to manage many recreation facilities because it is impossible to alter permanent facilities in order to correspond to lake levels. At times the beach can be 100 yards or more from the full pool shoreline. Those water level changes can happen in the course of the summer camping season.

#### **MANAGEMENT CHALLENGES OF FISHERIES**

The Fisheries Division's management challenges are common with those of Parks and Law Enforcement. The fluctuating water levels provide some difficulties when managing fish species. An average annual drawdown at Lake McConaughy has been approximately 13.6 feet. In 2004, the reservoir reached a record low end-of-season elevation of 67.4 feet below normal full pool. This was a 60 percent reduction from normal full pool surface area and an 80 percent reduction in volume. The carrying capacity of sport fish in the reservoir at normal full pool, or near full pool, cannot be supported with those dramatic declines in area or volume. At lower reservoir volumes, the potential exists for massive fish die-offs related to poorer water quality conditions and associated toxic blue-green algae bloom.

Parks and Fisheries agree on the management issues regarding boat ramps and docks. There are 16 concrete boat ramps with different serviceable elevations at Lake McConaughy. There are only nine ramps in service at normal full pool, but with progressively declining surface elevation, some ramps fall out of service while others come into service. Below 3,241 feet, no ramps provide bay protection from high wind events for loading boats and only two ramps remain in service below approximately 3,230 feet, with none remaining below approximately 3,220 feet.

Angler concern regarding poor catch rates of white bass from Lake McConaughy is a result of poor year-class recruitment by stocked fish or natural reproduction. A current University of Nebraska at Kearney research project is being conducted to gather life cycle background data specific to Lake McConaughy for that species to assist in future management.

Lake Ogallala is managed with annual stockings as a premier cold-water trout fishery. Along with the downstream North Platte River and Nebraska Public Power District supply canal, it can provide a popular year-round fishery for quality- or trophy-size fish. To manage this trout fishery at an optimum level, Lake Ogallala was chemically renovated in 1969, 1997 and 2009 to remove high densities of undesirable rough fish and subsequently maximize the growth potential and carry-over survival of stocked trout. Based on this renovation history, future treatments will be necessary.

The installation of the hydroelectric plant altered the water release conduit from Lake McConaughy into Lake Ogallala. This created a late-summer low dissolved oxygen level that resulted in physical stress, increased escapement downstream or intermittent trout mortality in the lake and downstream canal. This low dissolved oxygen issue has yet to be corrected.

The storage capacity of Lake McConaughy at surface elevations below approximately 3,232 feet negatively impacts thermal water quality in Lake Ogallala. Lake Ogallala supports the trout fishery as a result of water releases made from the cooler hypolimnetic water strata (optimally approximately 13 degrees Celsius) in McConaughy. Below elevation 3,232 feet, high-flow irrigation discharge in July and August pulls warmer upper level (less than 21.1 degrees Celsius) epilimnetic water into deep water releases to Lake Ogallala, which results in trout physical stress, increased escapement downstream or mortality.



#### WILDLIFE

Between Lake McConaughy, Lake Ogallala and the adjacent Clear Creek Wildlife Management Area (WMA), there is approximately 11,877 acres of land. While some of that land is developed into primitive campgrounds, parking lots, roads and other infrastructure, the majority of it is natural habitat that supports nearly 1,000 wildlife species, from macroinvertebrates to white-tailed deer.

Clear Creek WMA, located at the upper end of Lake McConaughy, encompasses more than 6,200 acres of land and water. It includes a 2,500-acre waterfowl refuge, 600-acre controlled waterfowl hunting area, and 3,000 acres of WMA. Clear Creek, which is administered and managed by the Wildlife Division, is supported by funds from the sale of Nebraska hunting permits, stamps, and federal funds from the excise tax of hunting equipment. Public lands on the area provide excellent hunting for small game, waterfowl and white-tailed deer. Public fishing access to the North Platte River is also provided on the WMA. Hunting is also allowed on portions of Lake McConaughy during specific seasons.



Lake McConaughy is located at the confluence of the Shortgrass Prairie and Sandhills Ecoregions. The lake's surrounding landscape supports varied habitats. The Shortgrass Prairie features rocky escarpments and large expanses of prairie. The Sandhills Ecoregion contains native communities ranging from wetlands to dry upland prairie. These areas come together near Lake McConaughy and support several hundred species of birds, plants, insects, mammals, reptiles and amphibians. Lake McConaughy and surrounding areas are focal sites within the ecoregions for anglers, bird watchers, hunters and campers. The location on central migration flyways and proximity to large bodies of water add up to ideal conditions for birds. The reservoir is on the southern edge of the Nebraska Sandhills and provides a variety of habitats ranging from open sand beaches to riverine marshes to cold-water streams. The lake area is home to many species of migrating waterfowl, including Canada goose, mallard, and northern pintail, providing high quality waterfowl hunting opportunities.

The Lake McConaughy area is one of the premier birding areas in the Great Plains because of the diversity of habitats and the area's location in the midcontinent. Habitats found within a relatively small area include a large lake, sandy beaches, marshes, prairie, cottonwood gallery forests, hillside cedar thickets, river, and urban centers. Over 360 bird species have been recorded in the immediate area and the annual Christmas Bird Count, held since 1993, regularly tallies more than 100 species – a remarkable feat for such northerly latitude. The Lake McConaughy area can be divided into three distinct areas: 1) Lake Ogallala/Keystone, 2) Lake McConaughy and beaches, 3) west end of Lake McConaughy and the Clear Creek marshes. In addition, Ash Hollow State Historical Park (SHP), located just to the west of the area, can also be a productive birding site. Lake Ogallala and Lake Keystone, which is actually a single water body, is arguably the most productive birding site within the area. The lake hosts waterbirds - often rare ones - throughout the year. Winter can be productive when water is being released from the dam into spillway. Large numbers of bald eagles, gulls and waterfowl may be viewed at close range. CNPPID (cnppid.com) maintains an eagle viewing building during the winter. Woodlands in the campgrounds and along the lake's shoreline attract migrant passerines in spring and fall. Lake McConaughy is a magnet for waterbirds, including large concentrations of western grebes. The sandy shoreline and beaches attract loafing gulls and terns, as well as shorebirds, during warmer months. The latter includes nesting piping plovers and interior least terns. The west end of Lake McConaughy can attract large numbers of waterbirds when the lake's water levels are low. The Clear Creek marshes, including the WMA, attract American bitterns, rails, waterfowl and sandhill cranes during migration.

#### MANAGEMENT CHALLENGES OF WILDLIFE

The Shortgrass Prairie and Sandhills Ecoregions face several stresses. Altered hydrology through surface water diversions and groundwater withdrawals can lead to lowering of the water table along rivers and



streams, causing changes in plant composition. Fluctuations in North Platte River flows can impact upland and wetland habitats on Clear Creek Wildlife Management Area and reservoir levels. Water levels in area wetlands and reservoirs often determine accessibility, which can impact availability of wildlife viewing or hunting.

Another common challenge is control of invasive plant species. Invasive species are a threat to habitat quality and ultimately, biological diversity. Plants such as downy brome, reed canary grass, narrowleaf cattail, Canada thistle, phragmites, smooth brome, Siberian elm, saltcedar, Russian olive, crested wheatgrass, and eastern red cedar invade upland and wetland areas, making it less appealing for wildlife use. Thick infestations of phragmites, brome and other species can also impede access for users. Building capacity to implement prescribed fire and grazing of the areas may help improve habitat quality for wildlife and recreationists. The area immediately surrounding Lake McConaughy is used primarily for camping and day-use activities. However, there are some upland and wetland areas at Lake McConaughy, Lake Ogallala and Clear Creek WMA that provide a variety of recreational opportunity. Continuing to balance needs of different user groups with wildlife needs will be an ongoing goal.

#### **THREATENED AND ENDANGERED SPECIES**

Two bird species protected by the federal Endangered Species Act and the Nebraska Nongame and Endangered Species Conservation Act nest and raise their young on the beaches of Lake McConaughy. Piping plovers *(Charadrius melodus)* are state and federally listed as threatened and interior least terns *(Sternula antillarum athalassos)* are state and federally listed as endangered. The terms of the FERC license require CNPPID to implement a comprehensive management plan to protect these species. CNPPID created and adopted the "Management Plan for the Least Tern and Piping Plover Nesting on the Shores of Lake McConaughy" to comply with the Endangered Species Act and the terms of their FERC license. As part of that plan, CNPPID constructs two types of human exclusion zones to protect nesting plovers; a small number of large zones that protect a concentration of nests and several smaller zones that are placed around individual nests with Keep Out signs.

Lake McConaughy's sand beaches support anywhere from 10 to hundreds of nesting piping plovers (358 nests in 2006) and a much smaller number of interior least terns (1-20 nests). Changing water levels have a significant impact on the number of nesting birds from year to year due to the amount of exposed beach available. Interior least terns typically nest in aggregations within human exclusion zones. Piping plovers nest individually in suitable habitat around the entire lake. Piping plovers typically lay four eggs in shallow, cup-shaped nests in the sand, incubate the eggs for approximately four weeks, and attend to the precocial chicks for approximately four weeks. Interior least terns typically lay three eggs in similar cup-shaped depressions in the sand, incubate the eggs for approximately three weeks and attend to their precocial chick for approximately three weeks. Adult plovers and their nests and chicks may be present in nesting areas from mid-April through mid-August. Terns typically arrive in mid- to late May and remain through early to mid-August. CNPPID has documented nests in almost every stretch of open beach at Lake McConaughy at one time or another. These nests have been mapped over a series of years and vary in location from year to year due to water levels and suitable habitat availability. Figure 19 provides a map of nesting locations throughout the past five years.

#### **MANAGEMENT CHALLENGES OF THREATENED AND ENDANGERED SPECIES**

In 2012, NGPC initiated a program designed to improve its understanding of the interactions between Lake McConaughy visitors and the piping plovers and interior least terns, which both nest on the lake's sandy beaches. Since 2013, NGPC has funded a research project executed jointly by the University of Nebraska-Lincoln and NGPC (UNL/NGPC study). The UNL/NGPC study has yielded four publically available, peer-reviewed publications appearing in international journals focused on 1) visitors' attitudes toward and

compliance with the leash law (Jorgensen and Brown 2014), 2) visitors' general attitudes toward piping plovers (Jorgensen and Brown 2015), 3) visitors' impact perception and acceptance capacity toward piping plovers (Jorgensen and Brown 2016), and 4) behavioral responses of piping plovers incubating eggs in nest to nearby recreational activity (Jorgensen et al. 2016).

During 2013-2014, nesting piping plovers were observed for 221 hours to better understand how recreational activity near nests during incubation was impacting the species. These observations tallied 706 recreation associated stimuli (humans, vehicles, dogs, humans with dogs) occurring within 100 meters of an incubating piping plover. Only two instances of visitors violating exclusion zone (protective fencing around piping plover nests) perimeters were observed. Piping plovers responded differently to different stimuli types and their responses varied over the course of a day and over the incubation period. Incubating piping plovers responded more often and at greater distances when the stimuli included a dog (either with a human or by itself). They responded at greater distances later in the day, after a day of repeated disturbances. They also responded at greater that 1)





even though instances of exclusion zone violations occur at Lake McConaughy, they occur infrequently, 2) the distances at which plovers respond to recreational stimuli varies with stimuli type (greatest response if dogs are involved, and 3) plovers vary in their responses in predictable ways.

Piping plover and interior least tern chicks, which are most often found with their parents in small groups of one to four siblings (broods), are more challenging to protect than nests because chicks are mobile. Broods are vulnerable to being trampled by humans or their vehicles once they move outside of Threatened and Endangered Species Zones. A high density of human recreationists can displace piping plover chicks and exclude them from accessing critically important habitats, such as the shoreline where they forage. Piping plover chicks that are unable to feed or spend a disproportionate amount of time fleeing perceived predators (humans, vehicles, dogs) may starve to death or physically develop more slowly. Piping plover chicks that develop at slower rates than normal will require more time to fledge (become capable of flight) and consequently will be vulnerable to predation for a longer period of time. Chicks that fledge at smaller sizes or are less well developed at fledging are less likely to survive migration and their first winter.

Since concern regarding dogs and compliance with the leash law has been expressed by USFWS, NGPC, and CNPPID, additional research focus was placed on better understanding that challenge. In 2013-2014, NGPC developed and distributed thousands of copies of a color flyer that provided information about piping



plover and interior least tern biology and legal protections. The flyers emphasized that a leash law was in place and the details of the leash law. The UNL/NGPC study showed leash law compliance was 16 percent in 2013-2014. During 2013-2014, researchers interviewed visitors and determined that 78 percent of dog owners were aware of the leash law. Clearly, passive education efforts, as illustrated by the distribution of flyers in 2013-2014, have a minimal effect on improving leash law compliance.

Two key lessons drawn from research efforts in 2013-2014 were that visitors' lack of awareness of the leash law did not explain the lack of compliance and traditional efforts to improve leash law compliance need to be reconsidered. In 2015, leash law compliance was 22 percent. In 2016, NGPC's Law Enforcement Division placed increased emphasis on enforcing the leash law, as well as educating visitors about the regulation. In 2016, the leash law compliance rate increased dramatically to 67 percent. In 2016, the UNL/NGPC study focused on evaluating the efficacy of various persuasive messages that could be used in a more sophisticated low-impact education campaign. The new campaign, which requires additional development, would replace the earlier, simplistic efforts that have been shown to have minimal impact on improving leash law compliance and protecting nesting birds.

Lake McConaughy visitors' lack of awareness and limited acceptance of threatened and endangered species and their protection measures are barriers to effective conservation and protection of the species. Individuals unaware of the species and their protections presumably are more likely to violate Threatened and Endangered Species Zones and possibly allow their dogs to go unleashed at Lake McConaughy. The UNL/NGPC study showed that 49-60 percent of visitors were aware of piping plovers and 49-56 percent of visitors were aware of piping plovers' protected status. Thus, a large proportion of visitors were unaware of the birds and their protected status, indicating the sorts of education efforts which have been implemented at Lake McConaughy have only had limited success. Local and older residents had higher rates of awareness. A significant challenge at Lake McConaughy is that nearly 50 percent of all visitors are from the front range urban corridor of Colorado and southern Wyoming and travel two to three hours to visit the lake. Even though their awareness of the birds was moderate, those visitors strongly favored protecting piping plovers. Improved efforts to increase awareness and improve the social acceptance of threatened and endangered species should be pursued to minimize negative impacts to the birds by visitors. Efforts, such as stakeholder engagement, which have been shown to be effective in other situations, should be considered to help prevent and mediate conflicts that may arise between visitors, stakeholders or other interests at Lake McConaughy.

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### GOALS, STRATEGIES AND TACTICS

In order to establish an effective plan, there must be a comprehensive set of goals that the plan is working to achieve. This master plan has 10 goals. Within each goal there are several strategies that outline how to reach the goal and tactics that give specific actions for implementing the strategy or goal. On February 12, 2016 the advisory committee met to discuss what goals were needed for this master plan. The committee discussed desired outcomes from implementing this master plan. Within those discussions, several tactics were discussed and the overall goals. After the meeting, a list of goals, strategies and tactics were developed and then finalized by the committee after further review. These goals will be instrumental in improving relationships with NGPC, CNPPID, the City of Ogallala, and Keith County, by giving all the partners tactics that work toward achieving the goals identified in this plan.


Many of the tactics identified in the plan call for evaluation of current actions to determine how things are working and where improvements may need to be made. The underlying intent of this plan is to use adaptive management to alter action items once assessed. It is critical that the plan remains flexible and change with lessons learned.

Definitions: **Goal** – What we are working to achieve **Strategy** – A plan of action to attain a goal Tactic – A specific action to accomplish a goal or strategy

**Goal 1.** Provide memorable experiences for users through diverse recreational opportunities.

Strategy 1: Expand recreational offerings where possible.

- Tactic 1: Evaluate existing recreation opportunities to determine gaps in offerings.
- Tactic 2: Add water-based recreation (kayak, paddleboards, etc.) to provide new opportunities.
- Tactic 3: Add an equestrian campground and trails.
- Tactic 4: Add water park features (floating playgrounds, splash pad, etc.), if feasible.
- Tactic 5: Create bike, backpacking, eco, and birding tours that connect regional amenities such as Ash Hollow SHP, other cultural attractions, wineries and golf courses.
- Tactic 6: Explore creating an ATV park in the region on newly acquired land.
- Tactic 7: Build fenced dog runs to provide guests a place to have their pets off-leash.
- Tactic 8: Build a large rental space for weddings, meetings, and other activities at the Water Interpretive Center.
- Tactic 9: Work with partners such as local communities and tourism entities on joint marketing efforts.

Strategy 2: Promote a family friendly atmosphere.

- Tactic 1: Build or restore family friendly amenities (picnic shelters, playgrounds, campgrounds, off lease dog run areas).
- Tactic 2: Build and promote community fire pits that can accommodate 10 to 20 people in identified locations.
- Tactic 3: Advertise family friendly activities.
- Tactic 4: Create and offer more educational and interpretive opportunities at the Water Interpretive Center.
- Tactic 5: Build and promote new and refurbished group facilities.

**Goal 2.** Increase visitation during the shoulder seasons.

*Strategy 1:* Understand facilities and manpower to identify potential opportunities for shoulder seasons.

- Tactic 1: Evaluate facilities for more usage during the shoulder seasons.
- Tactic 2: Create new facilities that promote the shoulder seasons.
- Tactic 3: Coordinate with local golf courses to develop coordinating events or similar attractions.
- Tactic 4: Coordinate with local entities for joint events.
- Tactic 5: Increase lodging opportunities such as camper cabins or lodge rooms. These could be provided by either NGPC or through a concessionaire.
- Tactic 6: Market chuck wagon cookouts and events at Ash Hollow SHP to visitors of Lake McConaughy and Lake Ogallala.
- Tactic 7: Develop a concert series at one or both of the lakes.
- Tactic 8:Explore the opportunity for a Water Outdoor Expo that includes water based recreationand the land based amenities affiliated with a lake.
- Tactic 9: Develop new programming and events such as a Halloween event, birding events, and interpretive programs for schools at the Visitors Center.
- **Strategy 2:** Expand local partnerships to create the area as a destination in shoulder seasons through new events and promotion.
  - Tactic 1: Create new events during shoulder seasons, such as an eagle viewing event.
  - Tactic 2: Examine current marketing strategies of NGPC and partners to determine what is working and expand marketing if needed.
  - Tactic 3: Work with city and county officials to coordinate events and promotion.
  - Tactic 4: Evaluate and redo the See and Do pamphlet.
- **Goal 3.** Explore partnerships to positively affect surrounding areas economies.
  - *Strategy 1:* Include regional entities and businesses in management conversations that impact the local areas economies.
    - Tactic 1: Conduct meetings with regional entities and business owners if new services or facilities are proposed.
    - Tactic 2: Create welcome baskets with local businesses to market to visitors.
    - Tactic 3: Create a passport-type program that encourages visitors to go to local businesses.
    - Tactic 4: Work with local businesses to host challenge games at storefronts to draw in people (minnow races, turtle races, duck races).
    - Tactic 5: Connect with the city and its events and activities.



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- Tactic 6: Work with the Friends of Ash Hollow Group to put on events and promote the park.
- Tactic 7:Reinvigorate the Friends of Lake McConaughy Group to help with events and<br/>fund-raising for the park.
- Tactic 8:Connect with the Western Nebraska Economic Development Group to assist with<br/>business promotion and help locals start new businesses that support the park.
- Tactic 9: Create a regional economic development summit.
- **Goal 4.** Manage and expand recreational opportunities to avoid user conflicts and protect the natural resources.
  - Strategy 1: Add services and facilities after a thorough analysis on the potential impacts.
    - Tactic 1: Evaluate the effect on emergency response with new activities.
    - Tactic 2: Evaluate the carrying capacity of the area to best serve the public.
    - Tactic 3: Examine beach uses and alter regulations to avoid conflicts.
    - Tactic 4: Evaluate lodging facilities and their location to best serve the public.
    - Tactic 5:Create more designated camping opportunity off the beach to avoid user<br/>conflicts and provide additional space during high-water years.

Strategy 2: Work with law enforcement to effectively regulate various recreational uses.

- Tactic 1: Create self-regulating facilities when possible (one way in one way out, defined camping spots, etc.).
- Tactic 2: Inform the public about the regulations through signage and other means.
- Tactic 3: Evaluate start and stop times for events to prevent issues.
- Tactic 4: Evaluate how much people know about the regulations and where they got their information.
- Tactic 5: Develop more effective methods for public awareness of regulations.
- **Goal 5.** Protect and effectively manage the natural resources of the lakes, with a focus on the threatened and endangered species.
  - **Strategy 1:** Recognize the relationship between the natural resources and the threatened and endangered species on the lakes.
    - Tactic 1: Evaluate all existing natural resources and devise strategies (education, messaging and awareness) to best protect those resources while still providing for sufficient outdoor recreation.
  - **Strategy 2:** Work with USFWS and CNPPID to adequately protect the Threatened and Endangered species.
    - Tactic 1: Evaluate and modify, as needed, measures intended to protect the threatened and endangered species in concert with efforts implemented by CNPPID under the Land and Shoreline Management Plan.
    - Tactic 2: Improve and maintain visitor compliance with Threatened and Endangered Species Zones and the leash law regulation.
    - Tactic 3: Develop, implement and evaluate a coordinated and comprehensive public engagement campaign that improves visitor literacy about and acceptance of threatened and endangered species through effective information delivery and messaging to specific audiences, as well as stakeholder engagement that builds dialogue between the agencies and visitors.
    - Tactic 4: Develop communication protocol and processes with CNPPID and USFWS to ensure adequate protection of the species.

**Goal 6.** Ensure public safety in a fair and effective manner.

Strategy 1: Work with the public so they better understand the regulations.

- Tactic 1: Man main kiosks every day to make at least one contact with as many guests as possible.
- Tactic 2: Conduct regular patrols of the area to ensure regulation compliance.
- Tactic 3: Evaluate additional Law Enforcement Division personnel needs.
- Tactic 4: Explore the possibility of creating a canine enforcement program.
- Tactic 5: Continue to coordinate with local and state law enforcement agencies for support during busy weekends with a particular focus on holiday weekends.
- Tactic 6: Expand communications regarding rules and regulations through the use of blogs, social media, etc.
- Tactic 7:Improve radio communications with Parks personnel, conservation officers, NebraskaState Patrol and local law enforcement.
- Tactic 8: Explore the feasibility of expanding coverage through the payment of overtime for law enforcement personnel.

**Goal 7.** Manage the area in accordance with the agreement between the NGPC and CNPPID.

**Strategy 1:** Work with CPPID to maintain compliance with regulations outlined in the management agreement.

- Tactic 1: Conduct quarterly meetings between the entities to discuss operations and any concerns.
- Tactic 2: Create and implement a recreation plan that corresponds to CNPPID Land and Shoreline Management Plan and Cultural Resources Plan and Management Plan for the Least Tern and Piping Plover Nesting on the Shore of Lake McConaughy.
- Tactic 3: Work with CNPPID on resolving boundary encroachments and non-permitted uses at the lakes.

**Goal 8.** Offer quality cultural and natural resources education and interpretation.

- *Strategy 1:* Provide opportunities that incorporate natural and cultural resources interpretation to visitors to the areas.
  - Tactic 1: Evaluate existing educational opportunities as well as staffing to determine what opportunities exist.
  - Tactic 2: Hire temporary naturalists to conduct educational sessions during the busy seasons.
  - Tactic 3: Hire temporary tour guides and volunteers at the Water Interpretive Center.
  - Tactic 4: Create new events that center around the cultural and natural resources in the area.



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- Tactic 5: Market the educational activities available to the public.
- Tactic 6: Evaluate and implement new methods to get more people to visit the Water Interpretive Center.
- Tactic 7: Create a message board for informing the public of events and important messaging, potentially building it at the Water Interpretive Center entrance off Highway 61.

**Goal 9.** Provide effective operation of the area.

**Strategy 1:** Work with NGPC staff to improve efficiency and offerings to visitors.

- Tactic 1: Evaluate manpower regarding current and future needs.
- Tactic 2: Evaluate the annual budget for current and future needs.
- Tactic 3: Evaluate current infrastructure and create a maintenance and replacement plan.
- Tactic 4: Evaluate existing management and determine if there are ways to more efficiently operate the areas.



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- Tactic 5: Collect accurate visitor counts.
- Tactic 6: Evaluate the number of visitors to specific high-use beaches and bays and determine the carrying capacity for each area.
- **Strategy 2:** Work with concessionaires, the City of Ogallala, Keith County, Keith County Area Development, Ogallala/Keith County Chamber of commerce and local nonprofit groups sources to improve efficiency and offerings to visitors.
  - Tactic 1: Evaluate concessionaire offerings regularly to avoid duplication and suggest additional services.
  - Tactic 2: Work with service providers to add or improve service and conditions particularly during holiday weekends.

### Goal 10. Increase revenue.

*Strategy 1:* Ensure park permit and camping registration compliance.

- Tactic 1: Evaluate new types of envelops at iron rangers for guests' self-service options.
- Tactic 2: Evaluate the use of technology along Bay Road for collecting fees.
- Tactic 3: Reduce entrances and access to the park to help ensure permit compliance.
- Tactic 4: Expand programming and event opportunities to bring people out to the areas during the shoulder seasons.
- Tactic 5: Evaluate pricing for services and amenities to stay competitive and maximize profit.

Strategy 2: Explore new uses or services that could be brought to the area.

- Tactic 1: Research what other large reservoirs do to generate revenue and evaluate the possibilities for Lake McConaughy/Lake Ogallala.
- Tactic 2: Work with existing and potential concessionaires to expand the services offered to visitors.



## DEVELOPMENT PLAN

A development plan was needed in order to effectively operate and manage Lake McConaughy and Lake Ogallala into the future. This is the culmination of the planning process. It is here where the regional analysis, inventory of existing facilities, analysis of operating conditions, review of the natural resources, the goals, strategies and tactics, and all the public input that was collected come together to outline the various programs and projects that have the potential to improve the visitor experience, effectively manage the natural resources, protect threatened and endangered species, and optimize revenue generation. Examining all of the information in the plan will allow for the best possible park experience for our visitors and protection of the natural resources.

### **PUBLIC INPUT**

It is important to capture the needs, desires and concerns of the public that uses the lake areas and the local constituents surrounding the lakes. As the manager of the areas, it is crucial that NGPC remains a good neighbor and partner to the local communities and their economies while fulfilling the commitments of the master lease agreement with CNPPID. The most effective way to gather public input is through public meetings. These meetings gave NGPC the chance to present to the public a vision for the areas and share some management concerns. It also allowed NGPC to hear directly from the users what issues they are seeing and ask them to come up with possible solutions to the problems the areas are facing. Without public support for the plan, implementation will be difficult and may not be successful.

### **JUNE 1, 2016 PUBLIC MEETING**

On June 1, 2016, NGPC held a public input session, where the public was asked to comment on two main questions regarding the public's favorite aspects of the lakes and changes and improvements wanted. These questions were asked so that this plan can reflect the desires and wishes of the general public. NGPC recognizes that mangers of the lake areas see things differently than users do, and want to make sure to incorporate those other views when setting the course for future development and management. There were approximately 150 people from Nebraska, Colorado and Wyoming in attendance. The meeting included a presentation outlining the reasons to create the Development Plan, background information on the management challenges the agency faces with the areas, a review of the goals and strategies created by the local Advisory Group, and two questions directed to the public for their input. Tables 9 and 10 provide a brief overview of the responses received from the public in regards to the two questions. See Appendix B for the presentation and the recorded comments.

# TABLE 9: WHAT ARE YOUR FAVORITE ASPECTS OF LAKE MCCONAUGHY AND LAKE OGALLALA?

Good Staff

Dam Run (events)

It's Primitive (little development)

Beach Camping, the Ability to Camp Right on the Beach Near the Water as Opposed to Designated Sites Surrounded by Other Campers

You can Drive on the Beach

The Control on Alcohol

You can Pull Campers and Vehicles Below the High Water Mark to Get Closer to the Water

**Beautiful Sunsets** 

**Excellent Sand and Water Quality** 

Good Friendly Local People

Good Vendors

**Great Family Place** 

There are Opportunities Along the South Shore

There is a Sense of Community at the Lake

There are Good Educational Opportunities

New Recycling Program



# TABLE 10: WHAT WOULD YOU LIKE TO CHANGE AND IMPROVE AT LAKE MCCONAUGHY AND/OR LAKE OGALLALA?

Allow More Tractors on the Beach to Pull in Boats (3 vendors cannot handle all the people on a busy weekend) and, Diaper Tractors and Charge Permit Fees for Tractors
Minimum Pool Levels for the Water
Additional Law Enforcement Presence
Don't Change the Operation of the Beaches
South Side is Not Utilized (ATMs or mountain bikes)
Management of Waste Disposal (overflowing dumpsters)
More Recycling
Educate the Campers on the Rules and Regulations of the Lakes
Enforcement of the Rules and Regulations
More Resources (staff and funding)
Fees are Too Low
Additional Fees May be Needed
Golf Carts Should be Allowed on the Beach, Charge Permit Fees to Allow Them
Better Cell Phone Coverage
Add Bike Lanes to the Roads
Build or Allow Someone to Build Boat Slips or a Marina
House Boats for Rent
15 mph Speed Limit on Cabin Roads
Weather/Safety Concerns with Getting People Off the Lake Quickly
A Trail System Possibly on the South Side
Upgrade/Improve the Boat Ramps
Dogs at Large are a Safety Concern
Additional Restrooms Along the Lake Shores
Utilize New Technology to Collect Fees and Improve Compliance
Cameras that can Catch People Entering and Send a Bill
Manage the Water Levels
Drug Issues

Based off these comments and the discussions that were had at the end of the meeting with staff, the main emphasis of responses were the use of the beaches, particularly for camping. The public believes this is a vital component to what makes Lake McConaughy so special. There was also a large contingency regarding the use of tractors on the beach for pulling out boats and campers because, permitted concessionaires can't keep up with demand on busy weekends and need additional help. Other comments were about additional law enforcement at the lake, controlling alcohol, and better waste disposal. Several people believed NGPC's fees are too low and should be raised. The public wanted to see better enforcement of current fees and regulations, perhaps with the use of new technology such as automated payment machines and video cameras. It was important to capture this information, relate it to the goals and strategies identified in the plan, and the operational management issues that exist. Staff took this information and began to create a draft development plan to bring to the public for review and comment.

## **AUGUST 4, 2016 PUBLIC MEETING**

On August 4 2016, NGPC held a second public meeting to present and take comments on a proposed development plan for Lake McConaughy and Lake Ogallala. At that meeting there was a presentation of the draft development plan and an open house for people to go to seven stations to discuss the various component of the plan. Following the open house, participants were given one more chance to comment in front of the entire group.

The successful meeting garnered several good comments that helped to devise the final development plan. Below were the most common themes in the comments received.

- Where can campers go if too much beach is restricted prior to developing new campgrounds.
- There was concern for a variety of law enforcement issues.
- Be more effective in the collection of permit and camping fees, use new technology and/or restrict access with gate houses.
- Charge nonresidents and beach campers more for permits or fees.
- Need to better deal with the large amount of trash that gets stacked up and littered along the beaches.
- Improved and additional boat ramps are needed.
- Better marked parking areas for traffic flow.

The open house consisted of seven stations that all had different portions of the development plan for the public to review and discuss with staff. At the General Policies station, there was much discussion about a



lack of bathrooms and trash service, tractor usage, and limiting vehicles and camping on the beach without other designated camping areas.

The Fishing Enhancements station garnered input about the traffic flow and parking at boat ramps, the lack of good docks and expansion of ramps, improvements and additional fish-cleaning stations, and more bathrooms near the water for quick boater access.

At the Limited Vehicle Access station, the public was concerned where the campers will go if they are not allowed on the beach and if limiting access have a negative effect on revenue.

The Threatened and Endangered Species Zones station fielded questions about how they would be delineated and how they would fluctuate with the changing water levels.

At the Law Enforcement station, people talked about how they would like to see better traffic flow in parking lots, additional officers at the area on busy weekends, and better enforcement of unattended trailers.

The Beach Access station talked to the people about not restricting the beach camping and allowing private cabin owners access to the beach.

The Other Development station heard concerns regarding safety on the beaches due to vehicle usage, capping the capacity for campers, how enforcement of restricted areas will happen, and boater safety during sudden weather events. See Appendix B for the presentation and the detailed comments received at the public meeting.



### **PROGRAMMING, STAFFING AND PARTNERSHIPS**

Three key elements for operating a successful park area are programming, staffing and partnerships.

**Programming** includes events, activities, and services at the park that keep people entertained and make them want to return. Currently, there are several events run by NGPC staff and partners, including annual events such as the Kites and Castles event and fishing tournaments. Other activities that are not annual events often are run by partners with assistance from the park staff. This relationship will be critical to any new programming from funding and recruitment aspects. Events are planned so they have minimal disturbance to the threatened and endangered species that inhabit the area and will continue in the future.

**Naturalist** programs and activities are becoming more popular and will continue to be offered in the future. Services are the amenities that NGPC provides, including fishing access, boating access, campgrounds, restroom/shower facilities, parking and other day use areas. A good balance of events, activities and services provides visitors the opportunity to have memorable experiences.

**Staffing** is the people hired and the job duties they are assigned to complete. To run a successful park, there is a need for people to maintain the area. This includes mowing, cleaning restrooms, collecting fees, answering phones, maintaining campgrounds, working on roads, maintaining fish-cleaning stations and boat docks and ramps, among other duties. There is a need for naturalists to teach visitors about the natural resources or instructors to show beginners how to fish, shoot a bow, or cook over an open fire. In many cases staffing dictates the types of programming that can be offered. Supervision is key when discussing staffing. Having a good supervisory team is paramount to the success of the lake areas.

**Partnerships** help a park thrive by supporting events, fund-raising for new facilities, and providing input on how to improve the park. In order to create the best possible park experience, there needs to be a strong connection between the park, the City of Ogallala and other local communities, the tourism entities, Keith County, neighboring counties, and the private enterprises that operate at or near the park. Having a well-connected park to the local communities and its interests provide better economic opportunities and a higher quality of life for local residents. In return, NGPC gains local residents that are environmentally sensitive stewards of natural resources and advocates of the state park system.

The combined elements of programming, staffing and partnerships bring people into the area, provide supplies and services for guests, and assist in creating memorable experiences for park users. Based

off discussions with the advisory committee and the comments made at the public meeting, this plan suggests the following for improved programming and relationships among the public and private sector players in the area.

### Programming

- Create a lake-based outdoor exposition that would promote activities such as kayaking, fishing, camping, wildlife viewing, birding, and aquatic education programs.
- Work with vendors and private businesses to expand services, while adhering to the LSMP as well as park regulations, for park visitors such as rental equipment at the lake, large house/party boat rentals, a vendor that would potentially clean and freeze/cook your fish, and any other venture that would enhance the user experience without compromising the natural resources of the lake areas.
- Locate and develop an ATV park close to Ogallala.
- Work with the local communities to create more events both at the lake and in the communities that are marketed to lake visitors and local residents, such as a summer concert series.
- Build tourist kiosks in the city and at the lakes that cross promote everything the area has to offer.
- Work with UNL and the Cedar Point Biological Station to increase education/naturalist programming at the lake.

### Staffing

- Work with the community to promote jobs at the park areas.
- Add staff where possible to create naturalist and outdoor skills programming.
- Add staff, if feasible for additional assistance in maintenance and management of the lake areas.
- Work with partners to provide volunteers that can assist staff with events and programming.

### Partnerships

- Work with the Department of Roads regarding interstate and highway signage that draws people to the area.
- Continue to work with and improve the marketing alliance between the city, county and NGPC to market the entire area including all the possible tourist draws.
- Work with the city of Ogallala to create more events both at the lake and in the city that are marketed to lake visitors and local residents.
- Create a welcome packet that markets local businesses to visitors so they know where they can go for various supplies and services.

Taking public comments and the goals and strategies developed by the advisory committee, NGPC met several times to discuss and outline numerous development proposals. NGPC also met with CNPPID and USFWS to discuss alternatives and that would fit in with CNPPID's LSMP and protect the threatened and endangered species of the areas. This input created the proposed development plan, which will be implemented over the course of the next 20 years.

## **IMPROVEMENTS AND DEVELOPMENTS AT THE LAKES**

All development and improvements identified on Figures 20 through 28 require some definition as to what the figures display. These figures are broken down into smaller areas, described by locations from west to east, such as Omaha Beach to Otter Creek Bay. This allows the maps to better delineate the various developments that will occur. The maps are not an exact representation of where individual elements will go. The locations for the elements are approximate, and exact locations will be determined at the time of construction, based on existing topography and the most logical location.





On the maps there are polygons, lines and points; polygons denote large areas with varying boundaries, such as the walk-in access areas, and new modern campgrounds. Lines represent road improvements, trail development, and barriers to control access; and points represent boat ramps, parking (new and improved) camping improvements, and trail heads. Because annual water fluctuations occur, zones that are identified on beach areas will be adjusted due to the fluctuations. An example of this would be an area that is delineated as a day use area will go down to the water's edge.

Many of the development proposals are not new ideas. Similar proposals have been suggested at Lake McConaughy for the past 15 years. The strategies being implemented here are a result of several factors, including NGPC's adherence to the LSMP, public input, the protection of threatened and endangered species, and the need to provide visitors with an enjoyable outdoor recreation experience. These strategies are meant to allow all the current uses of the park while implementing more control to reduce negative interactions between wildlife and humans, reduce law enforcement issues, and increase regulation compliance.

Many of the zones proposed were determined by reviewing historical data and use patterns. For example, the Threatened and Endangered Species Zones looked at historical bird use and nesting patterns to identify the most probable spots to create the zones. Other issues, such as access to water and proper habitat for broods, were considered when choosing the zoning sites. These locations were determined and prioritized by NGPC and CNPPID. For campgrounds, access, proximity to existing infrastructure and proper space were considered. Other beach uses were identified by the existing activity patterns. The general locations for each development was determined by staff most familiar with the area, along with input with CNPPID and USFWS. Some of the developments do not occur on non-NGPC managed property. For those to be implemented a cooperation agreement that permits the development will be needed.

The proposed developments are to be done in addition to activities already ongoing with regard to the protection of the piping plover and interior least tern. CNPPID will continue to build nest protection areas and fence off portions of the beach with large nest concentrations. NGPC's intent is to provide additional protection for the species in order to protect the species. Below are the definitions for the various terminology that is used on the Development Plan Maps, as shown in Figures 20-28.

### **Development Plan Definitions**

**Boat Ramp New or Improvements (BRN) (BRI)** – These items will be either a new boat ramp or improvement to an existing ramp by paving it, adding lanes or other improvements. These areas are specific to meeting the needs of the anglers and boaters at the lake areas.

*Campground Improvements (CI)* – Existing campground upgrades include ADA camp pads, upgraded electrical pedestals, replaced or renovated shower house/restrooms, and sewer and water hookups where possible. Upgrades to these areas will provide updated facilities that are necessary for today's visitors. Day-Use Areas (DU) – These areas will be open to day-use foot traffic only with no overnight camping allowed. Areas will be signed, fenced or have some form of barrier from other beach uses. These areas are intended to provide visitors the ability to recreate on the beach during daylight hours but potentially decrease enforcement issues during the overnight hours.

**Dog Park (DP)** – An off-leash dog park will consist of fencing, benches, dog exercise equipment, and water, if possible. Dog parks will provide users an area to exercise their dogs without keeping them on a leash and still be in compliance with park regulations.

*Equestrian Campground (EC)* – Construction of a new campground designed for equestrian users, including corrals, a water source and drinking trough, camp pads with electrical pedestals, restrooms, shower houses, and additional parking stalls. A trailhead for an equestrian trail will be located in the vicinity. The equestrian campground is to encourage a new user group to the lake area and provide them adequate facilities for their recreational purposes.

**Barrier/Fencing (B/F)** – Consists of barriers or fencing constructed mostly along boundary lines to prevent encroachment from adjacent properties and unauthorized access points. Barriers may also be put in place to separate conflicting uses such as Threatened and Endangered Species Zones from Managed Vehicle Access Areas. The intent of these barriers and fencing is to assist in controlling access and separating conflicting uses.

**Fishing Improvements (FI)** – Additional fishing amenities such as piers, bridges or fish-cleaning stations. All fish-cleaning stations will be evaluated for upgrade. New fish-cleaning stations and boat-wash facilities to prevent the spread of invasive species will also be studied and implemented where needed and feasible. These improvements will be designed and added to encourage additional anglers to the area and meet the needs of existing users of the areas.

*Group Facility (GF)* – An indoor/outdoor facility that could host large gatherings such as wedding receptions, community events, and family reunions. The purpose of the group facility is to expand use of the lake area for the local community.

*Gate (G)* – Gates will be built on roads to allow for road closures limiting access to certain areas. Gates are intended as a management tool to manage access to some areas of the lakes and to decrease the abilities of users to create their own access points down to the shoreline.

*Gate House (GH)* – A small kiosk will be built to house a person for the purpose of collecting fees when entering an area. Gate houses will be another management tool to enforce regulations, collect fees and manage access to locations on the lakes.

**Managed Vehicle Access (MVA)** – Areas will be either be designated for the use of licensed vehicles and recreational vehicles on the beach for day and overnight use, or for the management of areas adjacent to non-NGPC property. Both uses will allow for walk-in day use beach access. For the licensed and recreational vehicle areas, there will be controlled access points limiting the number of vehicles at a given time. A carrying



capacity for the area will be established, which will allow for effective collection of permit and camping fees, and prevent overcrowding.

Areas that are adjacent to non-NGPC areas will work with NGPC and CNPPID to create a beach management plan. This plan will identify places to create designated access points, allow use of permitted tractors in specific locations, outline procedures on any type of shoreline management perceived as beneficial to the public and non-manage NGPC areas, and outline the process for boat dock approvals. All of these procedures will be created by the non-managed NGPC area constituents, NGPC, and CNPPID. Both areas will be signed, fenced or have some form of barrier from other beach uses. The intent of these areas is to manage access and limit the licensed vehicles on the beach areas.

*Modern Campground (MC)* – Construction would consist of camp pads with electrical pedestals, sewer and water hookups, shower house/restroom, additional restrooms determined by the size of the campground, and, where possible, a fenced area for dogs off-leash. These campgrounds will be developed to provide the users new places to camp.

**Parking (P)** – These are new or improved parking lots. Because zoning is proposed on the beach areas, it will be important to provide parking to visitors in logical, convenient places.

**Road Closure (RC)** – Close off roads to restrict vehicle access to the beach. Gates will be placed across the road so they can be reopened for NGPC activities or emergency response. The purpose of this is to assist in managing access of the areas.



**Road Improvements (RI)** – Include repaving when necessary, filling of holes and cracks, adding rock to unpaved roads, and/or a cable/guard rail system along the roadside discourage additional access points to the beach. Improving existing infrastructure, such as road improvements, is important when updating development of an area. These improvements will provide better access to visitors and emergency personnel.

**Threatened and Endangered Species Zones (TEZ)** – Seasonally closed areas to human recreation that provide safe havens for threatened piping plovers and endangered interior least terns. TEZs provide supplemental protected habitat for these birds in addition to the small protective exclusion zones around individual nests erected and maintained by CNPPID. TEZs provide important shoreline and beach habitat for adults and their broods. TEZ boundaries are marked by barriers and/or interpretive signs to educate the public about the two species' status, legal protections and need for protecting these areas. These areas will extend to the water's edge and, in some cases, into the water by a buoy system. Current CNPPID protocols to protect the species will continue.

*Trails (T)* – Trails include seasonal equestrian, mountain bike and hiking trails, along with trail amenities such as trailheads, parking, restrooms, interpretive signage, wayfinding signage and benches. The public requested trails to provide safe walking alternatives and new activities.

*Walk-In Access (WA)* – Areas include swim beaches, walk-in beach camping and other day-use-only areas where no vehicles are allowed on the beach. Areas will be signed, fenced or have a barrier from other beach uses. The intent of these walk-in areas below campgrounds is to provide visitors safe access to the beach. The purpose of other walk-in areas is to manage access and to remove vehicles from the beach to protect visitors and the natural resources.

*Water Trail (WT)* – Canoe or kayak launch points and interpretive signage for paddlers. Water trails are popular activities at most water bodies. Whereas Lake McConaughy has abundant opportunities to launch a canoe or kayak, Lake Ogallala requires specific locations and development to afford visitors the same opportunities.

*Water Center Improvements (WCI)* – Expand the Water Interpretive Center to include a large meeting/party room that would be available as rental space for weddings, community events and other large gatherings. This would fulfill the requests received by the local community. This addition was identified shortly after the center was completed.







I Boat Ramp Improvem		a set a set a set a set a set		
		Modern Campground		
N Boat Ramp New	MS	Maintenance Shop		
Campground Improve	ements MVA	Managed Vehicle Access		
Dog Park	Р	Parking		
Day Use	RC	Road Closed		
Equestrian Campgrou	und RI	Road Improvements		
Fence	Т	Trail		
Fishing Improvements	ts TEZ	Threatened & Endangered Species Zones		
Gate	WA	Walk-In Access		
Group Facility	WCI	Water Center Improvements		
Gate House	WT	Water Trail		
T	T	T T P Sandy Point TEZ	Spring Park	TEZ

Phase 1
Phase 2
Phase 3
Phase 4
Phase 5

# Lake McConaughy/Lake Ogallala Development Plan

Figure 22: Sandy Point/Spring Park



	at Ramp Improvements	MC	Modern Campground
	at Ramp New	MS	Maintenance Shop
I Can	mpground Improvements		
P Dog	og Park	Р	Parking
U Day	y Use	RC	Road Closed
C Equ	uestrian Campground	RI	Road Improvements
Fen	nce	Т	Trail
Fish	hing Improvements	TEZ	Threatened & Endangered Species Zones
Gat	te	WA	Walk-In Access
F Gro	oup Facility	WCI	Water Center Improvements
		WΤ	Water Trail
	TEZ		emoyne

Phase 1
Phase 2
Phase 3
Phase 4
Phase 5

## Lake McConaughy/Lake Ogallala Development Plan

Figure 23: Lemoyne/West Theis Bay



BRI	Boat Ramp Improvements	MC	Modern Campground
BRN	Boat Ramp New	MS	Maintenance Shop
CI	Campground Improvements	MVA	Managed Vehicle Access
DP	Dog Park	Р	Parking
DU	Day Use	RC	Road Closed
EC	Equestrian Campground	RI	Road Improvements
F	Fence	Т	Trail
FI	Fishing Improvements	TEZ	Threatened & Endangered Species Zones
G	Gate	WA	Walk-In Access
GF	Group Facility	WCI	Water Center Improvements
GH	Gate House	WT	Water Trail

Property





1	and the second sec		
BRI	Boat Ramp Improvements	MC	Modern Campground
BRN	Boat Ramp New	MS	Maintenance Shop
CI	Campground Improvements	MVA	Managed Vehicle Access
DP	Dog Park	Р	Parking
DU	Day Use	RC	Road Closed
EC	Equestrian Campground	RI	Road Improvements
F	Fence	Т	Trail
FI	Fishing Improvements	TEZ	Threatened & Endangered Species Zones
G	Gate	WA	Walk-In Access
GF	Group Facility	WCI	Water Center Improvements
GH	Gate House	WT	Water Trail

F

**Eagle Canyon** 

F

Non-NGPC Property



# Lake McConaughy/Lake Ogallala Development Plan

Figure 25: Eagle Canyon



_			
BRI	Boat Ramp Improvements	MC	Modern Campground
BRN	Boat Ramp New	MS	Maintenance Shop
CI	Campground Improvements	MVA	Managed Vehicle Access
DP	Dog Park	Р	Parking
DU	Day Use	RC	Road Closed
EC	Equestrian Campground	RI	Road Improvements
F	Fence	Т	Trail
FI	Fishing Improvements	TEZ	Threatened & Endangered Species Zones
G	Gate	WA	Walk-In Access
GF	Group Facility	WCI	Water Center Improvements
GH	Gate House	WT	Water Trail

DU

Lakeview

Non-NGPC Property No.



# Lake McConaughy/Lake Ogallala Development Plan

Figure 26: Lakeview/Ogallala Beach



BRI	Boat Ramp Improvements	MC	Modern Campground
BRN	Boat Ramp New	MS	Maintenance Shop
CI	Campground Improvements	MVA	Managed Vehicle Access
DP	Dog Park	Р	Parking
DU	Day Use	RC	Road Closed
EC	Equestrian Campground	RI	Road Improvements
F	Fence	Т	Trail
FI	Fishing Improvements	TEZ	Threatened & Endangered Species Zones
G	Gate	WA	Walk-In Access
GF	Group Facility	WCI	Water Center Improvements
GH	Gate House	WT	Water Trail

Non-NGPC Property



# Lake McConaughy/Lake Ogallala Development Plan

Figure 27: Spillway Bay



BRI	Boat Ramp Improvements	MC	Modern Campground
BRN	Boat Ramp New	MS	Maintenance Shop
CI	Campground Improvements	MVA	Managed Vehicle Access
DP	Dog Park	Р	Parking
DU	Day Use	RC	Road Closed
EC	Equestrian Campground	RI	Road Improvements
F	Fence	Т	Trail
FI	Fishing Improvements	TEZ	Threatened & Endangered Species Zones
G	Gate	WA	Walk-In Access
GF	Group Facility	WCI	Water Center Improvements
GH	Gate House	WT	Water Trail

GH

Non-NGPC Property



# Lake McConaughy/Lake Ogallala Development Plan

GF

WT

ŴT

MC

WT

Figure 28: Lake Ogallala



## IMPLEMENTATION

Since Lake McConaughy is the largest reservoir in the state, NGPC recognizes that changes will take time to implement and cost a significant amount of money. The developments have been separated into five phases, with each phase reflecting a four-year period and corresponding with the state's biennium budgets. State budgets are on two-year cycles; operating and capital dollars must be planned out and approved by the Board of Commissioners, legislature and governor three years in advance. By phasing this plan out and matching it to the biennium budget cycles, NGPC can better plan and prepare for the new projects that are needed to implement this plan. Phase 1 is 2017-2020, phase 2 is 2021-2024, phase 3 is 2025-2028, phase 4 is 2029-2032, and phase 5 is 2033-2037. This plan is meant to be a living document that can and will change with time. Any changes to the plan will only be done after thorough evaluation, discussion and additional public input when necessary. A public meeting will be held once the plan is adopted to provide information regarding the next steps for implementation.

A separate implementation plan will be developed every year so that adaptive management strategies can be used throughout the life of the plan. The master plan provides the overarching picture of what the development and management of the lakes should look like for the next 20 years. The intent of the plan is to fulfill the goals and objectives outlined in the plan and manage this area to meet the needs of the visitors, while protecting the natural resources. The adaptive implementation plan will include project cost estimates and timeline. It will also describe how the development proposal will be implemented once alternatives are examined and a method for evaluating the success or failure of the proposals will be outlined. The future desired activity levels on the beaches will be defined within this implementation plan.

Phase 1 begins in 2017. Below are the projects scheduled to be completed in the first four years. While it is possible that unforeseen difficulties or opportunities may arise, it may move projects from one year to the next. Having them prioritized gives a sense of urgency to complete the projects in the years outlined. Figure 29 provides a map of the developments for Phase 1.

## PHASE 1: 2017-2020

### Year 1

- Road cabling in select areas to control access to beach and limit hill-climbing and habitat disruption
- New campground development near Sandy Beach and Arthur Bay
- Road Closures to Sand Point near Otter Creek Bay and Spring Park
- Fencing near Otter Creek Bay
- Parking lot near Cedar Vue



- Parking lot near Cedar Vue boat ramp
- Parking lot near Otter Creek Bay
- Parking lot near Spring Park
- Parking lot near Lone Eagle Campground
- Parking lot at Little Thunder Campground
- Parking lot at Martin Bay near the dam
- Campground improvements at Little Thunder Campground
- Three gates to control access to Lake Ogallala
- Gate House at Lake Ogallala
- Day Use area at Sand Point
- Managed Vehicle Access at North Shore
- Barrier/Fencing at North Shore
- Threatened and Endangered Species Zone at Sand Point
- CNPPID's Threatened and Endangered Species Zone at No-Name Bay


### Year 2

- Boat Ramp improvement by Cedar Vue (dependent on water levels)
- Visitor Center expansion •
- Parking lot at West Theis Bay •
- Threatened and Endangered Species Zone at West Theis Bay •
- Walk-In Access at West Theis Bay •

### Year 3

- Walk-In Access at Cedar Vue
- Managed Vehicle Access at Cedar Vue
- Modern Campground near Sandy Beach •
- Parking Lot at Martin Bay
- Managed Vehicle Access at Martin Bay •
- Walk-In Access at Martin Bay •

### Year 4

- Managed Vehicle Access at Omaha Beach
- Walk-In Access at Seagull Beach •
- Managed Vehicle Access at Seagull Beach •
- Managed Vehicle Access at Arthur Bay •

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Phase 1 - Year 1	$\bigcirc$	 	Road
Phase 1 - Year 2	$\bigcirc$	 i j	Communitie
Phase 1 - Year 3	$\bigcirc$		
Phase 1 - Year 4	$\bigcirc$		

## **PHASES 2 - 5**

Prior to Phase 2 beginning in 2021, all the remaining projects will be revaluated to determine if changes are necessary to the phasing process. A priority list then will be developed for Phase 2. This will occur the year prior to starting each new phase. By the 2037 – the final year of this plan – the overall plan and the park areas should look dramatically different than when implementation began. The plan will continue to remain fluid throughout its life. Figures 30-33 provide maps of the proposed developments per phase.

### Phase 2

- Boat Ramp Improvements at Otter Creek Bay
- New Boat Ramp at Sandy Beach
- Day Use Area at Otter Creek Bay
- Threatened and Endangered Species Zone at Otter Creek Bay
- Walk-In Access at Otter Creek Bay
- Fencing near Otter Creek Bay below private housing
- Parking lot at Sandy Beach
- Dog Park at Sandy Beach
- Walk-In Access at Sandy Beach
- Threatened and Endangered Species Zone at Sandy Beach
- Two Threatened and Endangered Species Zones at Martin Bay
- Dog Park at Arthur Bay
- Fishing Improvement at north end of Lake Ogallala

### Phase 3

- Equestrian Campground at Spring Park
- Day Use Area at Lemoyne
- Two Threatened and Endangered Species Zones at Lemoyne
- Equestrian trails leading out of Spring Park
- Campground development at Arthur Bay
- Threatened and Endangered Species Zone west of Sandy Beach
- Threatened and Endangered Species Zone at Arthur Bay
- Fencing below housing development on South Side
- Day Use Area on South Side near Lakeview

### Phase 4

- Walk-In Access at Lemoyne
- Walk-In Access at North Shore
- Parking at North Shore
- Road Improvements at North Shore
- New Boat Ramp at Arthur Bay
- Two Boat Ramp Improvements at Spillway Bay

### Phase 5

- Walk-In Access at Arthur Bay
- New maintenance shop at Arthur Bay
- Walk-In Access at No-Name Bay
- Mountain bike and hike trail on South Side
- Road Improvements to Spillway Bay
- Trail around Lake Ogallala
- Modern Campground at Lake Ogallala
- Water Trail features at Lake Ogallala
- Group Facility at Lake Ogallala
- Fishing Improvements at Lake Ogallala



If this plan is fully implemented, by 2037, there will be specific designations on 48 percent of beach, leaving the other 52 percent open to usage as it is in 2016. Threatened and Endangered Species Zones will account for 9 percent of the beach, and day-use only areas will be approximately 27 percent of the beach. Camping will still be allowed on approximately 65 percent of beach, with managed vehicle access zones being 9 percent of the beach and walk-in access being 4 percent. There will be more than 6 miles of barrier or fencing built, more than 12 miles of road improvements, and approximately 15 miles of trail development, not including the mountain bike and hiking trails that will be developed on the south side of Lake McConaughy.

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# EVALUATION

This is an ambitious and long-term plan for the betterment of one of the most visited and beloved park areas in the state. Change will not come without new issues arising, but NGPC is committed to evaluating those issues and working through them with the assistance of partners and communities. This dynamic plan is meant to change as time goes on. NGPC is proposing management techniques that change behaviors and traditions, growing pains will be experienced and learned from that will then alter how the plan is implemented in the future. What should not change are the overriding goals outlined in this plan:

- 1. Provide memorable experiences for users through diverse recreational opportunities
- 2. Increase visitation during the shoulder seasons
- 3. Explore partnerships to positively affect surrounding economic conditions
- 4. Manage and expand recreational opportunities to avoid user conflicts and protect the natural resources
- 5. Protect and effectively manage the natural resources of the lakes, with a focus on the threatened and endangered species
- 6. Ensure public safety in a fair and effective manner
- 7. Manage the area in accordance with the agreement between NGPC and CNPPID
- 8. Offer quality cultural and natural resources education and interpretation
- 9. Provide effective operation of the area
- 10. Increase revenue



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These goals should be integral to how the development plan and implementation plan are altered through the years so that they are still the driving force for change at Lake McConaughy and Lake Ogallala.

This plan will be evaluated annually by NGPC to determine what projects were completed, what projects are coming up, and what difficulties staff has encountered. These reviews will allow NGPC to plan for future years. Zoning classifications, such as the Threatened and Endangered Species Zones, will be evaluated. The Wildlife Division will determine the success of these zones. Evaluation parameters will be developed with CNPPID to ensure the zones are protecting the species. Managed Vehicle Access is another zone that will be evaluated.

Prior to the beginning of the next phase a more thorough review of the plan will be conducted. This review will involve NGPC staff, partners and members of the advisory committee that assisted in the completion of the plan. These reviews will look at what is working, what is not, what progress has been made toward meeting the goals of the plan and how the plan should change to meet those goals. It will also be a time to plan for the new biennium budgets in which the following phase will be implemented.

This plan will take a coordinated effort from NGPC and all the partners to be successful. If everyone commits to supporting this plan and work toward achieving it goals, Lake McConaughy and Lake Ogallala will continue to be two of the most popular tourist destinations in Nebraska.

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