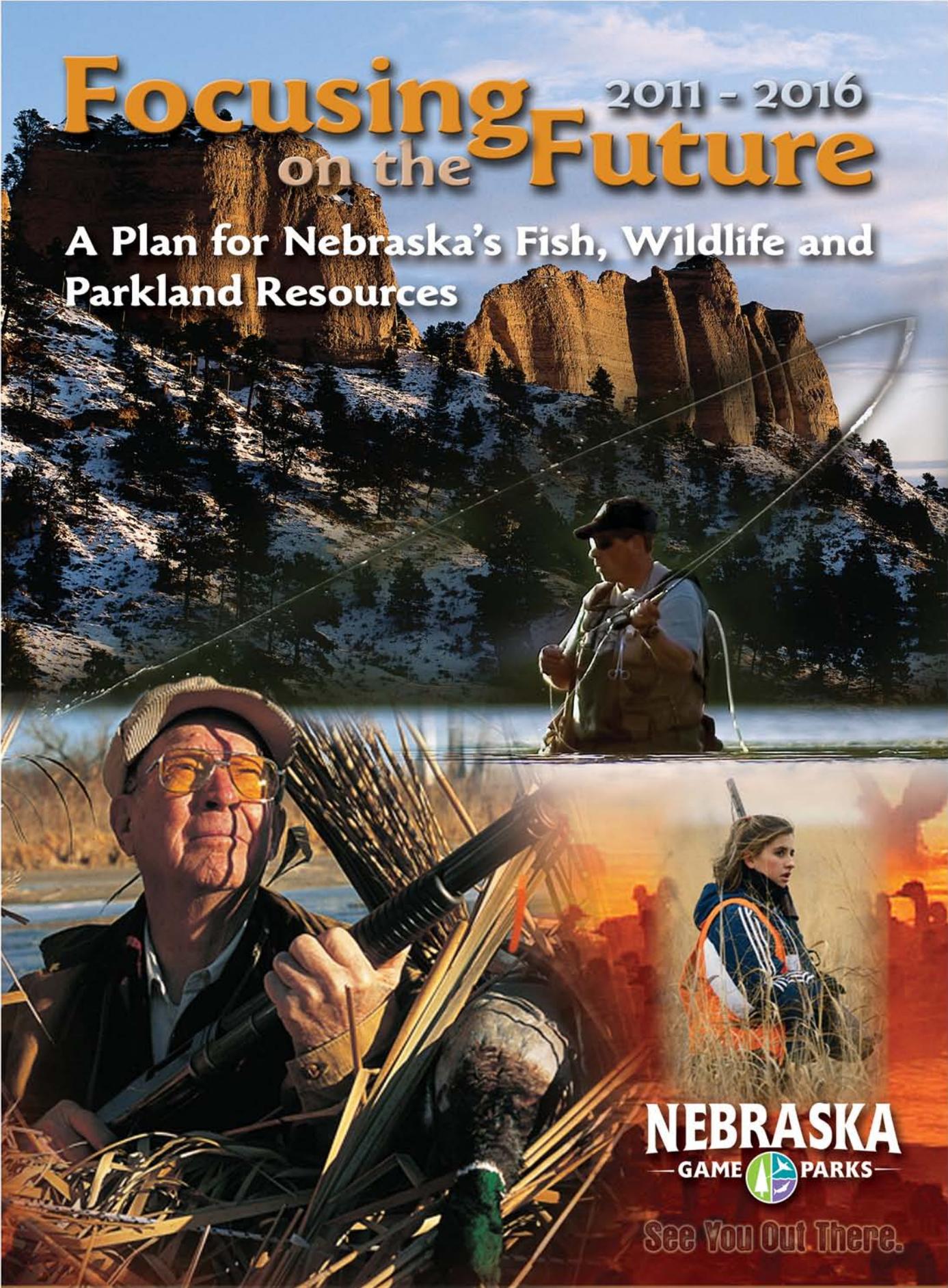


Focusing on the Future

2011 - 2016

A Plan for Nebraska's Fish, Wildlife and Parkland Resources



NEBRASKA
— GAME  PARKS —

See You Out There.

Focusing ^{2011 - 2016} on the Future

A Plan for Nebraska's Fish, Wildlife and Parkland Resources

Nebraska Game and Parks Commission

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Foreword

The first long-range agency plan for the Nebraska Game and Parks Commission was completed in 1996. Titled *Focusing on the Future – A Plan for Nebraska’s Fish, Wildlife and Parkland Resources*, this document served as a management blueprint for Commission activities in the years afterward. Application of the ideas and plans put forth in the document yielded a number of benefits to residents of Nebraska, and established the idea of continuing this type of forward-thinking, creative planning for the future.

As time passes, it is appropriate that we monitor our progress, make adjustments where necessary, and continue to plot our path forward into the future. In 2004, this document was reviewed and the progress made on the strategies contained within it assessed. This third edition represents further evaluation and assessment of progress. As of October, 2011, 49 percent of the strategies contained in the plan were in progress and another 25 percent partially or totally completed. The plan has been revised, augmented and updated to reflect the concerns of our constituents and new challenges faced by the agency. It is intended to guide the agency forward for the next two bienniums and contains a high level of detail for key activities.

As with previous versions, this edition represents hard work on the part of many employees of the Nebraska Game and Parks Commission, as well as valuable input from our constituents, stakeholders and Commissioners. All contributors gave extensive thought to the future of programs and doctrines, considering the path each should follow.

This is a guiding document for agency efforts. Resources are limited and new challenges often emerge; both the agency and staff need to be thoughtful and flexible in meeting those challenges. It is understood that we may not be able to accomplish everything in this document; budget, staff and time limitations mean that choices will need to be made and priorities assigned. Nor is this plan intended to usurp decision-making authority, or to replace the role of creativity and hard work. It will, however, serve as a roadmap to help guide the activities of this Commission into the years ahead and to keep our focus on the future of Nebraska’s outdoor resources. My thanks to all who have been part of this process.



Rex Amack, Director
Nebraska Game and Parks Commission

Introduction

Focusing on the Future is a strategic plan to help direct The Nebraska Game and Parks Commission's work activities for the next four years. The document is intended to provide a common understanding of where the agency will focus efforts to position for successful delivery of high quality products and services for our public. Defining agency goals, objectives, issues, strategies and tactics through a well articulated and transparent document, we seek to establish an accountability-based culture focused on producing results. Development of this plan was accomplished through cooperative efforts involving agency partners, public input, user groups and a cross-divisional representation of agency staff. By engaging the people we serve and partners in agency decisions we can more accurately anticipate changes in user trends and enhance agency perception.

The current plan builds upon the foundation of our two previous *Focusing on the Future: A Plan for Nebraska's Fish, Wildlife and Parkland Resources* documents published in 1996 and 2004. After completion of those planning periods, staff systematically reviewed the material to measure accomplishments and document results. This process has allowed us to ensure we are fulfilling our agency mission in the most efficient and effective manner possible and necessitate changes when deemed appropriate. The most current plan incorporates changes to programs and doctrines based on findings from previous plans and recommendations from within and outside the agency.

Plan Structure

The breadth and diversity of Commission responsibilities require the plan to be structured into both Program and Doctrine chapters. Programs are defined as a grouping of goals and objectives that are managed to carry out our agency mission. They are an aggregate of projects and activities that result in a multitude of product outputs which are generally classified by species, habitats, ecotypes, or activities. Product outputs are such things as recreational opportunities provided by hunting, fishing and park activities, but may also be in support of stewardship and regulatory responsibilities of our Agency. Doctrines are principles, positions, philosophies or policies advocated by the agency. They may be part of several individual programs, but should stand alone in the plan to adequately position the Commission for the future. Programs and doctrines are interdependent and essential to the successful operation of our agency.

Layout of each program and doctrine includes a purpose

and direction box that provides a brief chapter summary, introductory text that includes past considerations, current conditions and challenges to be addressed in the future, and the strategic planning component for the next four years. For the strategic section of the plan, agency intentions are formatted by a goal, objective (in programs only), issue, strategy and tactic structure.

Program and doctrine goals are general statements of broad direction or intent with no time limit. Generally, these are ideals, major accomplishments or a state of affairs to be perpetuated through ongoing operations to better meet the needs of our public. Objectives define the measurable results in addressing a goal that the agency seeks to accomplish through plan implementation. Some are realistic and attainable within the strategic plan period, while others will be ongoing components of our agency mission that we will work towards. Issues identified have been determined to be roadblocks preventing the attainment of either an objective or goal. Strategies identify the major course of action or approaches intended to overcome the issues and thus accomplish the objective. From a strategic standpoint, strategies address the *what* needs to be done in a broad sense, rather than the specific *how*. This strategic plan has been modified from the previous two documents to include tactics beneath each strategy that will address the *how* in attainment of objectives. Tactics identify a more precise level of action and define a specific course of action that is measurable within a realistic timeline. In addition, each chapter has identified five priority tactics for completion. These were selected as being of the highest importance and urgency.

While some chapters include tactic level priorities for species, it is beyond the scope of this plan to identify specific plans for each ecosystem. Much of the detailed planning for species specific projects are addressed in other agency planning documents; including *Natural Legacy Plan, Aquatic Habitat Plan, Statewide Comprehensive Outdoor Recreation Plan, Habitat Acquisition Plan and Recruitment, Development and Retention Plan* to name a few. This plan provides overall philosophies and guidelines related to ecosystem inventory, management strategies, stewardship, resource advocacy, education, and partnerships.

Each chapter was drafted by a core team of skilled staff and in some cases partners that are recognized as stakeholders of the program or doctrine. Drafts were provided for general public and user group review to ensure defined objectives align with user perceptions and expectations of the agency (public input comments can be found in the appendix). Core teams then reviewed and

updated chapter drafts to make sure public input comments had been adequately addressed. Final drafts were reviewed cross-divisionally to ensure incorporation of the agency's diverse responsibilities and interests.

North American Model of Conservation

The Nebraska Game and Parks Commission's management and regulation of resources is aligned with and builds on more than a century's worth of conservation policy in the United States. The foundation of our work is based on the idea that fish and wildlife resources of the United States are owned by the people. Our North American Model of Conservation recognizes wildlife as a public resource that is so important it cannot be owned or managed by any one segment of our society, but rather managed by professional state and federal government entities for the benefit of all citizens. This concept, known as the *Public Trust Doctrine*, has its origins in a landmark decision handed down from the Supreme Court in 1842, and greatly differs from other models of conservation where wildlife is privately owned and managed by the wealthy. States have been identified as the trustee of the public interest in fish and wildlife by the U.S. Supreme Court which has ruled that this trust responsibility, held by the states, should be to benefit all people and not just for the advantage of government or private individuals.

Mission

The mission of Nebraska Game and Parks Commission 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.*" Our mission statement affirms why our agency exists and serves as the foundation from which our organization aligns itself. As such, stewardship of resources is the core of our agency's structure and work. Stewardship can be defined as an ethic that embodies cooperative planning for careful and responsible management of resources.

Caring for the state's fish, wildlife, park, and outdoor recreation resources has been entrusted to our agency by the Nebraska Legislature. State statute identifies and authorizes a wide range of responsibilities and activities to our agency, from regulatory protection, management of fish and wildlife species and their habitats, management and development of public recreational opportunities, advocacy of ecosystem integrity, and resource investigation and education. These responsibilities extend to all species of aquatic and terrestrial animals and plants over which the Commission has jurisdiction and the communities they inhabit; including all state wildlife management

areas, state parks, state historical parks, state recreation areas, state recreational trails, other lands and waters owned, leased or operated by the agency as well as private lands. The diversity of responsibilities assigned to the agency reach far and wide and touches all citizens and visitors of Nebraska.

Stewardship efforts focus both on day-to-day management decisions as well as practices and policies that enhance the long-term sustainability of Nebraska's natural and recreational resources. Responsible management and regulation "*in the best long-term interest of the people and those resources*" requires looking beyond our area boundaries and understanding and managing complex ecosystems amidst an ever-changing demographic. To ensure continued enjoyment of these resources by current and future citizens and visitors, our agency must perpetuate and enhance the resources for their recreational, aesthetic, ecological, educational and scientific uses. Such efforts require policies and programs developed in an efficient and objective manner that manage natural resources to maintain a thriving and diverse environment, provide outdoor recreation opportunities for the maximum benefit of our citizenry, and helps Nebraskans appreciate their role in this effort.

Vision

The Nebraska Game and Parks Commission has a shared management philosophy and principles that provide staff a sense of pride and purpose as they work to successfully fulfill our agency's mission. The vision of The Nebraska Game and Parks Commission is to strive to:

- Establish, maintain and enhance fish, wildlife, park and outdoor recreational opportunities in a professional manner.
- Enhance agency support and awareness by being transparent, accountable and open to public input.
- Resolve most issues before conflicts arise, resolve conflicts without appeal or override and maintain a public perception of fairness in resource allocation and conflict resolution.
- Be sensitive to, maintaining creditability with the Legislature, executive branches and other agencies.
- Be adaptable and innovative in response to change, including societal change, by maintaining funding that is sufficient, diverse and stable while utilizing a management system that links planning and budgeting.
- Operate through participatory decision making, utilizing teamwork and effective communication while being led by individuals skilled in progressive management techniques.
- Invest in human resources by actively demonstrating strong leadership qualities to maintain a motivated workforce that is aware of its roles, understands the agency mission, has high morale and is recognized and

rewarded for outstanding performance.

- Provide the best opportunities possible to deliver quality programming and access to the public to serve their needs in the outdoors.

Positioned for the Future

The Nebraska Game and Parks Commission serves the public through the provision of science based fish and wildlife management, outdoor education, scientific research, and diverse recreational opportunities. The Commission's partnerships span the entire state and provide for the protection of fish, wildlife, and their habitats as well as opportunities for thousands to enjoy the outdoors.

The Commission will continue to build on previous successes by meeting current challenges and anticipating future trends within resources conservation to fulfill our mission in an efficient and effective manner. As hunter and angler support and participation steadily declined across the nation, agency staff developed a 20-Year Recruitment, Development and Retention Plan in 2007. Through partnership development, education and enhancement of public access, agency efforts such as *Outdoor Family Camps*, *Urban Fishing Programs*, *After School Outdoor Skills* and *Open Fields and Waters Program*, the Commission is positioned to make effective strides in increasing the numbers and involvement of Nebraska's hunters and anglers.

Pressure on our state's resources continues to impact Nebraska's diverse ecosystems. These dynamic and interconnected complex system of plant and animal communities and their non-living environments experienced dramatic changes as land was settled and altered to meet human needs. These changes continue today posing many unique challenges in balancing a wide variety of natural resource needs with those of agriculture and political subdivisions across the state. Continuing successful partnerships and expanding efforts with private conservation organizations, foundations and communities will be a key component to addressing these ecosystem challenges.

In order to effectively address many of these challenges, the Commission has developed a working relationship with higher education institutions. Using the research, teaching and outreach expertise at the University of Nebraska, Commission staff continues to build capacity in helping address many of the issues they are faced with in managing the state's natural resources and its users. Funneling federal pass-through funds in the form of grants and contracts to support research projects, graduate students and technicians allows the Commission to expand the number of challenges they can meet. University faculty and staff provide diverse technical support and training through special workshops, involvement in agency workgroups and one-on-one

collaborations. Fish and Wildlife students, both undergraduate and graduate, have many opportunities to work with agency biologists. This develops a potential pool of well trained and experienced applicants that in many cases have become temporary or permanent employees for our agency. The University offers significant outreach and extension expertise that can benefit the agency in meeting the needs of natural resource users. Whether developing survey questions, implementing statewide telephone or mail surveys, or developing and distributing technical information concerning agency issues, the University of Nebraska Extension and the Bureau of Sociological Research in the Institute of Agriculture and Natural Resources are valuable partners in meeting our challenges. In addition, to the University of Nebraska system (University of Nebraska in Lincoln, Omaha and Kearney), the Commission continues to expand this working relationship with other academic institutions. The Commission needs to build upon specific expertise they offer and find ways to create broader strategic relationships.

Competing responsibilities and close-to-home opportunities are recognized as limiting factors for participation within our user base. Expanded marketing and education about agency areas and programs will help the public choose us for their leisure time. Nebraska's nationally recognized state park system offers users the opportunity to participate in every one of the top ten outdoor recreation activities participated in by Nebraskans. The Commission directly manages or operates programs that provide access to 1.1 million acres, over 40 percent of all public recreation land and water in Nebraska.

Throughout this plan, references are made to ongoing support of existing programs and implementation of new efforts that enhance outdoor recreation opportunities to retain existing customers while increasing a new use base. Operating with enhanced transparency and increased accountability requires these efforts to be developed with clear goals and objectives and evaluated for effectiveness. Measure will be taken to enhance successful programs and services to provide the greatest return on investment for both our natural and recreational resources and our citizenry. We will continue to develop comprehensive which integrate the efforts of marketing, education, and providing information to our Stakeholders.

The Nebraska Game and Parks Commission will continue successful delivery of high quality programs and services with a diverse staff of highly trained and dedicated professionals that meet the public's needs. By producing results related to the goals and objects outlined in this plan, we will be positioned to ensure current and future challenges of resource conservation are met with advantageous solutions. ■

Funding

Keeping the great outdoors great through stewardship and accountability

“Purpose and Direction” - The current funding structure of the Nebraska Game and Parks Commission, while well served in the past is not likely to sustain the current and future needs of the agency, especially on the Park side. The directional needs of the agency will require either a narrowing of agency focus or the securing of alternative sustainable funding sources. Ensuring the agency has adequate funding to meet its mission and that those funds are spent in an efficient and fiscally responsive manner is the focus of this doctrine.

Introduction

This doctrine addresses the means by which the Nebraska Game and Parks Commission acquires, allocates and expends funds. The ideal end product is a fiscally sound agency that maintains high credibility with the Legislature and its constituents and keeps them informed and supportive of the agency's activities.

Concern about funding has been and continues to be at the forefront of the Commission, its programs as well as those of most other fish and wildlife agencies across the country. Those agencies viewed as most effective are successful at attracting and maintaining alternative funding beyond traditional permit revenue sources. It is a general consensus that agency responsibilities have become more diverse and have increased at a faster rate than revenue from traditional sources have been able to fund.

Specific efforts to strengthen existing revenue sources as well as expand opportunities to obtain new revenue sources have been targeted over the years with varying results. The Commission has made adjustments in its permit offerings and fee structures in an effort to keep up with costs and diversify opportunities. Changes over the past decade include the development of the Aquatic Habitat Stamp and corresponding fund (effective January 1997); institution of a nonrefundable application fee for paddlefish permits in 2002, which was changed to a permit fee in 2008 (nonresident fees became two times the resident fee in 2010); development of the Nebraska Migratory Waterfowl Stamp, one-day fishing permits, resident deployed military permits, reduced fee Veteran

and senior citizen permits, and an age-dependent lifetime permit fee structure that included nonresident opportunities (effective January 2006). Apprentice Hunter Education Exemption certificates were introduced in 2008. In 2010 there were increased opportunities for nonresidents, especially nonresident landowners and a reduction in fees for youth big game hunters.

In addition to some of the innovative permitting options, the Commission has also taken action over the past decade to increase fees to keep up with ongoing inflation and expenditure needs. While the Commission has authority to increase most hunting and fishing permits administratively each year, within a ceiling established by the legislature, increases were not made annually. The Commission does not have the authority to increase park entry permit fees administratively and during the 2009 legislative session, was not successful in getting legislative approval to do so. The 2010 permit fees (including hunt/fish permits) have essentially all hit the ceiling under current legislation, thus future permit increases will necessitate Legislative action.

The agency has and will continue to pursue and take advantage of grants and gifts at the state, local, federal and private levels to further its mission and stretch its limited fiscal resources. Federal programs appear to offer the most promise of large sustainable revenue flows, but they also require a nonfederal funding match which often is the limiting factor. Smaller more individualized partnering efforts are being pursued by nearly all of the agency's management units.

Many of the recent approaches and anticipated future endeavors will certainly continue to focus on traditional type revenue sources and customer bases. However, it is expected that new approaches such as special sales tax initiatives, like those found to be successful in Missouri, Arkansas and most recently Minnesota, could take on more importance. Efforts to introduce and/or support legislation along this line in Nebraska have been unsuccessful to date. This does not diminish their importance or need, but merely reflects the state's current level of acceptance of the concept.

Certainly all residents of Nebraska, as well as visitors, benefit from our natural resources in some intrinsic way. Traditional consumptive users of these resources have been the historic focus and have provided the majority of the financial support. As more is learned about the benefits derived by all citizens, directly or indirectly by the resources themselves or the recreational activities and subsequent fiscal impacts recreationists have on the state's economy, we anticipate more support for

broadening the revenue base.

To develop a better picture of revenue and expenditure patterns, it is important to provide some background information on the agency's budget. The budget is the driving document behind agency actions and in essence, operationalizes this plan.

Background

The Nebraska Game and Parks Commission operates under two separate budget documents. The **Operating Budget** provides for ongoing, day-to-day expenditures to include such costs as personal services, operating materials and supplies, travel and equipment. The **Capital Budget** provides for the acquisition of lands for wildlife or park purposes and for the construction of new capital improvements or the renovation/repair of existing capital improvements. The Operating Budget and the Capital Budget are both organized by programs. It should be noted that budget programs are not the same as strategic plan programs.

Funding for the various programs is determined by the Legislature after reviewing and discussing the agency's request with administrative personnel during the Commission's formal budget hearing. In the case of an approved General Fund request, the Legislature appropriates the expenditure authority and the funds necessary to utilize the authority; whereas in the case of a cash fund request, the Legislature merely appropriates the authority. Thus, to fully utilize the appropriated cash fund authority, each cash fund must produce sufficient revenue to equal or exceed the appropriated authority.

Balances and trend projections in a few of the major cash funds (namely the Game Cash Fund, Park Cash Fund and Habitat Fund) necessitated the agency to internally sequester expenditure authority beginning in the FY 2005–2007 biennium period. The agency's biennium budget for FY 2010 and FY 2011 reflects a voluntary authority reduction of nearly five million cash dollars, including the elimination of 28 positions in order to meet its fiduciary responsibilities.

Cash funds have varying restrictive uses identified in the respective enabling statutes. In addition to the state statutory use limitations, cash funds associated with permit fees paid by hunters and anglers have use restrictions placed on them by federal legislation as it relates to the agency's eligibility for use of specific federal funds. A brief summary of each fund follows:

Cowboy Trail Fund

In 1993, the Legislature created the Cowboy Trail Fund with the passage of LB 739. The fund was created to serve as the depository for funds received for and expended on the development, operations and

maintenance of the Cowboy Trail and consists of direct appropriations and monetary gifts, bequests or contributions. Aside from a large donation (\$100,000) from the Rails to Trails Conservancy and a \$1,000 donation from an individual affiliated with the Rails to Trails Conservancy, the fund has generated only modest revenue since its inception.

The majority of revenue has been generated from various land and right-of-way leases, interest earnings and a voluntary trail use fee. With long-term sustainable funding levels in question, the Cowboy Trail Fund has been reserved primarily for emergency repairs to the trail (Capital Program 979). It should be noted, however that one major calamity resulting from something as common as a flood could deplete this fund. Day-to-day operation and maintenance of the trail had been dependent upon ongoing general fund appropriations, which were eliminated in FY 2003-2004 shifting the care to cash funds (the Nebraska Outdoor Recreation and Development Act fund, has been the current source).

Game Cash Fund

The Game Cash Fund, which was created in 1929, serves as the primary funding source for fish and wildlife activities (**Figure 1**). The fund derives its revenue from a variety of sources with hunting and fishing permit sales and federal aid reimbursements being the top producers.

Permit sales provide a major revenue source, however trends in weather and wildlife populations can affect sales, which in turn affect total revenue. With the exception of big game permits, the sales for general hunting and fishing permits had been on a steady to declining trend. Big game permit sales have been increasing slightly as the agency has increased hunting opportunities to improve population control efforts, and in 2009 we experienced an increase in fishing permits. Deer permits have seen the largest increase in sales with nearly half of the permit revenue in FY 2009 attributed to deer permit sales (\$5,378,748). The significance of

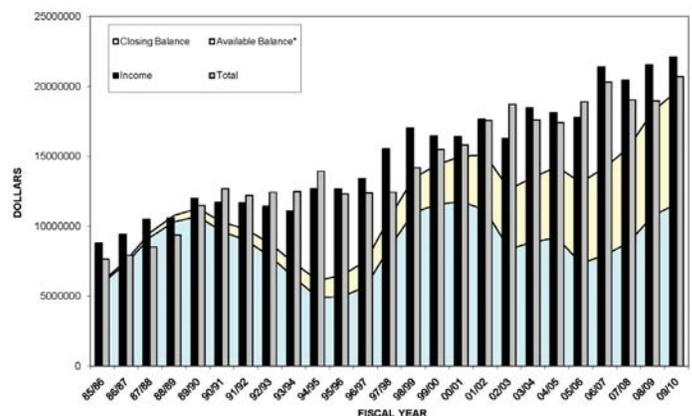


Figure 1. Twenty five-year history of Game Cash Fund.

these sales is obvious as is the concern that major fluctuations in these sales trends would have a significant impact on the fund balance.

A balancing act of ensuring that adequate financial reserves are maintained for down years with optimizing resource management needs, requiring expenditures that exceed income in a given year, is an ongoing process. It should be noted that the Game Cash Fund has a mandatory reserve of the revenue received from the sale of lifetime hunting and fishing permits. Until legislation passed in 2009, income from these sales was not available for expenditure, but the interest earned by the balance was expendable. Beginning in 2010, only 25 percent of the fees collected annually are required to be nonexpendable. As of June 30, 2009, the principle balance of lifetime permit sales was nearly \$7.5 million.

Although expenditures steadily increased over time, expenditures were consistently less than income until FY 1990–1991, the year that income started to decline. Expenditures exceeded income during the five-year period of FY 1990–1991 to FY 1994–1995 resulting in a significant decline in the fund balance and again in FY 2002–2003 and FY 2005–2006.

The Game Cash Fund provides the financial resources for about 36 percent of the agency's operating budget. The vast majority (approximately 87 percent) of expenditures pertain to the activities of the following divisions: Law Enforcement, Information and Education, Wildlife and Fisheries. The remaining 13 percent is used to fund portions of those divisions that provide support or administrative services (e.g., Budget and Fiscal, Administration, Director's Office, Personnel, Information and Technology, Realty and Environmental Services and Federal Aid).

Park Cash Fund

The State Park Cash Revolving Fund, which is more commonly referred to as the Park Cash Fund, was created as the depository for income received from fees established for the use of park operated facilities. This fund, which is the second largest source of funding to the agency, is used for the improvement, maintenance and operation of areas within the state park system and for administrative support services associated with same. More specifically, this fund is used to cover portions of the following activities: Law Enforcement, Information and Education, Administration, Park Operations, Area Maintenance and Credit Card Discount Sales. About 83 percent of the Park Cash Fund expenditures pertain directly to park areas and the remaining 17 percent pertain to support services. This fund is also used to fund a portion of the capital construction activities applicable to the state park system.

While income had increased rather steadily, with some

exceptions, from \$496,670 in FY 1975–1976 to a recent high of \$17,655,653 in FY 2008–2009, the fund balance has experience steady declines in recent years. In response to a growing demand for outdoor recreation, the Commission has developed a park system that satisfies a broad range of needs, but requires a steady source of revenue to maintain. Some activities that contribute to the park experience simply do not have the capacity to be self-supporting. The park system includes State Parks, State Historical Parks, State Recreation Areas and State Recreational Trails.

Three new State Parks, Eugene T. Mahoney, Platte River, and Smith Falls, were developed in the mid/late 1980s and early 1990s. The addition of these areas to the state park system had a significant positive impact on income. Additional facilities added in the past several years include a visitor center for Lake McConaughy, a recreation trail, expanded Aquatic Center, and lodging facilities at Eugene T. Mahoney State Park, and a new Resource and Education Center at Ponca State Park. The latter project was made possible primarily through a federal grant from the Corps of Engineers. Several new cabins are also under development at Ponca State Park. The agency has been quite fortunate in obtaining the majority of funding for its major developments through private donations.

The major income producing activities include park entry permit sales, food services, camping, entrance admissions, and lodging. Income and expenditures increased steadily and at a similar pace in the early years. The four-year period of FY 1991–1992 through FY 1994–1995 experienced a more rapid growth in income primarily related to the opening of Mahoney State Park. Income exceeded expenditures during this time frame but has since reversed, with expenditures exceeding income until FY 2005–2006, when a self-imposed reduction of expenditures was implemented. While it has always been recognized that the state park system is not self-sustaining, thus requiring a

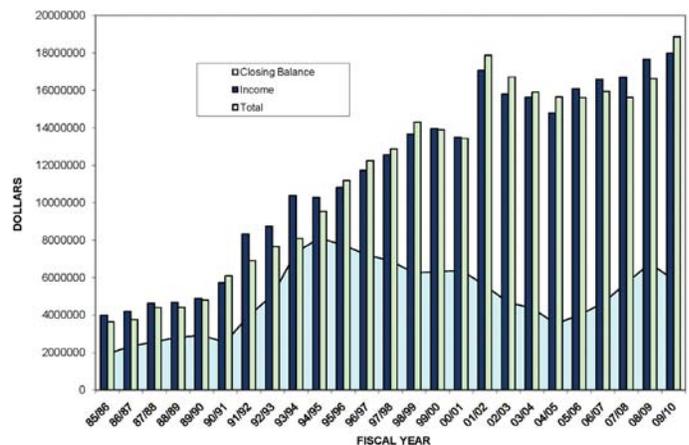


Figure 2. Twenty five-year history of Park Cash Fund.

supplemental general fund appropriation, the fluctuation of these appropriations has impacted overall park management. It has become clear that the current park system cannot be sustained at today's levels.

Habitat Fund

The passage of LB 861 in 1976 provided for the creation of the Habitat Stamp and the establishment of the Habitat Fund. The Habitat Stamp, which replaced the Upland Game Bird Stamp, became a requirement on January 1, 1977 and cost \$7.50. January 1, 2002 introduced a Lifetime Habitat Stamp priced at 20 times the annual (\$13 at the time), or \$260 (LB 111, Ninety-Seventh Legislature). The passage of LB 105 (One Hundred First Legislature, 2009) established the annual fee for the Habitat Stamp at \$20 effective January 1, 2010.

The sale of Habitat Stamps is the most important source of revenue followed closely by federal reimbursements from the Federal Aid in Wildlife Restoration Program. A voluntary State Waterfowl Stamp and the associated limited edition art prints were an important source of revenue in FY 1991–1992 and, to a lesser degree, in following years. A required “Nebraska Migratory Waterfowl Stamp” was established in 2006 and in 2008 a Lifetime version was offered at 20 times the cost of an annual stamp. Another important source of revenue is interest income but it does vary from year to year as interest rates change and the fund balance fluctuates.

The Habitat Fund can be used to fund operating or capital activities. Activities applicable to the preservation and development of wildlife habitat on privately-owned lands, on wildlife lands owned or controlled by the Commission, and on other public lands are financed under this fund. Habitat Fund monies are used to cover a portion of the costs of the Realty Division. Lastly, the Capital program providing for the acquisition and development of wildlife lands is funded predominantly under the Habitat Fund.

As will be noted, the fund balance of the Habitat Fund has been on a relatively stable incline since FY 1984–1985. This incline began to shift downward beginning in FY 1999–2000 when expenditures outpaced income. This trend was reversed beginning in FY 2005–2006 when the agency self-imposed expenditure limits to ensure the stability of the fund. The new fee structure will provide for more stable spending limits on program delivery in the near future.

It should be noted that, as with the lifetime permits associated with the Game Cash Fund, the revenue derived from the sale of Lifetime Habitat and Lifetime Nebraska Migratory Waterfowl stamps is partially protected. Until legislation passed in 2009, income from

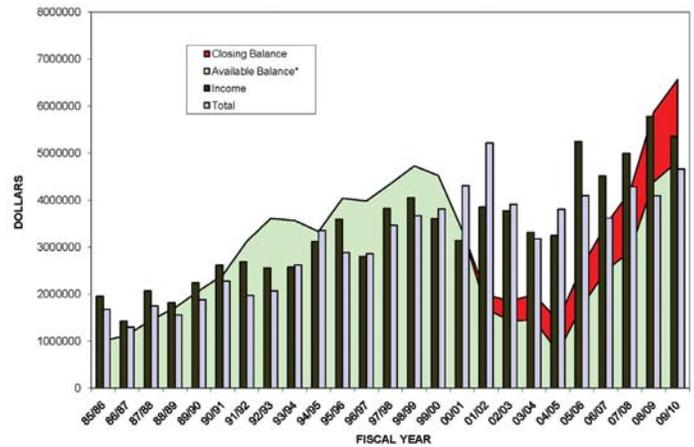


Figure 3. Twenty five-year history of Habitat Fund.

principle of these sales was not available for expenditure. Beginning in 2010, only 25 percent of the fees collected annually is required to be nonexpendable. As of June 30, 2009, the principle balance of these lifetime stamp sales was nearly \$1.5 million.

Wildlife Conservation Fund

(formerly the Nongame and Endangered Species Fund)

This fund was created with the passage of LB 466 (Eighty-Eighth Legislature, 1984) and is used to assist in carrying out the Nongame and Endangered Species Conservation Act. The name of the fund was changed in 2007 by LB 299 (One Hundredth Legislature) from the Nongame and Endangered Species Fund to the Wildlife Conservation Fund.

The income tax check-off program, which was established in 1984, is the primary source of revenue. During the period of FY 1984–1985 through FY 2008–2009, income tax check-off program donations have ranged from a low of \$63,951 in FY 2006–2007 to a high of \$108,277 in 1992–1993 and have averaged \$83,108 per year during this time frame. This source has experienced a stable to declining trend which is not atypical for this type of revenue source. Cash gifts, interest income and reimbursements are the other sources of revenue to this fund.

This fund is used to cover a portion of the costs associated with the Nongame and Endangered Species Program to include both operating and capital. Expenditures have exceeded income in the past, but recent years have seen a steady increase in the fund balance, primarily due to the availability of federal funds for program expenditure. The relatively modest fund balance explains the needed reliance on general fund dollars and federal grant dollars to keep a sustainable nongame and endangered species program operating in the state.

Game Law Investigation Cash Fund

The Game Law Investigation Cash Fund was created by the passage of LB 788 (Ninety-Sixth Legislature, 2000) for the purpose of obtaining evidence for the enforcement of the Game Law. Under regulations adopted by the Commission regarding fund disbursement and record keeping, available funds may be disbursed to the Law Enforcement Division for use in acquiring evidence of Game Law violations. Such funds are held in readily-available commercial accounts or cash to facilitate timely access to the funds for securing such evidence. Funds may be used for salaries and expenses of agents and informants and as front money for wildlife purchases. The fund receives budgeted funds through the Commission and can also receive donations from persons, wildlife groups and other charitable sources.

To date, income to the fund has been solely budgeted funds at a modest level (initial fund transfer of \$5,000), and expenditure activity has been limited. It is anticipated that the fund will serve a key role in future Game Law investigations as they are initiated and as the use of the fund in support of such investigations becomes familiar and routine.

Nebraska Snowmobile Trail Cash Fund

The fund was created by the passage of LB 230 (Eighty-Fifth Legislature, 1977) and provides for activities applicable to the establishment of public snowmobile trails on both public and private lands and for the procurement or preparation and distribution of educational materials. Revenue derived from the registration of snowmobiles, which is administered by the Department of Motor Vehicles, is the primary source of income.

Interest earned on the fund is the only other significant source of revenue. While income has seen some growth in recent years, primarily from interest income as the fund balance has increased, expenditures have been modest to nonexistent. The limited activity, especially in recent years partially contributed to the transfer of \$250,000 from this fund to the General Fund in FY 2009–2010 to help address General Fund shortfalls.

Nebraska Outdoor Recreation Development Cash Fund

This fund, which is normally referred to as NORDA, was established by the Legislature and became effective on July 1, 1980. The use of this fund is restricted to the

acquisition, development, operations and maintenance of areas of the state park system.

The primary source of revenue is the Nebraska Tobacco Products Tax. The portion of the tax earmarked for the Nebraska Outdoor Recreation Development Cash Fund is the equivalent of one cent on a conventional package of cigarettes. With few exceptions, income from the Tobacco Products Tax has declined steadily. Records indicate income declined from \$1,734,101 in FY 1980–1981 to \$1,254,473 in FY 1999–2000. It should be noted, however, that the passage of LB 683 (Ninety-Sixth Legislature, 1999) provided for some stability by identifying that the annual income shall be equal to that of FY 1997–1998 or \$1,309,039. This minimum amount guarantee offers some protection during years of low or declining cigarette sales. Federal reimbursements and interest income are the only other significant ongoing sources of revenue to this fund. This fund has been used in past years to cover costs associated with the state park system for both operating and capital construction, however, in recent years; an effort has been made to limit the use of this fund to capital projects which facilitates budgeting and record keeping.

It should be noted that State General Fund short falls identified in 2009 will result in cash transfers from this fund to the General Fund in the amounts of \$378,307 in FY 2009–2010 and \$1,064,007 in FY 2010–2011.

Trail Development Assistance Fund

The Trail Development Assistance Fund and the Trail Development Assistance Program were created with the passage of LB 714 (Ninety-Second Legislature, 1991). The fund consisted of direct appropriations by the Legislature and any funds received as gifts, bequests or other contributions. The fund was administered by the Commission, but was used to provide financial assistance to political subdivisions, other public agencies, or private nonprofit organizations in the purchase, development and maintenance of recreational trails. The Fund had a sunset clause requiring any balance in the fund existing on January 1, 2010 to be transferred to the state General Fund.

Income to the fund had been limited to the direct appropriations of General Fund dollars and to interest income. While funds had been obligated to projects on an annual basis equal to the appropriations received, expenditures had fluctuated as projects were actually completed and invoiced.

Aquatic Habitat Fund

The Aquatic Habitat Fund (**Figure 4**) and the aquatic

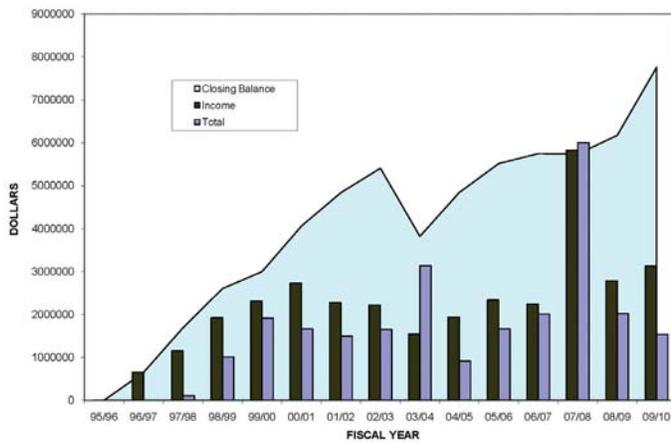


Figure 4. History of Aquatic Habitat Fund.

habitat stamp were created with the passage of Legislative Bill 584 during the Second Session of the Ninety-Fourth Legislature (1996). The aquatic habitat stamp, which is required of all anglers, became effective January 1, 1997 at a fee of \$5. The fee became \$10 in 2010 with passage of LB 105 in 2009. The stamp is the primary revenue source for the Aquatic Habitat Fund, although federal and state grants have become quite significant in recent years.

Monies in the fund are used for rehabilitation, enhancement and maintenance of aquatic habitat to improve recreational angling access. Nebraska’s introduction of the aquatic habitat stamp represented the nation’s first stamp of its kind and signified the beginning of a process to rehabilitate aging reservoirs. No money was to be spent from the fund until the Commission presented an aquatic habitat plan to the Committee of Natural Resources of the Legislature for their approval. That was accomplished in 1997 and projects soon followed.

In addition to the proceeds from the sale of aquatic habitat stamps, revenue has been derived from Federal Aid in Sport Fisheries Restoration Program reimbursements, grants from the Nebraska Environmental Trust and investment income. Many projects funded through the Aquatic Habitat Fund are cost shared by local Natural Resource Districts and or cities and communities as well as the grants discussed.

General Fund

The General Fund (**Figure 5**) is supported by monies collected by the State Department of Revenue and deposited with the State Treasurer and appropriated by the State Legislature. General Fund monies are appropriated to the Commission for those operating activities that are categorized as follows:

Non Self-supporting Activities

The Legislature has long recognized the inability of the

state park system to be self-supporting, thus, General Funds have been appropriated to cover the costs applicable to the administration of the state park system as well as trail coordination efforts, and to cover a portion of the operating and maintenance costs of state park and recreation areas.

A similar situation exists in the Nongame and Endangered Species Program which is partially funded under the Wildlife Conservation Fund. This fund does not have the capacity to cover all of the costs, thus, a portion of the costs are borne by the General Fund.

Administrative Activities

Activities that are general in nature, applicable to the entire agency, and difficult to prorate between the various other funding sources are partially or totally funded under the General Fund. Activities such as those covered under the Administration program (namely, Director’s Office, Central and District Offices, Budget and Fiscal, Realty, Personnel, and General Administration) are partially funded. Activities applicable to the Board of Commissioners are totally funded under the General Fund as are the current activities of the Engineering Division. The administration of those federal grant programs (e.g. Land and Water Conservation Fund Program) that do not provide for the associated administrative costs are also covered under the General Fund.

Activities that Extend Beyond the Statutory Use of the Various Cash Funds

Commission personnel are occasionally required to participate in an activity that can not legally be charged to an existing cash fund. And in recognition of this fact, the Legislature appropriates General Fund monies to certain programs to cover these costs. A Conservation Officer’s involvement in a drug case, backup of other state or local law enforcement personnel, or participation in homeland security initiatives would be examples of such activities.

General Fund appropriations for operating programs steadily increased until FY 1992–1993, then experienced a decline with subsequent years showing only modest growth. It should be noted that during the years prior to FY 1992–1993 when the appropriations were increasing, they increased at a slower rate than did the agency’s total budget. Budget cuts for the biennium period 2001–2002 to 2002–2003 of 4 percent and 8 percent respectively, as well as the elimination of General Fund support for the Cowboy Trail in FY 2003; and further reductions for the biennium period 2009–2010 to 2010–2011, had and will have an impact on agency’s ability to sustain some activities, especially on the park side of operations.

The only General Fund appropriations for capital projects since FY 1986–1987 were made to the Trail

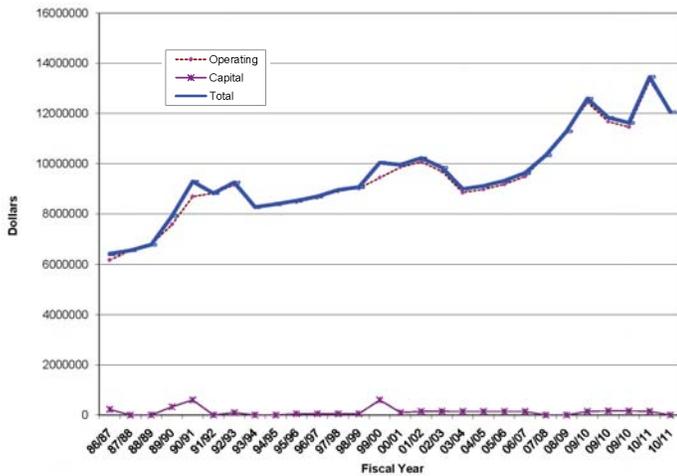


Figure 5. Twenty five–year History of General Fund Appropriations.

Development Assistance Program for pass through to political subdivision and to State Parks for flood-related repair work. Exceptions to this trend were made in FY 1999–2000 when \$500,000 was appropriated from the State Building Fund to provide 50 percent cost share on the Buffalo Soldiers Barracks project at Fort Robinson State Park and in FY 2009–2010 when \$165,000 was appropriated for design of an expansion to the Wildcat Hills State Recreation Area Nature Center.

Federal Funds

Federal Aid in Wildlife Restoration Act (Public Law 75-415, approved September 2, 1937)

In 1932, a special excise tax on rifles, shotguns and ammunition was established, however, it was treated as a general tax and was not reserved for any particular purpose. In 1937, when Congress was considering the abolishment of this 11 percent excise tax, conservationists requested that the tax be retained and used for wildlife restoration. The idea was so popular that it passed through Congress without any opposition. The new Act, which is known as the Federal Aid in Wildlife Restoration Act, brought the Federal Government and the states together to work for the conservation and restoration of wildlife. The tax on sporting arms and ammunition has been augmented since 1970 by a 10 percent tax on handguns and since 1972 by an 11 percent tax on archery equipment.

These monies are collected from the manufacturers by the Department of the Treasury and transferred annually to a special fund, which is administered by the Fish and Wildlife Service, U.S. Department of the Interior, for allocation to the states and territories based on a formula as follows: Half in the ratio that the area of the state bears to the total area of all the states, and half in the ratio that the number of paid hunting-license holders of the state bears to the total number of paid hunting-

license holders of all the states.

To participate in this program, the state must assent to the provisions of the Act (Statute 37-422, Revised Statutes, State of Nebraska) and must have laws that provide for the conservation of wildlife and that prohibit the diversion of license fees paid by hunters and of the interest earned on such fees for purposes other than the administration of the Commission. Funds are annually apportioned to the states and territories for activities that contribute to the restoration or management of wildlife, to the public use of these resources, and/or to hunter education. More specifically, these funds may be used to cover up to 75 percent of approved projects which may include activities such as the acquisition of lands for wildlife management and public use purposes; the development of these lands and the maintenance and operation of the developments; research studies designed to enhance wildlife populations; surveys and inventories designed to collect information needed by the administration to make resource management decisions; technical assistance to private landowners and other governmental agencies in wildlife related matters; and, hunter education. Each year’s apportionment is available for expenditure for two years. Historically, this has been operated as a reimbursement program. There have been interpretations of federal regulations at times to include the “eminent billing process.” This second approach gives the state the option of requesting the federal share of an expenditure at the time the bill or payment is due or eminent.

Nebraska has participated in this program since its conception. The first funds became available to the state on July 1, 1938 when \$20,428.51 was apportioned to Nebraska. The 2009 federal fiscal year apportionment was nearly \$5.5 million and brought the total funding for Nebraska to nearly \$97.7 million since the program inception.

The Federal Aid in Wildlife Restoration Act produced the first semblance of a national wildlife program and must be considered as one of the most significant pieces of conservation legislation ever passed by Congress. It should be recognized, however, that this legislation is merely the vehicle and that sportsmen, through the payment of excise taxes on sporting arms, ammunition and archery equipment and by the purchase of hunting licenses, are responsible for the many accomplishments attributable to the program.

Federal Aid in Sport Fish Restoration Act (Public Law 81-681, approved August 9, 1950)

The success of the Federal Aid in Wildlife Restoration Act prompted interest in companion legislation for sport fish restoration. The enactment of the Federal Aid in Sport Fish Restoration Act of 1950 followed a lengthy and arduous legislative process that began 11 years

earlier in 1939. Initially, the Act was funded by a 10 percent manufacturer's excise tax on rods, reels, creels and artificial baits, lures and flies. In 1984, the Wallop-Breaux Amendment passed as part of the Deficit Reduction Act (Public Law 98-369) which expanded the tax base to include essentially all items of fishing tackle, motorboat fuel taxes and import duties on fishing tackle and boats. This amendment also provided for the establishment of a new trust fund, the Aquatic Resources Trust Fund, which consists of two accounts: the Boat Safety Account and the Sport Fish Restoration Account.

Aside from the tax base and the benefitting resources, the only significant difference between this program and the Federal Aid in Wildlife Restoration Program is the makeup of the formula used to allocate funds to the states and territories. Funds are allocated as follows: 40 percent in the ratio that the area of the state (including coastal or Great Lake waters) bears to the total area of all the states and 60 percent in the ratio that the number of persons holding a paid license to fish for sport or recreation in the state bears to the number of such persons in all the states.

Participation requirements are similar to the Federal Aid in Wildlife Restoration Program. The state must assent to the provisions of the Act (Statute 37-903, Revised Statutes, State of Nebraska) and must have laws that provide for the conservation of fish species and that prohibit the diversion of license fees paid by anglers. Those fees and the corresponding interest earned are deposited in the game cash fund. Thus the game cash fund cannot be used for purposes *other than* the administration of the Game and Parks Commission to remain eligible to participate in either program.

Nebraska's share of the first year's appropriation, which was made on July 1, 1952, was \$44,703.57. Since that time, the collections and associated allocations have increased steadily. Nebraska received nearly \$5 million in apportionments for the 2009 federal fiscal year bringing the program total apportionment to nearly \$78.8 million since its inception.

State Wildlife Grant Program – U.S. Fish and Wildlife Service

The State Wildlife Grants Program provides federal grant funds for developing and implementing programs that benefit wildlife and their habitats, including species not hunted or fished. Priority is placed on projects that benefit species of greatest conservation concern. Grant funds must be used to address conservation needs, such as research, surveys, species and habitat management, and monitoring, identified within a State's Comprehensive Wildlife Conservation Plan/Strategy. These funds may also be used to update, revise, or modify a State's Strategy. Nebraska's wildlife conservation plan is known as the Nebraska Natural

Legacy Plan.

Revenues collected from Outer Continental Shelf Oil and Gas royalties are deposited into the Federal Land and Water Conservation Fund and apportioned annually to states based on a formula using one-third land area and two-thirds population. State Wildlife funds have been apportioned annually since 2002, but unlike Wildlife and Sport Fish Restoration Program funds, the State Wildlife Grant Program is not supported by dedicated funds. In addition to the apportioned funds, Congress authorized funding in 2001, 2008, and 2009 for competitive State Wildlife Grant Program awards to encourage multi-partner projects to implement actions contained in multi-State Comprehensive Wildlife Conservation Plans.

Grant funds are disbursed to States for approved grants on a 75 percent reimbursement basis for planning grants and a 50 percent reimbursement basis for implementation grants. Competitive grant reimbursement rates vary from 50 percent to 65 percent.

Nebraska has received \$2.59 million in competitive State Wildlife Grant awards and an approximate average of \$700,000 annually from 2002 through 2010.

Land and Water Conservation Fund Act of 1965 (Public Law 88-578, Approved September, 1964)

This program, administered by the National Park Service, U.S. Department of the Interior, provides matching grants to state and local governments for the acquisition and development of public outdoor recreation areas and facilities. The state's authority to participate is provided in Statute 37-904, Revised Statutes, State of Nebraska. An approved State Comprehensive Outdoor Recreation Plan is required. Commission personnel are required to periodically inspect all program lands and developments to ensure compliance with Federal regulations applicable to use and maintenance by project sponsors. The state retains 40 percent for state projects and reallocates the remaining 60 percent to political subdivisions with the statutory authority to acquire and develop lands for public outdoor recreation.

The Land and Water Conservation Fund has aided 366 political subdivisions in Nebraska, funding more than 936 projects between 1965 and 2009. Appropriations to the program have contributed nearly \$44 million to acquire and develop outdoor recreation projects in its 44-year history. Annual apportionments have varied from a high of \$3,933,224 in 1979 to zero funding in 1982 and 1996–1999, with funding levels of \$258,756 in 2008 and \$303,943 in 2009.

Recreational Trails Program (RTP)- A subprogram of the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETE-LU; formerly known as TEA-21,

Public Law 109-59, Approved August 2005)

This program, which is administered by the Federal Highway Administration at the federal level, is designed to provide financial assistance to states and political subdivisions for motorized, non-motorized and multi-use trails. The federal grant monies require a 20 percent non-federal match to be eligible for an 80 percent reimbursement. The Commission's authority to participate is provided in Statute 37-910, Revised Statutes, State of Nebraska (1993). A dedicated fund, the Recreation Trails Fund, was established under Statute 37-911.

A Public Interest Committee exists to review and assist in ranking project applications received by the State. The Committee meets at least once a federal fiscal year for this purpose. In addition, agency personnel are charged with assuring that all participants receiving funding adhere to all applicable federal regulations. The distribution strategy ensures that 30 percent of the funding goes to non-motorized trail projects, 30 percent to motorized trail projects, and the remaining 40 percent to multi-use projects.

The Recreational Trail Program allocations have steadily increased since the initial 1996 allocation of \$146,878 to the current 2009 allocation of \$1,052,000. The program has gone through several name changes at the federal level as part of a six-year Federal Highway Administration authorization bill. The most recent moniker Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETE-LU; formerly known as TEA-21) expired but funding still exists under a continuing resolution in 2010–2011. It is anticipated that the funding for Nebraska in 2010 will be a similar amount to 2009. During the 13 years that the program has been funded, Nebraska has received a total of \$9,482,950 for trail development, maintenance and acquisition. This equates to 101 trail projects since 1996 that have utilized Recreational Trail Program funding, of which 22 were Commission projects totaling some \$1.1 million.

Federal Boat Safety Act of 1971 (Public Law 92-75, approved August 10, 1971)

This program was established to encourage greater state participation and uniformity in boating safety efforts, and particularly to assume the greater share of boating safety education, assistance and enforcement activities. Authorization for the program expired in 1979, but was reestablished by the Recreational Boating Safety and Facilities Improvement Act of 1980 (Biaggi Act). The first appropriations under this new mechanism were approved in 1982. Funding is generated through taxes on motorboat fuels and allocated to the states on a reimbursement basis at a 50 percent cost share level.

Funds derived from this program, which is administered by the U.S. Coast Guard, are used to fund

activities applicable to boat safety education, vessel numbering and titling system and law enforcement.

Other Federal Programs

In recent years, the Commission has taken advantage of numerous small grants for specific, short-term activities. This practice will continue as it is an important source of additional revenue, especially in under funded areas such as nongame, threatened and endangered species programs.

Goal

To provide adequate funding to meet current and future demands for stewardship of Nebraska's fish, wildlife, and parkland resources.

ISSUE 1

Agency responsibilities have become more diverse and have increased at a faster rate than revenues from traditional sources have been able to fund.

Strategy 1. Through legislation, work to eliminate or minimize unfunded or conflicting mandates, and processing constraints related to dedicated funds and use of outside funding sources.

 **Tactic 1:** Prepare fiscal notes for all introduced legislation that may have an impact on the agency.

Strategy 2. Identify and develop new alternative revenue sources such as partnerships, support groups, taxing initiatives, vehicle registration surcharge, etc.

 **Tactic 1:** Work with interest groups at a grass roots level to develop plans and evaluate possible introduction of legislation for funding during the FY 2011–2013 period.

Strategy 3. Periodically evaluate agency responsibilities and priorities in light of funding levels.

Tactic 1: Develop an agency efficiency/effectiveness plan for the FY11-13 time frame that will consider reorganization of structure and processes as well as programmatic changes.

 **Tactic 2:** Identify properties of marginal, non-self supporting use that might be surplus or transferred to other entities.

Strategy 4. Periodically evaluate agency user fees and other revenue sources to ensure adequacy to meet current and future funding requirements.

 **Tactic 1:** Maintain a fund balance of between 25-50 percent of a years annual expenditures in key funds (Game Cash, Park Cash, Habitat Cash).

Tactic 2: Review existing permit offerings and identify new permit options that could increase

recreational opportunities and be revenue positive or neutral at best. Seek legislative change during FY 2011–2013 time frame for those options requiring it.

Strategy 5. Seek legislative authority to increase permit fee caps and add park entry permits to the list of permits that can be administratively changed.

 **Tactic 1:** Seek to increase the Annual Park Entry Permit to \$25, the duplicate annual to \$12.50 and the daily to \$5 by 2012.

Tactic 2: Seek to increase the permit fee caps by at least 12 percent by 2013.

ISSUE 2

Increased reliance on user fees presents problems related to perceived fairness and fee structure (i.e. ability to pay, and who pays for what).

Strategy 1. Develop sources of user pay revenues from nontraditional users (e.g. bird watchers, hikers, trail users, etc.).

Tactic 1: Work with interest groups at a grass roots level to develop plans and evaluate possible introduction of legislation during the FY 2011–2013 period.

Strategy 2. Educate both internal and external publics regarding income sources, expenditures and spending constraints.

Tactic 1: Distribute this document to all staff and post it on the web.

Tactic 2: Provide periodic fund summaries for all staff and monthly updates for management.

Strategy 3. Involve citizen advisory groups in decision making processes regarding fees and how/where money should be spent.

ISSUE 3

The agency has the responsibility to maintain, operate and fund programs and activities that may not have the capability to be self supporting.

Strategy 1. Educate both internal and external publics regarding income sources, expenditures, spending constraints and economic and social values of our products.

Tactic 1: Distribute this document to all staff and post it on the web.

Tactic 2: Provide periodic fund summaries for all staff and monthly updates for management.

Strategy 2. Identify and develop new revenue sources such as partnerships, friends groups, taxing initiatives, license plates, state motorboat fuel tax, etc.

Tactic 1: Work with interest groups at a grass roots level to develop plans and evaluate possible introduction of legislation during the FY 2011–2013 period.

Strategy 3. Seek additional General Fund support for those areas that are not self-supporting.

Tactic 1: Seek a minimum 3 percent annum increase in general fund support for each program

currently receiving same during the next biennium.

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Human Resources

*Every organization says its people are its most important resource.
The best organizations show it*

“Program and Direction” - As our agency undergoes reorganization and change, the role of the Human Resources department must change as well. The previously held notion that human resources act as the enforcer of the rules and the advocate of management must be changed. Although these roles must continue, Human Resources must also be a strategic section within the agency and an advocate for the employee. As a strategic section of the agency, the human resources department can help facilitate change throughout the agency and create orientation and training programs that aid employee’s transition through that change.

Introduction

With 50 percent of our workforce being age 50 or above, the next 10 years will see a massive change in our personnel and an influx of employees with different needs and expectations. As our aging workforce moves into retirement our agency faces the loss of knowledge, skills and history which we will be hard pressed to replace. In addition, our agency faces the challenge of creating a work environment suitable for the incoming workforce which has different expectations and needs than those departing.

As our agency undergoes reorganization and change of its work force, the role of the Human Resources department must change as well. Human Resources must develop to be a strategic partner within the agency and an advocate for both management and the employee. As a strategic partner of the agency, the human resources department can help facilitate change throughout the agency and create orientation and develop training programs that aid employee’s transition through that change and enable growth both agency wide and individually.

In the current climate of “doing more with less” it is vital that we foster productive and positive employee relations by serving as the advocate for the employees and providing excellent internal customer service. Employee relations impact morale and morale impacts

productivity, excellence in customer service, and ultimately, our success in carrying out our mission. Fostering an environment where management is seen as operating with compassion and respect creates long lasting and far reaching results where management can be proactive rather than reactive when issues arise.

Our future success will be gained through attraction, retention, and development of high caliber people who are dedicated to the Commission and our goals. Our Human Resources Department must parallel the changing needs of the Commission’s workforce and develop programs that are adaptive, resilient and customer centered to greater foster positive employee relations thereby improving morale.

Goal

The goal is the attraction, retention, and development of high caliber people who are dedicated to the Commission and our goals.

ISSUE 1

We have no formal on-boarding program for new employees of the Commission. Successful orientation programs allow new employees to feel valued by the agency. Training of new employees often currently falls to the manager and has no continuity or consistency.

Strategy 1: Creation of an on-boarding program for all new employees of the Commission that follows with the employee for the first year of employment.

Tactic 1: Development of an interdepartmental advisory group.

 **Tactic 2:** Create programs for new employees to learn about the Commission and our goals and perspectives. Create orientation program that encompass agency wide training to commence in early 2012.

 **Tactic 3:** Create agency wide procedures manual for distribution to new and existing employees.

Tactic 4: Maintain contact with new employee at least quarterly for the first year of employment.

ISSUE 2

Current Employee Evaluation tools are not regarded as important by managers or employees. Employee evaluations are viewed only as disciplinary and not used to build the employees career. Employees are not

actively involved in their performance evaluation.

Strategy 1: Implementation of new Human Resources software package for full utilization within our agency.

Tactic 1: Implement Employee Performance Management software within our agency.

 **Tactic 2:** Facilitate implementation of new Human Resources software through training and coaching for new and existing managers. Empower managers to utilize training and development plans as part of the human capital management process.

Tactic 3: Provide training for staff to fully utilize software package for all aspects of Human Capital Management as each component is rolled out.

ISSUE 3

Supervisors are not given adequate tools to do their job. Supervisors need training to better enable them to handle the complexities of managing people while still upholding the goals and objectives of the agency. Managers may use existing tools within the EDGE program. New tools are being developed for implementation that will enable managers to better empower and develop their teams.

Strategy 1: Set up and train managers to use manager tool box within JD Edwards system enabling them to utilize leave reports, accounting information, and various management reporting tools.

Tactic 1: Ensure information entered within JD Edwards is correct and current.

 **Tactic 2:** Provide training for managers to enable them to use these tools.

Strategy 2: Set up Learning Management Software to enable managers to assign and track education, training, and goals of their direct reports. Develop tools to help managers navigate through human capital management.

Tactic 1: Set up functional user groups within the Learning Management System.

 **Tactic 2:** Create and procure training programs for use by our employees.

Tactic 3: Create grouping of training and management tools required for all managers to better enable them to deal with all aspects of personnel management.

Review Team

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Internal Communication

An informed workforce is an effective workforce

“Purpose and Direction” - When an organization is developing communication strategies, internal communication is often overlooked, yet it is vitally important. It is the communication that relates directly to the foundation of the Nebraska Game and Parks Commission: the people – staff, administration and volunteers – give the Commission its ability to function. Developing sound internal communication processes and evaluating these processes on a regular basis ensures the Game and Parks can function efficiently and effectively.

Introduction

The rapid development of communications-related technology and the rapid expansion of communication channels create special opportunities and challenges. This doctrine addresses the Commission’s need to improve internal communication. The agency cannot function properly without excellent internal communication.

Employees must recognize their responsibility to properly communicate within their divisions and across the agency. Doing so results in an effective, efficient, well-informed workforce. Encouraging teamwork across division lines will foster trust and should result in better communication.

This doctrine will help the agency workforce understand the importance of and confidently embrace effective internal communication. The success of this effort will be measured by staff evaluations and staff feedback.

Goal

The goal is to develop and maintain a well-informed agency workforce that communicates effectively.

ISSUE 1 – The Employees Role

A well-informed agency workforce that understands the basic values and purposes of the agency gives employees the opportunity to make decisions at the line

level, reducing micro-managing.

Strategy 1: Help staff and administration recognize and take responsibility for their role in keeping the agency informed instead of acting as roadblocks to knowledge and information transfers.

Tactic 1. Identify individual needs and provide training in technology and effective communication techniques, listening skills, sensitivity and team building.

 **Tactic 2.** Plan district visits by the deputy director, division administrators and designated Information and Education staff to attend at least one meeting in each district annually to identify assignments for key staff.

Tactic 3. Identify, define and require through the incorporation into performance plans, the role of all agency staff in effective information exchange.

Strategy 2. Improve two way communications with senior administration.

Tactic 1. Re-evaluate inter-agency information delivery systems, identify inadequacies, and initiate corrective procedures.

 **Tactic 2.** Increase the involvement by senior administration in district and divisional meetings. Improved/increased information flow by senior administration and/or Commissioners to staff in the field about major topics/issues and possible courses of action should occur on at least a monthly basis via electronic communication.

ISSUE 2 – Communication Infrastructure

The agency needs an internal communication infrastructure and workflow that will create a staff that understands the mission, goals, values and procedures of the agency.

Strategy 1. Develop an agency internal communications infrastructure to meet the needs of the agency in a consistent fashion to ensure that people have the time and mechanisms to communicate more effectively.

 **Tactic 1.** Implement these needed internal communications Infrastructure elements:

- Print and Web-based organizational charts with photos
- Web-based list of standing meeting/groups
- Web-based wiki acronym list
- Internal discussion board to facilitate internal communication networks
- Agency wide use of Microsoft Communicator (chat tool) both at headquarters and district offices
- Agency wide use of new media tools to engage employees, foster collaboration and team building

Tactic 2. Ensure that electronic calendars through

Microsoft Exchange are accurate and make them easily available to all.

Tactic 3. Put support mechanisms in place for staff working with remote communications equipment.

Tactic 4. Train staff to use and benefit from the Intranet staff web page.

Tactic 5. Establish a guideline for agency-wide communication to take place.

Strategy 2: Develop a meetings culture and practice that promotes effective communication.

 **Tactic 1.** Develop a protocol on meeting procedures that will become part of the agency's culture. Ensure that meeting minutes are shared and that subjects discussed at meetings are followed up. The meeting minutes will be posted on the internal staff web page in a timely manner.

Tactic 2. Encourage managers to hold regular team meetings, with formal records of the meetings. The format and frequency should be appropriate for the team. Use team meetings as an opportunity to share the broader issues with colleagues and to receive feedback from them.

Tactic 3. Review the effectiveness and appropriateness of staff briefings (content, delivery and timing) and encourage managers to be the main source of internal communication on their teams.

Tactic 4. Use the Intranet and internal communications software Microsoft Sharepoint as a tool for all staff to receive information from administration and to discuss relevant issues among staff.

Strategy 3: Encourage effective cross-team and cross-division teamwork.

Tactic 1. Review the effectiveness and timing of Brown Bag Seminars then decide whether/how to continue the series.

Tactic 2. Create opportunities for greater engagement between staff in different division to promote knowledge of areas other than their own. Consider the opportunities for more in-depth all staff meetings.

 **Tactic 3.** Create a Social Committee to plan agency social activities. Encourage volunteers to ensure the Committee has cross-division membership and reflects the range of job roles. Give staff the opportunity to plan the annual staff functions.

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Information

Our society is losing touch with the outdoors. The right information can help reconnect it.

“Purpose and Direction” - This doctrine rises to the challenges we now face in producing high quality information for the public. It recognizes changes that have occurred since previous strategies and reflects contemporary demands. It emphasizes the importance of consulting with our customers to ensure that they receive necessary information when they need it. Developing sound internal communication processes and evaluating these processes on a regular basis ensures the Game and Parks can function efficiently and effectively.

Introduction

In order for the Nebraska Game and Parks Commission to accomplish its mission, it must receive support from all Nebraskans. Without public support, the agency’s programs will languish and its goals will remain unmet.

To earn this support, the agency must effectively share information about its mission and programs with the public. However, it first must be willing to openly share information between divisions in a timely manner. It also must not fear sharing unfavorable news, especially when it serves the public and users.

If it acts proactively, the agency is capable of influencing public opinion on a program or project by informing them of the benefits it would provide. It can encourage positive attitudes and ethics toward outdoor recreation or the use of our natural resources by both resource users and the general public. It can relay the need for changing levels of service, increasing fees, or modifying regulations to garner support for new programs.

The agency must be in tune with the public’s requests and respond appropriately while educating our constituents on the most effective and efficient course of action.

Many Nebraskans are not fully aware of the variety of programs the Commission administers nor our diverse mission and its effect on the quality of life. Some may believe the agency is only concerned with permit dollars or hunting, fishing and parks activities. The Commission must do more to increase awareness and appreciation of Nebraskans who do not hunt, fish or use the state’s park

resources to explain the benefits of agency programs and the public’s stake in our success. It is recognized that these individuals would become allies if they were made aware of the programs and the derived economic and social benefits.

The scope of this doctrine is the creation and distribution of information related to agency programs, products and the resources it manages. This informs and educates the public and fosters an appreciation for natural resources. It also encourages attitudes, behaviors and ethics appropriate for resource use and conservation.

The Commission’s constituents are informed and educated by: brochures distributed through district/division offices and permit agents across the state; OutdoorNebraska.org and social media (Camospace, Facebook, Twitter); *NEBRASKAland Magazine*; Outdoor Nebraska Radio; *Outdoor Nebraska Newspaper*; personal appearances on local radio and TV stations; appearances by staff at the Nebraska State Fair and sports shows; news releases sent directly to many newspapers, TV and radio station in the state; programs presented by agency staff members and news brochures and other information sent directly to our constituents via standard mail or e-mail and direct contacts with agency staff.

Coordinating these efforts is the primary responsibility of the communication professionals in the Information and Education Division. However, all Commission employees share the responsibilities of informing the public and assessing their information needs.

Goal

The goal is to encourage public appreciation for fish, wildlife, natural areas and state parks. To broaden public understanding of the Nebraska Game and Parks Commission and its mission. To promote support for Commission programs. To inform the public on conservation issues and outdoor recreation opportunities, and help attract new hunters, anglers and park visitors and other consumptive and non-consumptive users.

ISSUE 1 – Public Awareness

It is important that the public understands that we have skilled employees who do good work and who care about the state’s natural resources.

Strategy 1. Keep the public fully aware of the agency's mission and programs.

 **Tactic 1.** Compile a list of communication needs by agency program, create a communication plan with strategies that meet the needs identified for each program and update this plan as needed. This plan should use a public relations approach to promote the agency's programs and projects. Within the communication plan, maintain flexibility to exploit unanticipated outreach opportunities and avoid unforeseen problems.

Tactic 2. Annually assess public information needs through appropriate surveys of the media.

Tactic 3. Actively promote the idea that consumptive and non-consumptive users share common ground and are, in fact, allies on most management and environmental issues. Encourage non-consumptive resource users to purchase Habitat Stamps by showing them the benefits these programs provide to all Nebraskans.

Tactic 4. Actively promote the idea our products have economic, physical health, mental health, social health values and benefits and that it is important for the Commission to be well staffed and funded to deliver them.

Strategy 2. Improve the agency's credibility with the media and the public.

Tactic 1. Always pro-actively publish the truth regardless of the immediate consequences. Never patronize the public by publishing only what it wants to hear. Do not try to hide a negative story as eventually, it will be uncovered and the Commission will no longer have control of the story with negative consequences a likely result.

Tactic 2. Involve the public in the agency's decision-making process. Some constituents believe decisions are made behind closed doors and that input at public hearings during Commission meetings is not considered. This perception decreases our effectiveness. Develop and publicize ways the public can comment before Commission meetings. For bigger issues, solicit public comments before recommendations are written. This input can be valuable to staff developing recommendations and to Commission decisions, but science should remain the priority when the final decisions are made.

Tactic 3. Establish a credible staff member for the area media to contact on any Commission-related topic that may arise in the news media or that we want to address proactively.

Tactic 4. Train and empower the administration of the Commission to adequately respond to negative editorials/criticism, especially in print.

 **Tactic 5.** Establish a training program to enable staff to effectively interact with the media.

Strategy 3. Ensure information from within the agency

is provided in a timely manner for release to the public by improving channels of communication within the Information and Education Division and between divisions.

 **Tactic 1.** Encourage greater collaboration between divisions by implementing a communications protocol to ensure the correct information gets to key decision makers allowing information to be released more quickly.

Tactic 2. Hold educational sessions to staff informing them how the Information and Education staff may be a resource for their efforts. Also inform agency staff how to properly submit information (IE: ngpc.news@nebraska.gov) and what type of information to submit to Information and Education staff.

Tactic 3. Each division should assign a specific person on major projects the responsibility of notifying Information and Education of potential photo, video or news release opportunities before they happen.

ISSUE 2 – Media Coverage

The media plays a large role in setting public opinion of the agency's varied activities. It is important that the agency get the most media coverage of its messages it can.

Strategy 1. Increase media coverage of agency events knowing that local media outlets prefer to develop reports on agency activities in-house and have discontinued or reduced dedicated outdoor coverage.

Tactic 1. Meet with news and sports editors, program directors and others in major media outlets across the state and inform them of the high number of readers, viewers and listeners they have who are interested in outdoor recreation and the value of outdoor news to those individuals.

Tactic 2. Work proactively to publicize more activities, such as controlled burns, fish sampling or stocking and park construction, to the media before they happen to allow local media the opportunity to develop their own stories.

Tactic 3. Include features in news releases, including how-to or where-to type stories.

 **Tactic 4.** Information and Education staff will conduct weekly conference calls with district team chairpersons to ensure information staff is aware of events and activities in each district. Each district chairperson will participate in one call a month.

Strategy 2. Expand the use of online offerings to meet the needs of people who are increasingly using the Internet to find information.

Tactic 1. Assign individuals in each division to monitor the site and ensure that updates are made when needed. Also develop a chain of command that will allow others to know who to contact when they find problems with the site.

Tactic 2. Develop an educational program to help staff learn what is available on the site and how to use the site to aid their missions.

Tactic 3. Include links to other outdoor-related websites of interest to our constituents, including other state and federal resource agencies (i.e. U.S. Army Corps of Engineers sites detailing recreation opportunities and water levels in rivers and reservoirs and conservation organizations like Ducks Unlimited.) and of organizations with a similar mission and/or supporting programs to position our site as a portal or gateway to connect with Nebraska's outdoors, natural resources and rich history.

Strategy 3. Use media that appeals to young people to inform that age group of the agency's activities and programs.

Tactic 1. Develop content and make it available online and on social media sites that many young people frequent.

Tactic 2. Find ways to distribute information through schools, including college and high school newspapers and science classes. Create a youth page on the website.

Tactic 3. Develop additional ways to promote outdoor recreation opportunities as family activities.

 **Tactic 4.** Develop a way for the Commissioners, the Director, and/or Deputy Director to be more accessible and in-touch-with the public via a monthly outdoor talk radio show appearance and through social media.

Tactic 5. Develop and maintain a collection of blogs to allow staff to share their professional knowledge, experiences and insights, engage the public in thoughtful conversation and drive traffic to OutdoorNebraska.org.

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Marketing

People have many choices for their leisure time and money. Let's help them choose us.

“Purpose & Direction” - To keep pace with changes in our industry and in society, we must escalate Marketing from a secondary communications function to a strategic asset of the organization. More than half of our funding now comes from selling products and services to customers. Participation in traditional revenue-generating activities (small-game hunting and fishing) is in decline, while the market for big-game hunting and non-consumptive activities such as wildlife viewing (especially among non-residents) is growing. At the same time, the proliferation and aggressive marketing of new recreational options means that we too must promote more aggressively to sustain participation. We will achieve this by adopting the tactics of our for-profit competitors, while simultaneously capitalizing on our unique in-house opportunities with existing customers.

Introduction

“Marketing” means different things to different people. It calls to mind activities such as advertising, branding, public relations, sales promotion, direct marketing, special events, value-added partnerships, new product development, and so on. These activities, however, are all just tactics. To organize them into an effective marketing operation, we need well-articulated goals and strategies for achieving them. We also need to expand our capacity to execute. It all begins with a fundamental question: What do we want marketing to do for our organization?

The Marketing Communications Mix

The standard “freshman year” definition of Marketing begins with the 4 P’s:

- Product
- Place
- Price
- Promotion

(Some texts cite a “fifth P” – packaging – while others consider this to be part of either Promotion or Product, depending on the situation).

Looking at the list of activities shown above, we see that all except new product development and possibly branding deal mostly with Promotion. This is how most of us think of marketing, but it’s only one piece of the overall pie.

In the same way, marketing itself is just one part of the broader topic of Communications. Within the Nebraska Game and Parks Commission, Communications also includes Public Information, Internal Communications, Customer Service, and even Education. Though the lines between these activities can be quite blurry – and in a collaborative work environment we are crossing them daily – the basic distinction is that Marketing is the component of Communications designed to stimulate demand (as measured by sales, participation, or both).

Communications

Public Information
Internal Communications
Customer Service
Education
Marketing

Marketing

Product
Place
Price
Promotion

Promotion

Advertising
Sales Promotion
Direct Marketing
Special Events
Etc.

There is one other major difference: While the Commission has been practicing public information, internal communication, and customer service for decades, many of our nascent Marketing efforts are just now coming into being.

Why Marketing?

Marketing is an odd fit for most government agencies. The Commission, however, is more like a hybrid

between a typical state agency and a private-sector, for-profit entity. For example, more than half of our funding comes from selling products and services directly to customers. By comparison, less than 20% comes from our General Fund appropriation – and that figure is likely to decline. In fact, the Nebraska Game and Parks Commission is part of a dramatic trend toward self-funding among parks, fish, and wildlife agencies nationwide.

In a June 6, 2011 article in the *New York Times*, Becky Kelley, the director of state parks in Georgia, said she has been charged with a “repositioning” effort to make her agency financially independent by 2015. In Ms. Kelley’s words, “We were told by the General Assembly to ‘pursue a strategy of self-sufficiency.’ We realized we could not hunker down and wait it out. This was a different day.”

In the same article, Richard Just of the Idaho Department of Parks and Recreation warned that “a basic pact between parks and the public – the idea that parks will be easily accessible and affordable, and safeguarded by the state – is at risk.” In response to this challenge, Mr. Just says that in Idaho “we’ve put all our eggs in the marketing basket.” It makes sense for the Nebraska Game and Parks Commission to follow suit.

Just as state funding is no longer a given, participation in our traditional revenue-generating activities (small-game hunting and fishing) is also in decline. Our customers are aging and their numbers are decreasing. Unfortunately, we cannot address this problem in the same way as a private-sector marketer.

If a car maker finds that the demand for large SUVs is falling off and the potential for mid-sized hybrids is likely to keep growing, they can decide to abandon one product line (and therefore one audience) in favor of the other. We cannot make a similar decision with regard to our hunting and fishing customers for several reasons, including:

- Providing opportunity for these participants is part of our statutory responsibility.
- Federal matching funds mean that a dollar in sales of hunting or fishing permits equals several dollars in revenue for the agency.
- The harvest generated by these participants is a critical component in carrying out our management responsibilities.

In this case, we are very much a government agency. We exist to carry out a specific mission on behalf of the people of Nebraska. Driving revenue may improve our capacity to fulfill that mission, but it is not the reason we exist. Consequently, we have an obligation to serve a certain audience regardless of whether it is profitable to do so.

Finally, we have to consider the competitive environment. We may appear to be a monopoly in that no one else is authorized to issue Nebraska hunting, fishing, and park permits, but this is deceiving. The reality is that we sell products and services to customers who could choose to buy something else instead. Once, hunting and fishing were widely popular pastimes with little competition. Today, customers can spend their leisure time and money on video games, club sports, the Internet, cable TV, sports bars, shopping malls, and so on. All of these options compete with one another through aggressive marketing. If we want to compete, we need to do the same.

Opportunities

Fortunately, the risks and responsibilities described above are only half of the picture; there are also some excellent opportunities that we can realize by developing our marketing programs. Specifically:

- We are seeing sustained growth in big-game hunting and non-consumptive activities such as wildlife viewing, especially among non-residents. The success of the \$5 Youth Big Game Permit program attests to what we can achieve by using marketing tactics to stimulate peaks in this rising demand. By the way, this program is also a perfect demonstration of the value of combining three of the 4 Ps (Product, Price, and Promotion) into a single effort.
- Changes in technology have given us new ways of talking to our audience – a critical opportunity in the face of proliferating competition and over-communication. Traditional advertising media still provide the best opportunity to distill and repeat our positioning/branding themes, but Internet and email give us new and inexpensive ways of following through. Social media has multiplied our opportunity for targeted, in-depth relationship building with “high avids” among our audience. Going forward, mobile applications will offer yet another opportunity for rich interaction precisely when and where our customers want it most.
- Ironically, while our traditional “top earners” have been falling off, their potential benefit to customers and prospects is, in many ways, only growing stronger. The very products, services, and intense marketing against which we are competing have given rise to a new set of modern problems – sedentary lifestyles, poor diet, hypertension, obesity and diabetes, decay of the family unit, lack of free time, loss of self-sufficiency, and loss of a connection to our natural world. Movements such as slow/local/organic food,

wellness, new urbanism, and “no child left inside” suggest that a backlash is coming. In this environment, what we have always offered can be seen in a new light as an antidote to many of the “diseases of civilization.”

In fact, this last point is a reflection of the evolution of marketing itself. Business historians describe the decades after the Industrial Revolution as the Product Age – create something new, find an efficient way to manufacture it, use mass media to advertise it to everyone. This is the era of Henry Ford’s Model T, famously available in “any color you want, as long as it’s black.” The post-World War II era is the beginning of the Marketing Age, where businesses studied the population, identified (or in some cases created) an unfulfilled need, then developed products or services to address it.

In Henry Ford’s time, the precursor of the Nebraska Game and Parks Commission was developing and managing a resource for the public. While we are still doing that today, we can now look at the surprising deficiencies in our lives of plenty and see that we have a perfect offering to satisfy those needs. This also serves as proof that even in an age of new communications technologies and splintering media platforms, seemingly old-school concepts like positioning and branding are as essential as ever.

The Development Curve

The previous edition of *Focusing on the Future* described our marketing efforts up to that time as “disjunct”, developed independently by individual divisions. We have made several significant advances since then, including:

- Creation of an administrative-level position to oversee agency marketing efforts (combined with the duties of the Division Administrator for the Information and Education Division).
- Ongoing development of the Marketing (now Communications) Committee to act as liaisons between all divisions and the Information and Education marketing staff.
- Development of our first comprehensive marketing plan in 2006 and subsequent plans thereafter.
- Creation of the first dedicated agency marketing budget.
- Introduction of several new programs including email marketing, the revised website, Husker Sports partnership, Nebraska Broadcasters Association

partnership, and social media, as well as campaigns for Recreation Boating and Fishing Foundation, Fall Turkey, Great Park Pursuit, \$5 Youth Big Game Permits, Lake McConaughy, Open Fields and Waters, and others.

- Initial Marketing Committee workshop, the Inspire Marketing audit, and post-analysis and development from those efforts.

We now have many more messages going out than we did even one year ago, and are beginning to achieve some cumulative awareness and impact. Still, as the Issues, Strategies, and Tactics on the following pages will make clear, we have quite a bit of “foundation” work yet to do.

We have already made changes and clarifications in our roles and processes to reflect the recommendations of the Administrative Study Committee. We will likely be refining this process for another year.

Along with this, we need to continue to articulate our vision for marketing. The cross-functional processes prescribed in the Administrative Study Committee report are already helping us to develop this vision from the top of the organization down, as it should be.

Efforts to develop research, reporting capability, and technology are already underway and will continue to move forward as outlined in Issues 2, 4, and 5.

We will, of course, continue to execute actual marketing programs concurrently with all the development described above. In the coming months and years, the effectiveness of these programs will improve along with our infrastructure to support them.

Goal

To establish marketing as an asset of our organization, capable of improving our fiscal stability, expanding our customer base, generating broad public support, and otherwise facilitating our overall mission.

ISSUE 1 – Roles and Processes

Current roles/processes don’t enable adequate collaboration between marketing staff and division leadership. This limits our ability to effectively identify opportunities, develop strategies, execute, evaluate, and refine our efforts.

Strategy 1. Improve Collaborative Processes.

Tactic 1. Clarify roles, responsibilities, and meeting frequency for the Communications Committee (both “Big” and “Monthly”) and Information and Education marketing staff.

Tactic 2. Upgrade the Information and Education traffic system (work plan for project kickoff, concept, planning, execution, and evaluation) and establish its use within Information and Education and client divisions to improve communication, workflow, and timeliness.

 **Tactic 3.** Review and modify the process for development of the annual marketing plan so that all appropriate groups are involved throughout and all are invested in the final product. When the plan is presented, no one, including the commissioners, should be surprised by its contents.

Tactic 4. Coordinate all identified agency marketing activities through the Information and Education marketing staff to ensure consistency and efficiency. Establish protocols and processes to ensure this occurs.

ISSUE 2 – Research

We do not have adequate data to make strategic marketing decisions, choose tactics, or evaluate and refine our activities effectively.

Strategy 1. Improve access to market research and industry secondary research.

Tactic 1. Establish guidelines/processes for sharing information between divisions. Review existing information and look for ways to get more benefit from it.

Tactic 2. Study Department of Economic Development/Travel and Tourism and peer agencies in other states to find out what information they have available. Can we borrow theirs? Can we develop something similar?

Strategy 2. Identify needs for primary marketplace research, then commission a research firm to conduct this work for us.

Tactic 1. Create an ad-hoc committee to identify needed research. Emphasis should be on recurring primary/secondary research for benchmarking and opportunities to incorporate HD research into existing research activities.

- (e.g., upcoming research into why hunting households have a low rate of mentoring their children in hunting).
- Looking at research needed for Recruitment, Development and Retention of hunting/anglers as related to agency Recruitment, Development and Retention plan.
- Motivations of hunters and anglers for participation (sport vs. meat).

 **Tactic 2.** Develop a Request For Proposal for outside research firm to conduct this primary marketplace research for us. Commission the work, then use the results to create actionable models of the following:

- Segments of our customer base.
- Media preferences/how best to reach different segments.

- Key messaging for entire audience and individual segments.
- Best use of house media.

Strategy 3. Improve capacity to produce reporting and analysis.

Tactic 1. Create an ad-hoc committee to identify what kind of recurring metrics we need. If reporting exists, make it widely available. If it does not, develop means to get it. NOTE: This committee should include the Information Technology Division since they will likely manage development efforts.

- Example: permit data trends, NASIS data, success of marketing efforts such as Fall Turkey campaign, standard metrics for marketing campaign performance.
- Evaluate hunting and fishing permit sales data and market research data.
- Customer file – a database that integrates everything?

Tactic 2. Evaluate program results to make informed, data-driven decisions.

- Define programs.
- Ensure that all information generated regarding results, constituents, etc. is compiled in a central location in a usable format.
- Develop a process to refine what we are trying to find out/how to find that out.

ISSUE 3 – Vision

We have not defined all expectations for marketing to achieve for the agency, or guidelines to follow in achieving it (e.g. advocacy vs. permit sales).

Strategy 1. Determine expectations, set goals, chart a course. Keep this vision in front of everyone involved with marketing.

Tactic 1. Use objectives from other sections of *Focus on the Future*, along with the Administrative Study Committee report, as a source of direction to formulate expectations and goals.

Tactic 2. Develop a Marketing Strategy document that includes key words from goal.

Tactic 3. Using the Marketing Strategy document as a framework, develop a Creative Strategy document to provide focus and direction in developing creative work.

Tactic 4. Develop related documents to ensure consistency in message, copy style, imagery, typography, logo use, etc.

Tactic 5. Use the Recruitment, Development and Retention Plan as a model for operational planning of marketing activities (both within and outside the Recruitment, Development and Retention program).

ISSUE 4 – Capacity

We must develop the capacity to execute our marketing plans and achieve marketing goals efficiently.

Strategy 1. Identify core competencies to manage internally vs. functions better managed through contractors and partners.

Tactic 1. Review capabilities of current staff. Do we have the skills that we need? Do we have any areas of surplus manpower?

 **Tactic 2.** Identify marketing functions that can be outsourced with efficiency equal to or greater than handling them internally. Cultivate vendor relationships to address these needs.

Tactic 3. Share findings in tactics 1-2 with all staff involved in marketing so that there is a universally understood vision of who does what and how it all fits together.

Strategy 2. Improve capabilities of in-house marketing staff.

Tactic 1. Based on analysis of Strategy 1, Tactic 1 above, make needed changes in marketing staff as opportunities arise (e.g. retirements and resignations).

Tactic 2. Identify training opportunities to improve or expand skill set of division staff.

Tactic 3. Audit legacy marketing programs and activities (e.g. sports shows, handling of material preparation requests). Are there things we should discontinue or modify to free up existing staff resources for priority programs or activities?

Tactic 4. Cultivate a culture within Information and Education that is capable of producing highly effective, creative products in support of goals and strategies presented herein.

Tactic 5. Develop and leverage in-house utilities (e.g. new website, good data/reporting, audio/video production capabilities, e-commerce system, bricks-and-mortar locations).

Strategy 3. Empower others to help us accomplish our mission.

Tactic 1. Cultivate stronger partnerships with those who do not have the same statutory constraints that we do.

Tactic 2. Cultivate groups of people who may be better able to achieve outcomes on their own. For example, the community of trail riders may be better able than the Commission to support the Cowboy Trail. As another example, person-to-person aspects of Recruitment, Development and Retention can likely be handled better by individual hunters and anglers (with us making it as easy for them as possible) than by our organization, non-governmental organizations, or others.

Strategy 4. Plan now to develop fiscal resources sufficient to execute plans and achieve goals.

Tactic 1. Avoid previous practice of cutting existing budgets of other divisions to fund Marketing. Marketing is designed to support these divisions, and it cannot do so by reducing their budgets.

 **Tactic 2.** Using recommendations from Inspire

Marketing report, create a marketing budget request and submit it with the forthcoming agency budget request.

ISSUE 5 – Technology

Fast-paced market growth and new capabilities in Internet, social media, mobile applications, and database marketing is a double-edged sword: New opportunities appear every day, but we must commit significant resources to keep abreast of change.

Strategy 1. Create an ongoing planning process for keeping our Internet presence up to date.

Tactic 1. Hire a contractor to help us develop a “central repository” that will support multiple platforms (website, mobile apps, advertising service, and so on) from a unified content management system while managing manpower requirements.

Tactic 2. Plan for next-generation Nebraska Game and Parks Commission website, with an ongoing process for adding new features/capabilities.

Strategy 2. Plan for adoption of specific new technologies, then take action to achieve it.

Tactic 1. Secure outside resources to help create an online component of *NEBRASKAland Magazine*.

Tactic 2. Secure outside resources to help create an all-encompassing mobile application for the Nebraska Game and Parks Commission.

ISSUE 6 – Participation

We require significant public use of our opportunities in order to carry out our mission effectively; right now, that use is diminishing in many areas.

Strategy 1. Generate trial opportunities for the large portion of the population that does not use our services.

Tactic 1. For new-customer acquisition, create new products and packages to simplify trial of new entry-level activities (primarily parks and, to a lesser extent, fishing). Utilize focus group information to develop new products. Spoon feed them.

 **Tactic 2.** Develop a comprehensive advertising campaign to increase overall “share of voice;” establish Game & Parks and the opportunities we provide as a considered option for leisure time/money among the majority of Nebraskans.

Tactic 3. Promote select Recruitment, Development and Retention programs, which are specifically designed to facilitate trial opportunities.

Tactic 4. In developing new product offerings and packaging, focus on activities that have the potential to yield a profit, provide social benefits, or appeal to a broad base of prospective participants or advocates.

Strategy 2. Retain existing users (particularly the core hunter/angler group) through programs to generate reactivation plus trial of new activities.

Tactic 1. To increase retention of hunter and anglers, create new products and packages to make it simpler and

more convenient for people to continue or resume their participation. Spoon feed them. For example, promote New Angler Access program.

Tactic 2. Use increased share of voice as an opportunity to keep positive and even compelling images of fishing and hunting in front of the general public.

Tactic 3. Use cost-effective customer relationship management tactics like email marketing and Internet content plus code-driven e-commerce to communicate with and retain traditional core audience.

Strategy 3. Use marketing to influence user behavior.

Tactic 1. Use marketing tactics as a means of educating the public about the importance of ethical participation and compliance with statutes and regulations.

Tactic 2. Use public information tactics to increase awareness of less popular or crowded activities, thus allocating resources and spreading out demand more evenly.

Tactic 3. Use marketing tactics to communicate the benefits of hunting and fishing to the individual and society.

ISSUE 7 – Recognition

Too few Nebraskans, including government officials and employees, place enough importance on the value of our natural resources or the role our agency plays in conserving them.

Strategy 1. Educate Nebraskans about the values and benefits (economic, mental health, societal) of natural resources and how our work keeps these resources healthy and available.

Tactic 1. Follow Richard Louv’s advice: Beautiful images of wildlife and wild landscapes are universally appealing. Use Nebraska nature images as the centerpiece of our marketing materials to reinforce the idea that Nebraska is a place of great natural beauty and ecological diversity.

Tactic 2. Utilize existing economic information (and develop new, where feasible) to show the value of natural resource amenities compared to commodity use of natural resources (e.g. corn and cattle).

Tactic 3. Complement messages motivated by “consumerism” with messages motivated by “advocacy.” Focus on teaching and appealing to values. Careful leveraging of environmental values may be effective.

Strategy 2. Develop opportunities for individual citizens or corporate entities to give financial support or volunteer for specific agency interests/programs or political support to the extent that:

- Nebraskans place enough value on what we do that we can achieve sustainable funding mechanisms, such as a percentage of sales tax; and
- Within state government, natural resource issues take precedent over agricultural needs in at least some instances.

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Education

Enhancing conservation through collaboration, partnerships and expanded education opportunities.

“Purpose and Direction” - Conservation education is the cornerstone of public stewardship of our fish and wildlife resources and our agency’s Mission. The Commission must elevate the capability of all agency staff to participate in conservation education, RDR and outdoor skill activities by dedicating trained education and non-education staff to this effort. Moving forward, it is imperative we improve scope and evaluation of existing and new education programs, engaging all levels of outdoor participation. We must also improve promotion, development, delivery and participation in all education programs to targeted groups, diverse audiences and schools as well as improving volunteer recruitment, coordination, and training efforts.

education also lies in our ability to utilize trained and empowered professionals that understand various learning styles, understand effective management of volunteers, and develop programming that enables all participants to learn in a safe and effective manner. We must dedicate sufficient resources to offer the most efficient and focused educational programs to the public. Effective education programs should be aligned with the Association of Fish and Wildlife Agencies’ Core Concepts (see Appendix) of Conservation Education, representing the overall belief of all state fish and wildlife agencies. These concepts are supportive of the Commission’s overall Mission and should be integral in implementation of Nebraska’s Education Strategy.

Over the last several years, we have increased educational staff and implemented several new programs and projects. Strong partnerships have been important to these successes. Unfortunately, with the addition of these new programs (e.g., The 20 Year Recruitment, Development and Retention plan), existing programs have been difficult to maintain due to limited resources. Although we make efficient use of agency staff, volunteers, and educational partnerships, it is essential that we invest in more well trained, motivated education staff and volunteers to maximize our efforts in order to maintain quality long-term programming. Below is our goal and a list of prioritized issues to guide our educational efforts over the coming years.

Introduction

Public support for the agency is contingent on well informed individuals with an understanding of the importance of Nebraska’s natural resources, agency programs and its mission as well as continued public safety in outdoor recreational activities. Well informed individuals are more likely to positively influence agency policy and practice than those who are uninformed or misinformed. Education should result in informed constituents, conscious of the environmental challenges and the vast array of recreational opportunities. The scope of the agency’s educational activities include the development and coordination of all activities that advocate the sustained and appreciative use and management of Nebraska’s natural resources, with a focus on fish, wildlife, parks, and other related recreational uses.

The scope of education goes beyond providing information and acts as a catalyst for influencing attitudes and behaviors. Effective education lies not only in keeping active constituents informed, but also in winning support from the majority of the public that are unaware of natural resources, natural resource management and outdoor recreational issues. Effective

Goal

To foster a greater awareness, understanding, appreciation, and active stewardship of Nebraska’s natural resources, their management and outdoor recreational opportunities through education.

ISSUE 1

There is a need for greater emphasis on increasing participation and longevity of hunters, anglers, shooting sports enthusiasts and other outdoor recreation activities that support the agency Mission.

Strategy 1. Provide a continuum of programming that take participants from awareness through the independently active participation stage.

Tactic 1. Categorize and identify gaps in the

participation continuum and Recruitment, Development and Retention plan listing existing agency programs according to their level of engagement along the participation continuum. (2 days with key education coordinators use Conservation Education Core Concepts and scope and sequence as a guide, create a spreadsheet of program: audience, goal, objective, length, location)

 **Tactic 2.** Identify gaps in the hunter/angler shooting sports participation continuum of our education and Recruitment, Development and Retention efforts by Spring 2012 and recommend programs or connections to programs that fill identified gaps by Winter 2012, focusing on the expansion of current education programs and Recruitment, Development and Retention action plans when possible.

Tactic 3. Enhance agency focus and support for mandatory education programs such as Hunter/Bowhunter Education and Boater Education.

Strategy 2. Enhance community focused outreach efforts that provide for hunting, archery, shooting or aquatic outdoor skills based opportunities near populations.

Tactic 1. Develop an indoor/outdoor shooting park in Lincoln Nebraska (Boosalis Park) in partnership with the City of Lincoln focusing on recruitment and retention of hunting and shooting sports within families and youth.

Tactic 2. Expand shooting range/heritage park concept from Platte River State Park to one other State Park, focusing on family recruitment in hunting, shooting and aquatic skills within communities.

ISSUE 2

Agency educational programs are not always thoroughly evaluated.

Strategy 1. Improve evaluation of education programs based on their objectives.

Tactic 1. Investigate evaluation methods, available resources and funding opportunities utilizing University of Nebraska-Lincoln, agency partners, the Recruitment, Development and Retention Evaluation Committee or contract with a firm.

 **Tactic 2.** Implement program evaluations by agency staff, partner or contract firm and train agency education staff on effective evaluation methods and resources.

Tactic 3. Revise and develop programs based on evaluations and utilizing Best Practices.

ISSUE 3

Increased involvement and expectations of agency educators combined with lack of education personnel is creating a strain on human resources for new and on-going Nebraska Game and Parks Commission education programming.

Strategy 1. Increase education staff as outlined in Recruitment, Development and Retention plan and

Issue 3.

Tactic 1. Support current and implement new education programs and hire necessary staff to support and expand current and new efforts and partnerships.

Strategy 2. Identify and/or acquire trained and motivated education staff.

 **Tactic 1.** Designate one additional full-time employee per district to focus on key educational/outreach programs by 2013, either through re-dedication and training of current staff or new hires if possible.

ISSUE 4

Some agency staff are not engaged in outdoor activities and educational programming.

Strategy 1. Increase staff understanding of and participation in outdoor recreation activities.

Tactic 1. Implement Recruitment, Development and Retention Action Plan #10: Implementation of the Commission's Conservation Leadership Program to all staff. Provide training opportunities in outdoor skills, the North American Model of Conservation, resource management and ecological principles, and educational concepts. (implement 2 staff trainings a year and monthly cast and blast workshops).

Tactic 2. Encourage staff to participate in outdoor recreation activities through social support (intra and inter-divisional) and acknowledgement of achievements in the agency newsletter and at staff and division meetings.

Strategy 2. Increase staff understanding and involvement in leading outdoor education programming.

Tactic 1. Make educating the public a priority for agency personnel and encourage involvement in the agency's educational programs for capable, interested and enthusiastic staff. (e.g., revise position descriptions and provide formal recognition of staff education efforts).

Tactic 2. Provide opportunities for the education team to train staff in education programming such as Hunter Education, Boater Education, National Archery in the Schools Program, Shooting Sports Education/certification, Aquatic Education, Wildlife Education, etc. in conjunction with current educational programs such as camps and Outdoor Discovery Programs. (implement Conservation Education strategy and align agency programs with core concepts when approved).

ISSUE 5

Recruitment, management, training, and recognition of volunteers require updating to meet the needs of evolving programs.

Strategy 1. Create an agency-wide volunteer concept, and improve volunteer coordination efforts.

 **Tactic 1.** Appoint and convene an agency-wide committee on volunteerism, to discuss volunteer

coordination and needs, by December 2011.

Tactic 2. Develop and maintain a master list of partners/programs that defines exact role of their involvement in volunteer recruitment and training (compare volunteer recruitment and training of other organizations programs to our own.)

Strategy 2. Recruit, develop, and retain volunteers.

Tactic 1. Provide training for volunteer coordination staff focusing on volunteer management and coordination.

Tactic 2. Increase education volunteer base by 10 percent.

Tactic 3. Survey volunteers to determine needs and implement changes to enhance volunteer support by 2012.

Tactic 4. Enhance volunteer communication by creating a volunteer web page, forum, volunteer appreciation events (workdays, picnics, Commission functions).

Tactic 5. Enhance volunteer recognition by: hosting regional and statewide volunteer appreciation events; providing adequate funding for recognition awards; creation of a monthly volunteer recognition section in *NEBRASKAland*.

ISSUE 6

There is a need to foster a greater sense of responsibility, ethics, and stewardship for our natural resources and the outdoor recreational opportunities they provide.

Strategy 1. Influence public attitudes about the wise use and management of natural resources.

Tactic 1. Continue to implement Recruitment, Development and Retention Action Plans. Plans should be updated and changed as necessary to reflect changes in opportunities, research, and impacts.

Tactic 2. Develop new programs utilizing Best Practices, focusing on partnerships with non-traditional organizations such as churches, schools, and family groups.

ISSUE 7

There is a need to promote education and outreach programs, resources and opportunities.

Strategy 1. Develop and implement a marketing strategy for education and outreach programs, utilizing new, diverse and existing tools (social media), the Agency Marketing Plan and enhanced face-to-face networking and public interaction.

 **Tactic 1.** Develop and incorporate an Education Promotion Strategy into the Commission's overall Marketing Plan by December 2012.

ISSUE 8

The agency needs to increase educational program

delivery efficiency to all audiences.

Strategy 1. Identify and incorporate new delivery methods and/or materials into educational programs.

Tactic 1. Identify under-served audiences and establish relationship/partnership to develop opportunities to engage them.

Tactic 2. Support existing education programs by capitalizing on diverse technologies including online training, home study opportunities, and social networking.

Strategy 2. Enhance internal and external sharing of program development, offerings, results, and products.

Tactic 1. Develop opportunities for information sharing between Commission divisions by 2012 through education team meetings, staff newsletter and Commission reports.

Tactic 2. Utilize Public Information and Marketing teams to increase public awareness of education program opportunities.

Tactic 3. Create electronically shared information regarding education opportunities, materials, and resources available to internal staff and the public.

Tactic 4. Create Agency Policy on implementation of outdoor education programs especially hunting, shooting, boating and other skill based programs by 2012.

ISSUE 9

Educational materials/programs are not well represented in schools and current teaching curricula.

Strategy 1. Incorporate agency educational materials and programs into schools utilizing Association of Fish and Wildlife Agencies' Conservation Education Strategies.

Tactic 1. Develop a team to work directly with the Nebraska Department of Education to promote and develop outdoor skills, conservation education programming, and venues for mandatory education programs focusing on Physical Education, Health, Science, Social Studies, and Agricultural Education.

 **Tactic 2.** Provide effective and compelling natural resource and outdoor skills curriculum and materials, aligned to educational standards, for use by educators for in-school and after-school programs, reaching 30 percent of the state's schools by 2015.

Tactic 3. Develop and integrate quality curriculum-based outdoor and natural resource educational opportunities, to include field experiences at our agency facilities and public areas.

Tactic 4. Develop creative messaging and marketing tools promoting outdoor and natural resource education programming to school administrators.

Strategy 2. Create opportunities to enable educators to use outdoor activities in their curriculum.

Tactic 1. Provide and/or maintain hands-on experiences e.g. workshops, EXPO, Outdoor Discovery

Program, Master Naturalist and continuing education credits.
Tactic 2. Link to and populate the Nebraska Nature Network on-line clearing house of outdoor education and natural resource opportunities through the Commission's Education web page.

Tactic 3. Develop curriculum (aligned with appropriate teaching standards), equipment packages, highlight funding, and training for teachers/schools to use in their current curriculum.

Tactic 4. Allocate funding to support participation in outdoor and natural resource education programs for schools.

Strategy 3. Capitalize on existing agency and partnering properties to develop Outdoor Classroom venues that allow for graduated experiences.

Tactic 1. Develop or enhance agency facilities (similar to Boosalis city park or Platte River State Park) to accommodate programming that develops and fosters interest in all Commission-supported outdoor recreation activities and natural resource learning.

Tactic 2. Market existing agency venues that accommodate outdoor education experiences (e.g. field trips, Outdoor Discovery Programs, EXPO, Open Fields and Waters) at educator conferences, In-services and on the Commission website.

Tactic 3. Develop and promote advanced opportunities at the Nebraska Game and Parks Commission and partnering sites to students and educators for continued participation in Commission-supported activities.

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Appendix

Core Education Conservation Concepts

1. Wildlife is owned by the public and managed by state and federal agencies.
2. Private Landowners play an important role in conservation.
3. Education and responsible citizens are key to wildlife conservation.
4. What is good for wildlife is also good for people.
5. Conservation today ensures long term sustainability of wildlife for tomorrow.
6. Conserving biodiversity is important.
7. Wildlife management is rooted in science.
8. Human actions impact quality of life for wildlife and people.
9. Regulated hunting, shooting, fishing, boating and trapping provide the funding for conservation, enhance the quality of life for citizens and overall health of the environment.
10. Wildlife-based activities contribute billions of dollars to local economies.

Wildlife Damage Control

Human/wildlife interactions sometimes will be negative and will require abatement.

“Purpose and Direction” - This doctrine pertains to wildlife depredation and nuisance issues. As wildlife/human interactions become more frequent in occurrence, delivery of these programs will be liberalized to meet constituent needs, while continuing to protect the resource. Permits will continue to be stream-lined to make them more user-friendly and more efficiently delivered to permit applicants. Depredation and nuisance response will continue to be stepped up, increasing the amount of assistance delivered to landowners, in the form of materials to protect agricultural products as well as tools and materials to aid in deterring wildlife damage.

Introduction

The Wildlife Damage Control doctrine pertains to Wildlife Damage and Nuisance Management. This doctrine discusses the impacts of human/wildlife interactions and how they are addressed. The scope of this doctrine includes identification of problems and issues, how they are monitored and resolved and ways to improve the technical assistance process.

Damage control permits include the following: Aerial Coyote Control, Damage Control-Canada goose, Commercial Wildlife Damage Control, Nuisance Wildlife, Damage Control/Deer/Antelope /Turkey/Elk, Damage Control-Beaver/Muskrat.

Certain wildlife species (e.g., deer, turkey, mountain lion) are experiencing an increase in population size and distribution. This situation, coupled with habitat modification and human expansion, results in conflicts between humans and wildlife species. As wildlife populations increase, levels of damage are less tolerated and abatement measures are expected and sometimes demanded by landowners.

Continued training and education are needed by personnel who are tasked to implement abatement measures. Rather than reacting to depredation situations, personnel must be prepared to take proactive measures to lessen the impact of wildlife actions. Budget and personnel are often limiting factors in adequately

addressing damage complaints.

To lay the groundwork to develop an effective response program and to adequately address depredation issues, statutes and regulations must be revised or enacted to provide authority for actions taken. In addition, individual response plans are required to direct how these wildlife interactions are handled.

Depredation response must keep pace with wildlife population and distribution trends that are occurring in the state. Increasing wildlife populations can have a negative impact on both rural and urban residents. Abatement measures must keep pace with wildlife damage incidences to prevent undue political scrutiny of the depredation program.

Additional funds, personnel and materials will be utilized to address depredation problems across the state. Regulations have been liberalized to allow the Commission to respond to problems caused by additional species and will continue to be evaluated to maintain a proactive position. Response to human/wildlife problems, while becoming more liberal, will continue to consider the welfare of wildlife populations.

Goal

To reduce, to socially tolerable levels, damage caused by wildlife to urban, suburban and rural commodities and properties. Eliminate or reduce the threat to public safety, caused by wildlife populations.

ISSUE 1

Wildlife populations are increasing and expanding their distribution. Appropriate response actions are required.

Strategy 1. Develop response plans and make needed legislative and regulatory changes to address current and future threats from wildlife.

 **Tactic 1.** Staff will review and update existing depredation protocols and depredation season protocols.

Tactic 2. Statutes and regulations will be reviewed annually to determine needed changes.

Tactic 3. Furbearer Program Manager, with assistance from the Management Council, will develop bear and wolf response plans.

Tactic 4. Furbearer Program Manager, with assistance from the Management Council, will review

and update the current mountain lion response plan.

ISSUE 2

Employees require training, personnel and budget authority to effectively address depredation abatement.

Strategy 1. Provide the necessary resources for Commission employees to carry out depredation abatement functions.

 **Tactic 1.** Administrators and Program Managers will identify and authorize appropriate training for workshops and assign to personnel, approximately one to two sessions per year.

Tactic 2. Administrators and Program Managers will gather and disseminate technical information from the University of Nebraska-Lincoln Extension and other appropriate sources and distribute to Law Enforcement and Wildlife personnel, on an annual basis.

Tactic 3. Invite specialists, i.e. Mark Bruschino of the Wyoming Game and Fish Department, to conduct a public workshop addressing large carnivore depredation issues.

Strategy 2. Develop a monitoring system.

Tactic 1. Under the direction of the Management Council, a new reporting and permit issuance database will be developed by July 2012.

Tactic 2. Under the direction of the Management Council, a depredation database to consolidate and produce district and statewide reports will be developed by January 2011.

ISSUE 3

Wildlife populations are increasing. Wildlife causes damage to crops and property and landowners expect abatement actions.

Strategy 1. Initiate and carry out measures to mitigate negative impacts and address landowner complaints.

 **Tactic 1.** Wildlife District Managers/Biologists and Law Enforcement Officers will conduct field visits to verify damage and recommend abatement methods when deemed necessary.

Tactic 2. District Managers/Biologists will document field investigations and abatement actions taken in the Damage Control Permits database.

Strategy 2. Implement non-lethal control actions.

Tactic 1. Wildlife and Law Enforcement personnel will provide information to complainant regarding deterrents, repellents and other control measures.

 **Tactic 2.** Wildlife District Managers/Biologists and Law Enforcement Officers will provide funding, materials, technical assistance to complainant to construct enclosures, trap and relocate or other appropriate structures.

Strategy 3. Implement lethal control actions.

Tactic 1. Wildlife District Managers will issue kill permits to complainant, provided conditions are met, as

specified in Commission Regulations, Chapter 4, Section 1 (001.08B).

Tactic 2. Wildlife District Managers/Biologists and Law Enforcement Officers will carry out lethal control measures i.e. sharp shooting in certain situations when this appears to be the only viable option.

 **Tactic 3.** Staff will recommend hunting seasons and adjust management units to reduce local wildlife populations. Management Council will meet three times per year (March, July, and October).

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Captive and Propagated Wildlife

We are responsible and should be held accountable for captive wildlife.

“Purpose and Direction” - As

wildlife/human interactions become more frequent in occurrence, delivery of these programs will be liberalized to meet constituent needs, while continuing to protect the resource. Regulatory permits will continue to be stream-lined to make them more user-friendly and more efficiently delivered to permit applicants. The importance and attention given to this doctrine will likely increase in the future, as threats posed by invasive species, pathogens, and commercialization of fish and wildlife become more prevalent.

Introduction

The Nebraska Game and Parks Commission has authorized and permitted a large group of our constituents to participate in propagation keeping, and other commercial ventures involving wildlife. Some of these include taxidermists, Missouri River and inland commercial fishermen, controlled shooting area operators, captive wildlife holders, fur buyers, etc. Two examples of recent increases in the number of these permitted facilities would include 28 Controlled Shooting Areas in 1990 compared to 83 in 2011, 398 Captive Wildlife Permits in 1990 increased to 495 in 2011. As these constituents increase in number, so has the regulatory process and risk of disease threatening Nebraska’s fish and wildlife resources.

The agency has been involved with regulations addressing the captivity and propagation of wildlife since the early 1900’s, when the Nebraska Legislature gave specific authority to charge a \$5 per year fee to license private hatcheries as part of the regulatory process. In the early years much of the regulatory authority granted to the Commission addressed the over-harvest and commercial marketing of our valuable natural resources.

To regulate the exploitation of wildlife, a monitoring system is needed. A regulatory and permitting system has evolved to accomplish this. Permits are issued to regulate wildlife use in relation to captivity, husbandry, research and commercialization of wildlife and to address special concerns. Attention to these fields is needed to prevent exploitation of wildlife populations, both in natural and captive environments. Permits will

continue to be evaluated to incorporate a more efficient and effective system.

Humans must also be protected from negative impacts related to contact with wildlife species. Damage can occur to property or directly to humans by means of injury or disease. There are risks associated with contact with wildlife species and the public is largely unaware of these risks. Education is needed to inform the public of risks and the permitting process is a tool to relay information to the public.

The scope of this doctrine is to review our abilities, current guidelines, policies and man-power allocation to address the problems presented by the legal and illegal captivity and propagation of our natural resources, reflecting the tenets of the Public Trust Doctrine. The agency intends to limit/manage captivity and propagation with extreme care to avoid any harm to or misuse of those resources (e.g., introduction of diseases and invasive species, overharvest, and privatization).

Goal

To protect wildlife resources from human over-exploitation, while protecting humans from negative impacts of wildlife populations.

ISSUE 1

Permits pertaining to captivity and propagation of wildlife continue to increase with inadequate reviews of their overall impact. Procedures and protocols may be outdated and in need of revision.

Strategy 1: Evaluate existing permitting process to determine needed updates and oversight measures. Develop or refine year-end reporting requirements where needed.

Tactic 1. Identify permits currently being issued which fall into the range and scope of this doctrine. Review and modify application processes and develop protocols for applications, review and issuance.

 **Tactic 2.** Cross train office personnel to accept a variety of applications and issuing procedures.

Tactic 3. Designate staff to review and modify application processes and develop protocols for applications, issuance and submitted reports for complete and accurate information. Update procedures manuals.

Tactic 4. Develop or refine databases to track data and develop year-end reports.

 **Tactic 5.** Establish a review committee to assess and periodically review the resource, social impact and necessity of issuing permits. Review fee structures and associated regulations.

ISSUE 2

Requirements for permits are unclear for potential or new permit applicants.

Strategy 1. Improve the public's understanding of commercial permits requirements and processes by developing clear and concise user-guidance material.

 **Tactic 1.** Develop a captive wildlife guide for placement on the Commission website by July 2012.

Tactic 2. Develop a specific guide on the taking and possession of fish, mammals, amphibians and reptiles by January 2012.

ISSUE 3

The public is uninformed regarding the risks of keeping certain wildlife species in captivity.

Strategy 1. Reduce the risk of human health hazards associated with captive wildlife.

Tactic 1. Develop a wildlife health-risk guide for placement on the Commission website by December 2012.

Tactic 2. Develop wildlife health-risk guides for dissemination to the public and in permit application packets, by December 2012.

ISSUE 4

The keeping of some wildlife species in captivity could pose a risk to native wildlife species.

Strategy 1. Identify wildlife species that pose a risk to free-ranging wildlife.

 **Tactic 1.** Review and recommend changes to statutes and regulations to restrict the import and possession of wildlife species that pose a threat to free-ranging wildlife.

Tactic 2. Cooperate with National Disease Authority to assess the risk of tuberculosis and Chronic Wasting Disease transmission from captive cervids to livestock and free ranging wildlife and recommend appropriate restrictions.

Tactic 3. Evaluate the need for further restrictions on the possession of non-native or hybridized sheep and goats.

Tactic 4. Conduct periodic inspections of permit holder facilities by Fisheries, Wildlife or Law Enforcement staff.

Tactic 5. Establish methods and procedures for cooperative enforcement and resource management efforts to assure compliance.

ISSUE 5

Other regulatory agencies issue permits that impact wildlife issues.

Strategy 1. Improve interagency communications.

Tactic 1. Identify and review permits issued by other agencies and their impacts on Commission goals and objectives.

 **Tactic 2.** Establish and maintain an open and effective line of communication with outside permitting agencies in order to facilitate compliance with Commission goals and objectives.

Tactic 3. Forward guides and information to agencies and entities (University of Nebraska-Lincoln, Nebraska Department of Agriculture, United States Department of Agriculture Wildlife Services) regarding proper permitting procedures and requirements.

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Customer Service

Customer service is not a department, it's everyone's job.

“Purpose and Direction” - While much of the efforts of the agency are resource management focused, we understand that making those resources available for the public's enjoyment and meeting their needs is paramount to fulfilling the agency's mission. Ensuring that services provided are done in the most professional, efficient and expeditious manner is the major focus of this doctrine.

Introduction

The scope of this doctrine addresses the means utilized to provide effective customer service functions to the public. The desired result would be providing services in a manner that meets the needs of agency customers and results in a supportive constituency. Success will be a well-satisfied public and an enhanced agency image accomplished through effective, individualized contact.

Customer Service is of utmost importance for an effective agency. The Nebraska Game and Parks Commission must continue to improve efficiency of responses to daily phone, email and walk-in requests from constituents. Service can be improved by providing training to Commission employees and by listening to and involving constituents in the agency's decision making processes.

Goal

To provide services in a manner that meets the needs of agency customers and results in a supportive constituency.

ISSUE 1

Not all constituents trust, understand, or support agency programs and initiatives.

Strategy 1: Increase the level of trust, understanding and support of all our constituents for our agency.

Tactic 1. Continue to involve constituents in agency decision making processes.

Tactic 2. Ensure employees are trained in the importance of Customer Service.

Tactic 3. Explain/justify to the public programs,

policies, appropriations, and expenditures in an understandable and timely manner.

Tactic 4. Emphasize importance of providing reliable information.

Tactic 5. Emphasize importance of projecting a consistent professional image.

ISSUE 2

Customer's needs, desires, and opinions are not always actively sought or adequately known and are often conflicting.

Strategy 1: Periodically identify and utilize customer opinions, desires and preferences concerning the operation of our agency.

Tactic 1. Assess constituent opinions and desires by conducting surveys on a regular basis.

Tactic 2. Continue to provide an online forum for discussing issues among conflicting user groups.

Tactic 3. Increase constituent awareness of pending issues and the associated benefits and sacrifices that result from potential choices.

ISSUE 3

Application, permit issuing, and harvest reporting systems are not always customer friendly.

Strategy 1: Periodically review application, permitting and reporting systems to ensure they are user friendly.

Tactic 1: Continue to utilize modern electronic technology and equipment.

Tactic 2: Evaluate customer opinions, tolerance, and willingness to change.

Tactic 3: Develop customer friendly procedures and processes.

Tactic 4: Operate at least an 18-hour help desk for our on-line permit system.

Tactic 5: Staff help desk at our Customer Service Area with a PIO person to help with phone traffic.

ISSUE 4

Correct agency information or source of information is often not available in a timely manner.

Strategy 1: Streamline and improve processes of information transfer from agency to constituents.

Tactic 1: Modify agency operations to accommodate more timely production and distribution of informational materials (e.g., set regulations and seasons well in advance).

Tactic 2: Work with Governor's office, Attorney General's office, and other involved agencies to get

regulations approved in a timely fashion.

Tactic 3: Maintain consistency in application dates from year to year.

ISSUE 5

Staffing levels and operational hours are not always customer friendly.

Strategy 1: Implement changes in staffing numbers and work schedules and utilize technological advances to meet the needs of our customers.

Tactic 1: Provide extended service hours for peak seasonal activities.

Tactic 2: Reallocate staff to accommodate extended service hours.

 **Tactic 3:** Improve agency operations through utilization of modern technology.

Strategy 2: Implement changes in storage practices and technological advances to offset information storage problems.

Tactic 1: Dissolve the reprinting of brochures and materials.

Tactic 2: Maintain and update information on agency's web site.

Tactic 3: Continue to utilize modern technology to advertise, and distribute informational materials that are user friendly.

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Law Enforcement

This doctrine is multidimensional – ensuring income (permit requirements...), resource management rules compliance, and public safety – the rules and requirements only become real to the public with effective field enforcement approaches and education that reinforces a positive image of the Commission.

“Purpose and Direction” - The scope of the Law Enforcement Doctrine is primarily Wildlife, Fish, Parks and Boating Law Enforcement.

- This consists of all enforcement activities pertaining to hunting, fishing, trapping, boating, state parks and recreation areas and other laws for which the Game and Parks Commission has specific authority,
- Including enforcement of all laws on agency-owned or controlled areas; cooperative activities with other law enforcement agencies, and law enforcement-related emergency response duties.
- With the priority purposes of insuring permit and fee income to the agency and ensuring the effectiveness of fish/wildlife resource and parks management goals through law enforcement and effective public contact and education. Hiring and training on an ongoing basis should reflect the Commission’s need to have Law Enforcement personnel as front line ambassadors to the public.
- Staffing levels and demands for officer duties and response will require future efficiency enhancements through training, technology and equipment, cooperative efforts and prioritized responses to maintain appropriate levels.

controlled areas (traffic, drugs, criminal, etc.); cooperative activities with other law enforcement agencies, and law enforcement-related emergency response duties. The Goal of the Law Enforcement Doctrine is “*To seek public compliance with State statutes, State and Federal regulations and related agency directives*” with the priority purposes of ensuring permit and fee income to the agency and ensuring the effectiveness of fish/wildlife resource and parks management goals through law enforcement and related public contact and education.

The Law Enforcement Doctrine recognizes that other non-law enforcement duties and functions shall be embraced by Conservation Officers of the Law Enforcement Division. Such items include support for other priority agency programs (Open Fields and Waters; Recruitment/Development and Retention of hunters and anglers; issuing fur-buyer permits; wildlife rehabilitation liaison and permitting – among many other things).

These other duties are covered more extensively in the appropriate doctrines and programs specific to them elsewhere in the *Focus on the Future* plan, but are a large part of Conservation Officer activity.

The Conservation Officers of the Nebraska Game and Parks Commission have the specific responsibility of enforcing Chapter 37 of the Nebraska Revised State Statutes in all 93 counties consisting of 77,227 square miles or 1,643 square miles per officer when at full strength. The current staffing levels require that, Conservation Officers each cover an average of 1,980 square miles. Conservation Officers are also the primary officers responsible for law enforcement coverage of more than 300 state and federal public wildlife management and park areas consisting of more than 800,000 acres; 23,686 miles of rivers and streams; 439 public lakes which vary in size from small one-acre ponds to large reservoirs such as Lake McConaughy, which is more than 30,000 acres in size. There are also more than 400 miles of the Missouri River bordering Nebraska which Conservation Officers regularly patrol for boating, fishing and hunting enforcement as well as assisting with public safety duties such as recovery of drowning victims. Recently, additional private lands and waters have been opened under contract to public access for hunting and fishing through the Open Fields and Waters Program thereby increasing opportunities for the

Introduction

The scope of the Law Enforcement Doctrine is primarily Wildlife, Fish, Parks and Boating Law Enforcement. This consists of all enforcement activities pertaining to hunting, fishing, trapping, boating, state parks and recreation areas and other laws for which the Game and Parks Commission has specific authority, including enforcement of all laws on agency-owned or

public, but also increasing the high priority patrol area responsibilities for Conservation Officers since enhanced law enforcement presence is a component of the programs.

Equipment and technology acquisition, implementation and replacement have been priorities to increase officer effectiveness, efficiency and capabilities. The acquisition of smart phones with tethering capability to use as data modems for Internet access for laptop computers for all Conservation Officers and supervisory and administrative officers to enhance communications and information access capabilities is one example of this. These technological advancements allow Officers to directly access court information and permit data at anytime of the day or night without the need of a dispatcher or additional assistance from anywhere there is cellular telephone coverage.

The division also continues to enhance electronic information handling capabilities to address the expanding need for database management, and transfer and use of electronic information. Data pertaining to division operations from weekly time and mileage reports, project reports, arrest records and other statistics has been beneficial in the assessment of staff allocation and officer assignment priorities as well as other aspects of division operations, prioritization, effectiveness and budgeting.

There has been multiple demands on Conservation Officer work time with expanding outdoor recreation in some arenas; newer technologies that allow direct and immediate contact with officers; new priority non-law enforcement agency programs; recent additions of integrated responsibilities for some educational and natural resource conservation efforts. Additionally, officers regularly take part in a wide variety of public meetings in support of nearly all agency programs including those of cooperating organizations such as Pheasants Forever, Wild Turkey Federation and Ducks Unlimited to name just a few.

Officers have also been assigned time devoted to programs they present to various constituent groups on all aspects and priorities of the agency and to offer public hunting and fishing management duties such as the Open Fields and Waters Program.

The division continues to be very active in the Nebraska Law Enforcement Intelligence Network to enhance inter-agency law enforcement cooperation among all Nebraska law enforcement agencies. In addition, other specialized enforcement details in conjunction with bordering states such as joint Boating-Under-the-Influence details on the Missouri River have resulted in many good contacts and cases while saving manpower allocations for each participating agency through the cooperative efforts.

Enhanced interagency cooperation has been extended

to the local level as well. With a recent increase in the number of serious boating accidents and fatalities across the state, the division has provided training to other local law enforcement agencies and prosecutors on how to investigate and manage these tragic situations. As a result of these efforts a Boat Accident Response Team was implemented involving eight different law enforcement jurisdictions in the Lincoln to Omaha metro area in order to improve response to serious boat accidents through providing additional law enforcement officers across jurisdictional boundaries to assist with investigations, and to better serve the victims and their families.

Conservation Officers depend on the public to assist them in conservation law enforcement by providing timely information on violations. The Nebraska Wildlife Crimestoppers program has been, and continues to be, important in helping Conservation Officers receive violation information from the public. Nebraska Wildlife Crimestoppers reward funding has been increased through the efforts of the civilian Nebraska Wildlife Protectors Association board as the program has reached perpetual financial stability. This program will continually assess statutory penalties and fines to determine if adequate to serve as a deterrent.

Visitation to park and recreation areas has held strong even during some of the recent economic slumps as has Conservation Officer presence and contacts on these areas.

Park and recreation areas with lakes and reservoirs, and the Missouri River, have seen a continual increase in the number of vessels using them. The number of registered boats has steadily increased in Nebraska with the primary increase being personal watercraft. In addition to an increase in the overall number of registered boats and personal watercrafts, vessels are generally larger, faster and more diverse in types. Officers are seeing more large (24-plus foot), high speed party-type boats on the waters. Conservation Officers have had to become better equipped and trained to deal with these vessels as well as the responsibility of enforcing additional boating laws relating to them – sound and speed restrictions, conflicts with other water users, etc.

Conservation Officers spend considerable time and drive many miles in the fall during the major hunting seasons contacting hunters, answering landowner complaints and conducting investigations into violations. Officers need to be very knowledgeable of their assigned areas to provide adequate coverage and response to the public. Each year Conservation Officers respond to a high number of complaints from landowners and the public (more than 6,000 in 2009) regarding a wide variety of violations and problems ranging from hunting without permission to wounded game animals.

Of particular note, big game permit numbers have

steadily increased over the past twenty years to an all-time high of more than 180,000 permits issued in 2009. Officer presence in the field during these seasons is necessary to ensure compliance with game laws as well as response to related violation complaints. Some directed overtime has been utilized to address the increased demands during these and other high activity periods; and other staff-augmentation concepts are being assessed to determine their possible operational and cost benefits.

As we look to the future, the Law Enforcement Division will need to continually monitor division operations and training for compliance with the responsibilities set forth by state statutes and Commission regulations. An ongoing analysis of personnel allocation, priorities, duties and responsibilities will also be necessary to meet the changing agency priorities, the status of our wildlife and other natural resources, and societal and political expectations.

Officer hiring and training must keep pace with changes in responsibilities, challenges, and societal trends in order to ensure that officers are prepared to meet multiple demands while maintaining a positive public response. Future focuses will include ongoing review, assessment and implementation of appropriate advances that enhance hiring processes and training.

Goal

To seek willful public compliance with state statutes, state and federal regulations and related agency directives.

ISSUE 1

Company Personnel entrusted with Law Enforcement duties must represent the Commission on a variety of enforcement situations and public educational setting while striving to illicit a positive public response.

Strategy 1. Create and implement hiring, orientation and training regimens on an ongoing basis that conform to the desired model of Law Enforcement personnel performance.

 **Tactic 1.** Ensure that the hiring processes include selection criteria and testing that measure ability to perform with appropriate situational responses.

 **Tactic 2.** Ensure that training regimens include augmentation of appropriate communication and social skills.

Tactic 3. Develop ongoing scenario training exercises.

Tactic 4. Embrace cross training opportunities with fish, wildlife and communication divisions.

ISSUE 2 – Operations

Law Enforcement Division operations must continually strive to meet the requirements and responsibilities specifically set forth in State statutes and regulations promulgated by the Commission.

Strategy 1. Ensure that Division operational decisions comply with statutory and regulatory duties.

Tactic 1. Annually allocate available equipment, manpower and funding to meet the responsibilities set forth by law.

Tactic 2. Annually provide input to agency administration relating to the Division's operational ability to comply with new statutory and regulatory mandates.

Tactic 3. Complete statutorily mandated reports (ie. Traffic Stop Report, boat accident investigation report case and investigation reports, etc.) within required timeframes.

Strategy 2. Our ability to enforce statutes and regulations is predicated on maintaining good physical communications capabilities with the public, law enforcement agencies and other government entities.

Tactic 1. Enhance radio communications through continued support of and participation in the new state-wide public safety radio communications system (Nebraska Wireless Interoperable Network), by participating in planning, implementation and training of personnel as/when required.

Tactic 2. Provide other appropriate communications capabilities to all Conservation Officers (i.e., cell phones, e-mail, laptops, portable radios, etc.) within budgetary ability.

Strategy 3. Ancillary responsibilities performed by the Division must be assessed and prioritized to determine how they affect those set forth by State statutes and regulations.

Tactic 1. Statutory public safety responsibilities will be prioritized on an annual basis.

Tactic 2. New programs and responsibilities charged to the Law Enforcement Division will be reviewed as they are implemented to assess the impact on statutorily required duties.

Tactic 3. Lower priority responsibilities will be de-prioritized or eliminated as required to accomplish statutory responsibilities and new agency priorities assigned to the Division (nuisance animal response versus mountain lion response; general information programs versus Hunter/Angler Recruitment Development and Retention programs, etc.).

ISSUE 3 – Training

Law enforcement training must be provided to Officers to meet statutory mandates and required responsibilities of the Conservation Officer position.

Strategy 1. Identify and implement training courses

and programs that meet statutory and other required Conservation Officer responsibilities.

Tactic 1. Annually review statutory training mandates and initiate training as required (firearms training, defensive tactics training, emergency vehicle operation, domestic violence, etc.).

Tactic 2. Identify and implement other law enforcement training that supports agency priority programs (Open Fields and Waters, Recruitment Development and Retention, etc) in addition to law enforcement functions such as interpersonal communications and teaching skills.

Tactic 3. On a semi-annual basis, formulate a plan for the development, acquisition and distribution of identified training enhancements.

Tactic 4. Semi-annually, evaluate all training programs to ensure effectiveness, cost efficiency and meeting requirements set forth in state statutes.

Strategy 2. Identify and implement other training relating to Conservation Officer duties that enhance job effectiveness.

Tactic 1. Cultural awareness and linguistic training of Law Enforcement staff will be prioritized and implemented as possible.

Tactic 2. Information technology training will be provided to Law Enforcement staff as/when required.

Tactic 3. Specialized training will be provided as/when necessary to enhance the enforcement of laws and regulations relating to natural resources (invasive species training, wildlife diseases such as avian influenza, etc).

Tactic 4. Training related to enhanced law enforcement proficiencies will be evaluated and provided as/when appropriate (interview and interrogation, search and seizure, hunter incident investigation, boat accident investigation, etc.).

Strategy 3. Establish efficient and economical means of deploying identified training.

Tactic 1. Assess and implement alternatives to bi-annual Division training due to budgetary constraints (i.e. district-level or regional training with two or more districts in attendance).

Tactic 2. Training materials will be distributed in an electronic format whenever possible to reduce overall costs (email, CD / DVD distribution, flash drives, power point presentations, etc.).

Tactic 3. Video conferencing and conference calls will be utilized to reduce travel expenses when appropriate.

ISSUE 4 – Staffing and Effectiveness

Sufficient Law Enforcement Division staffing and effectiveness to address statutory mandates and agency mission responsibilities statewide must be provided to the highest degree feasible.

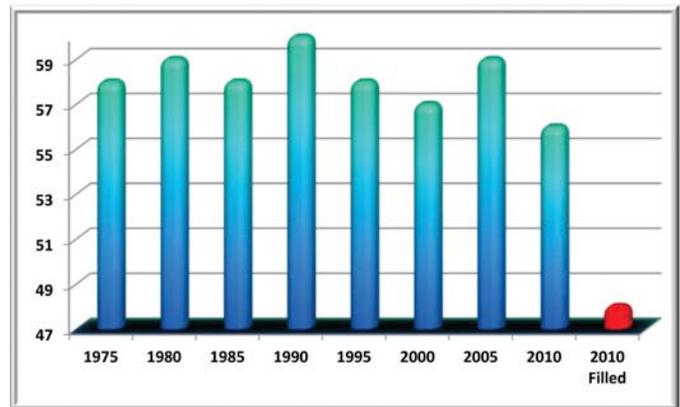


Figure 1. 1975 – 2010 Authorized Officer Compliment.

Year	# of Officers
1975	58
1980	59
1985	58
1990	60
1995	58
2000	57
2005	59
2010	56
2010 Filled	48

Strategy 1. Daily operations will be modified to address increasing duties with reduced staff.

Tactic 1. Officers will be deployed over larger geographic areas and primary areas of assignment will be adjusted to maximize effectiveness on an ongoing basis.

Tactic 2. Special enforcement operations will be utilized to address documented ongoing complaints or problems (i.e., Conservation Officers Protecting our Resources and Boating-Under-the-Influence details).

Tactic 3. An annual survey of district-specific staffing needs will be completed.

Tactic 4. Response to calls for service will be prioritized.

Tactic 5. Law enforcement patrols will be planned to insure maximum effectiveness by prioritizing problem or high activity areas.

Strategy 2. Staffing and organizational structure must be optimized to maximize Division effectiveness.

Tactic 1. Annually review potential implementation of additional specialized positions (Division Information Technology technician, district Outdoor Education Specialists, volunteers, temporary or contract employees, etc.), and implement as deemed beneficial and financially feasible.

Tactic 2. Officer duty stations and district alignments will be prioritized and adjusted based on current staffing levels, demographics, activity levels, calls for service, geographic considerations, etc.

Tactic 3. An effort will be made to maintain adequate wage and benefit differentials among Division staff ranks to ensure appropriate organizational structure and voluntary succession to supervisory and administrative vacancies.

Strategy 3. Hiring practices must be optimized to address current position responsibilities and Division operational viability.

Tactic 1. Hiring practices will be reviewed in

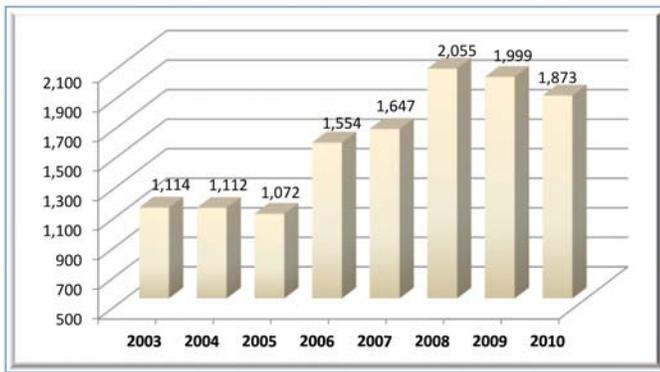


Figure 2. 2003 – 2009 Conservation Officer Programs by Year.

Programs by Year	
Year	Programs
2003	1,114
2004	1,112
2005	1,072
2006	1,554
2007	1,647
2008	2,055
2009	1,999
2010	1,873

relation to minority recruitment and an outreach plan implemented to encourage employment interest by ethnic groups such as advertising hiring assessment dates and application processes in ethnic language newspapers.

Tactic 2. Hiring components will be established that evaluate appropriate skill sets, education and job-specific physical abilities.

Tactic 3. Appropriate testing instruments will be identified and utilized prior to the testing process to ensure candidate suitability.

ISSUE 5 – Resource Allocation and Funding

Existing funding must be appropriately allocated to maximize operational effectiveness.

Strategy 1. Personal services funding constitutes the majority of budgetary expenditures and must be appropriately allocated.

Tactic 1. Review wage and benefit differences among officer ranks and strive to institute and maintain sufficient separation to provide incentive for officers to consider promotions.

Tactic 2. Review the costs/benefits of hiring additional staff versus paying overtime in order to address the increasing calls for service and other demands on Conservation Officer time.

Tactic 3. Adjust percentage of personal service funding as necessary to allow adequate operational and capital funding (no greater than 70–75 percent personal services of overall Division budget).

Strategy 2. Current equipment inventory and procurement will be reviewed for adequacy and appropriateness and a plan formulated for replacement or upgrade.

Tactic 1. Current equipment will be replaced on a schedule based on failure rates (i.e., portable computers on three year intervals), economic considerations (i.e., vehicle maintenance / repair costs), and officer safety (i.e., body armor on three year intervals).

Tactic 2. New equipment technology will be

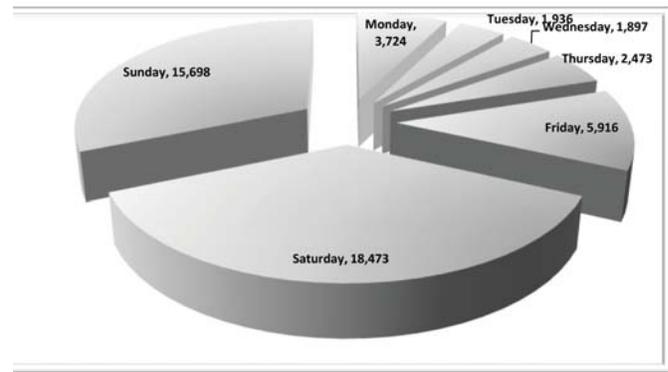


Figure 3. 1996 – 2010 Arrests by Day of the week.

1996 - 2010 Arrests by Day	
Day	Number
Monday	3,724
Tuesday	1,936
Wednesday	1,897
Thursday	2,473
Friday	5,916
Saturday	18,473
Sunday	15,698

assessed for possible utilization in Law Enforcement operations and implemented as appropriate and feasible (i.e., wireless communications and information technology capabilities, etc.).

Tactic 3. A process will be developed to solicit and consider officer input in determining acquisition of new, different or additional equipment items.

Tactic 4. An annual survey of Division equipment needs will be completed to insure appropriate allocation of available equipment budget.

Strategy 3. Review the availability of and seek expanded funding for law enforcement operations, equipment and projects.

Tactic 1. The availability of grants to help fund law enforcement operations and equipment will be researched annually and applied for as appropriate.

Tactic 2. Donations to help fund law enforcement operations and equipment will be sought annually.

Tactic 3. The coding of hours to federally funded programs will be optimized within grant guidelines to insure appropriate reimbursements.

ISSUE 6 – Cooperative Relations

Cooperative relations with other law enforcement agencies and government agencies need to be developed and enhanced in furtherance of common goals and objectives relating to public safety and compliance with state statutes.

Strategy 1. Joint projects with bordering states, federal agencies, other state and local agencies, and the public are necessary to accomplish mutual law enforcement goals and objectives.

Tactic 1. Covert operations involving other agencies will be utilized on a regular basis as warranted to maximize law enforcement effectiveness.

Tactic 2. Joint special details with Sheriffs' Departments, the Nebraska State Patrol, the U.S. Fish and Wildlife Service, and other law enforcement agencies will be utilized when appropriate to augment

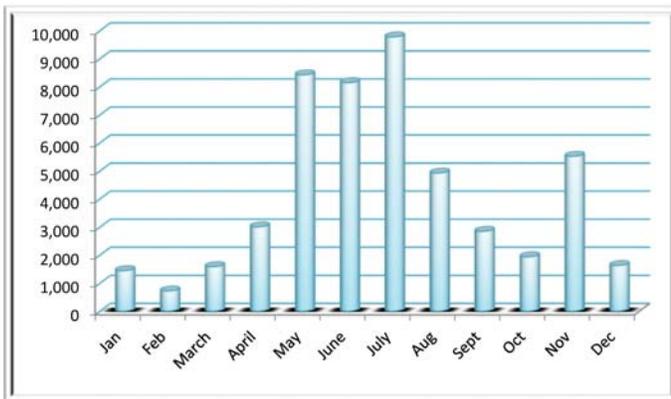


Figure 4. 1996 – 2010 Citations by Month.

1996 - 2010 Citations		
Years	Month	Citations
1996 - 2010	Jan	1,459
1996 - 2010	Feb	732
1996 - 2010	March	1,602
1996 - 2010	April	3,020
1996 - 2010	May	8,436
1996 - 2010	June	8,157
1996 - 2010	July	9,790
1996 - 2010	Aug	4,936
1996 - 2010	Sept	2,859
1996 - 2010	Oct	1,948
1996 - 2010	Nov	5,536
1996 - 2010	Dec	1,642

the limited manpower in all agencies.

Tactic 3. Multi-agency overt special operations will be utilized to address specific illegal activities and high activity areas such as night details utilizing State Patrol aircraft and pilots.

Tactic 4. The Division will allocate adequate resources on an ongoing basis to support the Nebraska Wildlife Crimestoppers program in cooperation with the Nebraska Wildlife Protectors Association, Nebraska State Patrol and the public, to include investigative and administrative support and the toll free hotline for reporting wildlife violations.

Strategy 2. Cooperative law enforcement mutual aid efforts are necessary to accomplish our public safety responsibilities.

Tactic 1. Backup and surveillance assistance from other law enforcement agencies as well as reciprocal backup and surveillance assistance to those agencies is essential and will be continued and enhanced as appropriate.

Tactic 2. Providing vehicle traffic control assistance to other agencies is required as a necessary mutual aid and Homeland Security function and will be provided as requested. Regaining full traffic law enforcement authority through legislation should be sought again to facilitate this responsibility.

Tactic 3. Attempt-to-locate-persons assistance and search and rescue operations will be prioritized.

Tactic 4. Law enforcement training will be exchanged with other agencies to insure training efficiency – such as firearms training provided to U.S. Fish and Wildlife Service personnel, defensive tactics to local police departments, defensive driving and high risk vehicle stops to Nebraska Law Enforcement Training Center students, all-terrain vehicle and Boating-Under-

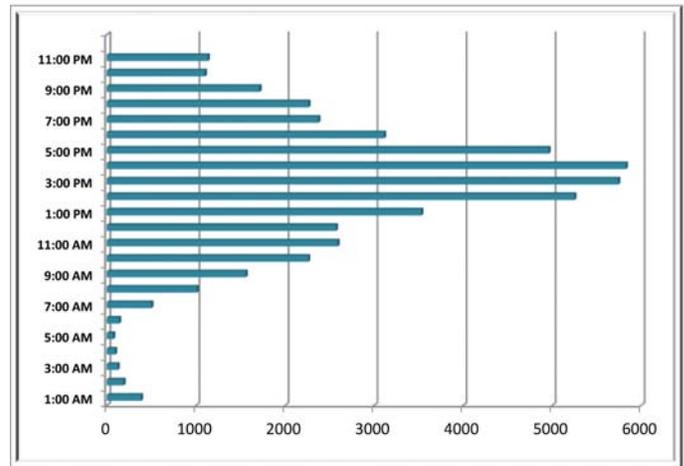


Figure 5. 1996 – 2010 Arrests by hour of the Day.

1996 - 2010 Arrests by Hour	
Hour	Number
Midnight	649
1:00 AM	385
2:00 AM	190
3:00 AM	122
4:00 AM	95
5:00 AM	74
6:00 AM	140
7:00 AM	502
8:00 AM	1012
9:00 AM	1561
10:00 AM	2262
11:00 AM	2593
Noon	2574
1:00 PM	3532
2:00 PM	5252
3:00 PM	5745
4:00 PM	5830
5:00 PM	4963
6:00 PM	3116
7:00 PM	2376
8:00 PM	2265
9:00 PM	1717
10:00 PM	1103
11:00 PM	1136

the-Influence training to local sheriffs’ departments; critical incident response training provided to us by the Nebraska State Patrol, breathalyzer training from Nebraska Law Enforcement Training Center, federal wildlife regulation training from U.S. Fish and Wildlife Service, etc.

Strategy 3. The Law Enforcement Division is required to provide support for Civil Defense, Homeland Security and other emergency operations as specified in the State Emergency Operations Plan.

Tactic 1. Emergency management coordination with other agencies will be established and assistance provided as required.

Tactic 2. Homeland Security mandates will be supported by the Law Enforcement Division.

Tactic 3. Mutual aid support plans and coordination for fires, tornadoes, floods and other disasters will be prioritized.

Strategy 4. Attendance at meetings and personal Interactions with other law enforcement agencies are critical to ensure optimal law enforcement response capabilities.

Tactic 1. Personal contacts and appearances by Conservation Officers at meetings with other law enforcement agencies will continue and be encouraged.

Tactic 2. Officers will be assigned to attend border-states meetings with other conservation enforcement agencies from surrounding states.

Tactic 3. The Division will participate in the Nebraska Law Enforcement Intelligence Network and will assign officers each year to participate in Nebraska Law Enforcement Intelligence Network functions.

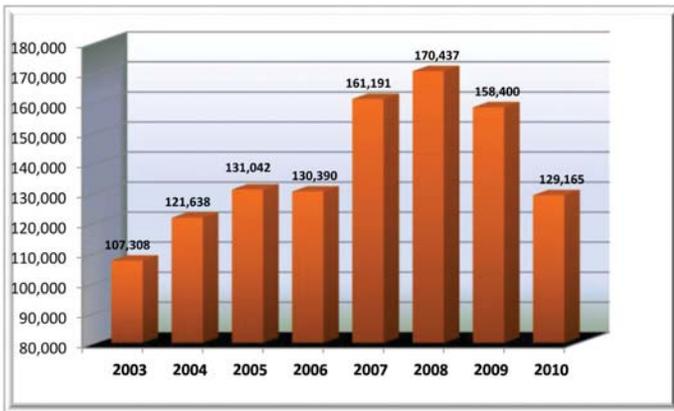


Figure 6. 2003 – 2010 Parks Contacts by Year.

Tactic 4. Conservation Officers will participate in and provide ride-alongs to other law enforcement agencies to enhance cooperative relations and information exchange.

ISSUE 7 – Information and Education

Effective law enforcement operations are predicated on the ability to provide information and education to the public and other cooperating agencies.

Strategy 1. Formulate and implement an educational and communication plan to address any needs in public awareness or understanding of natural resources and outdoor recreation statutes, regulations and other Commission directives.

Tactic 1. The Division will continue to support the simplification of statutes and regulations by providing ongoing direct input to the legislative and regulation process in order to enhance public understanding, acceptance and support of statutes, regulations and management goals and objectives.

Tactic 2. Direct support will be provided by the Division in the development of public informational guides to ensure clarity and content comprehension (annual hunt, fish, waterfowl, big game guides, etc.)

Tactic 3. Conservation Officers will be assigned to support and present a minimum of 1,000 total information and outreach programs annually to enhance willful compliance with outdoor recreation laws and the understanding of resource management programs including the history of hunting, fishing and trapping methods and traditions to instill an appreciation for fish and wildlife resources and the laws that help manage and protect them.

Tactic 4. Conservation Officers will be directed to establish and maintain rapport and communications with ethnic groups and provide information and education specific to their needs in appropriate forums such as ethnic language newspapers.

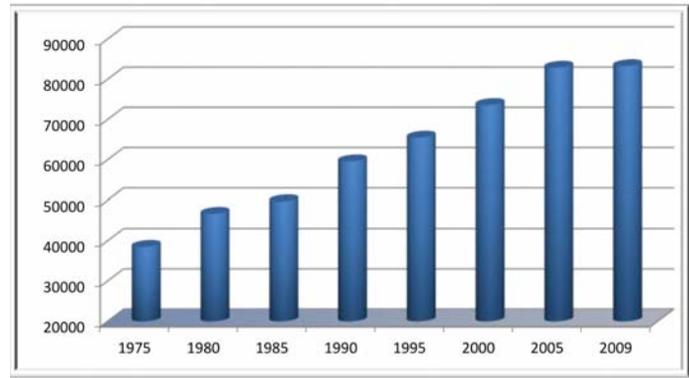


Figure 7. 1975 – 2009 Registered Boats.

Registered Boats	
1975	38517
1980	46718
1985	49736
1990	59631
1995	65527
2000	73638
2005	82918
2009	83300

Strategy 2. Media outlets are effective tools for the distribution of informational materials in order to reach a maximum number of our constituents to gain support for agency programs, statutes and regulations.

Tactic 1. The Division will participate in a minimum of 50 radio programs annually.

Tactic 2. The Division will submit a minimum of 100 news articles for publications in support of this strategy annually (*Nebraskaland Magazine*, press releases, local newspapers, etc.).

Tactic 3. The Division will utilize other media opportunities when feasible and beneficial (ride-alongs with media representatives, TV appearances, social media venues such as internet blogs, Facebook, Twitter, etc.).

Tactic 4. Conservation Officers will be directed to establish good working relationships with media representatives to ensure their support.

Strategy 3. Other law enforcement and governmental agencies are often called upon to provide information and support for Conservation Law Enforcement and they must have adequate knowledge to do so effectively.

Tactic 1. Game Law, Boating and Parks law training for other law enforcement agencies will be developed and provided to them by Conservation Officers as requested or as opportunities present themselves.

Tactic 2. Game Law, Boating and Parks law training and education will be presented to Basic Training classes at the Nebraska Law Enforcement Training Center annually.

Tactic 3. Conservation Law Enforcement annual training will be provided to the Nebraska Law Enforcement Intelligence Network Investigator Training Class.

ISSUE 8 – Future Issues

The assimilation and exchange of information and electronic data is necessary to ensure efficient and effective law enforcement operations.

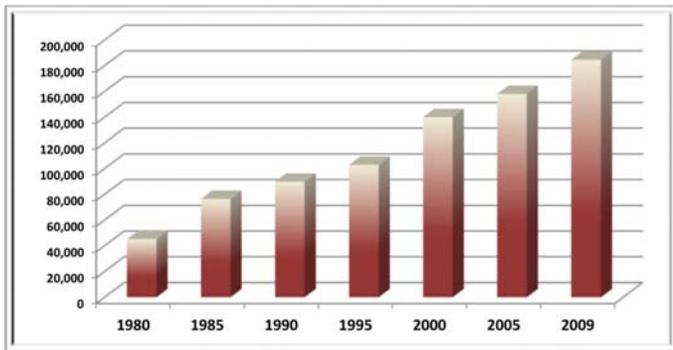


Figure 8. 1980 – 2009 Big Game Permits Sold.

Big Game Permits	
1980	45,148
1985	76,432
1990	89,743
1995	102,921
2000	140,070
2005	158,105
2009	184,530

Strategy 1. Law enforcement data and information handling guidelines will be reviewed and modified as necessary to insure they are appropriate to meet operational requirements.

Tactic 1. Current computerization of reporting and statistical functions will be reviewed and a plan formulated and implemented to address deficiencies and future needs such as electronic signatures.

Tactic 2. Data will be consolidated and compiled to be used as intelligence in Officer allocation, case investigation and reporting, file management, equipment replacement, etc.

Tactic 3. Policies and guidelines related to information and data generation, handling/routing, storage, retrieval, security and utilization will be formulated.

Tactic 4. All Officers will be given appropriate access to centralized data and information (agency permit system, arrest data, case report files, Telecheck data, etc.)

Strategy 2. Cooperative relationships with other agencies need to be reviewed and developed to insure appropriate data access and exchange in support of law enforcement operations.

Tactic 1. Computer communications with other law enforcement agencies are inadequate and will be improved (ie., secure e-mail, law enforcement web access, etc.) as appropriate and feasible.

Tactic 2. Access to hunting and fishing permit data via the web through the Nebraska Criminal Justice System will be explored and implemented if feasible and mutually beneficial.

Tactic 3. Nebraska Law Enforcement Information System access will be coordinated for all Conservation Officers.

Tactic 4. Data and resources will be exchanged with the Nebraska Law Enforcement Intelligence Network.

Strategy 3. Public surveys and public input are necessary to appropriately direct law enforcement operations.

Tactic 1. Survey instruments will be contracted or developed and utilized to determine public compliance with, and understanding of, natural resources and outdoor recreation statutes, regulations and agency directives as well as their support for the same.

Tactic 2. Surveys will be conducted to determine public perception of Commission law enforcement service and staffing levels.

Tactic 3. Results of public surveys will be reviewed and considered in formulation of operational guidelines and goals, and allocation of resources.

Strategy 4. Software applications, development and implementation will be optimized.

Tactic 1. Division software applications will be standardized to reduce overall costs and improve efficiencies.

Tactic 2. The development of necessary future software applications will be assessed to determine whether they should be developed in-house, contracted or purchased.

Tactic 3. Whenever possible specialized software applications will be deployed utilizing the web to reduce costs and improve efficiencies.

Review Team

(Drafted initial plan update)

Duane Arp
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Big Game

Despite some challenges, these are the good old days for Nebraska's big game hunters

“Purpose and Direction” - This program includes white-tailed and mule deer, pronghorn, elk, bighorn sheep, and wild turkey. White-tailed deer populations are higher than desired and should be reduced across much of their range. Mule deer will be managed for stable or increasing buck ages and populations in most units. Pronghorn populations have stabilized and will be allowed to increase while local depredation problems are addressed. Elk numbers will be allowed to continue to increase while maintaining our current bull age structure. Bighorn sheep now exist in four small sub-populations and remain limited by disease outbreaks. Turkeys continue to thrive with little active management.

Goal

To manage big game populations at levels consistent with social and biological carrying capacities, and provide opportunities for aesthetic enjoyment and hunting.

White-tailed Deer

White-tailed deer (*Odocoileus virginianus*) are native to Nebraska. By the early 1900's, white-tailed deer were nearly extirpated by market and subsistence hunting. In 1907 the Nebraska Legislature passed a law prohibiting the taking of deer. This law allowed deer populations to recover to the point that in 1945 a limited hunting season was held with hunters harvesting 361 deer, two white-tailed deer and 359 mule deer. Since that time, the white-tailed deer population has steadily increased, with over 77,000 white-tailed deer harvested in 2010.

Hunting seasons throughout the 1950s, 1960s and 1970s were generally conservative using a combination of buck only and either sex permits to manage the population. During the 1980s, the deer population had reached a point where a more liberal approach to antlerless (i.e., doe and fawn) harvest became necessary to achieve population goals. Liberal antlerless season formats including antlerless-only permits and bonus deer tags has become the norm since the 1990s. Unlike mule deer, the whitetail has shown the ability to adapt to land use changes and benefit from most agricultural practices, crop production or even urbanization. In addition, whitetails have expanded their range throughout the state due in part to the increase of trees on what was once a grassland landscape.

White-tailed deer have a relatively high average reproductive rate of almost two fawns per adult female with 67 percent of doe fawns conceiving and nearly 100 percent of the adult does conceiving. Predation on adult deer is low but coyotes and bobcats are considered the primary predators of fawns. Refugia in the forms of hunting leases, urban encroachment, municipality and private land holdings closed to hunting have added areas of protection for white-tailed deer not historically seen before. Because of the increase in available habitat and protection, high reproductive rate and low predation rate, whitetails have flourished across the state, especially in the east. Hunting remains the only reliable population

Introduction

Traditional big game animals in Nebraska are deer, pronghorn (antelope) and wild turkey. Mule deer, white-tailed deer, and wild turkey can be found statewide. Pronghorn inhabit the western grasslands. Elk and bighorn sheep only recently have become numerous enough in western Nebraska to warrant management considerations. The wandering nature of bear and moose create the possibility of rare occurrence in the state.

This strategic plan will cover the research, management, recreational use, and conservation of these species in an attempt to maximize benefits to the people of Nebraska. The inventory portion of this program will include population status and distribution, population health, recreational user surveys, and a compilation of species depredations. This program also will provide the following services related to big game species: recreational opportunities, technical assistance, management planning, educational assistance, professional and academic assistance, media assistance, and conservation of native wildlife. The big game program should yield the following benefits: satisfied hunters, satisfied viewers, satisfied landowners, and wildlife populations that are effectively managed.

control method, although disease (i.e., Epizootic Hemorrhagic Disease and Blue Tongue) may sporadically reduce local or regional numbers. Chronic Wasting Disease was discovered in white-tailed deer in Nebraska in 2002, but the long-term effects of this prion disease are unknown.

It will be a challenge for biologists in the future to develop season formats that will provide the necessary white-tailed deer management to meet the above goal for big game. Managers must determine the desired population level for each management unit, and then calculate an antlerless harvest that will achieve the population goal. A more conservative approach of doe harvest may be used in western Nebraska white-tailed deer habitats due to less productive and slower growing populations.

Objective 1.

Ensure that rural and suburban deer populations across the state are compatible with land uses, and that these levels are tolerated by most Nebraskans.

ISSUE 1

The past 6 years have seen an increase in white-tailed deer populations over much of its habitable range especially along many riparian corridors. There have also been land use changes contributing to deer problems suffered by rural landowners. Controlling deer populations within the tolerance levels of rural landowners remains a high priority of the deer program. To do this, white-tailed deer depredation problems must be addressed and recorded. Only when depredation problems have been properly documented can steps be taken to implement management practices that will offset problems.

Strategy 1. Survey landowners in each management unit to determine their tolerance to depredation problems.

Tactic 1. Big Game Program Manager will design and conduct survey every 5 years.

Tactic 2. Hold regional deer meetings annually to gather public input.

Strategy 2. Promptly respond to investigate deer depredation problems.

 **Tactic 1.** Management and Law Enforcement Divisions will collaborate to provide advice, materials and/or kill permits for handling depredation problems.

Tactic 2. Design harvest/permitting strategies to address regional depredation problems.

 **Tactic 3.** Seek partnership with extension specialists or USDA Wildlife Services for assistance with deer nuisance problems.

ISSUE 2

Increasing deer populations and increasing vehicle miles traveled are leading to increasing vehicle

collisions.

Strategy 1. Monitor deer vehicle collisions.

Tactic 1. Utilize the Nebraska Department of Roads Traffic Engineering Division's Deer Accident Report to track collision trends.

Objective 2.

Establish population trend and demographic objectives for each management unit.

ISSUE 1

Hunting remains an integral part of the deer management program, and is still the number one way to control deer populations. Control needs to be accomplished with our given hunter base. Antlerless deer harvest objectives need to be met if deer populations are to be controlled at specific levels.

Strategy 1. Develop buck and antlerless harvest objectives to satisfy the majority of constituents within each management unit.

Tactic 1. Complete the draft white-tailed deer management approach paper, including benchmark social and biological criteria needed to determine unit-level management goals.

 **Tactic 2.** Develop comprehensive approaches to deal with hunter access and refugia problems.

Objective 3.

Annually report on the status of deer populations.

ISSUE 1

Deer populations can be affected by hunting, predation, disease, parasites, food availability, weather and other environmental factors. Population trend indicators are important to managers when formulating recommendations and essential to the planning process. Analysis of these trend indicators will allow us to evaluate the success of our management program.

Strategy 1. Monitor the densities, trends, age structure and distribution of deer populations.

Tactic 1. Operate deer check stations during the regular firearm season, and operate telephone and web-based deer check for archery, muzzleloader and special seasons.

ISSUE 2

Cervid disease issues will continue impact deer management decisions.

Strategy 1. Collect and maintain biological information representative of herd health. Emphasize disease monitoring in association with captive cervid facilities.

Tactic 1. Monitor regional and national disease issues, mechanisms for spread and distribution patterns.

Tactic 2. Conduct appropriate disease surveillance.

Mule Deer

Mule deer (*Odocoileus hemionus*) is a native ungulate that was common throughout the state prior to the late 1800s. However, unregulated market and subsistence hunting, coupled with agricultural development, nearly extirpated the mule deer population of Nebraska. The Nebraska Game and Fish Commission's report for 1901-1902 estimated there were only 50 mule deer remaining in the state. Protection that was afforded by the 1907 Nebraska Legislature allowed for the eventual return of mule deer populations across most of the state.

The first modern regulated deer-hunting season was held in 1945 on the Bessey Division of the Nebraska National Forest, with annual seasons being initiated in 1949. A portion of the Panhandle was open to hunting in 1949, with a gradual expansion of additional units until the entire state was opened in 1961. Hunters harvested 359 mule deer during that first season held in 1945, and twenty years later in 1965, hunters harvested 10,000 mule deer during the regular firearm season.

Management units have been used to regulate firearm deer hunting, with little alteration in unit boundaries since 1961 and no change since 1974. Between 1960 and 1980, the annual mule deer buck harvest in Nebraska has averaged 5,500 animals. With increased mule deer populations and the authorization of additional permits, annual harvest increased to 7,500 mule deer bucks in the 1990s and over 9,000 mule bucks were harvested in 2010. Mule deer doe harvest fluctuated from 1,000 to 5,000 from the mid-1950s through the mid-1980s, and from 1988 to present mule doe harvest has been stabilized at 2,500-3,000 annually.

Mule deer habitat across Nebraska can loosely be considered as a gradient, with the most suitable habitats occurring in western Nebraska, the least favorable being found in eastern Nebraska, and transitional habitats arising in the central band of counties. The highest quality mule deer habitats are the relatively intact native grasslands and pine forests in Western Nebraska, plus some of the lightly agriculture diversified grasslands in central counties of the state. Intermediate habitat are fragmented grasslands interspersed with croplands and are characterized as the swath of east-central portion of the state. The least favorable mule deer habitat occurs in the agricultural compromised tallgrass prairie ecosystem, which is now mostly entirely converted to row-crops. Compromised poor quality habitat conditions are responsible for low relative abundance of mule deer in eastern Nebraska. Eastern Nebraska mule deer populations will likely remain low unless landscape conditions change.

Objective 1.

Maintain a population that supports a minimum harvest

of 7,500 mule deer bucks, with at least 75 percent of harvested bucks being age two or older.

ISSUE 1

Because of natural differences between mule and white-tailed deer, mule deer have suffered from habitat degradation and harvest strategies aimed at controlling white-tailed deer populations.

Strategy 1. Manage mule deer harvest separately from white-tailed deer harvest.

 **Tactic 1.** Complete the mule deer management approach paper, including any additional social and biological criteria necessary to guide unit-level management goals.

Objective 2.

Establish population trend and demographic objectives for each management unit.

ISSUE 1

Hunting remains an integral part of the deer management program, and remains the preferred way to control deer populations. Control needs to be accomplished with our hunter base. Antlered deer harvest objectives need to be met if deer populations are to be maintained at specific levels.

Strategy 1. Periodically review the permit allocation system so it is sensitive to maintaining mule deer. Develop buck and antlerless harvest objectives to satisfy the majority of constituents within each management unit.

Tactic 1. Complete the mule deer management approach paper, including preferred approaches to insure an appropriate level of buck and antlerless harvest.

Strategy 2. Promptly respond to investigate deer depredation problems.

 **Tactic 1.** Management and Law Enforcement Divisions will collaborate to provide advice, materials and/or kill permits for handling depredation problems.

Tactic 2. Design harvest/permitting strategies to address regional depredation problems.

Objective 3.

Annually report on the status of mule deer populations.

ISSUE 1

Deer populations can be affected by hunting, predation, disease, parasites, food availability, weather and other environmental factors. Population trend indicators are important to managers when formulating recommendations and are essential in the planning process. Analysis of these trend indicators will allow us to evaluate the success of our management program.

Strategy 1. Monitor the densities, trends, and distribution of deer populations.

Tactic 1. Operate deer check stations during the regular firearm season, and operate telephone and web-based deer check for archery, muzzleloader and special seasons.

Tactic 2. Annually conduct winter mule deer classification surveys.

Objective 4.

Annually report on mule deer health including disease and parasites.

ISSUE 1

Cervid disease issues have come to the forefront with Chronic Wasting Disease, brain worm, bovine tuberculosis and foreign deer lice being diagnosed in the Nebraska. Disease problems will continue be very important to the mule deer management program during this planning phase.

Strategy 1. Collect and maintain biological information representative of herd health. Emphasize disease monitoring in association with captive cervid facilities.

Tactic 1. Monitor regional and national disease issues, mechanisms for spread and distribution patterns.

Tactic 2. Conduct appropriate disease surveillance.

Tactic 3. Assign staff to participate in the Western Association of Fish and Wildlife Agencies' Mule Deer Working Group.

Bighorn Sheep

Prior to European settlement, bighorn sheep (*Ovis canadensis*) were once broadly distributed in most mountain ranges and badlands of western North America, including the escarpments of western Nebraska. Significant population declines occurred in the late 19th and early 20th century due to market hunting, diseases, and habitat degradation and fragmentation from development and agriculture. Prior to recent reintroductions, the last confirmed report of bighorn sheep in Nebraska occurred in the Wildcat Hills region in the early 1900s.

The Nebraska Game and Parks Commission initiated a bighorn sheep restoration program in the early 1980s. Input was solicited from wildlife biologists, landowners, conservation organizations, hunters, and concerned citizens. The goal of Nebraska's bighorn sheep program is to establish self-sustaining, free-ranging bighorn sheep populations in all areas of suitable historic habitat. To facilitate this goal, staff evaluated and prioritized all potential bighorn sheep habitat in Nebraska. As a result, successful reintroductions of Rocky Mountain bighorn sheep have taken place over the last two decades in the Pine Ridge and Wildcat Hills ecoregions. The Pine Ridge reintroductions took place at Fort Robinson State Park

(1981) and Bighorn Wildlife Management Area (2005). The Wildcat Hills reintroductions occurred at Cedar Canyon Wildlife Management Area (2001) and on private land near McGrew in Scotts Bluff County (2007).

Nebraska's first modern day bighorn sheep hunting season occurred in 1998, and one or two permits have been issued annually through 2008, except for the 2006 and 2007 seasons. A total of fifteen permits have been issued, and 15 full-curl rams have been harvested from the Pine Ridge herd.

Pasteurella pneumonia disease events have had significant impacts on bighorn sheep numbers in both herds. Presently, the Pine Ridge and Wildcat bighorn sheep herds total about 280 animals and have a strong component of younger animals. Reintroduced bighorns in the Pine Ridge and Wildcat Units were comprised of ewes, lambs, and younger age class rams.

Research is being conducted to attain information on population demographics, behavior, herd health and habitat. Ongoing education programs are aimed at informing the public and natural resource professionals on bighorn sheep ecology and management in Nebraska. A working document titled *Nebraska Bighorn Sheep Conservation Plan* is currently being developed. This plan will be reviewed and updated every 5 years or as research and information on bighorn sheep demographics are acquired.

Objective 1.

Bighorn sheep will be managed in two management units, The Pine Ridge Unit comprised of Dawes, Sioux, and Sheridan Counties, and the Wildcat Hills Unit comprised of Scotts Bluff, Morrill, and Banner Counties. Maintain a minimum population of 100 bighorn sheep in both units.

ISSUE 1

A cautious approach is needed when establishing population objectives for bighorns in their current and prospective range due to recurring disease problems associated with adult mortality and lamb recruitment.

Strategy 1. Determine densities, trends, and composition of populations.

Tactic 1. Implement studies on the ecology of bighorn sheep in the Pine Ridge and the Wildcat Hills to provide data needed for management decisions.

Tactic 2. Continue to hire temporary employees to monitor bighorn populations.

ISSUE 2

Public acceptance is important to success of the plan. We will share information and solicit support and ideas in implementation of this plan.

Strategy 1. Develop a public acceptance program for the establishment of bighorn sheep, including

encouragement of habitat improvement to entice sheep to occupy new areas.

Tactic 1. Work with area partners and concerned non-governmental organizations in a cooperative effort.

Objective 2.

Have a sustainable harvest of mature rams.

ISSUE 1

When population objectives are met, a surplus of rams is often available for harvest. Hunting is popular with sportsmen and provides necessary revenue for the program.

Strategy 1. Bighorn Sheep management will allow harvest of a portion of mature rams allowing for maximum population increase of herds within biological capacity.

Tactic 1. Use the bighorn sheep management approach paper to guide permit allocation.

Tactic 2. Develop and maintain hunting access on public and private land.

Objective 3.

Report annually on health status of bighorn populations and address disease issues affecting the populations.

ISSUE 1

Bighorn sheep can be affected by disease, predation, parasites, food availability, and weather and other environmental factors. Knowledge of herd health is of vital importance. Several species of lungworm can infect wild sheep and are responsible for stress and mortality. *Pasteurella pneumonia* disease events have had significant impacts on bighorn sheep numbers in both herds.

Strategy 1. Collect and maintain biological information representative of herd health.

Tactic 1. Check fecal samples for lungworm and examine samples from harvested animals for parasites and disease.

Tactic 2. Investigate population size and composition as indicators of health status. Respond quickly to reports of mortality suspected from pneumonia with collection of dead and sick animals, laboratory diagnosis and event reporting.

Strategy 2. Participate in efforts to learn about and address disease issues impacting bighorn sheep.

Tactic 1. Assign staff to participate in the Western Association of Fish and Wildlife Agency's Wild Sheep Working Group.

Tactic 2. Cooperate in multi-state efforts to implement new management practices to deal with disease issues.

Wild Turkey

The wild turkey (*Meleagris gallopavo*) has been successfully reestablished in the state after having been extirpated during settlement. Turkeys are of major importance for contributing to wildlife diversity, providing viewing pleasure, and hunting. The task of management is to maintain a viable turkey population in suitable habitat throughout the state and to meet hunting demand, along with other public interests.

Return of the wild turkey to Nebraska ranks as an outstanding success in wildlife management. Of the five recognized subspecies, two may have been native to Nebraska: the Eastern (*M. g. sylvestris*) and possibly Rio Grande (*M. g. intermedia*). By 1915, wild turkeys had been eliminated from the State by market and subsistence hunting.

The Game and Parks Commission initiated its turkey restoration program with the release of 28 Merriam's turkeys (*M. g. merriami*) in the Pine Ridge in 1959. In 1961 and 1962, 518 Rio Grande turkeys were released throughout the riparian-woodland habitat of central and north central Nebraska. The Merriam's releases met with immediate success, while the Rio Grande stockings resulted in temporary limited success and in most areas failed completely. In subsequent years, additional transplants and natural expansion increased the number of wild turkeys and their range until today they occupy nearly all Nebraska.

During the fall of 1962, the Pine Ridge population was estimated at 3,000 birds and a firearm season was held with 500 permits issued. This was followed in 1964 with the first tom-only spring turkey season.

Currently, both spring and fall seasons are held. The spring shotgun season (toms only) opens the middle of April and runs to the end of May. Archery hunting starts in late March and ends with the shotgun season. The spring season also includes youth hunts with archery starting the middle of March and running to the end of May, and the shotgun hunt starting the middle of April and running to the end of May. The fall shotgun and archery hunts (toms and hens) start September 15 and run to December 31.

Depredation by turkeys is normally not a problem. However, problems occasionally occur in isolated areas or through certain livestock or poultry feeding practices. Usually these problems occur during winter when birds are concentrated due to limited food. Normally the habitat provides sufficient natural food if turkeys are not encouraged to winter at farm/ranches. In the absence of proper management, flocks can build and concentrate in unacceptable numbers, particularly during prolonged harsh winters, and cause crop damage for landowners.

Objective 1.

Allow unlimited permits statewide whenever possible and maintain a minimum success rate of over 50 percent for spring hunting and over 60 percent for fall hunting to take full advantage of this growing resource.

ISSUE 1

Turkeys have expanded their range into most of the available habitat throughout the state. Their populations have doubled in the last five years.

Strategy 1. Provide maximum recreation possible within limits of the resource.

Tactic 1. Permits should be unlimited whenever possible and season length should be set to maximize opportunity.

Objective 2.

Report annually on the distribution, status, and health of turkey populations to provide guidelines for harvest management.

ISSUE 1

Turkey populations can be affected by hunting, disease, predation, weather and other environmental factors. Population trend indicators are important to managers for formulating recommendations and are essential to the planning process.

Strategy 1. Develop and evaluate survey techniques for health and status.

Tactic 1. Annually conduct rural mail carrier surveys to ascertain regional and statewide population trends.

Objective 3.

Minimize crop depredations so most landowners who have turkeys on their property consider damage negligible or tolerable.

ISSUE 1

Concentrations of turkeys can cause problems with crops in the field or in storage. Turkey depredations must be addressed and recorded.

Strategy 1. Respond promptly to complaints of depredation as well as unfavorable tolerance levels seen in surveys.

Tactic 1. Coordinate district-level response to depredation complaints among Wildlife and Law Enforcement staff.

Pronghorn

Historically large numbers of pronghorn (*Antilocapra americana*) ranged throughout most of Nebraska, however by 1900 they were found only in the northern panhandle. Overharvest by market hunters was but one of the reasons for the crash. Conversion of native prairies into agricultural fields consumed millions of acres of prime pronghorn habitat. Remaining grassland acres were fragmented by barbed and woven wire fences, highways, railroads and irrigation canals, which all proved to be formidable barriers to pronghorn movement. More recent threats to the viability of pronghorn populations include invasive plant species, and the advancement of pivot irrigation into the High Plains.

The taking of “antelope” was forbidden by legislature in 1907 and they remained a protected species until the first open season in 1953. Hunting seasons have since been held annually with exception of 1958, when unexplained population declines occurred over Nebraska, Colorado and Wyoming pronghorn ranges. While populations were slowly recovering in the panhandle, restoration efforts were being conducted in Cheyenne County and the Sandhills from 1958 to 1962 by relocating pronghorn. These restoration efforts have met with varying degrees of success.

For various reasons pronghorn populations began to decline from a 1974 statewide estimate of 10,000 animals. Major losses were attributed to a blizzard in early 1979, especially in the Sandhills where estimated losses ranged from 50 to 90 percent. Since then, the North Sioux area and southern Panhandle numbers have fluctuated and are currently below 1979 levels, whereas the Sandhills and central Panhandle numbers have remained low. Another restoration effort was conducted in southern Sheridan County with the release of 196 pronghorn in 1993. Recovery is still in progress, but it has been slow.

As with many big game species, habitat management is often the definitive factor in realizing population potential. However, in a state where the majority of the pronghorn population inhabits privately owned land, harvest management then becomes the most practical and effective method to ensure that pronghorn remain a viable component of Nebraska’s ecosystem.

Objective 1.

Attain a pre-season population of 8,000 pronghorn collectively within the surveyed management units.

ISSUE 1

Fawn production is often low and sometimes apparently below a level that will maintain the existing population. Landowners may not be receptive to

increased numbers, particularly if this involves transplant(s).

Strategy 1. Increase/maintain average annual populations of at least 3,000 in North Sioux, 2,500 in Box Butte, and 1,500 in Banner. The remainder would be in portions of the state not currently surveyed.

Tactic 1. Use the pronghorn management approach paper as a guide to determine unit-level permit allocations.

Tactic 2. Work with other government and non-government agencies to improve habitat for pronghorn.

Tactic 3. Use permit quotas by area to provide the maximum recreation possible within limits of the resource.

Objective 2.

Report annually on the status and health of populations to provide information on trends so proper harvest levels can be determined.

ISSUE 1

High vulnerability of pronghorns to hunting requires accurate population information in order to prevent over-harvest or under-utilization. Variable production and high mobility often make predictions difficult.

Strategy 1. Determine densities, trends, distribution and composition of populations.

Tactic 1. Conduct summer aerial and winter surveys.

Tactic 2. Record and file disease reports.

Tactic 3. Utilize mandatory check stations to obtain needed data and samples.

Objective 3.

Minimize crop depredation problems so that an average of no more than 10 complaints of documented damage is received annually.

ISSUE 1

Pronghorn commonly concentrate in sufficient numbers to cause actual or perceived problems with harvested and growing crops.

Strategy 1. Record and respond to contacts by affected landowners.

Tactic 1. Coordinate district-level response to depredation complaints among Wildlife and Law Enforcement staff.

Elk

Elk (*Cervus elaphus*) were historically distributed throughout the state of Nebraska. Early explorers recorded the presence elk from the Missouri River on the east to the Pine Ridge in the west. By 1880, wild free ranging elk had been extirpated from Nebraska. Overharvest and the conversion of large acreages to

agricultural production, especially in eastern Nebraska, altered the habitat and made suitable elk habitat a rare commodity. However, elk were not afforded legal protection until nearly 30 years after their elimination when in 1907 the legislature prohibited the taking of elk.

Sporadic sightings of elk were reported in the 1950s and 1960s. Wyoming transplanted elk near Lusk, Wyoming during the early 1960s and several years later tagged elk carcasses were found near Hay Springs (1967) and Harrison (1969). By the 1970s a resident elk herd became established in the Bordeaux Creek drainage near Chadron. Nebraska held its first modern-day elk hunt in 1986 in the Pine Ridge to alleviate landowner complaints.

Another herd became established in Boyd County and adjacent Gregory County, South Dakota, likely as a result of escapes from a captive herd near Pickstown, South Dakota. In 1996, a cooperative season was established with South Dakota whereby permittees are allowed to hunt in designated areas of both states. Wild free ranging elk likely wandered in from Colorado via the prairies and Platte River, and took residence in the loess hills of southeastern Lincoln County in the 1980s with the first season being held in 2002. Additional herds began to establish themselves on the North Platte River in the early 2000s with the first season being held in 2006. The most recent addition to Nebraska's elk population can be found in the northern Sandhills along the Niobrara River with herds likely originating from the Rosebud Sioux Indian Reservation in Todd County, South Dakota.

Elk populations have increased to about 2,000 animals as of 2010. With an annual growth rate of 15 to 20 percent, populations will likely double by 2014 as elk continue to expand into unoccupied habitat.

Elk are generally being met with acceptance by landowners with minimal depredation complaints and a high demand for general permits and landowner bull permits. However, elk can exceed the social carrying capacity of an inhabited area and hunting is the most effective method to retain elk populations within these limits.

Objective 1.

Establish population trend and demographic objectives for each management unit.

ISSUE 1

Elk can quickly exceed the social carrying capacity of the inhabited area. Hunting is the most effective method to control elk populations within these limits.

Strategy 1. Biologists will adjust permit allocations and target unit objectives to allow for a sustainable harvest of bull elk within the desired age structure.

Tactic 1. Use the elk management approach paper as

to guide unit-level permit allocation.

ISSUE 2

Elk populations expanding unevenly into unoccupied habitat have created problems for identification of landowner elk zones.

Strategy 1. Design an approach that equitably includes landowners into management unit elk zones.

Tactic 1. Utilize population surveys to create maps for elk zones in association with each management unit.

Objective 2.

Minimize crop depredations so most landowners who have elk on their property consider damage negligible or tolerable.

ISSUE 1

Landowner acceptance of elk is critical to the success of this plan. Responding to and solving elk depredation complaints are probably the most important aspects for public acceptance.

Strategy 1. Promptly respond to investigate elk depredation problems.

Tactic 1. Management and Law Enforcement Divisions will collaborate to provide advice, materials and/or kill permits for handling depredation problems.

Tactic 2. Design harvest/permitting strategies to address regional depredation problems.

Objective 3.

Report annually on the overall health of elk populations and prevent contamination of domestic livestock through removal of infected elk.

ISSUE 1

Landowners are concerned with potential spread of disease from elk to livestock.

Strategy 1. Collect and maintain biological information representative of herd health.

Tactic 1. Conduct appropriate disease surveillance.

Objective 4.

Annually report on the status of elk populations.

ISSUE 1

Elk populations can be affected by hunting, disease, parasites, food availability, weather and other environmental factors. Population trend indicators are important to managers for formulating recommendations, and are essential to the planning process. They permit us to determine where we have been and where we are with respect to elk populations, and will allow us to evaluate the success of our management program.

Strategy 1. Monitor the densities, trends, and distribution of elk populations.

Tactic 1. Develop surveys to assess population demographics. Develop a customized approach for each management unit.

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Small Game

Habitat improvement is an uphill battle, but some outstanding hunting still remains.

“Purpose and Direction” - This program includes ring-necked pheasant, northern bobwhite, sharp-tailed grouse, greater prairie-chicken, gray partridge, eastern cottontail, jackrabbit, fox squirrel, and gray squirrel. Populations of most of these species are declining or lower than desired for recreational use, although regional abundance may be high. The program will continue to monitor and evaluate population abundance, and conduct research aimed at improving management for upland species. Additionally, the program will promote effective habitat management techniques through comprehensive programs like Focus on Pheasants, streamline regulations, and encourage recruitment and retention of upland game hunters.

Introduction

The Small Game Program addresses the research, management, conservation, associated recreational use, and habitats of Nebraska’s small game species. These include ring-necked pheasant, northern bobwhite, sharp-tailed grouse, greater prairie-chicken, eastern cottontail, desert cottontail, fox squirrel, gray squirrel, and gray partridge. For the purposes of this plan, black-tailed jackrabbit and white-tailed jackrabbit are also included in this group, but are by regulation designated as “nongame species in need of conservation.” More specific information relating to each species is included under specific sub-headings below.

As a group, small game species generally have short life spans and high reproductive capacities. Because of these characteristics, sport hunting typically does not limit populations, thus hunters enjoy relatively liberal seasons for these species without affecting long-term population trends. Paradoxically, this tends to make these species more difficult to manage; because the one tool managers have complete control over (i.e., the regulation of hunting) has a very weak influence on population sizes or trends. Therefore, the management strategies outlined in this plan target factors that are the most

closely associated with population trends but are less amenable to control: the quantity and quality of small game habitat.

Habitat has long been the focus of the small game program in Nebraska and elsewhere. Not only does habitat directly limit the proportion of the landscape a particular species can utilize, but it also influences the effects of weather events and the vulnerability to predators, the other primary factors affecting small game numbers. However, the challenge of providing adequate habitat in a state where approximately 97percent of the land is privately owned can be daunting, because private land use is largely decided by potential economic return. Over time, the amount and quality of small game habitat has suffered under these economic pressures. As landowners have come under increasing pressure to improve the efficiency with which they produce commodities and compete in the global agricultural market, fewer are willing to use land less intensively solely for the benefit of wildlife without compensation for lost income. With the lone exception of the United States Department of Agriculture and its conservation programs, the Nebraska Game and Parks Commission and other government agencies have been unable to provide enough of this compensation to affect habitat conditions, and thus small game populations, at a statewide scale.

As a result, agency surveys indicate a long-term downward trend in most small game populations, hunter use days, and harvest. This trend also is evident in resident small game permit sales from 1980-2008 (Figure 1). Although the reversal of these trends is the ultimate goal of the agency, as outlined in the Recruitment, Development, and Retention Plan, we lack

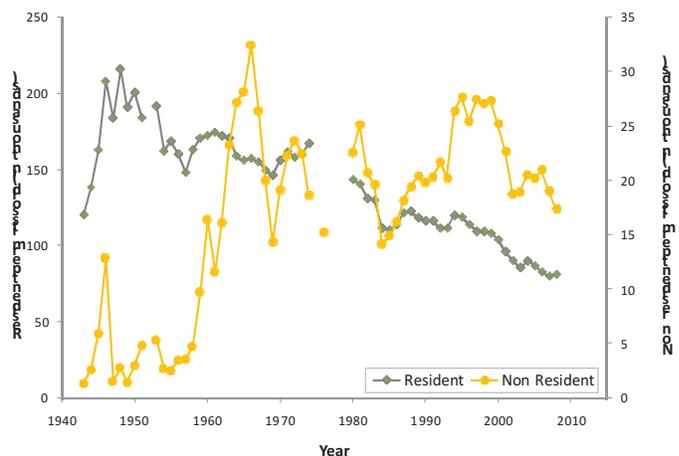


Figure 1. Number of resident and nonresident small game permits sold in Nebraska, 1943-2009.

adequate funding and manpower to accomplish this goal unilaterally. Therefore, rather than defining unrealistic population-related goals, this plan focuses on maximizing the efficiency with which we use our resources to improve habitat and recreational opportunities associated with small game, and to collect the information necessary to serve those goals. This approach, although different from the 1996 plan, whose unmet goal was to “achieve and maintain high populations of small game species...”, is in line with the 2004 plan.

Notwithstanding the different goals, many of the strategies in the 1996 and 2004 plans are part of this edition as well. Excellent progress continues to be made since the last planning period, and only a continuation of past work is needed. Foremost among these was the development of a private-land, hunter-access programs in 1997 (Conservation Reserve Program – Management Access Program) and in 2009 (Open Fields and Waters), which have grown from 20,000 enrolled acres in 1997 to around 180,000 total acres in 2009. Much effort has also been expended by the Commission at its partners to help develop or expand wildlife-friendly United States Department of Agriculture conservation programs and the resulting improvements in program implementation at the state and national levels have yielded benefits to small game. Other strategies, such as those calling for surveys of hunter and landowner opinions, received relatively little attention in the past and offer opportunities for improvement during the period covered under this plan. During the next five years, the Small Game Program will both promote these improvements and build on past successes, while seeking to efficiently deliver benefits to the greatest possible number of stakeholders.

Ring-necked Pheasant

The ring-necked pheasant (*Phasianus colchicus*) occurs throughout Nebraska and is undoubtedly our most popular upland game bird. The first reports of pheasant in Nebraska came in the years 1900-1904 when a few birds were shot along the Kansas border in the southeastern part of the state. The earliest releases by the Nebraska Game and Fish Commission, as the agency was then known, occurred in 1915. Early habitat conditions were nearly ideal, especially in the central portion of the state.

Pheasant populations peaked in the late 1940s but have been in a long-term downward decline since that time. The Soil Bank era of the 1950s and 1960s, and favorable weather conditions in the late 1970s and early 1980s had temporary positive impacts on pheasant numbers but the downward trend has continued. Currently, populations are largest in the northeast, southwest, and northeastern

Panhandle regions of the state.

The first regulated season for ring-necks in Nebraska occurred in 1927 in Wheeler County and parts of Sherman County; daily bag limit was five roosters. The ensuing hunting seasons from 1930-1941 allowed taking of one or two hens in the daily bag. Current regulations allow a three-rooster bag limit with a possession limit of 12 over a three-month season. Resident hunter-success data has been recorded in Nebraska since 1947. Since the late 1950s and early 1960s, a gradual downward trend has occurred in both hunter numbers and pheasant harvest (Figure 2).

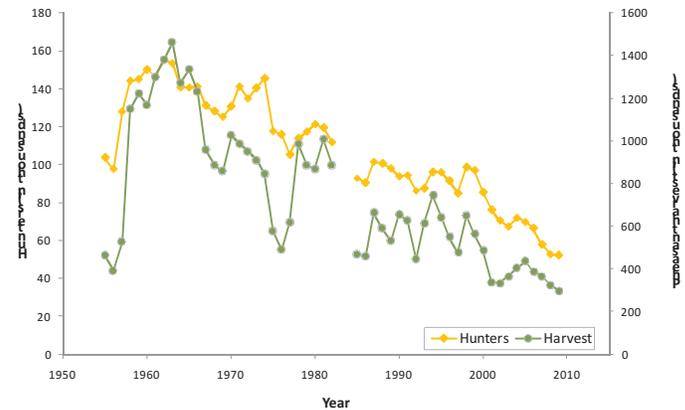


Figure 2. Resident pheasant hunters and harvest in Nebraska, 1955-2009.

The demand for pheasants by Nebraska hunters appears directly related to supply. As hunting success increases, hunter numbers also increase and vice versa. Non-consumptive values, while not specifically measured, are assumed to be important. The following surveys are currently used to monitor and obtain an index of the populations and harvest of the ring-necked pheasant in Nebraska:

1. April, July, and October rural mail carrier surveys.
2. Hunter success survey.

Northern Bobwhite

Before settlement of what is now Nebraska, the northern bobwhite (*Colinus virginianus*) was probably found only along wooded stream courses in relatively small numbers. However, as the prairies were broken out, a mixture of cropland, grassland, and woody cover was created which undoubtedly increased quail populations many-fold over historical levels. Records show that by 1901, bobwhite quail were distributed along river systems and wherever suitable habitat occurred throughout the state. By 1919, quail were especially numerous along the upper Elkhorn River and associated drainages.

Even though the bobwhite expanded its range with the expansion of agriculture, Nebraska lies in the northwest

corner of the bobwhite's range and the state's relatively harsh climate always has limited quail numbers.

Although severe winter conditions often cause major population fluctuations, the bobwhite still survives in Nebraska. Today quail are most abundant across the eastern third of the state and in some south-central counties, but southeastern Nebraska and the Republican River counties are the core of the bobwhite's range.

Nebraska's regulation of northern bobwhite harvest began in 1866. Concern over low quail populations prompted the closing of hunting, and complete protection occurred from 1917 to 1943. In 1944, a 10-day season was opened in Johnson, Nemaha, Pawnee, and Richardson counties with a bag and possession limit of five birds. The following year the season was extended to 15 days and Gage County was added to the open area.

In subsequent years, the area open to quail hunting grew until the entire state was open in 1962. Season lengths steadily increased, reaching the present 90-plus days in 1973. Within the 10-year period prior to the severe winter of 1983-84, hunter success surveys indicated 68,000 quail hunters were annually harvesting approximately 570,000 birds statewide (**Figure 3**). In 2008, 19,000 hunters harvested approximately 160,000 bobwhites. Populations had recovered to pre-1983 levels by 1990, but have declined sharply since.

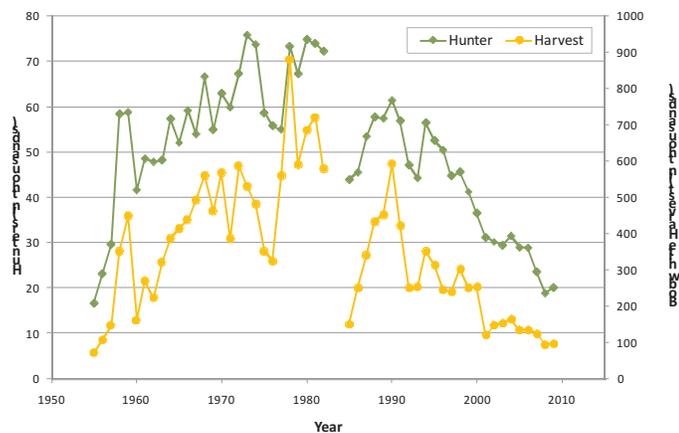


Figure 3. Resident northern bobwhite hunters and harvest in Nebraska, 1955-2009.

As is the case with some other Nebraska small game species, demand for the bobwhite appears directly related to supply. As hunting success increases, hunter numbers also increase. Non-consumptive interests are unknown, and no measurement criteria are currently available to determine the bobwhite's non-traditional value.

Four surveys are currently used to monitor and obtain an index of the populations and harvest of northern bobwhite quail in Nebraska:

1. April, July, October rural mail carrier
2. Whistle count
3. Hunter-cooperator wing survey
4. Hunter success survey

Prairie Grouse

Nebraska's prairie grouse (sharp-tailed grouse and greater prairie-chicken collectively) have established display grounds within the Sandhills for centuries and their booming calls and frantic courtship dances have been acted out for untold ages. Both sharptails and prairie-chickens once provided a ready source of food to early settlers and were shot and trapped for the commercial market as well. The eastern market's demands, efficient railway shipping, and unregulated exploitation of a seemingly unlimited resource all combined to dramatically reduce prairie grouse populations. The Nebraska Sandhills provided a temporary sanctuary for these birds, but even this is now potentially threatened by encroaching agriculture, resulting in a gradual reduction of suitable habitat.

Sharp-tailed grouse (*Tympanuchus phasianellus*) are native to Nebraska and once lived throughout the state. These grouse thrive where there is an abundance of grassland interspersed with brush, and are now largely confined to the 20,000 square-mile Sandhills region of north-central Nebraska. They are well adapted to cold and snow with a heavy undercoating of feathers on the body and legs, special nasal passages for warming cold air before it reaches the lungs, and "snowshoe" feet for walking on top of snow. Sharptails often feed on tree buds during the winter months, and it is not uncommon for them to burrow under the snow to escape cold temperatures or storms.

The greater prairie-chicken's (*Tympanuchus cupido*) original range once included only the tall grass prairies of eastern Nebraska. As these grasslands declined, the birds were resilient enough to follow the plow west and north into previously unsuitable areas. Their current continental range is quite limited, and Nebraska is one of the few states to offer a hunting season. Prairie-chicken expansion into unoccupied areas appears to be limited primarily by insufficient nesting cover or, to a lesser degree, a shortage of winter food. Its primary range is the southern and eastern borders of the Sandhills where grain crops are available, but the species has also become more abundant in the northern and western Sandhills over the past 20 years. In southeast Nebraska, several isolated flocks have always existed where small pockets of grasslands remain. These populations appear to have increased markedly since the Conservation Reserve Program's inception in 1985. However, despite Nebraska's population gains, continuing declines in other states may catalyze efforts to list this species as federally threatened or endangered, which may profoundly affect our prairie grouse management options in the future.

Nebraska's first open season on prairie grouse was set in 1950 when a three-day season (November 10-12), was opened in Brown, Cherry, Keya Paha and Rock counties

as well as part of Sheridan County. This included a daily bag and possession of 2 birds. In 1952, the season was moved to October 11-15, with the addition of Arthur, Box Butte, Dawes, Grant, Hooker, and McPherson counties with a daily bag of 3 birds. The season was closed entirely in 1954 due to a perception of low populations. By 1956, a larger portion of the Sandhills was open to shotgun hunting during October. Since then grouse numbers have fluctuated from year to year in response to weather and habitat, but they have always maintained huntable populations.

Hunting for prairie grouse is now permitted statewide. A 3.5-month season is open west of a line running south from the South Dakota border along U.S. Hwy 81 to the Kansas border, and a permit-only season was opened east of that line in 2000. Despite relatively stable grouse populations and hunter success, hunter numbers have dropped dramatically since 1985 (**Figure 4**). The reasons for this decline are unknown. The non-consumptive value of the prairie grouse is becoming increasingly important regarding the viewing of birds on spring display grounds.

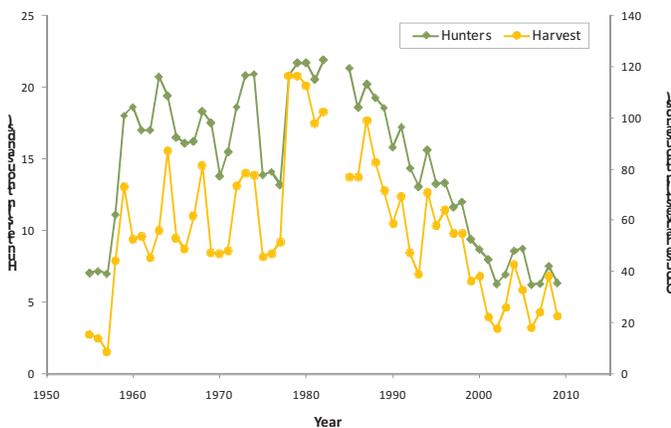


Figure 4. Resident prairie grouse hunters and harvest in Nebraska, 1955-2009.

The following surveys are currently used to monitor and obtain an index of the populations and harvest of Nebraska's prairie grouse:

1. Spring breeding ground survey
2. Opening weekend hunter check station
3. Hunter-cooperator wing survey
4. Hunter success survey

Gray Partridge

The gray or Hungarian partridge (*Perdix perdix*) is exotic to Nebraska. Several attempts have been made to introduce this species to the state through releases as far back as 1907 and as recently as 1993. Little information is available on the early releases as to how the birds were procured or released. Most releases were unsuccessful, meaning no birds were seen in the area following release. There are unconfirmed reports of birds in a very

restricted area of Box Butte County, apparently the result of a 1978 release of 85 birds acquired from North Dakota.

Confirmed reports of birds have been documented in the Atkinson area since the 1950s, but the origin of these birds is unknown. Currently gray partridge occur in most northeast counties and some central counties, probably the result of expansion of populations from South Dakota or Iowa rather than releases from Nebraska. Population densities are low, casual observations are infrequent, and annual harvest is low.

Although gray partridge have expanded their range in Nebraska since the early 1960s, there are many areas where they do not yet occur. These birds can reproduce rapidly under favorable conditions. Ideal climate includes cool, dry springs with no extended periods of drought, and ideal habitat consists of grassed strips, small cereal grain crop fields, numerous idle farmsteads, and low spreading shrub cover with no trees. Nebraska generally lacks these types of conditions, and will likely remain on the periphery of the gray partridge range.

A hunting season in Nebraska for gray partridge has been authorized since 1981. The daily bag limit is three birds with a possession limit of 12. The early trend was a steady increase in hunters and number of birds harvested (**Figure 5**). However, harvest declined markedly after 1990 and has remained at a low level.

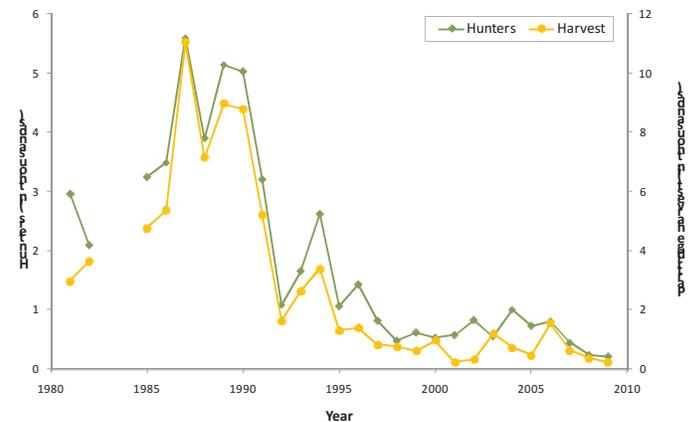


Figure 5. Resident gray partridge hunters and harvest in Nebraska, 1981-2009.

The following survey is now used to monitor and obtain an index of the populations and harvest of gray partridge in Nebraska:

1. Hunter success survey

Eastern Cottontail and Desert Cottontail

Nebraska is home to two species of cottontail rabbits. The eastern cottontail (*Sylvilagus floridanus*) is found statewide and is the most common, while the desert cottontail (*Sylvilagus auduboni*) may be found in

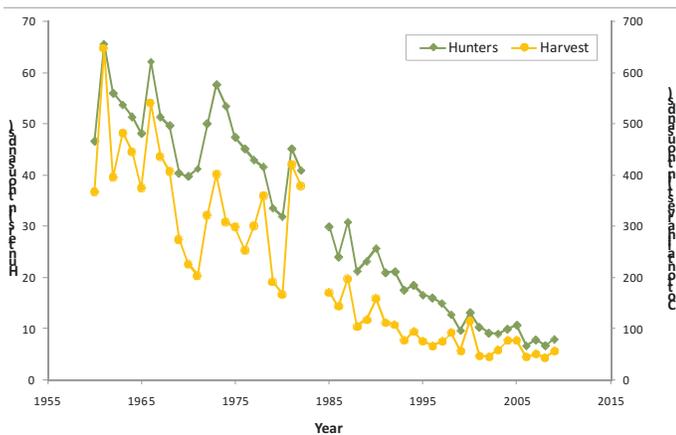


Figure 6. Resident cottontail hunters and harvest in Nebraska, 1960-2009.

extreme southwest Nebraska and over most of the Panhandle region. The habitat preference of the two species varies considerably. The eastern cottontail prefers heavy brush, edges of swamps, and stands of weeds. The desert cottontail prefers open grassland and sagebrush characteristic of the drier western regions of Nebraska. Cottontail populations fluctuate considerably and their survival and continued abundance can be attributed their high fecundity.

Historic survey data indicate rabbits once held a much greater significance as a small game species. In 1952, 84,005 hunters harvested 1,127,347 cottontails in Nebraska. In recent years the number of rabbit hunters has dropped nearly 90 percent from that figure, despite rabbit populations still being widespread and fairly common. Cottontails can therefore be considered an under-utilized resource (**Figure 6**).

The importance of cottontail hunting to Nebraska hunters appears to depend on the relative abundance of other small game species and on the abundance of cottontails themselves. It seems probable that more rabbits are taken incidentally to pheasant and quail than are taken during specific hunts for rabbit. Rabbit hunting specifically for rabbit occurs when seasons for other species are closed, particularly when good snow cover exists. Liberal bag and possession limits and open seasons extending to the end of February offer hunters late-winter opportunity to get back into the field.

The following surveys are currently used to monitor and obtain an index of the populations and harvest of cottontails in Nebraska:

1. April, July, October rural mail carrier survey
2. Northern bobwhite whistle count
3. Hunter success survey

Jackrabbit

Both the white-tailed jackrabbit (*Lepus townsendi*) and black-tailed jackrabbit (*Lepus californicus*) occur in Nebraska, although statewide numbers continue to be

very low. The species overlap in some parts of the state. The blacktail, which is more common, can be found statewide but is more exclusive to the cultivated lands in the southern part of the state. The white-tailed jackrabbit is more adapted to the open prairies and grasslands of northern and western Nebraska, specifically north of the Platte River.

Statewide rural mail carrier surveys continue to be our primary source of information related to jackrabbit numbers in Nebraska. These surveys show only about 20-25 percent of the peak numbers of the late 1960s. Current numbers indicate very little recreational opportunity.

Fox Squirrel and Gray Squirrel

Both fox squirrel (*Sciurus niger*) and gray squirrel (*Sciurus carolinensis*) are found in Nebraska. The fox squirrel is the most common and ranges across the state wherever timber occurs. It has adapted to city life, as well as farm woodlots and shelterbelts. The gray squirrel is found primarily only in woods that have a dense leaf canopy along the Missouri River bluffs in the southeastern portion of the state. Its restricted range and secretive habits make it the lesser known of the two species in the state.

The squirrel is a popular game species in the eastern part of the country. However, in Nebraska, it is an under-utilized resource even though squirrel hunting season is the first to open in the fall and offers liberal bag limits and season lengths. Declines in squirrel hunters mirror those for rabbit hunters, with current numbers down about 50 percent from those only 10 years ago (**Figure 7**). Woodland acreage continues to increase in Nebraska, so squirrel numbers are probably near historic highs. Therefore, declines in hunter numbers do not appear related to lower squirrel populations. Non-consumptive values are not currently measured but are assumed to be moderate to low, especially in urban areas where nuisance complaints related to damage of

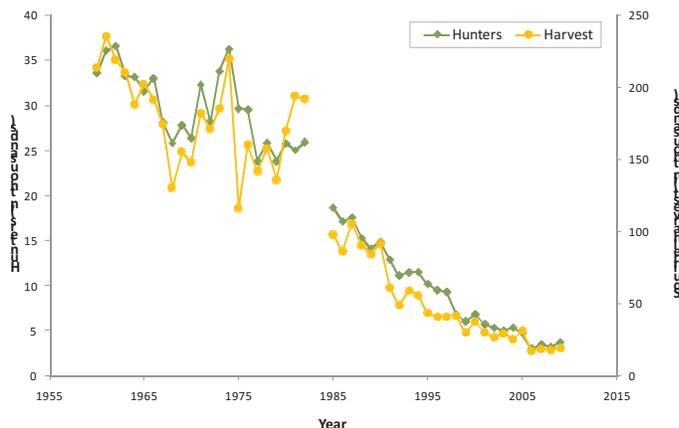


Figure 7. Resident squirrel hunters and harvest in Nebraska, 1960-2009.

landscaping have increased. The annual hunter success survey is currently the only survey conducted to monitor and obtain an index of squirrel populations and harvest.

Goal

To improve the quantity and quality of habitat for small game species on public and private lands in Nebraska. To increase recreational opportunities involving small game species in Nebraska. To gather and disseminate information fostering a greater understanding of factors affecting small game species and their ecological and recreational value in Nebraska.

Objective 1.

Increase the acres of habitat managed to benefit small game species, particularly pheasant and bobwhite, working toward a threshold of at least 15 percent suitable nesting cover in each county in the species primary range.

ISSUE 1

The quantity and quality of habitat for pheasant and bobwhites is insufficient to support recreational opportunities at historic levels.

Strategy 1. Promote farm program policies conducive to small game habitat enhancement.

 **Tactic 1.** Continue to foster partnerships with state and national farm-policy groups (e.g., Association of Fish and Wildlife Agencies, Western Association of Fish and Wildlife Agencies, Midwestern Association of Fish and Wildlife Agencies, etc.) working to maintain and improve farm programs beneficial to small game habitat.

Tactic 2. Advocate increasing Conservation Reserve Program enrollments to 1.7 million acres, and Wetlands Reserve Program acres to 100,000.

Strategy 2. Continue and expand capacity to deliver private lands programs.

Tactic 1. Continue to support the farm-bill biologist and coordinating wildlife biologist partnership programs, which offers assistance to land-owners interested in implementing conservation activities.

Tactic 2. Develop educational materials and events (e.g., workshops and trainings) through programs such as Focus on Pheasants, to improve public attitudes and abilities toward habitat restoration.

Tactic 3. Continue to support the development and implementation of the National Pheasant Management Plan in conjunction with the Midwest Pheasant Study Group.

 **Tactic 4.** Continue to support, develop, and improve the Focus on Pheasants program to support private lands management for upland game species.

Strategy 3. Promote land-management practices on other conservation lands.

Tactic 1. Develop and continue to foster cooperative wildlife management agreements on Natural Resources District lands, U.S. Corps of Engineers lands, U.S. Fish and Wildlife Service lands, Nebraska Game and Parks Commission Parks Division lands, public power districts, Bureau of Reclamation, and US Forest Service, The Nature Conservancy, and other conservation lands.

Strategy 4. Acquire lands in key areas through the Commission's Wildlife Habitat Acquisition Program, lease, or donation.

Tactic 1. Update Commission Habitat Acquisition Program plan, to ensure that small game habitat needs are considered.

Strategy 5. Promote farming and other methods that provide small game habitat.

Tactic 1. Create wheat management incentive program.

Tactic 2. Provide opportunities for landowners to better use fire and grazing to manage grasslands in a fashion conducive to grassland birds.

ISSUE 2

The quality of small game habitat has declined over time, with early successional habitats becoming less abundant due to lack of regular disturbance.

Strategy 1. Manage non-native, modified grasslands for small game.

 **Tactic 1.** Where provision of pheasant and/or quail habitat are priorities, disturb at least 50 percent of the non-native (i.e., non-prairie) grassland acres under federal and state management over the next five years.

Tactic 2. Promote mid-contract management methods for Conservation Reserve Program land under the Focus on Pheasants program to create suitable small-game habitat using research results and tours of demonstration areas.

Objective 2.

Maintain and disseminate accurate survey and demographic information regarding small game resources and the demands, perceptions, and satisfaction of its users.

ISSUE 1

Information regarding small game population levels, hunter participation, and hunter success needs to be collected and maintained every year to detect annual changes and monitor longer-term trends.

Strategy 1. Maintain and improve annual small-game population and harvest surveys, and disseminate the

results in a timely manner.

Tactic 1. Perform annual surveys, evaluate survey performance, and develop new survey and analysis methods for small game.

Tactic 2. Transmit survey results and analyses to Commission field offices, and other state agencies, for dissemination after survey completion.

 **Tactic 3.** Summarize survey results for public dissemination.

ISSUE 2

Information regarding hunter and landowner attitudes needs to be collected regularly (but not annually) to identify stakeholder needs and expectations.

Strategy 1. Survey stakeholders (hunters, landowners) at regular intervals to reveal potential issues and track changes through time.

Tactic 1. Develop a survey to quantify small-game hunter perceptions and satisfaction, and conduct such a survey every five years to track changes in these attributes.

Tactic 2. Periodically survey landowner perceptions regarding habitat-related issues and conflicts with hunters, and use the results to guide development of private lands programs to resolve hunter-landowner conflicts.

ISSUE 3

Information regarding specific aspects small game bird and mammal ecology are periodically needed to assess the efficacy of current management strategies and to guide necessary changes.

Strategy 1. Obtain information useful for making management decisions for small-game species.

Tactic 1. Identify high priority information needs regarding responses of small game species to factors important to population management (harvest regulations, habitat management, weather, predator behavior and abundance, and climate change.).

Tactic 2. Develop research projects to meet information needs, and disseminate results to decision-makers and the public, through news releases, reports, and peer-reviewed publications.

ISSUE 4

Stakeholders lack understanding of changes in landscapes through time and their implications for needed habitat changes for pheasant and quail habitat.

Strategy 1. Develop materials to demonstrate changes throughout Nebraska's landscapes.

Tactic 1. Develop a short presentation and supporting materials suitable for publication on the internet.

Tactic 2. Incorporate information in presentations on small-game management.

Tactic 3. Assess landscape-level effects on efficacy of site-level habitat condition and management.

Objective 3.

Increase small game users above present levels within the next five years.

ISSUE 1

Long-term trends indicate a decline in small-game hunter numbers; both hunter retention and recruitment are apparently problems.

Strategy 1. Support Commission efforts to improve hunter recruitment and retention as outlined in the Recruitment, Development, and Retention plan.

 **Tactic 1.** Collect information to identify barriers to small-game hunter recruitment and retention, and use the results to develop programs and regulations promoting the increase of small game hunter numbers.

Tactic 2. Continue and improve Conservation Reserve Program – Management Access Program, Open Fields and Waters program, and other recreational access programs on private lands.

Strategy 2. Promote hunting opportunities associated with underutilized species (e.g., cottontails, squirrels, prairie grouse) to both residents and nonresidents.

Tactic 1. Assist Information and Education Division personnel in their development of specific promotional plans to highlight harvest opportunities for under-utilized species.

Tactic 2. Facilitate local, community-lead hunting events and activities.

Tactic 3. Support the United State's Forest Service in implementing their management plan to enhance wildlife habitat and hunting opportunities on Nebraska's 351,000 acres of national forest and grassland, pursuant to Presidential Executive Order Facilitation of Hunting Heritage and Wildlife Conservation (August 17 2007).

Strategy 3. Simplify existing game laws and regulations.

Tactic 1. Review existing regulations and seek input from stakeholders on current regulations to assist with revisions.

Tactic 2. Investigate further price reduction in non-resident youth permits, and increase promotion.

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Migratory Game Birds

Nebraska's habitats are critical for maintaining healthy Central Flyway populations.

“Purpose and Direction” - This program includes ducks, geese, coots, doves, crows, rails, snipe and woodcock, and includes two non-hunted species, trumpeter swan and sandhill cranes. An important facet of the program focuses on the various wetland and upland habitats these species depend, both in Nebraska and across the continent. Another emphasis of the program is providing and sustaining hunting opportunity, as well as providing non-consumptive uses (i.e., viewing sandhill cranes). Balancing and sustaining these three facets (populations, habitat and user groups) given natural, fluctuating conditions is the foundation and ultimate focus of program.

Introduction

The scope of the Migratory Game Bird Program encompasses the conservation, management and research of migratory game birds that occur in Nebraska. Hunted species include ducks, mergansers, geese, coot, doves, crows, rails, snipe and woodcock. Although Nebraska statute proclaims trumpeter and other swans and sandhill cranes as game birds, they are not hunted in Nebraska, but are included in the Migratory Game Bird program. Due to their abundance and socio-economic importance, the primary focus of the Migratory Game Bird program is on waterfowl. However, the needs of other migratory game birds also are considered and many of the same conservation and management practices that benefit waterfowl also benefit other migratory bird species.

A vital linkage to managing and conserving these birds is the protection, restoration, conservation and management of the diverse habitats that they require to meet life-cycle needs. Thus, the scope of the Migratory Game Bird program must extend into the various wetland and upland habitats needed by waterfowl and the other species. Habitats can be classified in a variety of ways, and for this planning process, habitats are classified as either breeding, migration and/or wintering. This classification serves to identify the life-cycle of migratory birds and accounts for all seasons of the year

in which various species depend on Nebraska habitats.

As the name implies, migratory game birds use habitats across multiple national and international borders. Citizens from other nations and within the United States also desire similar recreational opportunities as those in Nebraska. Therefore, coordination with other national and international conservation agencies is required but the focus of the Migratory Game Bird program is on Nebraska resources and its citizens. Indeed, to ensure that all users have sufficient opportunities, population and management goals and objectives are established in an international setting. Again, as in Nebraska, the scope of the Migratory Game Bird program must extend into national and international habitats vital to migratory birds.

The Migratory Game Bird Program recognizes that generally habitat issues are considerably more important than the use (i.e., hunting, viewing) issues addressed by this program. For example, duck hunting seasons do not affect duck populations as much as habitat conditions. However, waterfowl, habitat and waterfowl hunting are inextricably linked as waterfowl hunters purchase migratory bird stamps, hunting permits and equipment, which provide support and many of the funds used for habitat conservation. Additionally, population goals and objectives for many species are based on levels to meet hunter demands and satisfaction for certain regulatory options (e.g., season lengths and bag limits).

Habitat Accounts

As mentioned previously, habitats important for migratory game birds are classified as either breeding, migration or wintering. There are numerous references that describe the various regions or habitats in more detail and the more pertinent are listed. Additionally, most of these references may document the loss of wetlands and uplands and the various threats that may cause future destruction or degradation. Thus, for this plan, only a cursory description is provided.

Breeding

The Sandhills represent the most important breeding area for ducks, geese and swans in Nebraska and is considered the best duck production area south of the Prairie Pothole region (Bellrose 1980). Located in north-central Nebraska, this area contains over 1 million wetland acres within 20,000-square miles (LaGrange 2005). The Sandhills are duly named as they represent the largest stabilized sand dune field in the Western

Hemisphere (Batt 1996). The Sandhills are located in the mixed-grass prairie region and wetlands are intermixed with lakes and marshes.

Located just south of the Sandhills, another similar area for breeding waterfowl is the Loup/Platte River Sandhills wetland complex. Considerably smaller in size than the Sandhills region, the Loup/Platte River Sandhills complex is located near the confluence of the Loup and Platte rivers in central Nebraska (LaGrange 2005). This area has numerous small (less than 5 acres) wetlands. Little information on waterfowl use and basic ecology and hydrology of this area is available.

Historically, the Rainwater Basin wetland complex also provided breeding habitat for waterfowl (e.g., Evans and Wolfe 1967). However, changes in land-use practices have dramatically reduced the number of breeding ducks in the area. Some waterfowl are still produced during extremely wet years.

Other wetland areas also probably produce ducks during good habitat conditions, and numerous areas also provide habitat for nesting geese and ducks. Trees along rivers, streams and creeks provide habitat for cavity-nesting ducks.

Some initial sources for more detailed description of the Sandhills and the Loup/Platte River Sandhills complex are McCarraher (1977), Novacek (1989), Bleed and Flowerday (1989) and LaGrange (2005).

Migration

Nebraska is probably more recognized for its migratory habitats than any other aspect. There are numerous wetland complexes and habitats that provide migrational staging areas in both fall and spring and are found across the state.

The most recognized area is the Rainwater Basin area of south-central Nebraska. The wetlands are wind-formed and the clay-bottoms catch and hold surface water runoff. Size of wetlands range from less than an acre to over 1,000 acres and do not have a natural outlet for water. Historically there were nearly 4,000 major wetlands totaling approximately 100,000 acres in the early 1900s (LaGrange 2005). Conversion of uplands to agricultural production lead to the drainage of over 90 percent of the wetlands and loss of about 80 percent of wetland acres. Modification and alterations of hydrology have occurred in the remaining basins.

Although separated, the Southwest and Central Table playas are very similar in nature. These areas are characterized by small circular wetlands reminiscent of the playa lake region of west Texas. The Southwest Playas are primarily located Perkins, Keith and Deuel counties, while the Central Table playas are located primarily in Custer, Dawson and Buffalo counties.

Wetlands in these complexes are similar to those in the Rainwater Basin in that they are dependent on surface

water runoff and have no natural outlets. However, most wetlands in both playa complexes generally are smaller and receive less rainfall and more seasonally-temporary in nature.

Two other important migration areas in eastern Nebraska include the Missouri River Valley and the Todd Valley wetlands. Most wetlands along the Missouri River valley are located within Iowa, but relatively large areas of flat, alluvial habitats are located in Dakota, Burt, Washington, Otoe, Nemaha and Richardson counties. Historically, the area was a mixture of backwaters, sloughs oxbows and marshes associated with a twisting, highly braided channel (LaGrange 2005). That has changed dramatically with erection of mainstem levees, channelization and wetland drainage.

Todd Valley wetlands are split into two regions, one located mostly north of the Platte River in Platte, Colfax and Dodge counties and the other south of the Platte River in Saunders County (LaGrange 2005). Todd Valley wetlands are similar to those in the Rainwater Basin and have undergone tremendous losses and degradation.

Finally, lakes and reservoirs, river systems and numerous watershed lakes and ponds provide abundant migration habitat scattered across the state. The best description of all of the aforementioned habitats and losses and potential threats can be found in LaGrange (2005).

Wintering

While not recognized as a “wintering” state, counts from the coordinated Mid-Winter Survey showed that an annual average of over 650,000 waterfowl of all species wintered in Nebraska from 1997-2001. The primary “habitat” necessary for sustaining wintering populations in Nebraska is the availability of open water. Most of the food obtained by waterfowl in winter are gleaned from agricultural fields (e.g., Jorde et al. 1984), although some aquatic vegetation may be consumed.

The Platte Rivers and associated habitats are the most important wintering habitats in Nebraska. In 2001, 45 percent of the mallards and 33 percent of the Canada geese counted in the Mid-Winter Survey were located along or in the Platte Rivers. Other river systems, most notably the Loups, Niobrara and Missouri also hold significant numbers of waterfowl during winter. Next to the river systems, the most important habitats are the large lakes and reservoirs. Sutherland (Lincoln County) and Harlan County reservoirs on average hold the most waterfowl during winter than any other reservoirs. Additionally, the southwestern reservoirs – Swanson, Enders, Red Willow and Medicine Creek also provide important wintering areas for waterfowl.

There are other areas that do not contain relatively large numbers of waterfowl but are of significant value to specific populations of waterfowl. For example, the

Snake River and Blue Creek (Garden County) provide wintering habitat for the majority of the trumpeter swan population in the Nebraska Sandhills.

The primary threat for most river system habitats are sufficient in-stream flows and potential alterations such as levees or channelization. Pertinent references are U.S. Army Corps of Engineers (2001), LaGrange (2005), Currier et al. (1985), and Aucoin (1984).

Species Accounts

Dabbling Ducks

Dabbling ducks include those species in the genus *Anas*, but also includes wood ducks. Dabbling ducks represent the most diverse group of waterfowl that breed, migrate and/or winter in Nebraska and are the most important in terms of harvest and abundance. As across the rest of the United States, the mallard by far represents the most important species in terms of harvest as well as the most abundant breeding species in Nebraska. Behind mallards, green- and blue-winged teal combined, represent the next important species, followed by gadwall, northern pintail, northern shoveler, wood ducks, and American wigeon. Cinnamon teal also breed in small numbers in Nebraska, but is confined to the extreme western part of the state.

Recent trends of most dabbling duck populations have shown increases, in direct response to improved habitat conditions in the Prairie Pothole Region. However, northern pintails have not recovered as other species. During 1999-2005, an average of 154,000 breeding pairs of ducks were estimated in the Sandhills region, with mallards (52,000), blue-winged teal (38,000) and gadwall (31,000) making up the majority of the breeding pairs.

Mallards also are the most abundant duck species to winter in Nebraska, with the majority along the Platte and other river systems and in major lakes and reservoirs. Approximately 230,000 mallards have been counted in the coordinated Mid-Winter Survey during 2005-2009. Few other dabbling duck species are counted during the Mid-Winter Survey. Numbers and composition of ducks migrating through Nebraska has not been annually estimated or monitored.

Approximately 17,100 duck hunters harvested 186,000 ducks annually from 1999–2008, with dabbling ducks comprising about 95 percent of that total. Mallards are the most harvested species in Nebraska, making up about 55 percent of total harvest. Blue- and green-winged teal, combined, accounted for 19 percent, gadwall 6 percent, and all other duck species 20 percent of total harvest. There has been a general decrease in the annual numbers of waterfowl hunters since 1999.

Diving Ducks

In regards to harvest and breeding abundance, diving ducks rank far below dabbling ducks in Nebraska. Less than 10 percent of the breeding pairs and about 5 percent of the total annual harvest are comprised of diving duck species. The most common species breeding in Nebraska include the redhead, which are probably the most important diving duck in Nebraska based on breeding abundance and harvest. Lesser scaup, canvasback, and ring-necked duck constitute the majority of the remaining harvest of diving ducks. Common goldeneye and bufflehead are the most abundant species counted in the coordinated Mid-Winter Survey.

Other Ducks

Ducks not included in the dabbling or diving duck group include the mergansers and stiff-tailed ducks. For Nebraska, this primarily includes the hooded and common merganser and the ruddy duck. Common mergansers are most commonly observed in the winter and have been observed in relatively large numbers. There are no records of hooded mergansers breeding in eastern Nebraska but are commonly seen in spring migration. Ruddy ducks breed in the Sandhills, and probably vie with redheads the most abundant non-dabbling duck species to breed there.

Canada Geese

By far, the most important goose species for Nebraska, in terms of presence and harvest opportunity, is the Canada goose. Actually, there are four different populations of Canada geese that reside, migrate and/or winter in Nebraska: the 1) Short Grass Prairie; 2) Tall Grass Prairie; 3) Hi-Line; and the 4) Western Prairie/Great Plains Populations. The Short and Tall Grass Prairie populations consist of smaller races of the Canada goose, whereas the other two consist of medium and large races. A significant portion of the Western Prairie/Great Plains population consists of restoration efforts conducted by the Commission and other state wildlife agencies.

Based on professional judgment, recent survey information and assuming continued growth in the population, the current estimated size of Canada geese in Nebraska in spring, including non-breeders, is approximately 32,000 geese (Central Flyway Council 2000). The Sandhills region represents the highest abundance of nesting Canada geese, with an estimated 4,000 nesting pairs. The southeastern portion of the states, including the metropolitan areas of Lincoln and Omaha has an estimated 1,500-2,000 pairs. Approximately 1,000 pairs each can be found in the Panhandle and southwestern portions of the state. The northeast and southcentral areas of the state probably have approximately 750 breeding pairs each.

Counts from the coordinated Mid-Winter Survey show the number of wintering Canada geese has increased from 24,000 in 1980 to 323,000 in 2009. The Platte rivers are the most important wintering areas for Canada geese in Nebraska, but large reservoirs (e.g., Harlan County) also hold relatively large numbers of geese.

Canada goose harvest has increased dramatically from the 1970s to the 2000s. Annual average harvest from 1970 to 1979 was 13,000 birds, 25,000 from 1980 to 1989, 59,000 from 1990 to 1999, and 80,000 from 2000 to 2008. The increase in harvest is a reflection of restoration efforts and increases in migrant populations.

Although the increased populations of Canada geese have led to increased recreational opportunities, it also has led to increased conflicts and depredation problems. Most of the conflicts with Canada geese in Nebraska involve resident birds and range from deposition of feces on sidewalks to concerns over human health and safety. Resolution of conflicts while maintaining sufficient recreational opportunities will become a management challenge in the future. Implementation of an early September season to reduce resident populations has resulted in approximately 1,000-2,000 geese.

An additional consideration in trying to manage large, resident Canada geese is the status of migrant populations, specifically the Short Grass Prairie and Tall Grass Prairie populations. Recent season length and bag limits have been allowed due to the high population levels of these populations. Long seasons and liberal bag limits have assisted in controlling large Canada goose populations. Sufficient decreases in small Canada geese would likely complicate management of large birds.

Greater White-fronted Geese

Nebraska plays an important role in the life-cycle of the greater white-fronted goose (white-front). During spring migration, approximately 90 percent of the mid-continent population stages in the Rainwater Basin area to accumulate lipid and nutrient reserves before departing for northern breeding grounds. In contrast, in the fall, white-fronts do not congregate in large numbers or for a long period of time in Nebraska. Less than 500 white-fronts winter in Nebraska. The population status of white-fronts has been good in recent years, although a decreasing trend in survival rate in recent years (Alisauskas 2001) has caused some concern. The average estimated harvest of white-fronts from 1962 to 2008 was less than 2,000 birds.

Lesser Snow Geese

The management of lesser snow geese probably has changed more in the last decade than any other goose species. Increasing populations have caused serious damage to arctic tundra habitats, and management actions have been initiated to reduce populations (Batt

1998). The most significant management action has been the implementation of a conservation order, which among other measures, allows the taking of snow geese after March 10 and beyond the 107-day hunting limit established by the Migratory Bird Treaty Act.

Recently, the migration of lesser snow geese through Nebraska has changed dramatically. Historically, relatively large numbers of snow geese staged in the fall and spring at areas along the Missouri River. Although snow geese still stage at those locations in the fall and spring, numbers have decreased and beginning in the late 1980s and early 1990s, snow geese started to stage in large concentrations in the Rainwater Basin area during spring (Vrtiska and Sullivan 2009). In fact, large concentrations began to appear and the annual white-fronted goose aerial survey was discontinued in 1992 due to safety concerns. Since then, approximately 2 to 7 million snow geese may use the Rainwater Basin during spring migration (Vrtiska and Sullivan 2009), and probably another 1 to 2 million snow geese migrate through other parts of the state. These birds represent the mid-continent population (the largest) and the West Central Flyway and Western Canadian Arctic populations. Observations of neck-collared snow geese indicated that all major breeding colonies use habitats in Nebraska during spring.

The recent influx of snow geese into the Rainwater Basin has raised a number of issues. First, with the expanding hunting regulations and implementation of a conservation order, increased disturbance may cause negative impacts to other species that utilize the basin wetlands. However, efforts to maximize the harvest of the snow geese to meet population goals also are needed. Competition with other waterfowl and migratory game bird species for food and water resources is another concern. Finally, given the large concentrations of snow geese and other birds on remaining basin wetlands, concern has arisen over a potential major outbreak of avian cholera.

Harvest of snow geese in the fall has averaged less than 10,000 birds in the last 40 years, but the annual take of light geese during the conservation order has averaged approximately 104,000 birds (includes Ross's geese).

Ross's Geese

As with lesser snow geese, dramatic changes have occurred in the past 30 years with Ross's goose populations (Moser 2001). Inventories in the central Canadian Arctic show that breeding birds numbered 34,000 in 1966 and increased to 567,000 in 1998 (Kelley et al. 2001). Range expansion also occurred with Ross's geese being observed in the Central Flyway beginning in 1974 and further eastward into the Mississippi Flyway in 1982 (Kelley et al. 2001). Perhaps more disturbing, evidence is mounting that Ross's geese also are causing

damage to vegetation in arctic areas (Didiuk et al. 2001).

With the increased population and distribution, the importance of Nebraska to Ross's geese also has changed over the last 10-15 years. Increased use of Rainwater Basin habitats as well as other areas of Nebraska has occurred. The peak of Ross's geese spring migration tends to be about a week behind peak snow goose arrival. Fall migration through Nebraska is quick and sparse, and harvest of Ross's geese has averaged less than 1,000 birds from 1962 to 2008. Ross's geese also can be taken in the conservation order, but estimates of take are unknown.

Swans

Reintroduction efforts originating at LaCreek National Wildlife Refuge in southwestern South Dakota has led to a population of breeding trumpeter swans in the Sandhills. A systematic breeding survey is not conducted, but during the 2009 Mid-Winter Survey, 679 swans (adults and juveniles) were counted. Swans from the Sandhills do not leave the state. Primary wintering areas include the Snake, North Loup, and North Platte rivers, Blue Creek in Garden County, and the North Platte River. A recent reintroduction effort by the Iowa Department of Natural Resources also has led to sightings of trumpeter swans in eastern Nebraska. Current use and abundance in specific areas has not been determined, but sightings have become more frequent.

Tundra swans do not migrate through or winter in Nebraska. Mute swans are confined to private ponds and lakes where individuals have acquired them.

American Coot, Sora and Virginia Rail, Common Snipe and American Woodcock

Collectively, these species comprise a group of birds that receive little public attention or hunting pressure. All are regular breeders in Nebraska, and the state hosts additional birds during migration. American coots are likely the most abundant of these species both during migration and the breeding season, but sora and Virginia rails, common snipe, and American woodcock are furtive and notoriously difficult to census, so their distribution and abundance in Nebraska (particularly during migration) is largely guesswork.

Nebraska typically adopts the maximum season length and bag limits allowed by the U.S. Fish and Wildlife Service for each of these species except rails (Virginia and sora collectively), for which we traditionally adopt a smaller daily bag (10) than the Service usually allows (25). There is little annual variation in opening and closing dates. Few hunters pursue these species, so historic estimates of hunter numbers and harvest derived from our standard hunter success survey were probably less accurate than those for other migratory game birds. Because of this problem, Nebraska now relies on figures

produced by the Service's Harvest Information Program, which should produce more reliable harvest estimates for these species than were previously possible

Mourning Doves

The mourning dove is one of the most numerous and widely distributed birds in North America, and is the most abundant game bird breeding in Nebraska. The species is highly fecund, with pairs raising several two-chick broods within a single breeding season, and is cosmopolitan in its habitat needs, faring well in agricultural and suburban landscapes.

Hunting seasons for mourning doves were open intermittently in Nebraska during the late 1940s and early 1950s before the state legislature reclassified the species as a songbird in 1953. Mourning doves were again reclassified as game and the season reopened in 1975, and liberal hunting seasons have been enacted each year since. Currently, the daily bag limit is 15 with 30 in possession during a 60-day season. Dove hunter numbers and harvest were highest shortly after the initial season in the late 1970s, and have declined since.

The hunting season typically starts on September 1, the earliest possible date allowed under the Migratory Bird Treaty Act. Although a portion of the population migrates before this date, some adults still have dependent young in nests into early September. If the Migratory Bird Treaty Act was amended to allow an earlier opener, it is unknown if the potential benefits of the increased hunting opportunity would outweigh the potential costs of lowered productivity in Nebraska. Further, a hunting season that potentially increases the mortality of nestlings also runs the risk of creating a significant public relations problem with nonhunters.

Despite the current abundance of mourning doves, long-term population trends in the Central Management Unit (i.e., the states in the central United States identified by the Service as sharing a common mourning dove population) are downward. This has prompted interest by state and federal wildlife agencies in identifying the reasons for the decline, and to ascertain possible effects of hunting mortality on dove populations. Nebraska is participating in these efforts, which will lead to a comprehensive national harvest strategy based on population models derived from data contributed by the states. Nebraska's continued cooperation is essential for the success of these efforts.

American Crow

American crows are abundant and widely distributed across the United States, with Breeding Bird Survey results indicating a population increase since 1966. Crows are protected under an amendment to the Migratory Bird Convention with Mexico, but federal regulations allow take under sport hunting seasons and

depredation situations. Hunting seasons must comply with the following restrictions: 1) crows shall not be hunted from aircraft, 2) open seasons shall not exceed a total of 124 days during a calendar year, 3) hunting shall not be permitted during the peak crow nesting season within a state, and 4) crows may only be taken by firearms, bow and arrow, and falconry. In the case of depredation complaints, crows may be taken without a federal permit “when found committing or about to commit depredations upon ornamental or shade trees, agricultural crops, livestock, or wildlife, or when concentrated in such numbers and manner as to constitute a health hazard or other nuisance.” However, a fee-exempt state permit is required to take crows under these conditions.

Because of past nuisance problems with large crow roosts in southcentral Nebraska, a Public Nuisance/Health Hazard Order has been issued for Buffalo, Phelps, Harlan, Franklin, Kearney, and Dawson counties. The order allows the take of crows during the late fall and early winter period when the regular hunting season is closed. The objective of the order is to help facilitate the dispersal of large roosts, which can cause noise nuisances and over time can lead to a build-up of associated fecal material. This material can provide the medium necessary for the growth of the fungus that causes histoplasmosis, a potentially serious respiratory disease in humans.

Crow harvest has been monitored with the hunter success survey since 2000. Over the period of harvest monitoring, harvest and hunter participation has declined. In 2000, an estimated 2,200 hunters took 28,000 crows in Nebraska, but in 2008, only around 1,000 hunters harvested 12,000 crows. State, regional, and range-wide crow population trends appear to be adequately monitored with the U.S. Geological Survey’s Breeding Bird Survey.

Sandhill Cranes

The spring congregation of sandhill cranes along the Platte River between Grand Island and Overton is one of the great wildlife spectacles on the continent, drawing birdwatchers from across the United States and other countries. Though hunted in all the other Central Flyway states, sandhill cranes are considered a nongame species in Nebraska. At present, this designation costs little in the way of hunting opportunity, because few cranes stop here during fall migration.

The U.S. Fish and Wildlife Service conducts a survey of mid-continent sandhill cranes during late March to monitor annual and long-term population trends. The centerpiece of this survey is an aerial count conducted along the Platte and North Platte rivers. The aerial count is supplemented with simultaneous ground surveys elsewhere in Nebraska, as well as in traditional staging

areas in Texas and Kansas. The 2008 photo-corrected estimate of sandhill cranes along the Central Plate River Valley was 414,000 birds.

Management issues regarding sandhill cranes in Nebraska revolve around providing adequate roosting and feeding areas on the Platte and surrounding lands, and there are reasons for concern regarding these habitats. Lower, less seasonally variable water levels in the Platte potentially threaten maintenance of sandbars free of woody vegetation required for roosting habitat. Also, food in the form of waste corn is becoming less abundant due to more efficient harvesting machinery and competition with a growing Canada goose population and light geese wintering on and near the Platte. Vigilance will be needed to monitor the status of these resources and provide corrective measures when necessary.

Benefits of successfully implementing the Migratory Game Bird program will be:

- Improved quality and a greater quantity of migratory game bird habitat.
- A greater quantity and distribution of public areas to hunt and view migratory game birds.
- Maximum hunting opportunity.
- A greater availability of technical services to public and private land managers/owners.
- Improved data quantity and quality collected to assist in making management decisions.
- Better understanding of population dynamics and distribution of migratory game birds.
- Improved and more efficient migratory game bird conservation decisions.
- Improved internal and external communications about the Migratory Game Bird program.
- An increased number of technical reports and popular articles about the Migratory Game Bird program.

Measurement criteria will be:

- Acres, distribution, and number of habitat areas conserved, restored or enhanced.
- Acres distribution, and number of habitat areas available for public use.
- Establishment of population and habitat acre goals and objectives.
- Increases or decreases in some migratory game bird populations
- Hunter numbers and activity (number of days or trips).
- Harvest (kill/hunter, total harvest).
- Stamp sales and associated income (Nebraska Habitat and Federal Duck Stamp).
- Number of programs or presentations given to various publics.
- Reports, technical and popular articles written/published.

Goal

To ensure a healthy migratory game bird resource and migratory game bird habitats, while maximizing recreational opportunities.

Subgoals:

Management/Regulatory

Base management and regulatory decisions on current information, both biological and sociological, in accordance with other goals and management plans.

Habitat

Provide the quantity and quality of habitats necessary for migratory game birds to meet their life-cycle requirements and to provide diverse recreational opportunities.

Research/Inventory

Conduct research and surveys as necessary to increase knowledge and understanding of migratory game birds to better guide management decisions.

Public Relations/Outreach

Increase awareness and understanding of Nebraska's migratory game bird resources and their management to the public and other conservation agencies.

satisfaction.

Tactic 1. Support Central Flyway and national efforts to conduct survey(s) examining barriers/constraints and/or satisfaction that assists in identifying factors that hinder participation in waterfowl hunting.

Tactic 2. Participate in national meetings or efforts that examine factors behind waterfowl hunter demographics and waterfowl hunting regulations or management that increase waterfowl hunter participation.

Strategy 3. Shooting and waterfowl identification skills are inadequate for some hunters, resulting in non-intention illegal take, higher crippling losses and possibly resulting in an increased harvest of species that may need greater protection from hunting.

Tactic 1. Continue support for and increase participation in Cooperative Non-Toxic Shot Education Program).

Tactic 2. Initiate new efforts at public outreach programs that stress waterfowl identification and shooting skills.

ISSUE 2

There is an inadequate supply of lands open to the public that provide high quality migratory game bird hunting opportunity near larger metropolitan areas.

Strategy 1. Acquire and develop more public access to lands, especially near metropolitan areas.

Tactic 1. Maintain wetlands and riparian areas as a priority in public access programs and in future acquisitions.

Tactic 2. Restore and manage wetlands on public lands to improve habitat for migratory game birds and provide better hunting opportunities.

Tactic 3. Work with the Platte River Recovery and Implementation Program, the Nebraska Department of Roads, and other agencies/organizations to have their properties open to public waterfowl hunting when possible.

Strategy 2. Obtain public hunting access to private lands, especially near metropolitan areas.

Tactic 1. Encourage the enrollment of wetland habitat into Conservation Reserve Program – Management Access Program and Open Fields and Waters programs.

Tactic 2. Restore and manage wetlands on private lands to improve habitat for migratory game birds and provide better hunting opportunities.

Strategy 3. Review status, need and desirability of establishing or maintaining hunting refuges including statutory and Nebraska Game and Parks Commission-imposed.

Tactic 1. Develop a plan to examine roles and objectives of statutory and Nebraska Game and Parks Commission-imposed refuges including potential informational needs and timelines if and what type of

Comprehensive Objectives

Objective 1.

Increase or maintain the number of Migratory Bird Hunting and Conservation Stamp (a.k.a., duck stamp) sales sold to Nebraska residents.

ISSUE 1

The number of waterfowl hunters has decreased since the 1970s.

Strategy 1. Promote waterfowl hunting among all people including minorities, women and youth.

Tactic 1. Conducting seminars/classes on various aspects of duck hunting including duck identification, blind construction, shooting, decoy placement, and the general value and legitimacy of hunting.

Tactic 2. Participate in expos, other education efforts (e., Becoming an Outdoors-Woman) that promote waterfowl hunting.

Tactic 3. Publish original or reprinted articles in *NEBRASKAland Magazine* and/or on webpage, regional or national magazines, conduct radio and TV interviews related to waterfowl hunting.

Strategy 2. Initiate and/or support studies that examine the factors behind waterfowl hunter demographics and

changes regarding refuges are warranted.

Strategy 4. Support goals and objectives of the Rainwater Basin Joint Venture and other joint ventures or partnerships in other habitat priority areas.

Tactic 1. Prioritize and assist with acquisition of new areas and roundouts of existing Wildlife Management Areas in the Rainwater Basin area to expand and improve effective and efficient management capability on existing Wildlife Management Areas in the Rainwater Basin.

Tactic 2. Promote and assist the Rainwater Basin Joint Venture in establishing a structured decision making process for habitat management practices in the Rainwater Basin that promote duck/waterfowl use.

Tactic 3. Participate and contribute to the Rainwater Basin Joint Venture, Playa Lakes Joint Venture, Upper Mississippi River Joint Venture technical committees and/or working groups that promote conservation of wetland habitats within Nebraska. Participate in and contribute to other partnerships working to improve habitat in priority areas such as the Sandhills Task Force, Platte River Habitat Partnership, Platte River Basins Environments, Platte River Recovery and Implementation Program, Lower Platte River Corridor Alliance, Saline Wetland Conservation Partnership, and Missouri River Partnerships.

Objective 2.

Improve knowledge about waterfowl and wetland management for staff and the general public.

ISSUE 1

Understanding and communication among Nebraska Game and Parks Commission staff and with various publics regarding waterfowl and wetland management and conservation issues is needed to maintain or garner support for various programs.

Strategy 1. Conduct or facilitate programs and presentations to staff, civic, hunting and other organizations.

Tactic 1. Conduct meeting regarding duck and goose zone changes and/or other issues to gather public input on waterfowl management issues or waterfowl hunting regulations.

Tactic 2. Publish original or reprinted articles in *NEBRASKAland Magazine* and/or on webpage, regional or national magazines, conduct radio and TV interviews about waterfowl and wetland management.

Tactic 3. Participate in and provide or present pertinent information at Commission-related and appropriate non-governmental organizations or other organization meetings.

ISSUE 2

Effective and efficient conservation of waterfowl

habitat in Nebraska requires current information on the quantity and quality of wetlands throughout the state.

Strategy 1. Collect current data on wetland quality and quantity.

Tactic 1. Prioritize wetland complexes in which to update the National Wetland Inventory data and initiate the updates.

Tactic 2. Initiate an Environmental Protection Agency-funded project to assess the quality of wetlands in Nebraska through the University of Nebraska-Lincoln Fish and Wildlife Cooperative Research Unit.

Objective 3.

Maintain a forum within which the Commission both provides and receives support for national and international efforts and programs that benefit migratory birds, migratory bird hunters, and users who are not hunters.

ISSUE 1

Migratory game birds are an international resource requiring an extensive coordinated effort subject to federal laws and international treaties.

Strategy 1. Maintain an active role in the Central Flyway meetings and activities at both technical committee and council levels.

Tactic 1. Attend Central Flyway and associated meetings (e.g., Adaptive Harvest Management Working Group) as needed/necessary. Attend, host and support technical meetings and activities that provide Nebraska representation and input at both national and international levels.

Strategy 2. Maintain an active role at national and international meetings and/or related waterfowl habitat/management groups.

Tactic 1. Attend scientific and professional meetings (e.g., North American Duck Symposium) that provide Nebraska representation and input at both national and international levels.

ISSUE 2

Migratory game birds require habitats at international levels.

Strategy 1. Support and participate in updates or revisions to the North American Waterfowl Management Plan.

Tactic 1. Participate in flyway/national level meetings or other efforts that discuss, evaluate and plan for updates or revisions to the North American Waterfowl Management Plan.

Tactic 2. Provide funding to wetland habitat conservation efforts to Canada. Also, maintain communication efforts with partners delivering habitat conservation efforts in Canada.

Strategy 2. Maintain an active role in the Rainwater

Basin Joint Venture and participate in other Joint Venture meetings and activities.

Tactic 1. Participate in Rainwater Basin Joint Venture technical committee and other work group meetings and assist in other efforts that discuss, evaluate and plan for habitat conservation work in the Rainwater Basin Joint Venture area.

Tactic 2. Attend and participate in other joint ventures (Playa Lakes, Upper Mississippi/Great Lakes) meetings and assist in other efforts that discuss, evaluate and plan for habitat conservation work in their respective areas.

Tactic 3. Attend and participate in the Arctic Goose Joint Venture as a Central Flyway representative.

ISSUE 3

Habitat conservation for migratory game birds is a large task that will require the support of our partners.

Strategy 1. Continue to support and obtain adequate funding to implement the habitat objectives that have been identified.

Tactic 1. Attend and participate in national and international meetings that address habitat issues that affect migratory game birds, and assist and communicate with various partners regarding habitat issues.

Tactic 2. Assist at Central Flyway meetings in preparation and submittal of letters or other forms of communications to congressional delegates, state representatives, and other leaders regarding funding issues (e.g., North American Wetland Conservation Act that affect waterfowl, waterfowl habitat and waterfowl hunters).

Strategy 2. Advocate for policies and programs that protect, restore, and better manage wetlands.

Tactic 1. Prepare and submit letters or other forms of communications to Nebraska's congressional delegates, state representatives, and other national, state or local leaders regarding issues that affect waterfowl, waterfowl habitat and waterfowl hunters.

Tactic 2. Assist at Central Flyway meetings in preparation and submittal of letters or other forms of communications to congressional delegates, state representatives, and other leaders regarding issues that affect waterfowl, waterfowl habitat and waterfowl hunters.

Objective 4.

Respond to waterfowl disease/contaminant issues.

ISSUE 1

Various types of diseases that threaten both waterfowl (e.g., avian cholera) and human health (e.g., avian influenza) sporadically occur that require monitoring, surveillance and clean-up efforts.

Strategy 1. Coordinate with state and federal disease

officials in determining risk of disease and the need for sampling.

Tactic 1. Initiate and support monitoring, surveillance, clean-up and research activities as needed to address disease outbreaks and work in and assist with conjunction with national efforts in addressing disease outbreaks.

Tactic 2. Publish original or reprinted articles in *NEBRASKAland Magazine* and/or on webpage, regional or national magazines, conduct radio and TV interviews on disease issues. Participate in and provide or present pertinent information at Commission-related and appropriate non-governmental organizations or other organization meetings or to the public.

ISSUE 2

Lead is considered an environmental contaminant. Use of lead for hunting of all migratory game birds is being reviewed at national and international levels.

Strategy 1. Coordinate with state and federal officials in determining the risk to wildlife of lead in spent ammunition.

Tactic 1. Attend Central Flyway and other pertinent meetings as needed or necessary to coordinate flyway and national efforts about the use of lead for hunting of migratory game birds. Attend, hold and support technical meetings and activities that provide Nebraska representation and input at both national and international levels.

Tactic 2. Initiate and support monitoring, surveillance, and research activities at national levels, including hunter attitude surveys, about use of lead for hunting of migratory game birds.

Tactic 3. Publish original or reprinted articles in *NEBRASKAland Magazine* and/or on webpage, regional or national magazines, conduct radio and TV interviews about use of lead. Participate in and provide or present pertinent information at Commission-related and appropriate non-governmental organizations or other organization meetings or to the public as needed.

Habitat Objectives

Objective 1.

Increase the quantity and quality of breeding habitat for migratory game birds in Nebraska.

ISSUE 1

The Sandhills region is the most important area for breeding waterfowl and other waterbirds in Nebraska. Certain land management and conversion activities in this region have reduced breeding populations of several species.

Strategy 1. Create habitat objectives for the Sandhills region.

Tactic 1. Assist and participate in Joint Venture or other bird-related habitat conservation efforts that address habitat objectives for migratory game birds in the Sandhills.

Strategy 2. Support the goals and strategies of the Sandhills Management Plan developed by the Sandhills Task Force.

Tactic 1. Attend and participate in meetings held by the Sandhills Task Force.

Strategy 3. Coordinate efforts with land management groups on both public and private lands to ensure waterfowl needs are considered in land acquisition, development, and management decisions.

Tactic 1. Meet and discuss waterfowl habitat needs with pertinent Commission and other agency/organization staff. Present and/or provide pertinent data or information regarding waterfowl needs at Commission- or other related meetings.

Strategy 4. Develop and implement a habitat monitoring protocol that evaluates current techniques being used to ensure best management practices are implemented on Sandhills publicly-owned wetlands.

Tactic 1. Promote and assist the Rainwater Basin Joint Venture in establishing a structured decision making process for habitat management practices in the Rainwater Basin that promote duck/waterfowl use. Report methodology process and results to Commission and other related personnel at appropriate venues.

Objective 2.

Increase the quantity and quality of spring migration habitat in the Rainwater Basin region of Nebraska to levels identified in the Rainwater Basin Joint Venture Implementation Plan.

ISSUE 1

The Rainwater Basin, found in 22 counties of south-central Nebraska, contains playa wetlands that exist in a region of considerable agricultural development. Approximately 90 percent of the original wetlands have been destroyed or converted to other uses. In spite of the substantial loss of wetlands, this region is still a major focal point of a spring migration corridor used by millions of ducks, geese, and other waterbirds. Thus, the Rainwater Basin was recognized by the North American Waterfowl Management Plan in 1992 as a waterfowl habitat of major concern in North America.

Strategy 1. Support the habitat objectives of the Rainwater Basin Joint Venture Concept, Implementation and Evaluation Plans.

Tactic 1. Participate in Rainwater Basin Joint Venture Management Board, technical committee and other work group meetings and assist in other efforts that discuss, evaluate and plan for habitat conservation work in the Rainwater Basin Joint Venture area.

Strategy 2. Coordinate and improve communication with land managers about strategies to enhance habitats for waterfowl.

Tactic 1. Participate in Rainwater Basin Joint Venture technical committee and other work group meetings and assist in other efforts that discuss, evaluate and plan for habitat conservation work in the Rainwater Basin Joint Venture area.

Tactic 2. Promote and assist the Rainwater Basin Joint Venture in establishing a structured decision making process for habitat management practices in the Rainwater Basin that promote duck/waterfowl use.

Strategy 3. Increase/improve management practices on Rainwater Basin publicly-owned wetlands with extension to private lands as much as possible, by developing and implementing research and monitoring and waterfowl use protocols to evaluate current techniques being used and examines waterfowl use and habitat management practices and wetland function and conditions in Rainwater Basin wetlands.

Tactic 1. Participate in Rainwater Basin Joint Venture technical committee and other work group meetings and assist in other efforts that discuss, evaluate and plan for habitat conservation work in the Rainwater Basin Joint Venture area.

Tactic 2. Promote and assist the Rainwater Basin Joint Venture in establishing a structured decision making process for habitat management practices in the Rainwater Basin that promote duck/waterfowl use.

Objective 3.

Increase the quantity and quality of other migration habitat for migratory game birds in Nebraska.

Strategy 3. Coordinate wetland inventory and restoration among our conservation partners.

Tactic 1. Use private lands programs, such as the Commission's WILD Nebraska and the United States Department of Agriculture's Wetlands Reserve Program to better protect, restore, and manage wetland complexes and other important wetlands listed below.

Tactic 2. Initiate coordination efforts with land management groups on both public and private lands to start inventory process and ensure waterfowl needs are considered in land acquisition, development, and management decisions.

ISSUE 1

Eastern Nebraska saline wetlands have suffered a significant loss in both numbers and total acreage due to development pressures from the City of Lincoln and Lancaster County. Historical records indicate these wetlands, prior to substantial development occurring in this region, supported a tremendous number of birds during both the spring and fall migration.

Strategy 1. Work with partners to define and achieve habitat goals in this region.

Tactic 1. Support the goal and objectives of the Implementation Plan for the Conservation of Nebraska's Eastern Saline Wetlands by participating in the Eastern Saline Wetlands partnership.

Issue 2. Todd Valley wetlands, which are playa-like wetlands in Saunders, Platte, Colfax, Dodge, Cuming, Burt, Thurston, and Wayne counties, have suffered significant losses due to agricultural conversion activities. These wetlands are similar to Rainwater Basin wetlands in functions performed and values provided.

Strategy 1. Work with partners to define and achieve habitat goals in this region.

Tactic 1. Explore the formation of a partnership to address the conservation of Todd Valley wetlands.

ISSUE 3

Due to the channelization and erection of levees, the numerous sandbars, backwater chutes, oxbows, and floodplain wetlands historically found in the Missouri River valley have been eliminated. These habitat types provided important staging areas to a wide range of migratory game birds.

Strategy 1. Support the goals and objectives of the various committees and work groups working to restore Missouri River habitats.

Tactic 1. Work with these groups to make sure that the conservation and restoration of floodplain wetlands, that were an important component of the historical habitat, are given high consideration.

Tactic 2. Continue to provide support to the NRCS Wetland Assistance Team that is working to implement the Wetlands Reserve Enhancement Program along the Missouri River.

Tactic 3. Support the habitat objectives of the Upper Mississippi/Great Lakes Joint Venture Plan by participating in management board and technical committee and other working group meetings and activities.

ISSUE 4

The Central Table Playas are playa-like wetlands found in Hall, Buffalo, Dawson, Lincoln, Logan, Custer, Valley, Greeley, and Sherman counties. These wetlands, which exist in a predominantly row crop agricultural landscape; have suffered significant losses in both numbers and total acreage due to conversion activities.

Strategy 1. Work with partners to define and achieve habitat goals in this region.

Tactic 1. Work with the Central Loess Hills Coordinating Wildlife Biologist to develop a strategic plan to address the protection, restoration, and management of Central Table Playa wetlands.

Tactic 2. Determine the geographic distribution of Central Table Playa wetlands.

ISSUE 5

The Southwest Playas found in Chase, Perkins, Lincoln, Keith, Deuel, Garden, Cheyenne, Kimball, and Banner counties are playa wetlands that exist in an agricultural landscape. The pre-dominant water regimes of these wetlands are temporary and seasonal allowing them to be farmed through in most years. Although some drainage activities have reduced the number of these wetlands, the primary threat is from siltation and lack of establishment of beneficial plant communities within the wetlands.

Strategy 1. Work with partners to define and achieve habitat goals in this region.

Tactic 1. Implement the findings from the Southwest Playa Evaluation Study that was completed by Rocky Mountain Bird Observatory in 2009.

ISSUE 6

In addition to the wetland complexes listed above, there are wetlands that can provide important habitat for migratory game birds. As opportunities arise, the conservation of these important habitats should be considered.

Strategy 1. Work with partners to define and achieve habitat goals in areas outside our primary wetland complexes.

Tactic 1. Identify and prioritize these other important habitat areas and work to conserve them.

Objective 4.

Increase the quantity and quality of wintering habitat for migratory game birds in Nebraska.

ISSUE 1

Wet meadow habitat, along with open sandbars, backwaters, and chutes in the Platte rivers, Loup, Snake, Niobrara, and other rivers and larger creeks have decreased in both number and acreage as well as quality. Conversion activities have eliminated a significant amount of these habitat types and decreased flows in the river have allowed tree encroachment and invasive plant species have significantly reduced their value as wintering habitat by waterfowl.

Strategy 1. Work with partners to define and achieve habitat goals in these regions.

Tactic 1. Create habitat objectives for the Platte River valley wetland complex by working with the Platte River Recovery and Implementation Program, Platte River Habitat Partnership, Lower Platte River Corridor Alliance, and Platte Basin Environments, Inc.

Tactic 2. Coordinate efforts with land management groups on both public and private lands to ensure waterfowl needs are considered in land acquisition, development, and management decisions.

ISSUE 2

Large, open water reservoirs throughout Nebraska are important wintering areas for waterfowl during most years. Water management, primarily for irrigation and power generation, has a significant effect on the quality of wintering habitat these reservoirs provide for migratory game birds.

Strategy 1. Work with partners to define and achieve habitat goals in these areas.

Tactic 1. Coordinate efforts with reservoir managers to improve wintering habitat provided by reservoirs.

Ducks and Mergansers

Objective 1.

Maintain and/or improve a breeding population of ducks in the Sandhills commensurate with habitat conditions (i.e., water and uplands).

ISSUE 1

The Sandhills region is the most important area for breeding ducks in Nebraska. Conservation and some land management activities may threaten the viability of the area to continue to do so. Identification of objectives, priorities and strategies for maintaining the Sandhills as an important area for breeding ducks in Nebraska has not been conducted.

Strategy 1. Work with partners to define and achieve production and/or habitat goals in this region.

Tactic 1. Create a “thunderstorm” map of duck production in the Sandhills to target or identify those areas that are important to waterfowl production in the Sandhills.

Tactic 2. Identify and contact pertinent groups/organizations/individuals to initiate process to identify objectives, priorities and strategies for maintaining the Sandhills as an important area for breeding ducks in Nebraska.

Tactic 3. Participate in meetings of the Sandhills Task Force and other groups/organizations that are involved in habitat conservation in the Sandhills.

ISSUE 2

There is information that duck nest success in the Sandhills is relatively low.

Strategy 1. Generate information regarding factors affecting Sandhills duck production.

Tactic 1. Initiate and support research investigating basic information on duck nesting ecology and biology and land management practices that affect duck nesting success in the Sandhills.

Objective 2.

Obtain reliable estimates of the number of breeding ducks in the Sandhills with methods comparable to the

North American May Breeding Waterfowl and Habitat Survey or other surveys (e.g., 4-square mile survey).

ISSUE 1

Reliable estimates of the number of breeding ducks in the Sandhills will assist in conservation and management actions, both in Nebraska and in the Central Flyway.

Strategy 1. Estimate breeding duck densities in the Sandhills.

Tactic 1. Locate and identify appropriate personnel that can conduct May Breeding Waterfowl Survey, and conduct survey using appropriate methods.

Objective 3.

Initiate new studies or inventories as needed to improve conservation or management of ducks and mergansers in Nebraska and the Central Flyway.

ISSUE 1

New issues and informational needs constantly arise that need addressing to improve conservation or management actions.

Strategy 1. Communicate with key experts in determining regional information needs.

Tactic 1. Initiate or implement new studies or surveys as needed with appropriate Commission staff or other wildlife agency personnel.

Tactic 2. Maintain an active role in the Central Flyway activities and programs (e.g., banding) that provide important management information.

Tactic 3. Attend professional or scientific and other national/international meetings and activities regarding duck conservation and management. Attend, hold and support technical meetings and activities that provide Nebraska representation and input at both national and international levels.

Objective 4.

Conduct an analysis of duck migration and harvest chronology with recent information to improve management of ducks and mergansers in Nebraska and the Central Flyway.

ISSUE 1

Current information on duck migration chronology and harvest parameters would assist in management decisions (e.g., season dates).

Strategy 1. Examine various factors that influence duck migration chronology and harvest parameters.

 **Tactic 1.** Obtain and analyze weather, banding and harvest data from various sources and examine for trends or patterns in duck harvest in Nebraska and the Central Flyway.

Canada Geese

Objective 1.

Reduce or minimize the number of nuisance Canada goose complaints and potential for risk of human health and safety.

ISSUE 1

Nuisance complaints about Canada geese have been increasing in the last decade in urban areas, and are likely to increase with more urban development and growing goose populations.

Strategy 1. Initiate/continue efforts to increase or permit local control measures for nuisance Canada geese without direct or reduce the Commission's commitment of time or personnel.

Tactic 1. Initiate discussions with U.S. Department of Agriculture, Wildlife Services, about respective roles and define appropriate measures in regards to nuisance Canada geese in Nebraska.

Tactic 2. Provide permits to local agents with proper authority to take actions (e.g., egg oiling) that would reduce nuisance Canada geese problems on their properties.

 **Tactic 3.** Distribute information to property owners about nuisance permits and different techniques that will address nuisance Canada geese problems. Conduct programs and initiate efforts with local housing groups, contractors and developers to reduce potential problems with Canada geese.

Strategy 2. Continue ongoing efforts (e.g., goose roundups) and initiate new programs or efforts that reduce or eliminate Canada goose populations near urban and other problem areas.

Tactic 1. In conjunction with banding efforts, conduct roundups of Canada geese and relocate to appropriate locations. Capture nesting females and relocate to appropriate locations.

 **Tactic 2.** Use appropriate control methods (e.g., egg oil) to alleviate or eliminate nuisance Canada geese problems.

Strategy 3. Participate in Central Flyway efforts to reduce potential problems with Canada geese.

Tactic 1. Participate in Central Flyway and other pertinent meetings and assist in data analysis or other informational needs that examine management of nuisance and resident Canada geese.

ISSUE 2

The management plan approved by the Commission in 2006 is likely out of date. An update would help direct future management of resident Canada geese in Nebraska and make nuisance control activities consistent across the state.

Strategy 1. Review the management plan.

Tactic 1. Update the resident Canada goose management plan for Nebraska and present to Board of Commissioners for approval.

Objective 2.

Obtain data and other information about population demographics of Canada geese in Nebraska. Conduct analysis of previous data and initiate new research and or inventories to gain information about population.

ISSUE 1

Banding and other marking data exist that would assist in determining survival rates, distribution, chronology and derivation of harvest of various resident populations of Canada geese in Nebraska.

Strategy 1. Analyze existing banding data.

Tactic 1. Contact university and/or other professionals to cooperatively analyze and disseminate data regarding population parameters of resident Canada goose in Nebraska.

Tactic 2. Continue banding and marking efforts to monitor population parameters and determine those for other sub-populations of Canada geese in Nebraska.

ISSUE 2

Population estimates and demographic data are not available for areas of the state that require more intense management (i.e., Lincoln and Omaha metropolitan areas).

Strategy 1. Collect demographic data necessary for management decisions.

Tactic 1. Investigate the methodology and costs to implement an annual or semi-annual Canada goose population survey or index in Sarpy and Douglas Counties.

Tactic 2. Initiate study on Canada geese population dynamics in the metropolitan area of Omaha and/or Lincoln.

Tactic 3. Initiate study on Canada geese carrying capacity or habitat availability in the metropolitan area of Omaha and/or Lincoln.

Objective 3.

Examine the creation or elimination of refuges established primarily for Canada geese.

ISSUE 1

Refuges can contribute or harm hunting opportunity, depending on local conditions (e.g., hunting pressure, other refugia). Creating refuges in some locations may enhance hunting or viewing opportunity while eliminating others may alleviate or prevent nuisance problems.

Strategy 1. Consult with District managers, law enforcement and the public to review the status, need and

desirability of establishing or maintaining hunting refuges including statutory and Commission-imposed.

Tactic 1. Develop a plan to examine roles and objectives of statutory and Commission-imposed refuges including potential informational needs and timelines if and what type of changes regarding refuges are warranted.

Objective 4.

Assist in maintaining populations of small Canada geese above population goals to maximize hunting opportunity on all Canada geese.

ISSUE 1

Populations of small Canada geese are more susceptible to periodic declines which may reduce overall hunting opportunity while exacerbating problems with resident, large Canada geese.

Strategy 1. Work with partners to conserve small Canada geese.

Tactic 1. Cooperate and participate in Central Flyway efforts, both regulatory and support for new inventories and research, to maintain populations of small Canada geese.

Tactic 2. Continue to conduct the annual Mid-Winter Survey which provides information on abundance and distribution of wintering Canada geese in Nebraska and the Central Flyway.

Tactic 3. Assist in the analysis of data existing on small Canada geese in the Rainwater Basin.

Lesser Snow and Ross's Geese

Objective 1.

Reduce the breeding population of lesser snow and Ross's geese (hereinafter, light geese) to the levels identified in the Central Flyway Mid-Continent Snow Goose and Ross's goose management plans, or at other levels determined by national/international agreements.

ISSUE 1

Survival rate of light geese is high and harvest relatively low, resulting in overabundance that is causing destruction and degradation of Arctic habitats.

Strategy 1. Adopt regular hunting season and conservation order regulations that maximize harvest of light geese in Nebraska.

 **Tactic 1.** Examine management actions or regulations that may increase harvest of light geese, particularly in the Rainwater Basin region.

Tactic 2. Investigate actions or licensing requirements that would increase participation in the light goose conservation action.

Tactic 3. Provide information within and outside the agency via published original or reprinted articles in

NEBRASKAland Magazine and/or on webpage, regional or national magazines, conduct radio and TV interviews about light goose hunting in Nebraska. Provide or present pertinent information at Commission-related and appropriate non-governmental organizations or other organization meetings or to the public as needed about light goose hunting and/or management.

Strategy 2. Adopt regular hunting season and conservation order regulations that maximize harvest of light geese in the Central Flyway.

Tactic 1. Examine management actions or regulations that may increase harvest of light geese in the Central Flyway.

Tactic 2. Investigate actions or licensing requirements that would increase participation in the light goose conservation action.

ISSUE 2

Overabundance of light geese may be negatively impacting other species in other habitats (e.g., migration areas).

Strategy 1. Document and mitigate negative impacts of light geese on other species.

Tactic 1. Examine possible impacts of hunting and implementing conservation order for light geese on other waterfowl populations, and support/participate in Flyway activities that monitor damage or conducts research of impacts of snow geese on Arctic habitats.

Tactic 2. Examine possible impacts (e.g., competition for resources) of lesser snow geese on other waterfowl species.

Tactic 3. Conduct hunter and participation surveys to determine success and harvest of light geese in Nebraska and Central Flyway.

Greater White-fronted Geese

Objective 1.

Investigate factors involved with the biology and ecology of spring-migrating greater white-fronted geese in the Rainwater Basin.

ISSUE 1

Ninety percent of the mid-continent population stages in the Rainwater Basin during spring.

Strategy 1. Work with partners to collect key information needed to conserve white-fronted geese in the Rainwater Basin.

Tactic 1. Support and assist in analysis of data already collected in the Rainwater Basin by the Canadian Wildlife Service and Commission.

Tactic 2. Initiate and support new research that gain better understanding of the ecology of spring-migrating white-fronts in the Rainwater Basin.

Objective 2.

Maintain a high level of active support for management of greater white-fronted geese.

ISSUE 1

White-fronted geese are a valued resource by hunters, but are sensitive to population decreases attributed to hunting.

Strategy 1. Work with partners to collect key information needed to regulate hunting of white-fronted geese.

Tactic 1. Continue support of the fall population survey conducted by the Canadian Wildlife Service, support research on white-front biology and ecology, and participate in planning sessions within the Central Flyway Waterfowl Technical Committee regarding white-front management.

Swans

Objective 1.

Determine amount of available quality breeding and wintering habitat for trumpeter swans in Nebraska.

ISSUE 1

The High Plains population of trumpeter swans is growing. Growth of population, however, may be limited by habitat.

Strategy 1. Ascertain relations between habitat parameters and swan population trends.

Tactic 1. Assist or initiate efforts to determine the number of potential lakes and marshes in the Sandhills that may support breeding trumpeter swans.

Tactic 2. Assist or initiate efforts to investigate the wintering ecology of trumpeter swans in Nebraska to determine carrying capacity.

American Coot, Sora and Virginia Rail, Wilson's Snipe, and American Woodcock

Objective 1.

Help develop reliable methods for surveying breeding populations applicable to Nebraska habitats.

ISSUE 1

Reliable census techniques are lacking for all species except woodcock; woodcock survey methods developed for northern deciduous forest may not work well in the Great Plains.

Strategy 1. Contribute to the creation of reliable census techniques.

Tactic 1. Support research funded by the U.S. Fish and Wildlife Service's Webless Migratory Game Bird

Research Program and other entities to develop suitable survey techniques applicable in Nebraska.

Objective 2.

Increase awareness of hunting opportunities for these species.

ISSUE 1

There is little hunting tradition for these species in Nebraska, thus few hunters have the knowledge necessary to take advantage of current hunting opportunities.

Strategy 1. Increase the availability of information about hunting opportunities to current and potential hunters.

Tactic 1. Work with Information and Education Division to push information through new media (Facebook and Twitter) on hunting opportunities.

Tactic 2. Provide information via published original or reprinted articles in *NEBRASKAland Magazine* and/or on webpage, regional or national magazines, conduct radio and TV interviews about hunting opportunities in Nebraska. Provide or present pertinent information at Commission-related and appropriate non-governmental organizations or other organization meetings or to the public as needed about hunting these species.

Mourning Dove

Objective 1.

Maintain a mourning dove hunting season that maximizes recreational opportunity commensurate with stabilizing currently declining populations.

ISSUE 1

The effect of past and current hunting regulations on dove population trends is poorly understood.

Strategy 1. Support harvest and population management research through active participation in the Central Flyway Webless Migratory Game Bird Technical Committee.

Tactic 1. Support development of a national dove harvest management plan that will place harvest management on a better foundation.

Tactic 2. Cooperate with United States Fish and Wildlife Service on mourning dove population surveys, banding program, and parts-collection survey in support of harvest management strategy.

ISSUE 1

Public and political pressure exists to amend the Migratory Bird Treaty Act to allow hunting of doves prior to September 1.

Strategy 1. In concert with the Central Flyway Webless Migratory Game Bird Technical Committee,

support status quo hunting regulations until sufficient research exists to ascertain potential hunting effects on population declines.

Tactic 1. Support Central Flyway Webless Migratory Game Bird Technical Committee efforts to apply harvest models to address issues related to harvest period.

American Crow

Objective 1.

Set the crow hunting season such that hunter satisfaction is maximized commensurate with population levels.

ISSUE 1

Data regarding season dates preferred by crow hunters are lacking.

Strategy 1. Collect data on hunter preferences.

Tactic 1. Survey crow hunters (as identified by hunter success survey returns) to ascertain preferred dates.

Objective 2.

Assess the adequacy of current statutes and regulations in addressing nuisance crow complaints.

ISSUE 1

No consensus has been sought among staff regarding adequacy of existing nuisance abatement tools.

Strategy 1. Reach consensus among staff regarding adequacy of available tools

Tactic 1. Seek information from appropriate staff regarding current statutes and regulations, and work to make necessary changes.

Sandhill Crane

Objective 1.

Maintain and enhance habitats used by sandhill cranes during the spring migration, particularly along the North Platte and Platte rivers. Approximately 90 percent of the mid-continent population of sandhill cranes uses these river systems.

ISSUE 1

Water flows and the amount of suitable roosting habitat in the Platte, South Platte and North Platte rivers may not be adequate in the future.

Strategy 1. Work with all appropriate agencies and organizations to ensure that adequate flows are present to provide migration habitat in sufficient quantity and quality.

Tactic 1. Participate, hold and support pertinent meetings that address water policy issues regarding the

Platte rivers.

Tactic 2. Initiate or support management actions that increase water flows in the Platte rivers.

Strategy 2. Work with all appropriate agencies and organizations to ensure that adequate amounts and distribution of suitable roosting habitat are present during migration.

Tactic 1. Participate, hold and support pertinent meetings that address invasive species management in the Platte rivers.

Tactic 2. Initiate or support management actions that address habitat conditions suitable for roosting sandhill cranes in the Platte rivers.

ISSUE 2

The amount of waste grain and other required foods available to migrating sandhill cranes may be reduced in the future.

Strategy 1. Take steps necessary to document adequacy of waste grain, and if necessary, promote the increase of grain availability.

Tactic 1. Participate, hold and support pertinent meetings that address waste grain availability for sandhill cranes along the Platte rivers.

Tactic 2. Initiate or support management actions that address waste grain availability for sandhill cranes along the Platte rivers.

Objective 2.

Increase the biological and ecological understanding of sandhill cranes that migrate through Nebraska.

ISSUE 1

Improved management of sandhill cranes depends on current and accurate population demography and abundance information.

Strategy 1. Assist with efforts to collect data necessary for proper management.

Tactic 1. Support efforts by the Central Flyway Council to monitor and initiate or continue research aimed at understanding crane populations and their use of Nebraska habitats.

Tactic 2. Participate in the U.S. Fish and Wildlife Service's annual sandhill crane survey in March.

Objective 3.

Encourage crane viewing during the spring migration so that it occurs without negatively affecting the resource and landowner/viewer relations.

ISSUE 1

The Commission has had a limited role in coordinating ethical crane viewing.

Strategy 1. Assess the need to increase the Commission's role in coordinating and promoting ethical

crane viewing.

Tactic 1. Initiate study examining the influence of human disturbance from both light goose conservation action activities and crane viewing on sandhill crane energetics.

References

Aucoin, J. 1984. *Water in Nebraska*. University of Nebraska Press. Lincoln, Nebraska.

Batt, B. D. L. 1996. *Prairie ecology - prairie wetlands*. Pages 77-88 in F. B. Samson and F. L. Knopf, eds. *Prairie Conservation*. Island Press, Washington, D.C.

Batt, B. D. L., ed. 1997. *Arctic ecosystems in peril: report of the Arctic Goose Habitat Working Group*. Arctic Goose Joint Venture Special Publication. U.S. Fish and Wildlife Service, Washington, D.C. and Canadian Wildlife Service, Ottawa, Ontario.

Bellrose, F. C. *Ducks, geese and swans of North America*. Stackpole Books, Harrisburg, Pennsylvania.

Bleed, A. and C. Flowerday, eds. 1989. *An atlas of the Sand Hills. Atlas No. 5*. Conservation and Survey Division, University of Nebraska, Lincoln, Nebraska.

Currier, P. J., G. R. Lingle, and J. G. VanDerwalker. 1985. *Migratory bird habitat on the Platte and North Platte rivers in Nebraska*. Platte River Whooping Crane Critical Habitat Maintenance Trust. Grand Island, Nebraska.

Didiuk, A. B., R. T. Alisaukas, and R. F. Rockwell. 2001. *Interactions with arctic and subarctic habitats*. Pages 19-32 in T. J. Moser, ed. *The status of Ross's geese*. Arctic Goose Joint Venture Special Publication. U.S. Fish and Wildlife Service, Washington, D.C. and Canadian Wildlife Service, Ottawa, Ontario.

Evans, R. D. and C. W. Wolfe. 1967. *Waterfowl production in the Rainwater Basin area of Nebraska*. *Journal of Wildlife Management* 33:788-794.

Kelley, J. R., D. C. Duncan, and D. R. Yparraguirre. 2001. *Distribution and abundance*. Pages 11-17 in T. J. Moser, ed. *The status of Ross's geese*. Arctic Goose Joint Venture Special Publication. U.S. Fish and Wildlife Service, Washington, D.C. and Canadian Wildlife Service, Ottawa, Ontario.

Jorde, D. G., G. L. Krapu, R. D. Crawford, and M. A. Hay. 1984. *Effects of weather on habitat selection and behavior of mallards wintering in Nebraska*. *Condor*

86:258-265.

LaGrange, T. 1997. *Guide to Nebraska's wetlands and their conservation needs*. Nebraska Game and Parks Commission, Lincoln, Nebraska.

McCarragher, D. B. 1977. *Nebraska's Sandhills lakes*. Nebraska Game and Parks Commission. Lincoln, Nebraska.

Moser, T. J. 2001. *The status of Ross's geese*. Arctic Goose Joint Venture Special Publication. U.S. Fish and Wildlife Service, Washington, D.C. and Canadian Wildlife Service, Ottawa, Ontario.

Novacek, J. M. 1989. *The water and wetland resources of the Nebraska Sandhills*. Pages 340-384 in A. van der Valk, ed. *Northern Prairie Wetlands*. Iowa State University Press, Ames, Iowa.

U. S. Army Corps of Engineers. 2001. *Missouri River master water control manual*. Revised Draft Environmental Impact Statement, Volume 1: main report. Northwestern Division. Portland, Oregon.

Vrtiska, M. P. and S. Sullivan. 2009. *Abundance and distribution of lesser snow and Ross's geese in the Rainwater Basin and Central Platte River Valley of Nebraska*. *Great Plains Research* 19:147-155.

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Furbearers and Nongame Mammals

Generally thriving as a group; some species may warrant less protection in the future.

“Purpose and Direction” - This program includes furbearers, other carnivores, feral pigs, and rare mammals, including those listed as threatened or endangered. Our primary furbearers are abundant and widespread; therefore little management is necessary beyond harvest and disease monitoring, depredation response, and outreach to current and potential furharvesters. Mountain lion numbers have increased since 1990, and estimating abundance is increasingly important as their protected status is questioned. The threatened status of river otter also requires review as more comprehensive abundance data emerge. Past efforts to eradicate feral pigs in Nebraska have been largely successful, but strict vigilance is needed to prevent new introductions.

Introduction

This program addresses the research, management, conservation, and use of Nebraska's furbearers and select game and nongame mammal species. This will be accomplished through the cooperative efforts of the Nebraska Game and Parks Commission, other natural resource agencies and organizations, landowners, fur harvesters, and concerned members of the public.

Furbearers played a significant role in the exploration and in the early settlement of Nebraska. Habitat changes – including plowing of grasslands, planting of trees, draining of marshes and wetlands, construction of farm ponds and reservoirs, and the suppression of range fires with the resulting increase in woody habitat – have caused dramatic changes in furbearer abundance. Some species such as the raccoon and bobcat have benefitted and others such as muskrat and weasel have declined in numbers.

Nebraska fur harvest data has been collected for over 60 years. During this time period, conditions relating to furbearer resources have been very volatile. Pelt prices have fluctuated over short periods. Changing prices coupled with unstable weather during fur harvest seasons have resulted in unpredictable harvests. License

requirements and fees have changed, seasons have been altered, and species have been added to the furbearer list, giving them added regulatory protection.

The number of fur harvest permits sold has fluctuated greatly throughout the years, responding to pelt prices and damage control necessities. However, despite fluctuating pelt prices the average number of fur harvesters has remained at a relatively high level (on average 6,116 per year 1999 to 2008).

Anti-trapping sentiment has increased throughout North America and Western Europe. The humaneness of trapping and the morality of wearing furs continue to be debated around the globe. These factors increase the scrutiny on both wildlife managers and resource users.

It is important to communicate that regulated trapping does not cause wildlife to become extinct or endangered. In Nebraska, the fur harvest is managed through scientifically based regulations that are enforced by our law enforcement division. The Nebraska Game and Parks Commission continually review and develop rules and regulations that consider safety and animal welfare. Among other projects, Nebraska trappers and biologists have participated in the development of Best Management Practices – a nationwide research project with the objective of increasing the humaneness, safety and efficiency of traps and trapping techniques.

Currently fur harvesters are the best and sometimes only source of information about many of Nebraska's wild mammals. Trappers and other fur harvesters not only provide information on population trends, they also are a potential source of other data such as disease trends, which may affect humans, wildlife and livestock.

Trappers continue to play an important role in controlling wildlife damage. Trapping allows the specific removal of individual problem animals, instead of indiscriminate methods such as poisoning. Our agency maintains a depredation trapper list that facilitates contact between those in need of wildlife damage control and those that can provide such services. In addition, we also provide information on non-destructive preventative measures to avoid damage by furbearing species.

Trapping has and continues to play an important role in wildlife conservation. Between 1986 and 1992, 159 river otters were released in Nebraska. Most of these animals had been caught by trappers in other states with abundant otter populations and were then transported to Nebraska for their reintroduction. River otters are now established in the state and trapping has been used to study and manage river otters in Nebraska.

Mink

Mink occur statewide, but are sparsely distributed throughout their range. The primary harvest region in Nebraska is in the eastern third of the state. Mink harvest and pelt price since the 1940s has varied less than that of other furbearers. Catch per unit effort data indicate a decline in mink population densities and close monitoring will be necessary to investigate the causes of this decline and to protect and enhance this species.

Badger

Badgers occur statewide but are most common in less-disturbed grasslands. Its take is often incidental or damage control related. Badgers may be harvested during a four-month period.

Long-tailed Weasel

The long-tailed weasel is found statewide but is rare in all parts of the state. Reported weasel harvest and population densities have declined over the last 50 years. Currently, weasels face an uncertain future in Nebraska. The cause of the weasel population decline is uncertain but apparently continues. As predators at the top of the food chain, weasels serve as an environmental barometer. The few weasels taken during the season are presumed to be incidental or damage control related. The weasel may be harvested during a four-month period.

Striped Skunk

The striped skunk is common throughout Nebraska. Although pelt quality of skunk is excellent, there is little demand for this fur. Skunks often are caught incidental to coyote and raccoon harvest, and many are not sold for their pelt. Skunks are important from a disease standpoint, since they are one of Nebraska's main rabies vectors. A year-round striped skunk season is currently in place.

Spotted Skunk

The spotted skunk appears to be extremely rare in Nebraska at the present time. In 1944, the spotted skunk harvest was estimated at 35,000 animals. The harvest declined precipitously to an average annual harvest of 120 animals for the five years prior to the spotted skunk's protection in Nebraska in 1977 as a Species in Need of Conservation. The spotted skunk is fully protected with no open season.

River Otter

A total of 159 northern river otters were released in Nebraska between August 1986 and March 1991 in an effort to reestablish this once native furbearing species to a self-sustaining and potentially harvestable level in Nebraska. The distribution of observations and accidental mortalities indicate that to date the reintroduction has been a success and river otters have become established in some areas and have begun to reoccupy portions of their former range in Nebraska. The highest otter densities seem to be on or near the Platte River, but other river basins have also yielded consistent and frequent observations. Ongoing research regarding river otter home range, habitat use, population size, and response to phragmites on the central Platte River should provide solid information to be used in the creation of a river otter management plan for Nebraska. River otters are currently listed as a threatened species in Nebraska.

American Marten

The marten is classified as a furbearer by statute; however, marten do not naturally occur in Nebraska. Marten do occur in Colorado, South Dakota, and Wyoming, but no confirmed occurrences have been reported in Nebraska. Marten are fully protected with no open season.

Beaver

Beaver populations were severely reduced due to unregulated trapping and hunting in the 1800s. Regulatory protection has enabled the beaver to reestablish populations throughout its original range. Beaver are currently common in all major drainages and have become one of the leading causes of wildlife damage complaints. Beaver may be harvested during a five-month season.

Muskrat

The muskrat occurs throughout the state but is most abundant in the Sandhills, Rainwater Basins and along the major rivers. Muskrats were the most frequently caught furbearer prior to 1985. Since that time, muskrat harvest has declined dramatically, partially reflecting a decline in interest due to low price. Muskrat numbers have also declined significantly in the Rainwater Basins due to low water levels since 1988. Muskrats can be harvested during a five-month season.

Woodchuck (Groundhog)

Woodchuck populations have experienced growth and a westward range extension. In most cases they are taken for wildlife damage control purposes, to prevent or reduce damages to building foundations and fruit and vegetable crops. Woodchucks are an unprotected nongame species.

Raccoon

The raccoon is abundant throughout the eastern third of Nebraska and is common in riparian areas in the western two-thirds of the state. The raccoon has been the most often caught furbearer in Nebraska since 1985. High population densities have resulted in a substantial number of damage related complaints and an increase of observations of diseased animals (mostly distemper and parvovirus). In 2001, an early hunting-only season was implemented in an effort to increase take and reduce population densities. Despite such measures, current land use methods and low pelt prices limit our ability to control population levels on a statewide basis through harvest. Instead, local prevention of damages via exclusion and population control on a regional scale may yield better results. Raccoons can be taken during a six-month season.

Virginia Opossum

The opossum is common throughout Nebraska and abundant in the eastern third of the state. The opossum is one of our least sought-after furbearers. It is generally taken as an incidental catch by trappers seeking other species. Pelt value has always been low and a substantial portion is not sold. Opossums can be taken during a six-month season.

Bobcat

The 1990s witnessed a strong and consistent increase in bobcat harvest numbers and incidental observation that appears to have leveled off in recent years. The high harvest numbers can be attributed to the establishment of the Conservation Reserve Program, high prey densities, declining coyote densities and thus reduced competition, and the increasing interest in this species by harvesters. Bobcats are listed in the Convention on International Trade in Endangered Species treaty because of their resemblance to endangered or threatened spotted cats in other parts of the world. Tagging of bobcats has been mandatory since the 1978-79 season and continues to yield valuable harvest and population data. Bobcats have been the most valuable furbearing species in Nebraska since 1965. Bobcats are still a novelty for many

harvesters and are becoming increasingly attractive as a game species. Bobcats can be taken during a three-month season.

Canada Lynx

The Canada lynx is classified as a furbearer by statute, but Canada lynx populations do not exist in Nebraska. Any lynx found in Nebraska is either a long-distance migrant or a game farm escapee. Lynx are fully protected as a furbearer with no open season.

Mountain Lion

A small population of mountain lions has recently been documented in the Pine Ridge area of northwest Nebraska and mountain lions or their sign have been documented over 100 times since the first modern confirmation in 1991. The increasing number of confirmed and unconfirmed mountain lion observations has facilitated the development of a mountain lion response plan by our agency. This plan addresses sighting evaluation and investigation and responses to different scenarios that involve mountain lions. The majority of confirmed mountain lion observation reports come from areas in close proximity to Colorado, Wyoming or South Dakota, all states with increasing mountain lion populations. Immense interest from the public and many existing misconceptions necessitate further educational outreach and research on mountain lions in Nebraska. The mountain lion is a game species with no open season.

Coyote

The coyote is common throughout the state. Coyotes are responsible for a large portion of livestock depredation and have been extensively hunted, trapped, and poisoned for the last century. Despite heavy prosecution, populations have proliferated throughout the last century. Recently, population densities have declined in portions of the state, presumably due to high infection rates for sarcoptic mange. As with other furbearing species, comprehensive disease studies will be necessary to evaluate disease impacts on populations. Coyotes are an unprotected nongame species and can be hunted and trapped year-round with few restrictions.

Red Fox

The red fox occurs statewide and is found most commonly in areas where coyotes are less abundant. Red fox numbers have probably increased over the last 50 years. Red fox are frequently found in or around farms and municipalities where they occasionally present a

threat to livestock and pets. The red fox may be harvested during a four-month period.

Gray Fox

The gray fox was never common in Nebraska and is rarely encountered at the present time. It prefers woodland habitat and the few animals reported are generally found in the Missouri and Platte river basins. Any harvest of gray fox occurs incidental to the harvest of red fox, coyote, or bobcat. The gray fox may be harvested during a four-month period.

Swift Fox

The swift fox is a small fox species native to western Nebraska's short grass prairies. Recent information about swift fox in Nebraska is based mainly on observation and mortality reports tracked by the Heritage Program. In an effort to evaluate the species' distribution and population status in Nebraska, annual sign surveys began in 2001. Our agency participates in efforts of the Swift Fox Conservation Team (a multi-state and multi-agency team) to coordinate the management and conservation of this species nationwide. The swift fox is listed as endangered in Nebraska.

Gray Wolf

Judging from historical accounts gray wolf were once abundant in Nebraska but became extinct in the state in the early 1900s. Gray wolf populations do not exist in the wild in Nebraska. Captive or escaped wolf-dog hybrids may occasionally be mistaken for a gray wolf.

Black Bear

Black bears were once part of Nebraska's native fauna, but have become extinct due to the intensive predator removal practices and habitat reduction by settlers. Any black bear found in Nebraska is likely a long-distance migrant or an exotic pet escapee. The few confirmed black bear observation reports come from areas in close proximity to Colorado or Wyoming where black bear populations are well established. Immense interest from the public will necessitate further educational outreach and research on black bears in Nebraska. Black bears are currently listed as a game species in Nebraska with no open season.

Prairie Dog

Prairie dogs are found in the western two-thirds of the state where soil conditions are appropriate for creating the stable burrow system that prairie dogs require.

Intense efforts to poison colonies and susceptibility to plague create concern for this keystone species and the distribution of this species should be monitored closely. Prairie dogs are an unprotected nongame species and can be hunted and trapped year-round with few restrictions.

Goal

To manage furbearer and nongame mammal populations to promote diversity and consumptive and nonconsumptive opportunities, and minimize property damage and negative impacts on habitat and other wildlife.

Objective 1.

Develop and implement a furbearer disease monitoring program.

ISSUE 1

Little is known about the status of furbearer diseases in Nebraska. Disease plays a primary role in ecology of furbearers and has implications for wildlife, humans and domestic animals.

Strategy 1. Establish and implement a monitoring program for the following diseases in Nebraska furbearer populations (wild and urban): Brucellosis, rabies, leptospirosis, echinococcus, Tyzzer's disease, canine distemper, mange, plague, tularemia, parvovirus and heartworm. Utilize fur harvesters, furbuyers and wildlife damage control companies to attain samples.

Tactic 1. Initiate a graduate project to determine baseline levels for disease in Nebraska furbearers and establish protocols for future monitoring programs

Strategy 2. Identify and monitor disease outbreaks and investigate causes and possible control.

Tactic 1. Opportunistically sample furbearers when disease is suspected as the cause of death.

Objective 2.

Evaluate and improve accuracy of harvest information.

ISSUE 1

Accurate fur harvest information is needed to make informed management decisions and to assess population status. The response rate to the annual fur harvest survey is low which decreases its accuracy.

Strategy 1. Increase response rate and determine non-responder bias in the fur harvest survey.

Tactic 1. Survey non-responders by telephone or email after at least two annual fur harvest surveys to create an estimate of non-responder bias.

Tactic 2. Adjust past and current fur harvest survey

results to account for biases

Tactic 3. Send an additional email survey to all non-responders to increase response rate.

Strategy 2. Verify harvest estimates derived from the fur harvest survey.

Tactic 1. Compare furharvest survey estimates with harvest estimates from the furbuyer survey and furbuyer record books.

Tactic 2. Compare furharvest survey estimates with bobcat tagging data.

Strategy 3. Make survey results more widely available.

Tactic 1. Post surveys results on website.

Tactic 2. Handout survey results and present results at Expos and furharvesters conventions.

Objective 3.

Continue to assist with efforts to prevent damage to property by furbearing species.

ISSUE 1

The depredation trapper list is not being used consistently by all involved personnel.

Strategy 1. Continue to promote and update the depredation trapper list annually.

Tactic 1. Post depredation trappers list on website.

Tactic 2. Send updated depredation trappers list to Commission staff on a yearly basis.

ISSUE 2

Furbearer related depredation problems and their management are important issues that need to be properly addressed in regulation and policy.

Strategy 1. Develop and propose regulation changes that simplify damage control for all affected individuals, not just landowners, who are experiencing agricultural depredation.

Strategy 2. Evaluate damage control of furbearers within city limits by private wildlife damage control companies.

Strategy 3. Publicize furbearer damage control information.

Tactic 1. Link to Internet Center for Wildlife Damage Management and other appropriate sources, from our website.

Tactic 2. Include section on depredation trappers on our website.

Objective 4.

Educate the public about trapping as an efficient wildlife management tool that is governed by scientifically based regulations.

ISSUE 1

Public understanding of fur harvesting is important in

maintaining it as a tool for wildlife management and as a source of income and recreation for fur harvesters.

Strategy 1. Estimate and distribute information about the value of animal damage control work done by fur harvesters.

Tactic 1. Post results of estimates in reports on website and disseminate information through education efforts at outdoor expos and other events

ISSUE 2

Public education about the benefits of fur harvesting has not been a continuously updated and improved process.

Strategy 1. Create or update effective educational tools and programs

Tactic 1. Customize “The Kit,” an outreach tool developed by the Furbearer Resources Committee of the Association of Fish and Wildlife Agencies, for use in Nebraska, and distribute the customized version or portions thereof to relevant parties such as the media, hunter and outdoor educators and the Nebraska Fur Harvesters Association

Tactic 2. Inform the public regarding fur harvesting through education and hands on demonstrations at Expos, outdoor skills camps or other events, and measure the success of these efforts.

Objective 5.

Increase the involvement of non-consumptive users with the recreational utilization of furbearers.

ISSUE 1

Furbearer related information and activities for known potential non-consumptive users have not been implemented.

Strategy 1. Publicize comprehensive furbearer information that is not targeted at harvesters.

Tactic 1. Continue to update website for all furbearer species

Strategy 2. Promote furbearer, and furbearer sign, identification.

Tactic 1. Continue furbearer sign competitions and activities at Expos, outdoor skills camps and other events.

Tactic 2. Continue outdoor education mammal trunk activities.

Strategy 3. Promote mammal specific wildlife photography.

Tactic 1. Create mammal/furbearer photo section of website.

Strategy 4. Involve non-consumptive users in furbearer conservation and funding.

Tactic 1. Promote projects involving nongame, threatened and endangered species and volunteer opportunities.

Tactic 2. Promote donations to the Wildlife Conservation Fund through the website, news releases and the media.

Objective 6.

Continue to promote ethical fur harvesting to include current standards of animal welfare, safety and efficiency.

ISSUE 1

Many furbearer related publications are outdated.

Strategy 1. Improve/update furbearer publications and information.

Tactic 1. Update and publish new *Nebraska Trappers Manual*

Tactic 2. Update furharvesting section of webpage

ISSUE 2

We have not sufficiently used available opportunities to promote ethical and safe fur harvest.

Strategy 1. Evaluate and distribute available scientific information in an effort to improve safety, animal welfare and species specificity when trapping.

 **Tactic 1.** Provide available scientific information through our website and offices (Best Management Practices, trappers education, etc.), and promote this information actively at state fur harvest conventions, trapper's camps, Expos and other fur harvest related activities.

Objective 7.

Maintain and improve furbearer/mammal diversity.

ISSUE 1

The status of mammals that are considered endangered, threatened, in need of conservation, or keystone species, such as river otter, mountain lion, swift fox, prairie dog, and spotted skunk, has not been adequately evaluated.

Strategy 1. Gather data in order to derive estimates of population size and distribution for river otters.

Tactic 1. Continue bridge surveys, observation data collection and carcass collection.

 **Tactic 2.** Create scat/track detection survey for areas of likely river otter distribution where records are absent.

Tactic 3. Complete River Otter Home Range and Habitat Use project.

Tactic 4. Continue to support scat collection and genetic analysis graduate project through the Nebraska Cooperative Fish and Wildlife Research Unit.

Tactic 5. Use remote sensing and the creation of GIS habitat suitability models to aid in estimating population and distribution.

Tactic 6. Explore possible future translocation or reintroduction of river otters into areas with appropriate

yet unoccupied habitat, such as the Republican River.

Strategy 2. Gather data in order to detect populations and derive estimates of population size and distribution for mountain lions.

Tactic 1. Continue observation investigations and carcass collection.

 **Tactic 2.** Create a scat/DNA collection and genetic analysis project using a scat detection dog or other noninvasive techniques beginning in the Pine Ridge and expanding to other areas as needed.

Tactic 3. Begin a Global Positioning System telemetry project in the Pine Ridge to determine population size, home range, habitat use, dispersal corridors, and colonization of new areas.

Tactic 4. Use remote sensing and the creation of Geographic Information System habitat suitability models to aid in estimating population and distribution.

Tactic 5. Create an accurate statewide stable isotope map using lymph nodes collected for Chronic Wasting Disease testing and use in analysis of mountain lion claws and other tissues to determine origination of dispersers.

Strategy 3. Gather data in order to derive estimates of population size and distribution for swift fox.

Tactic 1. Continue and expand scent station surveys, observation data collection and carcass collection.

Tactic 2. Continue and expand scent station surveys conducted by volunteers and students at Chadron State College and other institutions.

Tactic 3. Use remote sensing and the refinement of Geographic Information System habitat suitability models to aid in estimating population and distribution.

Strategy 4. Gather data in order to derive estimates of population size and distribution for spotted skunk.

Tactic 1. Continue observation data collection, carcass collection, and survey efforts.

Tactic 2. Use remote sensing and Geographic Information System habitat suitability models to aid in estimating population and distribution.

Strategy 5. Gather data in order to derive estimates of population size and distribution for black-tailed prairie dogs.

Tactic 1. Begin a statewide Geographic Information System aerial photograph interpretation survey, modeled after the South Dakota survey, to estimate the statewide distribution of back-tailed prairie dogs that can be repeated every five years.

Objective 8.

Create response plans for large predators that are rarely present but may enter Nebraska.

ISSUE 1

Large predators such as black bears and gray wolves do not presently have populations in Nebraska but may

enter the state from nearby areas and the response to these dispersing animals should be approved by the Commission and known by field staff.

Strategy 1. Gather response plans from other states and evaluate our own mountain lion response plan to use as models for black bear and gray wolf response plans.

Tactic 1. Create black bear response plan.

Tactic 2. Create gray wolf response plan.

Tactic 3. Disseminate response plans to staff and hold workshops in all districts to clarify plans and prepare for their use.

Objective 9.

Continue efforts to ensure feral pig populations are not established in Nebraska.

ISSUE 1

Feral pigs are non-native and pose an economic and ecological threat.

Strategy 1. Identify feral pig populations in Nebraska.

Tactic 1. Investigate and document reports of pigs living in the wild in Nebraska.

Tactic 2. Request observations of feral pigs and pig sign during deer check, Expos, through surveys or the media.

Strategy 2. Eliminate feral pig populations upon discovery.

Tactic 1. Create a feral pig response and eradication plan that provides direction and the tools necessary to eradicate newly discovered populations of feral pigs

 **Tactic 2.** Work with landowners and district staff to carry out a feral pig eradication program in any area they are discovered

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Biological Diversity

The Nebraska Natural Legacy Project leads the way in conserving the state's biota.

“Purpose and Direction” - This program includes all native plant and animal species in the state, with a focus on at-risk species and natural communities. The Nebraska Natural Legacy Project, developed in conjunction with partner agencies and organizations, is the strategic plan addressing the conservation, research, and recreational use of biological diversity as well as associated educational programs. The Project identifies 96 Tier-1 and 607 Tier-2 at-risk species, 84 priority natural communities, 40 Biologically Unique Landscapes where conservation actions will be focused, and numerous strategies for addressing threats to biological diversity. This program will depend on implementation of the Natural Legacy Project.

Commission programs. Fewer than one percent of the state's species are monitored and managed as game species, the remainder fall under the scope of Biological Diversity.

The Nebraska Game and Parks Commission also has statutory responsibility for protecting endangered and threatened species under authority of the Nongame and Endangered Species Conservation Act (Neb. Rev. Stat. section 37-801 to 37-811). This Act prohibits “take” of state listed endangered and threatened species. It also requires state agencies to consult with the Commission to insure their actions do not jeopardize the continued existence of state listed species. Environmental reviews, pursuant to the Clean Water Act (404 permits); National Environmental Policy Act and Fish and Wildlife Coordination Act also help ensure our states' biodiversity is protected. Species that are considered threatened or endangered are a minor percentage of the total number of nongame species this chapter addresses. Additionally,

Introduction

Biological diversity or biodiversity is the variety of life and its processes. It includes the variety of living organisms, the genetic differences among them, the communities and ecosystems in which they occur and the ecological processes that sustain them. Nebraska's rich biological diversity is composed of thousands of plant and animal species (**Figure 1**) interacting with each other and the environment in four distinct ecoregions (**Figure 2**). Nebraska's biological diversity provides the state and its citizens with numerous ecological, economic, recreational and aesthetic benefits. Today, Nebraska's biodiversity faces a variety of threats including habitat loss and fragmentation, proliferation of non-native invasive species, and ecosystem degradation.

The mission of the Nebraska Game and Parks Commission includes stewardship of the state's wildlife resources including all non-domesticated plants and animals as well as the communities they inhabit. The flora and fauna of the state, along with natural habitats they occupy, form Nebraska's natural heritage – a legacy that should be treasured just as we do our cultural heritage. This chapter focuses primarily on those species considered nongame that are not addressed in other

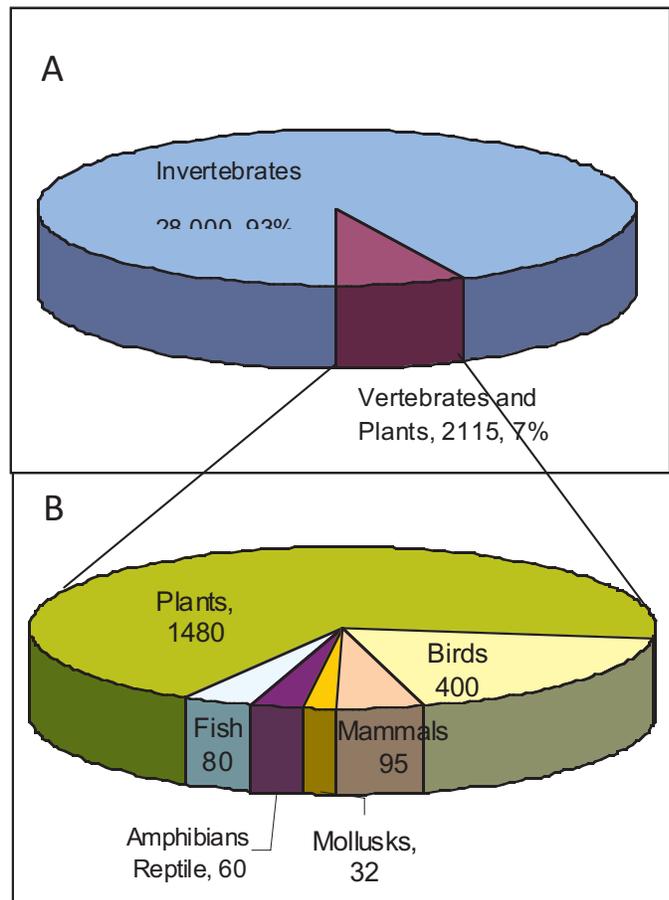


Figure 1 Nebraska's biological diversity. Invertebrates compose approximately 93% of Nebraska's biodiversity (A). Vertebrates and Plants compose approximately 7% (B).

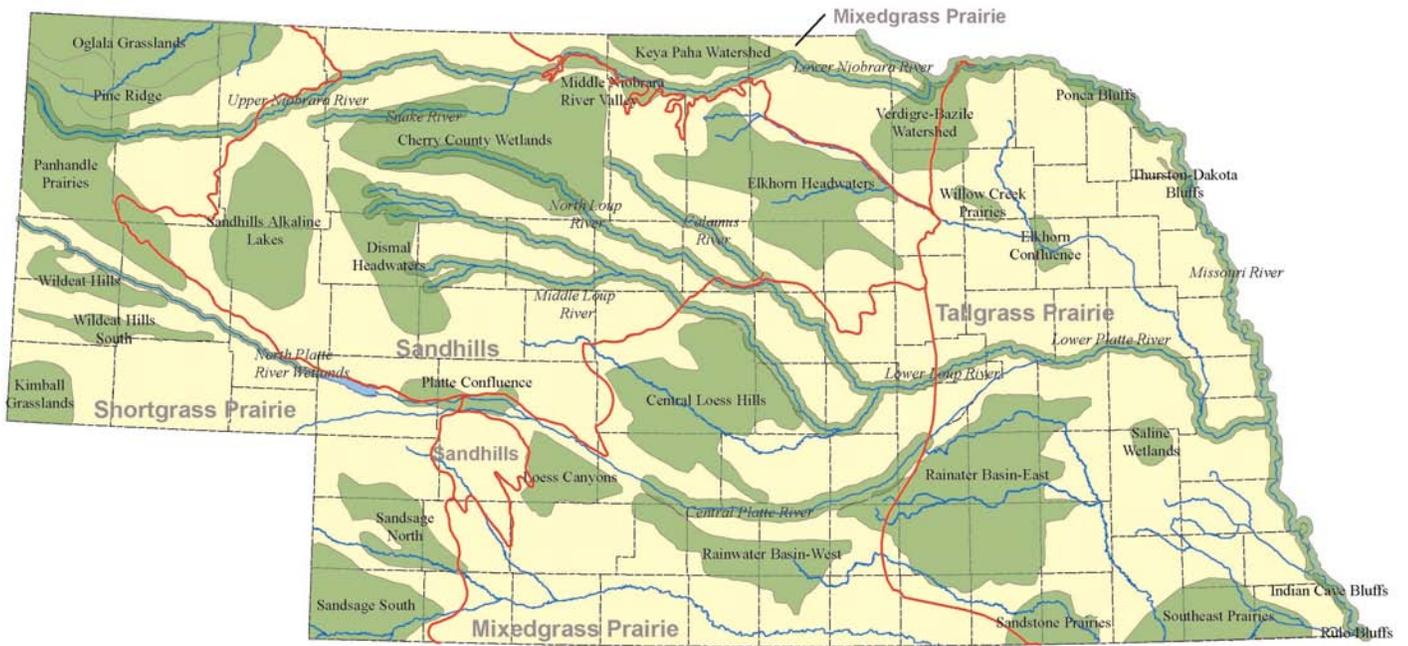


Figure 2. Biologically Unique Landscapes as identified in the Nebraska Natural Legacy Project in green. Red lines delineate the four main ecoregions of Nebraska.

this chapter focuses on methods to prevent future listings.

The sheer magnitude of the number of species makes their conservation and management a daunting task. Managing Nebraska’s biological diversity means addressing the research, conservation and recreational use of the native biological diversity as well as associated education programs. Stewardship of Nebraska’s biodiversity includes terrestrial and aquatic communities, ecosystems and all native plants and animals.

To address the challenges of conserving Nebraska’s biodiversity, in 2005 the Nebraska Natural Legacy Project was developed. The Legacy Project was developed by Commission staff in collaboration with many partners, conservation practitioners and

landowners. The Legacy Project identified Biologically Unique Landscapes (**Figure 3**) that offer the best opportunities for conserving the full array of biological diversity in Nebraska. The Legacy Project also strategically evaluated the species of Nebraska, determined which were in greatest need of conservation, their locations, stresses and developed conservation actions. The species of greatest conservation need were divided into two categories. Tier 1 species are those found in the state that are globally or nationally most at-risk of extinction. The Tier 2 species are those that did not meet the criteria for listing as a Tier 1 species, but that are listed by the Nebraska Natural Heritage Program as state critically imperiled, state imperiled or state vulnerable (Schneider et al. 2005). Implementation of the Legacy Project focuses on restoring habitats and communities in a manner that addresses the needs of the at-risk species, but that benefits the vast majority of Nebraska’s species. Implementation also includes inventory, research and conservation efforts focused at the species level to ensure conservation actions are efficient and effective. Given the similar statewide scope and purpose of the Legacy Project and this chapter of Biological Diversity, the contents of both documents are very consistent.

Completion and federal approval of a comprehensive strategy for at-risk species conservation was a condition to receive federal State Wildlife Grant dollars. The Legacy Project surpassed all requirements, and the Commission has received federal State Wildlife Grant dollars annually for implementation (**Figure 3**). The Nebraska Environmental Trust has been a key partner to secure the 50 percent match typically required for the

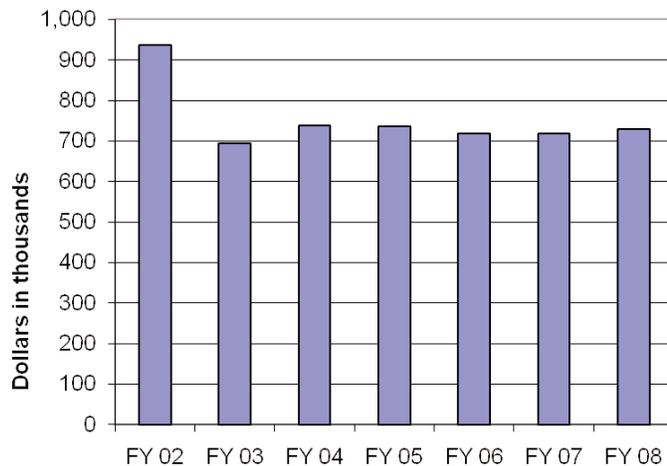


Figure 3 Nebraska’s Federal Allocation of State Wildlife Grants for implement of the state’s Wildlife Action Plan, Nebraska’s Natural Legacy Project.

federal State Wildlife Grant funds. Previously, sources of funding have been general fund appropriations by the State Legislature and the Wildlife Conservation Fund. The Wildlife Conservation Fund enables the public to support nongame conservation through the donation of a portion of their tax. Additional funds are also received for survey and research projects through grants from numerous state and federal agencies and non-governmental organizations.

Over the last five years, the Legacy Project has become an effective guidebook for biological diversity conservation. Conservation actions have been implemented by developing and enhancing partnerships statewide. Successful implementation of the strategies in both the Legacy Project and those identified in this chapter will require maintaining existing and developing new funding, staffing and supporting existing and creating new partnerships with state and federal agencies, conservation organizations and private entities and individuals.

The goals of biological diversity conservation are to achieve healthy, functioning ecosystems that support the associated ecological communities and populations of native plant and animal species. Another goal is to recover imperiled species so that they can be removed from the Threatened and Endangered list or preclude the need for listing altogether. The remainder of this chapter identifies clear tactics to work toward achieving these substantial goals. Nebraskans will benefit socially and economically from achieving these goals, they will become better informed about our biological diversity and have increased opportunity to enjoy our natural heritage.

The Biological Diversity Program has been organized into four main functional areas: research, inventory and monitoring; conservation implementation; education and outreach; and wildlife-dependent recreation.

Research, Inventory, and Monitoring

Research, inventory and monitoring projects will gather the knowledge needed to implement effective conservation of biological diversity. This information will guide decision-makers and the public in making informed decisions about protecting and managing Nebraska's natural heritage. Biological diversity is being lost, in part, because land use decisions are being made without relevant biodiversity information that is effectively developed, interpreted and communicated. The Nebraska Natural Legacy Project provides guidance in prioritizing research, inventory and monitoring needs.

Research will increase our understanding of the ecological requirements of species and the processes that

maintain natural communities. This knowledge is critical to effectively manage and sustain these components of biodiversity. Inventory work will identify those areas essential for the long term protection of native plants, animals and natural communities. Prioritization is needed to make the most efficient use of the limited funds available for conservation. Monitoring of species and natural communities is critical to determining their status and trends and to evaluate the effectiveness of conservation actions.

Success in research, inventory and monitoring can be measured by determining the level to which information generated from these activities is incorporated into conservation planning and actions, and how effective that conservation is as a result.

Conservation Implementation

The Nebraska Natural Legacy Project was developed as a blueprint to guide the conservation of Nebraska's biological diversity. Our native flora and fauna can only be conserved by protecting and managing the habitats that sustain them. This will most easily be accomplished in partnership with other government agencies, conservation organizations and private entities and individuals. With over 96 percent of the land in Nebraska in private ownership, stewardship on private lands is critical to the conservation of biological diversity. However, stewardship of biological diversity on Commission properties and other conservation lands is also critical since these areas provide long-term protection for species and natural communities.

Utilizing information from inventory and research, habitat areas of high conservation value will be identified and protected through acquisition of fee title or easements. Management practices that sustain native species and natural communities will be refined, implemented on agency lands and promoted for use by our conservation partners. Efforts will be made to re-establish extirpated populations of native species into appropriate habitats on agency lands and those of willing private landowners.

In our role as administrator of Nebraska's Nongame and Endangered Species Conservation Act, the Commission will periodically evaluate species to determine if they should be listed as Endangered, Threatened, or as a Nongame Species in Need of Conservation. Such designations provide protection for these species from a variety of threats, focus attention on their plight and bring additional resources to bear on their recovery. Consultations will be conducted with state agencies so that they may ensure that actions which they conduct, fund, or authorize do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of

essential habitat.

The success of conservation actions can be measured by the response of species and ecological communities to the implementation of recovery or management plans. Changes in populations and their distributions, species diversity and community vigor can all be measured. The number of species listed as Threatened or Endangered and those down-listed or de-listed is another measure of success of conservation actions. The success of conservation programs can be measured by the number of acres protected and restored through the implementation of appropriate management practices. Goals for the conservation of natural resources, such as water, that are critical to species and ecological communities can be measured through the maintenance or improvement of water quality and by securing in-stream flow appropriations for wildlife.

Education and Outreach

Education is an essential component of conservation. An environmentally literate citizenry is critically important to sustaining Nebraska's natural resources. Education and outreach efforts will seek to strengthen and coordinate existing biodiversity educational programs, increase the public's appreciation and understanding of Nebraska's native biological diversity and promote conservation practices that sustain that biodiversity. Continued education and communication between conservation professionals regarding sharing information and providing technical assistance will occur to a variety of conservation partners on the development and implementation of conservation programs, habitat improvement projects, land acquisition, land and water development projects, and other various plans and programs affecting the environment.

The potential impact of educational efforts is difficult to measure, as the results may not be apparent for a decade or more. Successful implementation of education programs is measured by the number of programs and workshops presented, the number of individuals participating in programs and workshops and user surveys. Public comment and input is also an important measure for the success of conservation and educational programs.

Wildlife-dependent Recreation

Wildlife-dependent recreation projects will develop and enhance opportunities for nature interpretation, education, and public enjoyment of Nebraska's biological diversity. This will be achieved by identifying, promoting and helping to improve existing sites designated for various types of wildlife-dependent recreation. This will also involve developing new areas,

facilities and opportunities. Providing access to areas for public participation in wildlife-based recreation activities can establish ownership of our biologically diverse resources and create a foundation for conservation minded actions by our constituents.

Nebraska's increasing urbanization, aging population and changing family structure are contributing to a shift in outdoor recreation interests. Nebraskans are expanding outside the traditional hunting and fishing pursuits to a variety of other wildlife-dependent recreational activities. According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 650,000 Nebraskans, 16 years of age or older, hunted, fished or watched wildlife. Of these, 48 percent engage in hunting and/or fishing while 75 percent participate in non-consumptive wildlife watching activities which includes observing, photographing, and feeding wildlife, as well as maintaining wildlife habitat or natural areas. The 2009 Nebraska Statewide Comprehensive Outdoor Recreation Plan Survey showed that 20.9 percent participated in viewing wildlife as a winter activity, 59.2 percent had participated in observing or photographing wildlife at least once in last 12 months, 16 percent rated wildlife observation in their top three most important activities to their household, 19.6 percent would like to see wildlife viewing areas added or expanded. This point is accentuated not to minimize the importance of hunting and fishing but to illustrate the value that our constituents have placed on other wildlife-associated recreational activities and to emphasize the responsibility this agency has to those constituents.

Success of wildlife-dependent recreation can be measured by the number of existing areas and facilities, the number of new areas and facilities developed; the number of Nebraskan's participating in non-consumptive wildlife-dependent recreation activities, and public feedback.

Goal

To conserve Nebraska's native biological diversity and promote the public's understanding and enjoyment of this resource.

Research, Inventory, and Monitoring

Objective 1.

Prioritize research, inventory, and monitoring needs.

ISSUE 1

Limited funds and personnel are available to conduct

research, inventory, and monitoring and those funds and personnel should be expended on the highest priority activities.

Strategy 1. Develop guidance documents and tools to help prioritize research, inventory, and monitoring.

 **Tactic 1.** Develop, by 2012, an overall research, inventory, monitoring, and adaptive management plan for the Natural Legacy Project that will identify and prioritize needs.

Tactic 2. Develop predictive models of species distribution for at-risk species to guide survey work and increase inventory efficiency. Develop models for 20 Tier 1 species by 2012.

Tactic 3. Evaluate current research, inventory, and monitoring approaches to determine whether new methods can produce better and more defensible results.

Objective 2.

Increase knowledge of the distribution, abundance, and condition of species and natural communities.

ISSUE 1

Insufficient information on the distribution, abundance, and condition of components of biological diversity limits our ability to make sound conservation decisions.

Strategy 1. Conduct systematic inventories to identify new populations of at-risk species and occurrences of natural communities.

Tactic 1. Conduct inventories to identify the distribution and abundance of at least three groups of species (e.g. grassland birds, aquatic invertebrates) each year. Prioritize inventory work based on Legacy Plan objectives.

Tactic 2. Conduct an inventory and assessment of priority natural communities in at least one Biologically Unique Landscape per year.

Strategy 2. Conduct monitoring of species, natural community, and landscapes to determine trends in status and condition.

Tactic 1. Conduct highest priority species monitoring identified in the Legacy Research, Inventory, Monitoring plan or by the Legacy Science Team. Priority monitoring activities should be initiated in 10 BULs by 2015.

Tactic 2. Conduct highest priority community and landscape monitoring identified in the Legacy RIM plan or by the Legacy Science Team. Priority monitoring activities should be initiated in 10 Biologically Unique Landscapes by 2015.

Objective 3.

Increase knowledge of the ecology of species and the ecological processes and management actions that maintain natural communities.

ISSUE 1

Insufficient knowledge of the ecological requirements of species and natural communities limits our ability to manage and sustain these components of biological diversity.

Strategy 1. Conduct or fund studies to evaluate the effects of management practices (e.g., burning, grazing, hydrologic regime manipulation, habitat restoration) on the composition, structure and function of natural communities.

Tactic 1. Each year, initiate at least one high-priority, management research project identified in the Legacy Research, Inventory, Monitoring Plan or by the Legacy Science Team.

Tactic 2. Complete a study to evaluate the effects of a patch burn/grazing system on biodiversity in tallgrass prairie. Study should be completed by 2012.

Strategy 2. Conduct or fund studies to better understand the ecology, genetics and life history characteristics of species.

Tactic 1. Each year, initiate at least one high-priority, species research project identified in the Legacy Research, Inventory, Monitoring Plan or by the Legacy Science Team.

Tactic 2. Each year, initiate at least one study on federally listed threatened or endangered species utilizing Endangered Species Act Section 6 grant funds.

Strategy 3. Increase the capacity of partners and outside researchers to conduct research on at-risk species and natural communities.

Tactic 1. Develop partnerships with academic institutions, state and federal agencies and non-governmental organizations to fund and conduct inventories and research.

Tactic 2. Conduct a granting program to provide State Wildlife Grant funds for research on at-risk species and natural communities following priorities listed in the Legacy Research, Inventory, Monitoring Plan.

Objective 4.

Develop and maintain biological resource information systems and databases and disseminate the information to conservation partners and others to better inform conservation decisions in Nebraska.

ISSUE 1

Biological diversity is being lost because conservation and land use decisions are being made without relevant biodiversity information that is effectively developed, integrated, interpreted and communicated.

Strategy 1. Maintain and keep current databases on the distribution, abundance, and ecology of at-risk species and natural communities.

Tactic 1. Annually update species databases maintained by the Wildlife and Fisheries Divisions

research sections.

Tactic 2. Annually update the Natural Heritage Program database with information from other Commission databases and inventory data collected by outside cooperators.

Strategy 2. Provide information on at-risk species and natural communities to agency staff, conservation partners, and the public.

Tactic 1. Develop, by 2012, a web page with data delivery tools to more efficiently provide Natural Heritage Program information.

Tactic 2. Develop, by 2012, a geodatabase design to improve Natural Heritage data exports.

Tactic 2. Hold periodic workshops/symposia for researchers and conservation practitioners to provide updates on research, inventory, and monitoring results.

Conservation Implementation

Objective 1.

Increase conservation of biological diversity on Commission lands.

ISSUE 1

Commission lands harbor important components of Nebraska's biological diversity. Protection and stewardship of biological diversity on lands managed by the Commission has not been adequately addressed.

Strategy 1. Provide long-term protection for natural communities and at-risk species populations.

Tactic 1. Annually acquire a minimum of one tract with existing, high-quality natural communities or areas harboring at-risk species (stand alone or multiple benefit tracts both qualify).

 **Tactic 2.** Develop a "natural area" designation for agency lands that contain significant natural communities or at-risk species and which will be managed to maintain those features.

Strategy 2. Provide support for agency management of natural communities and at-risk species.

Tactic 1. Complete, by 2013, Best Management Practices guidance for managing different natural community types and incorporate into Wildlife Management Areas management plans.

Tactic 2. By 2012, identify, and prioritize for management action, Commission properties (Wildlife Management Areas, State Parks, State Recreation Areas) that have high quality natural communities and populations of at-risk species.

Tactic 3. Provide technical and financial (e.g., State Wildlife Grants, Nebraska Environmental Trust funds) assistance to Commission land managers to manage natural communities and at-risk species.

Strategy 3. Increase management for biodiversity values on agency lands in concert with management for

other values.

Tactic 1. Initiate natural community Best Management Practices management on five high priority agency properties each year.

Tactic 2. Conduct projects to re-introduce at-risk species on agency lands where appropriate opportunity exists. Initiate project to re-introduce the Salt Creek tiger beetle to NGPC saline wetlands in Lancaster or Saunders counties.

Tactic 3. By 2013, develop and begin implementing a plan to control invasive species in deciduous woodlands on Commission properties in eastern Nebraska.

Objective 2.

Increase conservation of biological diversity on non-Commission lands through implementation of the Nebraska Natural Legacy Plan and other means.

ISSUE 1

Protection and stewardship of natural communities and at-risk species on non-Commission lands is critical to the conservation of biological diversity and is a bigger task than any one agency or organization can accomplish.

Strategy 1. Participate in strategic conservation planning efforts statewide to increase the efficiency and effectiveness of conservation actions.

Tactic 1. Complete an interim review and revision of the Natural Legacy Plan by 2010 and a full review and revision by 2015. Interim review will incorporate consideration of climate change in conservation planning.

 **Tactic 2.** Develop and begin implementation of landscape conservation plans for five Biologically Unique Landscapes by 2013.

Strategy 2. Facilitate stewardship of biological diversity on non-Commission lands.

Tactic 1. Initiate a minimum of 30,000 acres of private land projects each year that meet Legacy Plan objectives.

Tactic 2. Conduct a granting program to provide State Wildlife Grant funds for conservation actions that meet Legacy Plan objectives.

Tactic 3. By 2012, conduct a workshop on conservation land management to facilitate management activities among conservation organizations and agencies.

Strategy 3. Improve conservation programs and incentives.

Tactic 1. Use existing programs and develop new programs to provide incentives for stewardship of significant natural communities in private ownership (e.g., tax incentives, easements, annual payments or alternatives such as native seed harvest, grassland banking, ecotourism etc.).

Tactic 2. Provide technical assistance, training and stewardship guidance to other agencies, conservation

organizations and private landowners.

Tactic 3. Develop and distribute natural community Best Management Practices documents to conservation partners by 2012.

Strategy 4. Increase collaboration among conservation partners.

Tactic 1. Develop new and support existing, locally-based conservation partnerships in Biologically Unique Landscapes that include a diversity of stakeholders and are charged with conserving biological diversity.

Tactic 2. Develop cooperative agreements with partners that build capacity (i.e. personnel, equipment, expertise, and funding) for stewardship efforts.

Tactic 3. Participate actively on interagency work groups that pertain to stewardship of biological diversity.

Strategy 5. Facilitate the protection of at-risk species and natural communities.

Tactic 1. Facilitate projects to ensure that high-quality occurrences of all natural community types and viable populations of at-risk species are under long term protection and management.

Tactic 2. Review, update and develop appropriate regulations, laws and policies that will promote the protection and stewardship of native species and natural communities. Coordinate with affected partners to promote these policies and regulations.

Tactic 3. Administer the Nebraska Nongame and Endangered Species Conservation Act. Conduct consultations with state agencies and periodically review and revise the list of threatened and endangered species.

Education and Outreach

Objective 1.

Increase materials and educational opportunities for general public.

ISSUE 1

It is important that Nebraska's citizens are knowledgeable of the state's natural resources in order to make educated decisions. Educational materials and programs that address biological diversity and conservation have not been adequately developed, distributed or coordinated for the general public, educators and children.

Strategy 1. Develop and distribute new and updated educational materials that will increase the public's understanding and appreciation of biodiversity and inform them about related educational and recreational opportunities.

Tactic 1. Annually develop and distribute magazine articles in a variety of publications, develop and distribute posters relating to Nebraska's flora and fauna for the four ecoregions, update existing Commission

website to provide more information regarding Nebraska's biodiversity and learning opportunities.

Tactic 2. Publish and distribute *Trail Tails Magazine*.

Tactic 3. Partner with Nebraska Alliance for Conservation and Environment Education to develop updatable online database of Environmental Education materials and learning opportunities.

Strategy 2. Develop new and strengthen existing partnerships with conservation organizations, agencies, schools and businesses to educate students and the public about Nebraska's biological diversity.

Tactic 1. Support development and implementation of the Nebraska Master Naturalist Program.

Tactic 2. Continue to support educator positions with partners (e.g., Rocky Mountain Bird Observatory, Nebraska Prairie Partners Wildlife Education Coordinator, National Wild Turkey Federation and U.S. Fish and Wildlife Service).

Tactic 3. Support and participate in Nebraska Alliance of Conservation and Environment Education in their efforts to evaluate existing education opportunities, develop educational standards and to incorporate environmental education in existing Nebraska's state standards.

Strategy 3. Provide the necessary support and tools to expand existing conservation education programs designed for educators to integrate into their programs.

 **Tactic 1.** Train 600 educators in Project WILD, Growing Up WILD, and Flying WILD.

Tactic 2. Develop and maintain on-line educational resources and tools such as Project BEAK, and the *Environmental Education Connections* update.

Tactic 3. Develop and distribute hands-on resources such as Nebraska's biodiversity trunks to educators statewide.

Strategy 4. Develop and utilize natural areas for educational purposes and create programs that bring nature to the classroom.

Tactic 1. Support programs that promote the development of replica natural communities (outdoor classrooms) at schools, parks, government offices, businesses, etc.

Tactic 2. Support agency Expos and provide biodiversity education opportunities.

Tactic 3. Partner with the Master Naturalist Program to provide opportunities for volunteers to develop additional natural areas for educational purposes.

Strategy 5. Develop and provide Nebraska's natural resource professionals with educational materials and training about the state's biological diversity and encourage them to educate their constituencies.

Tactic 1. Provide one training session annually for Commission staff.

Tactic 2. Expand the scope of current agency

training such as Birding Days to encompass more learning opportunities.

Tactic 3. Identify facilities with the capacity to deliver environmental education programming (e.g. nature centers) and provide them with resources and annual training.

Objective 2.

Develop and implement evaluation of education programs and products.

ISSUE 1

The agency lacks information on constituency wants, needs, awareness, attitudes, knowledge and support. This lack of information limits our ability to plan for and develop appropriate services, facilities and information.

Strategy 1. Evaluate education efforts and make adjustments to strategies and tactics

Tactic 1. Incorporate an evaluation component in educational programs

Tactic 2. Once every five years, contract with market research experts to identify Nebraskans needs, opinions, and expectations regarding current and potential Biological Diversity Program products and services.

ISSUE 2

Implementation of conservation actions to benefit species of conservation concern is difficult due to inadequate development and distribution of information on ecosystem management and species' needs.

Strategy 1. Provide technical assistance, training and management guidelines (e.g. handbooks) to Commission staff, other agencies, conservation organizations and private landowners to facilitate the understanding, restoration, and management of ecological communities and populations of native species.

Tactic 1. Develop best management practices white sheets and field guide for the Legacy Tier 1 species in the next four years.

Tactic 2. Develop and use demonstration sites to illustrate management techniques, conduct four demonstration workshops per year.

Tactic 3. Hold annual workshop or conference to educate landowners and conservation professionals of management techniques and research.

ISSUE 3

Current funding sources are insufficient to sustain existing or initiate new research, conservation, education and wildlife-dependent recreation efforts.

Strategy 1. Continue promotional efforts directed at increasing existing funding sources (e.g., Wildlife Conservation Fund) and gain public support for new funding sources (e.g., conservation license plates, sales

tax, grants, State Wildlife Grant legislation).

Tactic 1. Develop and implement marketing plan for the Wildlife Education Fund and potential new funding sources in cooperation with Wildlife Staff and Information and Education Division Staff.

Tactic 2. Participate in national Fly-In Day to garner support for State Wildlife Grants.

Tactic 3. Annually seek and apply for available grants.

Wildlife-dependent Recreation

Objective 1.

Develop and assist access and programming for areas and facilities that provide wildlife viewing opportunities, nature interpretation and education, and promotion of wildlife conservation.

ISSUE 1

There is an increasing demand for individuals pursuing wildlife-dependent recreation, but these needs are not adequately met. Many existing facilities and wildlife recreation sites are unable to provide the services, quality wildlife viewing opportunities and information needed by users. These sites and facilities that provide opportunities for these activities do not exist in many of the important resource regions.

Strategy 1. Develop and implement a statewide watchable wildlife program. Secure sufficient support through partnerships, grants, etc.

 **Tactic 1.** Conduct a systematic inventory by 2014 of sites on public and conservation lands currently providing opportunities and access for wildlife viewing, nature and wildlife interpretation. Evaluate the potential and need for enhancing existing opportunities and access.

Tactic 2. Identify by 2014 a minimum of 15 sites that would provide new opportunities and access for wildlife viewing, and nature and wildlife interpretation, pursue partnerships and funding to develop sites as needed.

Tactic 3. Develop watchable wildlife blog/website and staff willing to post watchable wildlife activities.

Strategy 2. Develop financial and technical support for improvements at existing facilities/sites that will enhance opportunities for wildlife viewing, nature interpretation, and wildlife conservation education.

Tactic 1. Form partnerships with Natural Resource Districts, state and federal agencies, local communities, conservation organizations, and partners to enhance existing and develop new sites and facilities.

Tactic 2. Secure funding from grants or other opportunities to enhance wildlife-dependent recreation.

Objective 2.

Identify and promote opportunities and incentives for conserving biological diversity at the local and regional level by promoting ecotourism.

ISSUE 2

Many communities have wildlife viewing opportunities but lack the knowledge, organizational structure and funding to promote these resources.

Strategy 1. Support partnerships with the Division of Travel and Tourism, community groups and organizations, conservation organizations, outdoor recreation organizations and businesses, and nature-based tourism businesses to provide financial and technical support for the expansion and establishment of local ecotourism sites and networks in Nebraska.

Tactic 1. Support the Master Naturalist Program as they train naturalists and interpreters.

Tactic 2. Assist with development of promotional materials.

Tactic 3. Provide support to communities by bringing professionals and resources to the community.

Strategy 2. Provide technical assistance to city planners in developing parks, nature interpretive centers and green space corridors that enhance access to wildlife dependent recreational opportunities.

Tactic 1. Provide information via website and provide contact information to appropriate Commission staff.

Tactic 2. Identify sites conducive to greenway development and provide resources and support to help communities engage in green planning and development.

References

Steinauer, G. and S. Rolfsmeier. 2003. *Terrestrial Natural Communities of Nebraska, Version III*. Nebraska Natural Heritage Program and Nebraska Game and Parks Commission. Lincoln, Nebraska.

Schneider, R., M. Humpert, K. Stoner and G. Steinauer. 2005. *The Nebraska Natural Legacy Project: A Comprehensive Wildlife Conservation Strategy*. The Nebraska Game and Parks Commission. Lincoln, Nebraska.

2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation- Nebraska. U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of the Census.

The 2009 Statewide Comprehensive Outdoor Recreation Plan (SCORP). Nebraska Game and Parks Commission. Lincoln, Nebraska.

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Wildlife Management Areas

Places available to all people, where wildlife and habitat prosper.

“Purpose and Direction” - This program includes all lands designated as Wildlife Management Areas. The highly diverse habitats on these lands are managed for their intrinsic value to wildlife and for public use. Management Plans emphasize protection and enhancement of native ecosystems with emphasis on conservation of game species for public benefit. Acquisition of additional Wildlife Management Area acres is increasingly important to preserve unique or rare plant communities, conserve declining habitats and provide hunting, trapping, fishing, educational opportunities and non-consumptive outdoor experiences to an increasing population.

Introduction

This program includes all lands designated as State Wildlife Management Areas and Public Access Areas and managed by the Nebraska Game and Parks Commission. The recreational value of Wildlife Management Areas is very high in Nebraska where only about 1.7 percent of the state area is considered to be public lands available for non-urban outdoor recreation. These lands must not be viewed as a solution for the perpetuation of wildlife or plant resources. Private land will always hold the key to resource abundance or scarcity for most species in Nebraska.

Management of Wildlife Management Areas will strive to maximize recreational and educational opportunities while protecting, enhancing, and sustaining diverse wildlife, fish, and plant resources.

Our basic goals for Wildlife Management Areas are:

1. To provide hunting, trapping and fishing opportunities.
2. To provide the public with an opportunity to experience wildlife and their habitats within a natural outdoor environment.
3. Enhance and maintain habitat for the benefit of wildlife, fish and plant species.
4. Preserve natural plant communities and native plant and wildlife species.

Public Access

- Strive to maximize public access for hunting, trapping and fishing
- Encourage visitation for non-consumptive uses
- Promote Wildlife Management Areas to showcase Natural Legacy components i.e. Biologically Unique Landscapes, natural communities, habitat management

Habitat Management

- Develop and implement standard management plans for all Wildlife Management Areas.
- Enhance natural plant communities on Wildlife Management Areas.
- Promote early successional habitat in all plant communities.
- Establish and manipulate plantings to promote hunting opportunities to encourage hunter recruitment and retention.

Wildlife Management Areas Subprogram

This program addresses the acquisition and management of State Wildlife Management Areas for the purpose of providing recreational and educational opportunities consistent with wildlife and fisheries resource objectives. Wildlife Management Areas are lands owned, leased, or operated by the Nebraska Game and Parks Commission. These lands are currently under the responsibility of the Management Section of the Wildlife Division. In the Revised Statutes of Nebraska, 81-815.22, (5):

“State Wildlife Management Areas shall be those areas which are primarily of public hunting, fishing or other wildlife values, and which cannot logically be classified in one of the categories listed in subdivision (2) State Parks, (3) State Recreation Areas, or (4) State Historical Parks of this section, when so designated by the commission to be maintained from fish and game funds”.

Wildlife Management Area inventories include acres and number of Wildlife Management Areas, wildlife and plant species, soils, water regimes, plant communities, habitat types and distribution, public use, wildlife population status, distribution and habitat requirements, historical overview, management plans, and habitat acquisition plans. The services provided on Wildlife Management Areas include outdoor recreational

opportunities for constituents, access and availability of public use facilities (e.g., parking lots, signs, fences, boat ramps, and toilets), and management planning (e.g., regulations). Wildlife Management Areas are designed to provide benefits in the form of satisfied users, well-managed resources, broad-scale resource appreciation, and improved local economies.

Lands purchased for the benefit of wildlife began back in the 1920s when the Bureau of Game and Fish under the Department of Agriculture reported earmarking \$50,000 in hunting and fishing license monies for the purchase of public hunting and fishing areas. With that money, the department purchased Goose Lake, Walgren Lake, Rat and Beaver Lakes, and the Fremont sandpits. Later, under the Game, Forestation and Parks Commission, these areas were called Special Use Areas and included a wide range of habitat types and recreational uses. In the early 1970s, it was decided that a more descriptive designation was required, and Special Use Areas became either State Recreation Areas under the Parks Division or Wildlife Management Areas under the responsibility of the Resource Services Division.

Acres and number of Wildlife Management Areas began increasing substantially in 1977 with the passage of the Wildlife Habitat Stamp Program that required a mandatory \$7.50 Habitat Stamp for all hunters. The Habitat Stamp has increased periodically since then with the most recent increase in 2010 to \$20. The original Habitat Stamp plan called for expenditures to be allocated in three categories, each to receive about one-third of the funds gathered. These categories are 1) habitat protection or improvement on private lands, 2) acquisition of wildlife lands, and 3) habitat improvement and management on Commission-controlled wildlife areas and on other public lands not controlled by the Commission. In addition to the Habitat Stamp Fund, Wildlife Management Areas are supported by the Game Fund, 75 percent matching monies from Pittman/Roberts, Dingell/Johnson, and Wallop/Breaux federal funds, the Environmental Trust Fund, private donations received through the Nebraska Game and Parks Foundation, and funds from many private, non-profit organizations and individuals.

Wildlife Management Areas range in size from as small as one acre to nearly 9,000 acres. Presently, the Commission operates 274 Wildlife Management Areas comprising approximately 170,000 acres of land, marsh, and water. Of the total acres under management, 115,000 acres are owned by the Commission while 55,000 acres are leased for fish and wildlife resources. These leases pertain mainly to federally owned lands, irrigation districts, power districts, and Natural Resources District lands. Several Wildlife Management Areas are located on leased reservoir project lands that carry a dual designation with State Recreation Areas, since large

areas of wildlife lands are contained within the reservoir boundaries. The public areas along the Platte and Loup rivers and canal systems brought about by public power districts make up an important segment of Nebraska's wildlife lands and waters.

Primary use of Wildlife Management Areas is intended for hunters, trappers, and anglers. Less than two percent of the total acreage is developed for high-density, general, outdoor recreation, and most Wildlife Management Areas provide few public use facilities other than access roads and parking lots for visitors. Wildlife Management Areas with high use – usually associated with fishing access on lakes, reservoirs, or as river access sites – require more public use facilities such as boat ramps and docks, toilets, camping and picnicking facilities, and drinking water wells. Wildlife Management Areas are popular in some parts of the state (especially near urban areas) with other outdoor enthusiasts who find them ideal for hiking, camping, bird watching, photography, and many more outdoor activities.

The value of Wildlife Management Areas is very high in a state such as Nebraska where only about 1.7 percent of the state area is considered to be public lands available for non-urban outdoor recreation. These lands present the public with an opportunity to enjoy wildlife and their habitats within a natural outdoor environment. They must not, however, be viewed as a solution for the perpetuation of wildlife or plant resources. Private land always will hold the key to resource abundance or scarcity for most species in Nebraska.

While the Goal and Objectives remain essentially unchanged for the Wildlife Management Areas Program since the original plan was developed in 1996, Strategies have been removed or revised to more accurately address the present issues. In addition, Tactics have been added for each Strategy to specifically identify actions that will accomplish the Objective and Goal.

Goal

The goal is to provide outdoor recreational and educational opportunities while protecting, enhancing, and sustaining diverse wildlife, fish, and plant resources.

Objective 1.

To develop a universal management philosophy, policy, and procedure and expand these tenets to all Wildlife Management Areas.

ISSUE 1

Agency management guiding principles are not defined and, as a result, managers develop plans that reflect

individual philosophies and preferences.

Strategy 1. Create standardized procedures and guiding principles for management plans.

 **Tactic 1.** A previously formed committee will finalize Management Plan Guidelines by the end of 2012.

Tactic 2. Managers and Biologists will be instructed on the application of the Statewide Management Plan for all WMAs.

Tactic 3. Biologists will write executive summaries on all Wildlife Management Areas under their responsibility.

ISSUE 2

Managers are expected to balance hunter and angler desires with resource capabilities, regional needs, threatened and endangered species protection, and state and federal mandates.

Strategy 1. Protect, enhance, and sustain diverse wildlife and plant resources and unique, threatened, and endangered resources compatible with funding sources, regional needs, and resource capabilities while providing outdoor recreational opportunities consistent with wildlife and fishery objectives.

Tactic 1. Biologists will create cover maps that delineate grasslands, woodlands, wetlands and converted habitat and apply newly created Management Plan guidelines and objectives to respective habitat types.

Tactic 2. Biologists will apply best-known techniques and guidelines to protect respective threatened or endangered plant, animal, fish and invertebrate species that exist on Wildlife Management Areas.

Tactic 3. Leverage Commission funds with outside sources, i.e, non-governmental organizations and other resource agencies, and grants for management of native plant communities and rare species habitat.

Strategy 2. Encourage opportunities to enhance habitat components for game species to maintain hunter and angler interests.

Tactic 1. Biologists will annually commit at least 25 percent of all cropland to early successional habitat.

Tactic 2. Establish plantings for specific hunter targeted activities i.e. dove food plots.

Tactic 3. Biologists are encouraged to manipulate and enhance habitat for game species on “converted habitat” according to Management Plan guidelines.

ISSUE 3

Managers are expected to meet the needs and demands of increasing numbers of users, multiple use interests, and additional state and federal mandates, along with rising operation and maintenance requirements. In addition, managers are given responsibility of newly acquired Wildlife Management Areas and Wildlife

Management Areas acres annually without proportionate increases in funding and staffing.

Strategy 1. Expand partnerships with non-governmental organizations and other resource agencies.

Tactic 1. Create partnership staff positions for specific tasks or assigned to specific Wildlife Management Areas.

Tactic 2. Create the Habitat Share Program.

Tactic 3. Leverage Commission funds with outside sources, i.e, non-governmental organizations and other resource agencies, for habitat development for game species.

 **Tactic 4.** Increase use of service contracts and/or leases to accomplish specific management practices.

Strategy 2. Develop proposals to reassign individual Wildlife Management Area management responsibilities to other Divisions, local governments, interested groups, or appropriate individuals. Surplus appropriate Wildlife Management Areas.

Tactic 1. Identify Wildlife Management Areas that no longer function as public hunting or fishing areas and pursue surplus actions.

Tactic 2. Transfer management responsibilities of fishing access Wildlife Management Areas to Parks or Fisheries Division or non-governmental organizations.

ISSUE 4

Wildlife Management Areas may contain natural plant and animal communities and in many cases provide an opportunity to preserve remnant rare or threatened plant communities. Many of these unique areas have not been identified or recognized by managers and have not been included in plans for protecting or preserving these habitats.

Strategy 1. Continue to conduct systematic inventories following Natural Heritage Program procedures to identify natural communities and ecosystems on all Wildlife Management Areas and all new and future acquisitions.

Tactic 1. Annually contract plant and animal inventories as funds are available, with priority given to Wildlife Management Areas within Biological Unique Landscapes.

Strategy 2. Develop and utilize management practices that sustain, enhance, and restore natural communities and ecosystems and include these practices in management plans.

 **Tactic 1.** Conduct “Best Management Practices” on natural grassland, woodland and wetland communities according to guidelines, procedures and best management practices outlined in the Statewide Management Plan for Wildlife Management Areas.

Tactic 2. Prioritize management efforts on Wildlife Management Areas containing unique or threatened plant communities or species.

Tactic 3. Biologists will utilize regionally developed documents such as “Ecological Evaluation of Wildlife Management Areas”, and other Nebraska Natural Heritage Program data.

ISSUE 5

Multiple use interests are becoming more apparent with increased use and demand for outdoor recreational opportunities. Some users have little impact on Wildlife Management Areas while others conflict with hunting and fishing activities or negatively impact the resource.

Strategy 1. Identify users on Wildlife Management Areas and limit activity to compatible-use within the context of fish, wildlife and native plant community objectives.

Tactic 1. Special use requests will be considered on a case-by-case basis.

Tactic 2. Regulation and/or statute changes that address public use will be submitted to the Management Council before being recommended to the Commission.

ISSUE 6

Management activities have not been monitored or consistently recorded on an annual basis.

Strategy 1. Develop and apply universal methods to survey, monitor and record management activities.

Tactic 1. Biologists will record annual habitat manipulation practices on a spreadsheet developed by the Management Plan Committee.

Tactic 2. Geographic Information System software and training will be provided to biologists and managers.

Tactic 3. Biologists will record annual habitat manipulation practices on Geographic Information System mapping software.

Objective 2.

To acquire, lease, or retain land and water to improve the agency's resource management effectiveness and public access.

ISSUE 1

The present Game Fund and Habitat Fund are insufficient for current acquisition needs and potential acquisitions are lost due to lack of funds.

Strategy 1. Identify, develop, and use alternate funding sources for land acquisition.

Tactic 1. Solicit acquisition funds from non-governmental organizations and other outside sources.

Tactic 2. Obtain land through leases, agreements, or partnerships with non-governmental organizations and other resource agencies.

Strategy 2. Revise legislation for increases in Habitat Stamp and license fees.

Tactic 1. Continue periodic increases.

Strategy 3. Acquire land with funds provided by

partnerships and joint ventures.

Tactic 1. Identify funding sources before review by Habitat Committee.

Tactic 2. Pursue tracts with major funding source potential other than Habitat and Game Funds.

ISSUE 2

Wildlife Management Area tracts acquired by purchase, lease, or donation are not consistent with the original priority system established under the Habitat Program.

Strategy 1. Re-define acquisition priority system.

 **Tactic 1.** Priority given to land adjacent to existing Wildlife Management Areas, land within Biologically Unique Landscapes, wetlands, and high-quality native plant communities.

Tactic 2. Acquire key parcels of land from Board of Educational Land and Funds when available.

ISSUE 3

Potential acquisitions are lost due to lengthy and uncoordinated reconnaissance and negotiation processes.

Strategy 1. Streamline the acquisition process to be proactive, flexible, consistent, expeditious and responsive to the seller.

Tactic 1. Create and make use of a committee as a preliminary review and follow-up team to coordinate acquisition processes.

Strategy 2. Continue reconnaissance policies and procedures to be practiced by Wildlife, Fisheries, and Realty Divisions.

Tactic 1. Habitat Committee will meet on an as-needed basis to review potential acquisitions.

Tactic 2. Priority system will be revised and adhered to for all potential acquisitions.

ISSUE 4

Acquisition of Wildlife Management Areas has resulted in negative opinions toward state or public ownership in some local communities. Common arguments against state purchase of lands include these examples: concerns regarding user trespass on adjacent lands, increased road use causing high maintenance costs for counties, and inadequate in-lieu-of-tax payments.

Strategy 1. Improve public attitude and cooperation through coordination of public relations, education and information efforts.

Tactic 1. Solicit support from local chapters of non-governmental organizations and resource agencies.

Tactic 2. Solicit support at Public Hearings.

ISSUE 5

Limited resources for management of Wildlife Management Areas requires a re-evaluation of the habitat acquisition strategies and planning as well as the

assessment of utility and functionality of existing Wildlife Management Areas.

Strategy 1. Create an updated land acquisition plan.

Tactic 1. Task the Habitat Committee with reviewing the current plan and prepare a new 10 year plan by the end of 2012.

Strategy 2. Create a list of potential properties that no longer meet the needs of the public.

Tactic 1. Create a team to review the potential properties and the options available for transfer or surplus of those.

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Private Lands and Other Public Lands

Partnerships deliver conservation.

“Purpose and Direction” - This program improves the quality of habitat on private lands and non-Game and Parks lands, promotes greater conservation awareness through education and outreach, and provides more public access to our stakeholders. Our programs and assistance will be evaluated for effectiveness and impact to landscape acreage goals. In addition to our own programs, we will continue to develop and engage our existing and new partners. A targeted effort will be made to have a significant impact on the U.S. Department of Agriculture Farm Bill, as these programs continue to be a catalyst for habitat improvement in Nebraska.

Introduction

Wildlife is a product of the land. The quantity and quality of habitat determines the diversity of species and sheer abundance of wildlife that live on the land. Nebraska has 49.4 million acres of land and water within its boundaries of which approximately 97 percent is under private ownership. If the Nebraska Game and Parks Commission intends to have significant impact on wildlife populations, considerable emphasis must be devoted to the private and “other public” (non-Nebraska Game and Parks Commission lands of Nebraska. It should be noted that throughout this plan that “lands” will be used to represent both aquatic and terrestrial habitats.

This section of the Strategic Plan addresses overall land stewardship on the 49 million acres of private and other public lands in Nebraska as did the July, 1996 and 2003, editions of the Commission’s Strategic Plan. The 1996 plan identified one goal, three objectives, fourteen issues, and twenty-three strategies. The 2003 plan identified three goals, seven objectives, seven issues, 36 strategies, and 39 sub-strategies. Since the 2003 plan, 50 actions of the 75 listed strategies and sub-strategies were initiated. Essentially all of the strategies and actions initiated in the earlier plans are on-going. Therefore, some of the objectives and strategies listed below are similar to earlier plans. In addition, new objectives and

strategies have been developed to address new issues, challenges, and opportunities and better address those identified earlier.

A major product of the 1996 plan was the renovation and consolidation of all of the Commission’s private lands wildlife habitat programs into the comprehensive WILD Nebraska program. This new program is significantly more flexible and places emphasis on habitat partnerships that are complementary in nature and thus more efficient in placing and managing habitat on Nebraska’s landscape. WILD Nebraska continues to evolve and expand and now includes significant additions involving the implementation of the Nebraska Natural Legacy Project in 2005.

Other recent significant changes in private lands habitat work include the following: Focus on Pheasants was added to address the need to demonstrate pheasant and other grassland bird habitat management in 2002; addition of the Farm Bill Wildlife Biologist Partnership occurred in 2004 to better address habitat development and management opportunities provided by U.S. Department of Agriculture Farm Bill activities; and in 2009 the Open Fields and Waters program was added to address broad hunting and fishing access limitations as well as certain elements of the agency’s 2008 Recruitment, Development and Retention Plan.

Partnerships to improve the quantity and quality of wildlife habitat are a key ingredient in this Strategic Plan. We recognize that without partners we can do little to improve the condition of the land, plant communities, or the animals that use them. Essentially all of the listed strategies include several potential partners that may assist in meeting mutual objectives. The most obvious and important of these partners are the private landowners and land managers in the state.

The art of managing habitat on private lands and other public lands is largely comprised of identifying mutual goals and objectives and then acting in complementary fashion to achieve them. Elevating the sense of land stewardship held by our staff and partners is a critical factor in this process. Development of a strong conservation ethic by individuals and entities making decisions on private land use is necessary for success. Therefore, education is an inherent component of this plan.

Access to high quality wildlife habitat on private lands for public participation in wildlife-related recreational activities is also addressed in this plan. These diverse activities range from hunting, fishing, and trapping to

hiking, wildlife-watching, and interest in native plant communities. Some strategies have been tailored to address the agency's 2008 Recruitment, Development and Retention Plan.

Various measures may be necessary to ensure we continue to effectively make improvements in the quality of wildlife habitat and address access issues on private lands. As such, evaluation of actions and program components are intended to be accomplished as part of this plan. New strategies for structured decision making along with adaptive management approaches have specifically been incorporated to provide flexible programmatic responses. Many challenges exist to the successful implementation of listed plan strategies including adjustments to Federal Farm Programs, the agricultural economy, policy shifts and funding availability by partners, and even on-going climactic changes. The following strategies and tactics are designed to embrace the dynamic nature of land management while continuing to progress towards the overall goals and objectives of this plan.

Goal

The goal is to improve the quality of habitat on private lands and non-Nebraska Game and Parks Commission public lands.
To increase access to private lands and non-Nebraska Game and Parks Commission public land for wildlife-related recreation.
To promote greater conservation awareness of land stewardship through continued education and outreach programs.

Objective 1.

Ensure that appropriate habitat technical assistance is available that is of high quality, is science-based, and meets habitat and landowner needs by January 1, 2012; review and revise as needed annually thereafter.

ISSUE 1

Methods of providing habitat technical assistance and delivery staff are limited and our approaches may need periodic adjustments to improve our outputs; the quality of habitat technical assistance is critical but it is very difficult to measure.

Strategy 1. Ensure qualified habitat technical assistance providers are available.

 **Tactic 1.** Develop prescriptive training needed for various job classifications. Increase staff training in each

district on prescribed fire so that each district has at least five staff with basic prescribed burn training/certification and two staff with training/certification to be a fire boss.

Tactic 2. Hire experienced and competent biologists well-suited for habitat technical assistance work.

Tactic 3. Provide habitat technical assistance outreach to staff and volunteers of partner organizations and strengthen existing partnerships.

Strategy 2. Review and evaluate existing habitat technical assistance activities on a regular basis.

Tactic 1. Develop a process to review habitat technical assistance through agency and partner participation and prepared a document that identifies strategies to improve technical assistance deficiencies by January 1, 2013; repeat process biennially.

Tactic 2. Take positive and measurable actions (i.e., training, refocusing, delivery, etc.) to implement strategies to improve technical assistance activities within six months of report issuance.

Tactic 3. Survey landowners every four years, including a subset who received technical assistance, to determine their technical assistance needs and how well they have been served. Include survey results in technical assistance review process.

Strategy 3. Identify other actions, and programs that impact wildlife habitat.

Tactic 1. Strengthen relationships with the Natural Resource Districts and other resource partners to improve habitat and communicate land stewardship goals.

 **Tactic 2.** Exert positive influence on U.S. Department of Agriculture conservation programs and policies to improve wildlife habitat benefits that are focused on the Commission's high priority species and habitats.

Tactic 3. Continue to assess potential future implications of economic, cultural, societal, etc. changes on land use and document strategies to positively affect habitat.

Objective 2.

Evaluate, in a structured formal fashion, current incentive programs used to develop, enhance, and manage habitat on private lands and non-Nebraska Game and Parks Commission public lands and implement improvements by January 1, 2014.

ISSUE 1

Current habitat programs may not be the most effective at impacting landscapes or influencing landowners' attitudes and actions and incentive programs could perhaps be better directed toward more effective capacity building efforts.

Strategy 1. Develop a methodology to evaluate the quality, quantity, and effectiveness of current habitat

programs.

Tactic 1. Define scope of evaluation and identify attributes to be evaluated.

Tactic 2. Prioritize attributes and collect relevant data.

Tactic 3. Prepare evaluation report.

Tactic 4. Repeat periodically (every four years).

Strategy 2. Develop a methodology to evaluate the delivery process of various programs and implement improvements.

Tactic 1. Define scope of evaluation, identify attributes, and collect relevant data.

Tactic 2. Develop an interdisciplinary team to evaluate delivery processes and prepare periodic (four years) evaluation reports.

Tactic 3. Implement adjusted delivery processes as suggested by evaluation.

Tactic 4. Expand the number of meaningful Commission “contacts” with cooperators.

Tactic 5. Foster and develop capacity building efforts with expanded partnerships.

Strategy 3. Adjust and improve habitat programs and delivery processes to provide acceptable quality, quantity, and effectiveness.

Tactic 1. Work with government and non-government organizations to deliver habitat programs.

 **Tactic 2.** Implement necessary changes to habitat programs and delivery processes based on biennial evaluation reports.

Strategy 4. Identify and utilize other types of incentives (other than financial, i.e. technical, social, and intrinsic) to positively influence habitat management by landowners, partners, officials, constituents, and general public.

Tactic 1. Survey landowners, partners, constituents, and general public to determine other incentives that may effectively influence habitat management on the land and share results with partners.

Tactic 2. Implement and/or facilitate other effective incentives to influence habitat management on the land.

Objective 3.

Implement habitat management on private and non-Nebraska Game and Parks Commission public lands to meet the goals of agency and nationwide plans and encourage conservation stewardship among the citizens of Nebraska.

ISSUE 1

There are several agency and nationwide plans that focus on habitat implementation these plans need to be broken down into Commission district private lands areas. Beyond habitat implementation, conservation stewardship needs to be encouraged throughout the state.

Strategy 1. Develop and prioritize landscape acreage

targets in important focus areas by 2013.

Tactic 1. Evaluate the Nebraska Natural Legacy Project using the best available data to determine desired future conditions in identified Biologically Unique Landscapes break down the tasks required to achieve the future conditions into achievable annual components.

Tactic 2. Evaluate the remaining landscapes in conjunction with partners to determine desired future conditions; break down the jobs required to achieve the future conditions into achievable annual components.

Tactic 3. Review existing habitat implementation plans (eg., grouse) and break them into achievable objectives for each Commission District.

Strategy 2. Implement the revised Focus on Pheasants on Plan.

Tactic 1. Implement the objectives of the Focus on Pheasants plan in designated private lands focus areas.

Tactic 2. Implement the objectives of the Focus on Pheasants plan on non-ngpc public areas.

Strategy 3. Implement the WILD-Nebraska Program.

Tactic 1. Continue to develop relationships with Natural Resource Districts to complete habitat management on private lands.

Tactic 2. Work with other government organizations to implement the Wild-Nebraska program on private and non-Nebraska Game and Parks Commission public areas.

Tactic 3. Work with non-government organizations to implement the WILD-Nebraska program.

Strategy 4. Provide examples of desired outcomes of good habitat management practices to the public and our partners with “Habitat Demonstration Sites.”

Tactic 1. Develop quality Habitat Management Demonstration Sites for key habitat types on public and/or private lands in each Commission District.

Tactic 2. Work cooperatively with other public landowners (Natural Resources Districts, Nebraska Department of Roads, U.S. Forest Service, U.S. Fish and Wildlife Service, etc.) to demonstrate quality habitat management on their properties.

Tactic 3. Provide periodic (annual) Field Tours of Habitat Management Demonstration Sites for landowners, partner organizations, policy makers, other constituents, and general public.

Issue 2. Habitat management goals and strategies are not provided for any of the big game species as they are for most other taxa.

Strategy 1. Provide habitat management direction in order to provide a stronger foundation for building partnerships with other government and non-government organizations (eg., Rocky Mountain Elk Foundation, National Wild Turkey Federation, and various state and federal agencies).

Tactic 1. Develop fencing specifications that accommodate big game movement.

Tactic 2. Develop forest management activities to

provide sustainable pine habitats by reducing the risks of large-scale crown fires.

Tactic 3. Develop prescribed burning goals for habitat improvement on forest service lands.

Objective 4.

Assess habitat to refine and maintain a current statewide dataset of conditions which can serve as a tool to better target and prioritize habitat program delivery. This assessment will happen every four years beginning on January 1, 2012.

ISSUE 1

No comprehensive statewide habitat baseline dataset exists for targeting and prioritizing habitat program delivery.

Strategy 1. Develop a methodology to assess and develop baseline information regarding the quality and quantity of aquatic and terrestrial habitat.

 **Tactic 1.** Develop a baseline report of land-use and habitat conditions to be repeated every five years to determine trends and changes in land-use and habitat that will feed into landscape planning efforts.

Tactic 2. Prioritize development of data collection to fill identified gaps.

Tactic 3. Periodically reassess the quality and quantity of habitat conditions and trends.

Strategy 2. Develop and establish a model of “desired” habitat conditions and priorities to enable managers to make better planning decisions.

Tactic 1. Establish a core working group to develop model of “desired” selected lands.

Tactic 2. Core working group will work cooperatively with managers to prioritize efforts on the landscape.

Tactic 3. Core working group will review and, if necessary, adjust established “desired” habitat conditions periodically (every four years).

Objective 5.

Ensure that quality information on habitat development and management is available to all stakeholders so that they can make informed decisions.

ISSUE 1

Current outreach efforts may not be the most effective at impacting landscapes or influencing landowners’ attitudes and actions and could perhaps be better directed toward more affective or capacity building efforts.

Strategy 1. Develop a methodology to evaluate the quality, quantity, and effectiveness of current outreach programs.

Tactic 1. Define scope of evaluation and identify attributes to be evaluated.

Tactic 2. Prioritize attributes and collect relevant

data.

Tactic 3. Prepare evaluation report.

Tactic 4. Repeat periodically (every four years).

Strategy 2. Adjust and improve outreach programs to provide acceptable quality, quantity, and effectiveness.

Tactic 1. Expand the number of meaningful Commission “contacts” with cooperators.

Tactic 2. Foster and develop capacity building efforts with expanded partnerships.

Tactic 3. Provide guidance to partners and cooperators on monitoring habitat responses in relation to identified management objectives.

Tactic 4. Provide annual Field Tours of Habitat Management Demonstration Sites for landowners, partner organizations, policy makers, other constituents, and general public to learn about quality habitat management practices and techniques.

Strategy 3. Develop and initiate a cooperative program to improve relationships among landowners, sportsmen and women, the non-hunting public and local communities to demonstrate appreciation for habitat management contributions.

Tactic 1. Provide periodic District wildlife and habitat interactive tours to landowners/operators, public officials, non-governmental organizations, other constituents, and general public.

Tactic 2. Develop and initiate a recognition program for quality efforts of private and/or public landowners accomplishing or fostering quality habitat management.

Strategy 4. Develop guidelines for a media outreach program to improve exposure to quality habitat management practices and available habitat technical assistance.

Tactic 1. Annually schedule special “Media Days” for local and regional media representatives to spend time on District Habitat Management Demonstration Sites interacting with Commission and partner organization staffs.

Tactic 2. Develop “Question & Answer” Habitat Fact Sheets (both paper and electronic copies) on habitat and spatial requirements of important wildlife species and habitats; include techniques and practices to develop and manage habitat types, and available habitat management assistance.

Tactic 3. Prepare regular, timely news releases on habitat management for local newspapers and/or other local media outlets at the District level.

Tactic 4. Incorporate an “Ask-an-Expert” component on website or other “social media” to directly respond to wildlife and habitat questions and assign this responsibility to specific staff member(s).

Objective 6.

Evaluate existing access programs and opportunities and facilitate improvements in order to achieve a level

of 250,000 acres of access on private land and 850,000 acres of non-Nebraska Game and Parks Commission public land by September 1, 2012.

ISSUE 1

Approximately three percent of Nebraska land is open to public hunting, fishing, and other wildlife-related outdoor recreation opportunities. Public access is obviously limited.

Strategy 1. Use or develop tools to periodically measure the level of desired public access and periodically assess the quantity, quality, and distribution of available public access.

Tactic 1. Develop a GIS database of all public/partner-owned lands in Nebraska and assess access opportunities.

Tactic 2. Develop survey tool(s) to assess access demand and use.

Strategy 2. Develop a methodology to evaluate the quality, quantity, and effectiveness of current access programs and adjust as necessary.

Tactic 1. Define scope of evaluation and identify attributes to be evaluated.

Tactic 2. Prioritize attributes, collect relevant data, and prepare evaluation report.

Tactic 3. Initiate necessary adjustments to access programs.

Tactic 4. Repeat periodically (every four years).

Strategy 3. Develop, expand, and deliver current and additional access programs and processes to improve wildlife-related outdoor recreation opportunities.

 **Tactic 1.** Develop survey instruments and methods to critically evaluate access programs (Open Fields and Waters, Passing Along The Heritage) to guide future changes or expansion.

Tactic 2. Facilitate deer and/or turkey hunting on lands experiencing depredation problems.

Tactic 3. Develop, evaluate, and adapt “Pilot” programs that address specific access situations and opportunities.

Tactic 4. Support the United State’s Forest Service in implementing their management plan to enhance wildlife habitat and hunting opportunities on Nebraska’s 351,000 acres of national forest and grassland, pursuant to Presidential Executive Order Facilitation of Hunting Heritage and Wildlife Conservation (August 17 2007).

Strategy 4. Develop and initiate a cooperative program to improve relationships among landowners, sportsmen and women, the non-hunting public and local communities and to demonstrate appreciation for public access opportunities on good habitat sites. (Can be accomplished in conjunction with Objective 4, Strategy 5 above).

Tactic 1. Provide periodic District wildlife and habitat interactive tours to landowners/operators, public

officials, non-governmental organizations, other constituents, and general public.

Tactic 2. Develop and initiate a recognition program for quality efforts of private and/or public landowners providing public access to quality habitat sites.

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Missouri River

It could be so much more!

“Purpose and Direction” - The Missouri River has been so modified (primarily for navigation) that it no longer supports the flora and fauna it once did. Despite the proximity of a large portion of the state’s population, only 17 percent of Nebraska licensed anglers fished the Missouri River in 2002. The agency has played a prominent role in recovering the Missouri River to a more-natural state. This is an arduous process, fraught with politics, but progress is being made. The agency should continue to conduct research necessary to evaluate changes made in the Missouri River (mostly funded by the U.S. Army Corps of Engineers). We should also continue our involvement in the many committees, organizations, and groups that influence decisions on how the system will be operated.

periodic flooding and other factors affecting channel morphology. Most of the dynamic changes in river morphology were correlated with natural flooding events. Mainstem reservoir water management operations have minimized and controlled high spring runoff events in order to provide flood control and to regulate flows for navigation in the channelized reach downstream of Sioux City. Not only have fish communities been affected, but reproduction of native birds and aquatic insects as well. The number of species that are declining in abundance or facing extinction continues to grow.

Navigation on the Missouri River began in 1819; alterations started in 1829 with snag removal, which was initiated to improve steamboat navigation to Fort Benton, Montana. During the 1930s and 1940s, a bank stabilization and navigation project constructed a 6-foot-deep by 200-foot-wide navigation channel from Kansas City to St. Louis, Missouri. During the 1950s and 1960s, the navigation channel was deepened to nine feet with a 300 foot wide channel and extended upstream to Sioux City, Iowa. Between 1940 and 1964, six mainstem dams (Fort Peck, Garrison, Oahe, Big Bend, Fort Randall, and Gavins Point) were constructed on the Missouri River. The upper three dams impound 540 miles of river in Montana, North Dakota, and South Dakota while the lower three impound 220 miles predominately in South Dakota; the lowermost, Gavins Point, impounds water on the South Dakota/Nebraska border. Although the channel was built and maintained for navigation purposes, navigation has almost completely disappeared from Nebraska in the past 50 years.

Channelization of the Missouri River downstream of Sioux City, Iowa, between 1923 and 1976 altered the channel from a broad semi-braided river to a single, narrow, channel with a series of gentle bends. This river reach was shortened by 127 miles (U.S. Fish and Wildlife Service 1980) and islands, chutes, backwaters, oxbows, sandbars and other shallow aquatic habitats were cut off and/or largely eliminated. Much of the historical channel habitat, which contained the optimum fish and wildlife habitat and recreational land, was converted to agricultural land and river front properties. From the headwaters to the mouth, the Missouri River lost 4.5 million acres of fish and wildlife habitat to impoundment, channelization, and encroachment. The scope of this program includes research, management, conservation education, recreational use, and habitat restoration of the Missouri River ecosystem in Nebraska. Geographically, the landscape includes 39 miles of the unchannelized National Recreation River starting at

Introduction

The historic Missouri River was known for its ability to quickly change its appearance and even its location. Many people believed that the changes made to the Missouri River over the last 100 years were irreversible and that the habitat for fish and wildlife was lost forever. The Nebraska Game and Parks Commission has been committed for nearly 40 years to correcting this misunderstanding and repeating the message that the Missouri River can indeed be restored. The Commission leads the effort to restore the natural form and function of the Missouri River, within the constraints of a multipurpose system, to a condition ensuring the long-term survival of the Missouri River ecosystem.

The Missouri River drains approximately 529,350 square miles of land. Originating at the confluence of the Jefferson, Madison, and Gallatin rivers in Montana, it flows 2,341 miles east and south to its confluence with the Mississippi River near St. Louis, Missouri. Historically, this river was one of the most dynamic large rivers on earth. Natural runoff events were instrumental in creating its constantly shifting course, with depth, width, and length changing in response to bedload,

Fort Randall Dam in South Dakota to the headwaters of Lewis and Clark Lake, Lewis and Clark Lake including Gavins Point Dam tailwaters, an additional 59 miles of unchannelized National Recreation River downstream to Ponca, Nebraska, the channelized reach starting at Ponca to the Kansas border, as well as associated backwaters, wetlands, chutes, oxbows and the floodplain of the river proper.

In the past 15 years, changes to the Missouri River have occurred at a rate perhaps similar to that prior to man's influence. Some of these changes have been physical, but many changes have been in attitudes regarding what the Missouri River could or should be. These include the role that the Missouri River should play in the lives of the people of the Missouri River Basin. Changes can be seen in the commitments of state and federal agencies and non-governmental organizations towards restoration, management, recreation and educational efforts on the Missouri River. There is interest and sound justification for making the Missouri River an economic engine based on the concept of increasing ecosystem goods and services to society (ECONorthwest 2006). The demand for fishery, wildlife, and other outdoor recreational opportunities on and along the Missouri River far exceeds the supply available at the present time due to a shortage of surface water (in both reservoirs and streams) in eastern Nebraska. The most reasonable prospect to address this shortage appears to be maintaining and/or improving waters currently available to the public. Since over 60 percent of Nebraska's population lives in the first two tiers of counties adjacent to the river, the potential exists for the Missouri River floodplain corridor to become a primary source of recreation for more than one million Nebraskans. The prospect for economic development in terms of recreational benefits (ecotourism) is greater if floodplain river habitat is restored. Also, it would ease the burden on the U.S. taxpayer if a more natural Missouri River ecosystem was restored because it would reduce obligations under the National Flood Insurance Program.

To restore endangered pallid sturgeon populations, the U.S. Fish and Wildlife Service issued a Biological Opinion (U.S. Fish and Wildlife Service 2000) and a revised biological opinion (U.S. Fish and Wildlife Service 2003) for the Missouri River recommending restoration of shallow water habitats and a more natural flow regime. The U.S. Army Corps of Engineers accepted these Opinions and has developed a plan to meet these objectives.

In 2007, Congress passed a Water Resource Development Act requiring identification of plans and actions needed to restore ecosystem functions, mitigate habitat losses, and recover native fish and wildlife that are dependent upon the Missouri River. This effort is

referred to as the Missouri River Ecosystem Recovery Plan. In 2008, Congress funded the Missouri River Authorized Purpose Study (five years, \$25 million) to review the authorized purposes of the Flood Control Act of 1944. These purposes are flood control, navigation, fish and wildlife needs, irrigation, power, recreation, water supply, and water quality control. The directive of the study is to review purposes in relation to contemporary and future needs of the region and the Nation.

Accomplishments over the past 15 years have included expanded authorization of the Missouri River Mitigation Project (under the Missouri River Recovery Program) to 118,650 acres and new border water agreements and regulations. Monitoring activities have included mitigation site and pallid sturgeon monitoring projects, continuation of a long-term fisheries monitoring program, a Missouri River boat access site inventory, and recreational and angler use surveys. Nebraska has been active in fostering communication by hosting the Missouri River Natural Resources Conference in 1998, 2002, 2006, 2007, 2008, 2010 and 2011. Commission staff have provided technical assistance to individuals, agencies, politicians, and the media on a variety of Missouri River issues. A new interpretive center focusing on the Missouri River opened at Ponca State Park (Ponca, Nebraska) in 2002. Boat ramps were completed at Verdel Landing (RM 851.5, Verdel, Nebraska), Mulberry Bend (RM 775.0, Newcastle, Nebraska), and Indian Cave State Park (RM 517.0, Shubert, Nebraska), and a new marina was built at Lewis and Clark SRA (Crofton, Nebraska). Also, the Bob Kerrey Pedestrian Bridge linking Omaha and Council Bluffs opened and facilities were updated at Niobrara State Park (Niobrara, Nebraska). Approximately 10,000 acres of mitigation land has been acquired and enhanced for public access in Nebraska.

The most important accomplishment on the Missouri River has been the development of close working relationships with many different agencies that have greatly facilitated successful Missouri River projects. These include: basin states' fish and wildlife agencies, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, United States Geological Survey, National Parks Service, University of Nebraska (Lincoln and Omaha), The Nature Conservancy Izaak Walton League, Natural Resources Conservation Service, Nebraska's Natural Resource Districts, Nebraska Department of Roads, Nebraska Environmental Trust, Ducks Unlimited, and many other non-governmental organizations (e.g., The Conservation Fund, Missouri River Futures, Missouri River Institute).

Goal

The goal is to restore, recover, protect, and maintain the diversity of Missouri River habitats, resources, and ecosystem functions so present and future generations can enjoy consumptive and non-consumptive outdoor recreational opportunities.

Objective 1.

Restore a total of 203,000 acres of terrestrial and aquatic floodplain habitat types by 2014 between Sioux City and the Kansas/Nebraska state line. This would include oxbows, chutes, sand bars, backwaters, wetlands, and other shallow water habitats.

ISSUE 1

Modification of the physical form of the Missouri River impacts the natural ecological functions.

Strategy 1. Recover the physical form and function of the river within the constraints of the Flood Control Act of 1944.

 **Tactic 1.** Increase top width of the channelized reach to establish shallow water habitat diversity for fish and wildlife (e.g., encourage meandering by removal of stabilization structures; opening chutes; restoring backwaters).

Tactic 2. Encourage levee setbacks and a functional connected floodplain.

Tactic 3. Develop partnerships with Federal, State, and non-governmental organization entities in order to cost share on projects and grants.

Tactic 4. Restore and/or enable sediment transport for river reaches downstream of Fort Randall and Gavins Point dams.

Tactic 5. Restore coarse particulate organic matter and large woody debris in the river.

Tactic 6. Investigate bioengineering alternatives to traditional stabilization practices to protect vital infrastructure on a case by case basis.

ISSUE 2

There is a lack of a large-scale land acquisition strategy and too many fragmented and ineffective administrative authorities and responsibilities.

Strategy 1. Work with federal, state, and local/private entities to acquire floodplain land.

 **Tactic 1.** Continue coordination with the U.S. Army Corps of Engineers for the expanded mitigation and Missouri River Biological Opinions (under Missouri River Recovery Program) to consolidate administrative authority and responsibilities.

Tactic 2. Encourage zoning legislation and public management of the 100-year floodplain, especially between federal levees.

Tactic 3. Address local taxation issues associated with floodplain acquisition.

Objective 2.

Restore flows that mimic the natural hydrograph by 2014.

ISSUE 1

Reproduction, survival, and population levels of fish and wildlife are hampered by existing water management that favors navigation.

Strategy 1. Continue coordination with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to implement a naturalized hydrograph.

Tactic 1. Participate in monitoring studies.

 **Tactic 2.** Advocate the use of flows to create an erodible corridor between Sioux City and the Kansas/Nebraska state line that will build riverine habitats and recover ecosystem functions in addition to storing flood waters.

 **Tactic 3.** Target flood-prone lands, wetlands, and similar floodplain lands for acquisition (reducing repetitive taxpayer bailouts).

Tactic 4. Restore floodplain wetlands to improve water quality conditions from non-point sources of pollution, to increase floodplain storage and flow conveyance capacity, and to maximize wetland diversity (connectivity, duration, vegetative composition, flood frequency, etc.) benefitting increased species diversity.

Objective 3.

Inform and educate the general public and constituency groups about ecosystem function and management.

ISSUE 1

The general public and river users are not aware of or knowledgeable about how large river ecosystems function.

Strategy 1. Develop public outreach programs to educate the public on all aspects of ecosystem needs, including a naturalized hydrograph and erodible corridor.

Tactic 1. Create a Missouri River homepage.

Tactic 2. Provide information to interpretative centers.

Tactic 3. Incorporate Missouri River information into Outdoor Education curriculum.

 **Tactic 4.** Participate in river festivals, expos, river cleanups, and educational events.

Tactic 5. Develop an educational video to communicate scientific information to the public.

Objective 4.

Increase public use of the Missouri River and its floodplain by 2014.

ISSUE 1

Access to the Missouri River is inadequate.

Strategy 1. Increase and improve public access.

Tactic 1. Maintain an on-going boating access project through 2014 with a priority list of potential/needed access sites.

Tactic 2. Develop public bank-line access areas for anglers.

Tactic 3. Contribute to ongoing efforts to develop a canoe trail for users.

Tactic 4. Develop river user guides.

Objective 5.

Manage native fish, wildlife, waterfowl, and furbearers.

ISSUE 1

Some native fish stocks, furbearers, and wildlife comprise a fraction of their historic densities and diversities.

Strategy 1. Propose and implement regulations that ensure resources are managed for optimum sustained yield.

Tactic 1. Conduct monitoring and evaluation projects for fish and wildlife resources on the Missouri River.

Tactic 2. Coordinate with local, state, federal, tribal, and other organizations interested in intra- and inter-jurisdictional resources, issues, and management.

References

ECONorthwest. 2006. *Natural-Resource Amenities and Nebraska's Economy: Current Connections, Challenges, and Possibilities*. Eugene, Oregon. August 2006. 119p.

U.S. Fish and Wildlife Service. 1980. *Fish and Wildlife Coordination Act Report, Missouri River Stabilization and Navigation Project, Habitat Restoration*. May 1980.

U.S. Fish and Wildlife Service. 2000. *Biological Opinion On The Operation of the Missouri River Main Stem Reservoir System, Operation and Maintenance of the Missouri River Bank Stabilization Project, and Operation of the Kansas River Reservoir System*. Region 6, Denver, Colorado and Region 3, Fort Snelling, Minnesota. 286p.

U.S. Fish and Wildlife Service. 2003. *Revised Biological Opinion On The Operation of the Missouri River Mainstem Reservoir System, Operation and*

Maintenance of the Missouri River Bank Stabilization Project, and Operation of the Kansas River Reservoir System. December 2003.

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Rivers, Streams and Canals

A river is not a river without water!

“Purpose and Direction” - Historically, rivers and streams provided most of Nebraska’s fishing opportunities. In 2002, 11 percent of licensed anglers fished the Platte River and 26 percent fished other streams, rivers, and canals. Most efforts aimed at streams, especially warmwater streams, involve legal attempts to maintain or improve flows. It should be a goal of this program to establish environmental flows for all of Nebraska’s rivers and streams, below which no water would be extracted. This would be difficult to accomplish! Others activities include stocking trout in select coldwater streams, improvements of instream and riparian habitats, construction of fish by-pass structures, increase angler access, and the introduction of sauger in canals.

Canoeing/floating Nebraska’s rivers is increasing in popularity. The 1991 Statewide Comprehensive Outdoor Recreation Plan noted that canoeing recreation days increased from 531,390 in 1980 to 886,912 in 1985. An indication of the popularity of canoeing is that there were 26 canoe outfitters or rental companies operating in Nebraska in 1995. The National Park Service estimated that 46,456 floating days occurred on the Niobrara National Scenic River reach during 2008 (Shultz 2009).

The scope of this program includes research, management, conservation, associated recreational use and habitats of all flowing waters, excluding the Missouri River (i.e., rivers, streams, canals, brooks, creeks), wetlands (i.e., sloughs, backwaters, bayous, marshes, and all other areas with periodic connections to flowing waters), and associated riparian zones. Multi-use issues such as hunting, trapping, boating and swimming will be addressed by this program as they relate to fisheries and ecological management in rivers, streams and canals.

Nebraska has 13 river basins according to the University of Nebraska-Lincoln’s Conservation and Survey Division. These 13 river basins contain 12,370 miles of streams (**Table 2**).

Introduction

On March 10, 1867, when Nebraska was granted statehood, it was a place of rivers and streams. Lakes were few outside of the Sandhills. Nebraska’s native fishes were almost exclusively stream and river fishes. As time passed, agricultural and cultural needs resulted in the construction of many reservoirs, water diversion projects, and flood protection projects (e.g., levees, channelization, flood storage dams) to protect development in flood plains. Due to these developments, water-based recreation shifted from streams to reservoirs. However, rivers, streams and canals still provide important recreational opportunities and contribute to the biological, social and economic values of Nebraska. Angler use surveys indicate that 20.7 to 30.8 percent of Nebraska licensed anglers fish rivers, streams or canals (**Table 1**).

Table 1. Percent of all anglers and number of fishing trips on Nebraska streams.

Year of Survey	Percent of all anglers	Number of stream fishing trips	Source
1975	20.7 %	1,038,633	Morris, 1977
1981	29.0 %	2,801,400	Zuerlein, 1984
1985	30.8 %	3,119,940	SCORP, 1991
2002	24.1%	NA	Hurley and Duppong Hurley, 2005

Table 2. Drainage area and miles of streams by river basin in Nebraska.

STREAM BASIN	DRAINAGE AREA (ACRES) ¹	MILES OF STREAMS ²
Missouri Tributaries	1,890,000	651
Nemaha	1,770,000	1,278
Big Blue	2,925,000	1,600
Little Blue	1,695,000	905
Republican	6,175,000	1,136
Lower Platte	1,990,000	694
Middle Platte	3,285,000	630
North Platte	4,570,000	412
South Platte	2,015,000	280
Elkhorn	4,480,000	1,259
Loup	9,750,000	1,626
Niobrara	7,595,000	1,555
White River-Hat Creek	1,360,000	345
Total	49,500,000	12,371

¹ Nebraska Natural Resources Commission, 1974.

² Bliss and Schainost, 1971.

Goal 1

The goal is to conserve and improve the physical, chemical, and biological integrity of Nebraska’s flowing water systems.

Objective 1.

Develop coordinated data-collection efforts and foster inter-divisional and inter-agency communications and involvement.

ISSUE 1

There is insufficient coordination and cooperation within our agency or among Nebraska's regulatory and planning agencies with regard to stream protection, management, or assessment.

Strategy 1. Improve intra-agency coordination of projects and data sharing.

Tactic 1. Develop an inter-divisional conflict resolution process to address sport fishing, recreation, and native/threatened species conflicts and to recommend alternatives.

Tactic 2. Maintain existing databases and develop new stream fisheries and habitat databases.

Tactic 3. Coordinate with other local, state and federal agencies on Environmental reviews that are pursuant to the Clean Water Act (404 permits), National Environmental Policy Act and the Fish and Wildlife Coordination Act.

Strategy 2. Improve inter-agency coordination of projects and data sharing.

Tactic 1. Involve partners in project planning and implementation.

Tactic 2. Coordinate the exchange and use of project data.

ISSUE 2

There is a lack of biotic and abiotic information.

Strategy 1. Collect appropriate information.

Tactic 1. Review and revise "Sampling guidelines for Nebraska rivers and streams" as needed.

Tactic 2. Train agency staff in stream survey techniques contained in the manual.

Tactic 3. Conduct surveys on 10 streams each year.

 **Tactic 4.** Pursue funding opportunities to support stream survey work (e.g., State Wildlife Grants; Nebraska Environmental Trust; Environmental Protection Agency; Fish and Wildlife Service; Corps of Engineers).

Objective 2.

Annually improve a minimum of 10 miles of stream habitat.

ISSUE 1

Stream alterations have resulted in negative impacts to habitat and fisheries. Funding and landowner cooperation are vital to the success of stream habitat improvement projects.

Strategy 1. Develop funding and agency/landowner partnerships to improve stream habitats.

 **Tactic 1.** Coordinate with other agencies and non-

governmental organizations (Natural Resources Conservation Service, Natural Resources Districts, etc.) on programs to work with willing cooperators to protect streams from degradation.

Tactic 2. Coordinate with the Natural Resources Conservation Service, ag-related groups, and non-governmental organizations to develop publications, presentations, visual aids, workshops and field demonstrations that demonstrate successful habitat improvement methods and strategies.

Tactic 3. Monitor selected demonstration projects to evaluate effectiveness and document success.

Objective 3.

Develop policies and practices to preserve and enhance native stream fish populations.

ISSUE 1

Reservoir management negatively impacts native stream fisheries.

Strategy 1. Integrate reservoir and stream fisheries management.

Tactic 1. Develop a policy regarding the practice of watershed renovations that preserves stream fisheries integrity.

ISSUE 2

Anthropogenic changes have impacted native fish populations.

Strategy 1. Determine present status of at-risk species

Tactic 1. Conduct surveys to monitor distribution and abundance of at-risk species.

Tactic 2. Coordinate and cooperate with Nongame and Heritage programs in maintaining and updating lists and distribution maps of threatened aquatic species and assist with development of species recovery plans.

 **Tactic 3.** Re-establish (where feasible) populations of native species into areas where they have been extirpated.

Tactic 4. Work with Heritage to review Scientific Collection Permit processes and improve the quality of data reported.

Strategy 2. Evaluate the impact commercial baitfish harvest has on native fish populations.

Tactic 1. Document species composition and abundance of commercially harvested baitfish from streams.

Strategy 3. Identify and mitigate stream barriers that interfere with the migration of fish, increase fragmentation of populations, and isolate individuals into marginal or terminal habitats.

Tactic 1. Inventory barriers and diversions on Nebraska streams and prioritize mitigation efforts.

Tactic 2. Develop partnerships with federal agencies (e.g., National Fish Passage Program), state and local entities (e.g., Department of Natural Resources; Natural

Resources Districts; power companies; irrigation districts), and barrier owners to mitigate impacts of barriers and diversions.

Goal 2

The goal is to promote the recreational values and increase the use of Nebraska's flowing waters.

Objective 1.

Provide at least one new stream access site per year for the next 10 years.

ISSUE 1

The majority of land bordering streams is privately owned, limiting access for recreation. No listing of access points and their suitability currently exists.

Strategy 1. Document all existing public and private stream access sites.

Tactic 1. Inventory stream access sites and assess their suitability.

Tactic 2. Develop a statewide guide to stream access sites.

Strategy 2. Expand the number of available access sites and improve existing sites for public use.

Tactic 1. Develop agreements and partnerships with other entities (e.g., municipalities; Natural Resources Districts; Department of Roads; non-governmental organizations) and individuals for leasing, purchasing, or obtaining easements to properties with good access potential.

Objective 2.

Secure an instream flow appropriation(s) for the Niobrara River by 2014.

ISSUE 1

Water depletions threaten recreational activities like canoeing, fishing, and wading, and fish and wildlife resources.

Strategy 1. Determine information needs to prepare an appropriation request for recreation, and fish and wildlife resources.

Tactic 1. Conduct interdisciplinary studies to determine adequate flow needs.

Tactic 2. Conduct public outreach.

Tactic 3. Secure Commission approval to file.

Objective 3.

Protect existing instream flow appropriations.

ISSUE 1

Appropriations are up for review every 15 years.

Strategy 1. Develop justifications for maintaining our Platte River instream flow appropriations.

Tactic 1. Submit appropriate documents to the Department of Natural Resources.

Goal 3

The increase the public's awareness, knowledge, and appreciation of the importance of flowing waters.

Objective 1.

To develop educational programs/projects/materials promoting awareness, safe use, and benefits of Nebraska's flowing waters.

ISSUE 1

Nebraska citizens and policy makers don't understand or appreciate the recreational and environmental values of streams, rivers, and canals.

Strategy 1. Inform and educate Nebraskans.

Tactic 1. Utilize a diversity of printed and electronic media approaches to communicate the importance and function of streams, rivers and canals.

Tactic 2. Utilize Outdoor Education staff and "Project Wild" to develop pre-packaged curricula for schools which address Nebraska's flowing water issues and benefits.

Tactic 3. Continue to work with the Nebraska Wildlife Federation on ways to implement the "Adopt-a-Stream" program.

Objective 2.

Suggest new legislation and respond to proposed legislation, legal issues, and advocacy issues that can affect stream resources.

ISSUE 1

Existing water law does not sufficiently protect aquatic resources.

Strategy 1. Obtain more support from policy makers.

Tactic 1. Educate policy makers, other agencies, entities and non-governmental organizations on the economic and social values of streams for recreation and natural resources.

Tactic 2. Develop an inter-agency legislative/regulatory concerns committee to review proposed legal/institutional actions involving stream resources.

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Reservoirs

Seen by some as blights on the landscape, they are important to the quality of life in Nebraska!

“Purpose and Direction” - Man-made impoundments, stocked with sport fish (some non-native) provide most of Nebraska’s fishing, with 80 percent of licensed Nebraska anglers fishing these waterbodies in 2002. Reservoir fisheries management is thus a priority and will continue to be so. Since 2004, more strategies (28) have been completed or partially completed for reservoirs than any other waterbody type. But, there is still much to accomplish; the reservoir program also had more strategies with no action taken (34) than any other waterbody type. Restoration and enhancement through the Aquatic Habitat Program continues to be a major focus.

Reservoirs are popular fishing, vacation, and recreation destinations in Nebraska. Gabelhouse (1995) estimated that 57 percent of Nebraska anglers preferred to fish in reservoirs (**Figure 1**) while Hurley and Duppong Hurley (2005) found that 81 percent of anglers actually fished public lakes, reservoirs and ponds. An average direct expenditure of \$54 was estimated by anglers for each fishing trip (U.S. Fish and Wildlife Service 2006). Based on data reported in this survey, over 160,000 anglers fished these waters. This indicates that reservoir fishing has a substantial impact on Nebraska's economy. Reservoirs are also important to tourism in Nebraska, with three reservoir recreation areas (Branched Oak, Harlan County Reservoir and Lake McConaughy) ranked in the top ten visitation sites in 2007 (Nebraska Department of Economic Development 2009). Six other reservoirs areas ranked in the top 50 statewide (Calamus, Pawnee, Lewis and Clark, Willow Creek, Lake Maloney and Lake Minatare).

There are in excess of 280,000 surface acres of standing water in Nebraska with over 115,000 surface acres designated as public access (Statewide Comprehensive Outdoor Recreation Plan 1991). Reservoirs comprise 124,681 surface acres contained in 108 bodies of water. There are 34 reservoirs associated with power and irrigation totaling 113,747 acres with a mean size of 3,345 acres. Seventy-four reservoirs are classified as flood control with a total surface acreage of 10,934 and mean size of 148 acres.

Construction of new reservoirs in Nebraska reached a peak in the 1940s and 1950s, decreasing dramatically afterwards (**Figure 2**). The era of large reservoir construction has passed and future reservoirs will likely be less than 1,000 surface acres in size. Maintenance and improvement of existing reservoirs takes on a higher priority with the decline in new reservoir construction. One of the most important aspects linking all types of water bodies together is the need for good water quality, quantity, and suitable habitat. The Commission Fisheries Division Aquatic Habitat Program has assumed the task of improving reservoirs in terms of water quality and habitat restoration. In addition, the Fisheries Division provides planning and funding assistance for new reservoir construction with techniques that reduce sedimentation, shoreline erosion, nutrient inputs, improved angler access, and enhanced aquatic habitat. Although Commission authority in watershed management is limited, staff interacts with other entities (i.e., federal, state and local government agencies, and irrigation districts) that control these resources.

Introduction

Reservoirs are defined as those public bodies of standing water which are operated for flood control, irrigation, or public power purposes and managed for fish, wildlife, and other outdoor activities. This Program addresses fisheries aspects of reservoirs and those components of the aquatic ecosystem upon which they are based. Multi-use issues such as access, hunting, and boating will be addressed by this program only as they relate to fisheries management.

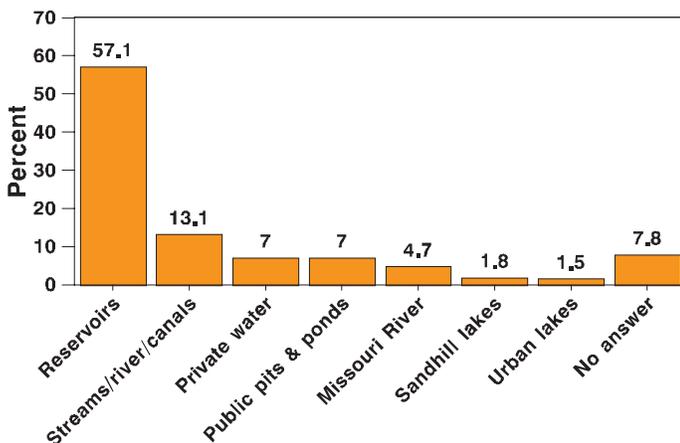


Figure 1. Type of waterbody licensed anglers in Nebraska prefer to fish.

Fish communities inhabiting Nebraska's reservoirs are diverse. Larger reservoirs are managed for pelagic or open water fish species such as walleye, white bass, and wipers. Smaller reservoirs, where the water levels do not fluctuate greatly, are managed for littoral or shoreline communities composed of largemouth bass, bluegill, and crappie. Common reservoir species, including walleye, channel catfish, white bass, and crappie, have shown increasing statewide preference from 1975 to 2002 (Figure 3). Information gathered from fish populations and angler use surveys are vital to the management of reservoir fisheries. Reservoir management plans are then completed to effectively manage and manipulate fish communities, aquatic habitat, fishing access, and angler use.

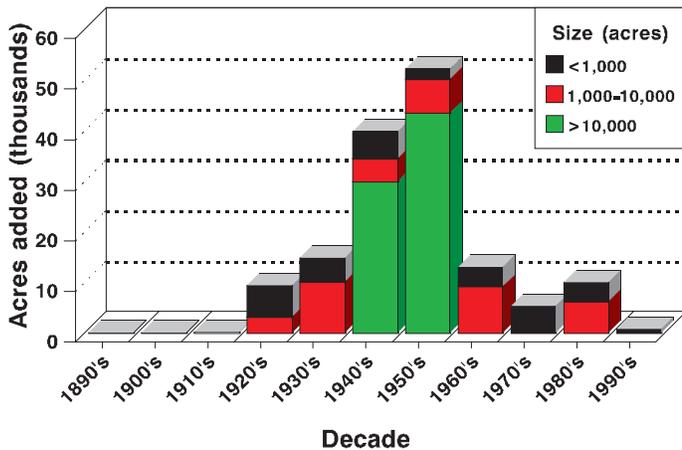


Figure 2. Acres of new fishing opportunities added in Nebraska by decade.

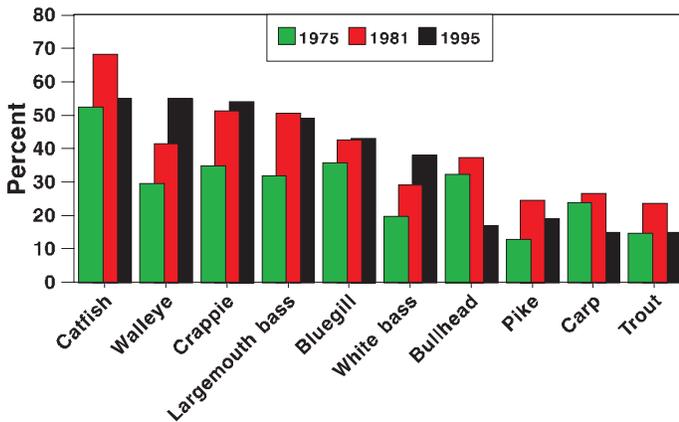


Figure 3. Percent of Nebraska anglers who fished for various fish species according to Morris (1976), Zuerlein (1984), and Gabelhouse (1995).

Goal

The goal is to create, enhance, and promote angler opportunities by maintaining and improving aquatic resources and public information.

Objective 1.

Improve aquatic habitat in Nebraska reservoirs with annual expenditures of about three million dollars over the next four years.

ISSUE 1

Aquatic habitat and the ability to support desirable fish communities decline as reservoirs age.

Strategy 1. Maintain a coordinated statewide program for improvement and rehabilitation of aquatic habitat in Nebraska reservoirs.

Tactic 1. Continue to seek other sources of aquatic habitat project funding (e.g., Sport Fish Restoration, Nebraska Environmental Trust, Environmental Protection Agency 319, Bureau of Reclamation, and Natural Resources Districts).

Tactic 2. Develop site-specific habitat project plans with completed engineering design.

Tactic 3. Address intra-agency and interagency coordination, project prioritization, project distribution, and evaluation techniques.

Tactic 4. Conduct periodic review and updates of the Nebraska Aquatic Habitat Plan, including guidelines for evaluation of reservoir rehabilitation methods to identify most effective techniques.

Tactic 5. Encourage public support of the Nebraska Aquatic Habitat Plan by distribution of information about completed and ongoing projects.

ISSUE 2

Watershed degradation negatively impacts water quality and aquatic habitat.

Strategy 1. Provide technical expertise on watershed management.

Tactic 1. Provide input to watershed controlling agencies such as Nebraska Department of Environmental Quality, Natural Resources Districts, and Natural Resources Conservation Service.

Tactic 2. Coordinate with Commission Wildlife Habitat Partners and the Private Water Biologist to implement watershed improvement projects such as buffer strips, stream fencing, and watershed impoundments.

Tactic 3. Demonstrate the benefits of watershed improvement projects to the public.

Tactic 4. Seek increased funding for watershed improvement such as EQUIP; improve public knowledge of economic incentives and programs available.

ISSUE 3

There is limited Commission input for reservoir water management.

Strategy 1. Advocate the ecological and socioeconomic benefits of timely water level management.

Tactic 1. Provide technical input to water control entities for reservoir operation and water level management.

Tactic 2. Maintain or improve water storage by leasing or purchasing water with outside funding.

Tactic 3. Document the relationship between public use and reservoir elevations.

Objective 2.

Provide fisheries management for all proposed or newly obtained public reservoirs.

ISSUE 1

Most public entities lack sufficient expertise concerning fisheries management.

Strategy 1. Provide technical expertise to public entities.

Tactic 1. Consult with other entities concerning the design and construction of reservoirs to enhance fishery potential.

Strategy 2. Insure proper fish species communities and public access is available in new reservoirs.

 **Tactic 1.** Provide fish stocking in new or newly obtained reservoirs

Tactic 2. Obtain Memorandum of Understandings or management agreements to provide Commission management and insure public access.

Objective 3.

Design and implement research projects to develop effective and innovative fisheries management practices.

ISSUE 1

The effectiveness of fishery management strategies needs to be evaluated.

Strategy 1. Assess and prioritize research needs, to include fish stocking, fisheries regulations, habitat improvement, reservoir operations, and life history requirements.

Tactic 1. Obtain input from Commission staff, non-agency fisheries professionals (e.g., American Fisheries Society Technical Committees), and other entities.

Tactic 2. Allocate funding and staffing both within and outside Commission.

Tactic 3. Conduct research that improves fisheries management effectiveness (e.g., stocking criteria, regulation applications, habitat improvement techniques, life history details).

Objective 4.

Complete 12 individual reservoir management plans each year to provide site-specific management activities and long-range planning.

ISSUE 1

Fishery managers need site-specific data from reservoirs to develop sound management plans.

Strategy 1. Perform annual fish population and angler use surveys.

 **Tactic 1.** Annually inventory the fish populations in at least 30 reservoirs.

 **Tactic 2.** Collect angler use data on selected reservoirs, including creel surveys and information from concessionaires, fishing guides, angler groups, and fishing tournaments.

Tactic 3. Conduct a statewide angler use survey every five years.

Tactic 4. Develop and maintain a computer database of angler survey data and results.

ISSUE 2

There is a lack of communication and coordination concerning reservoir management.

Strategy 1. Establish and maintain intra- and inter-agency communications.

Tactic 1. Hold periodic meetings to improve coordination of reservoir management.

Tactic 2. Provide reservoir operation recommendations to controlling agencies.

Tactic 3. Use printed materials and electronic media to distribute reservoir management plan information.

ISSUE 3

Conflicts arise between different user groups and management philosophies or practices, and there is no formal Commission mechanism to resolve such conflicts.

Strategy 1. Formalize an inter-divisional communication process.

Tactic 1. Form inter-divisional committees to prepare recommendations for necessary laws, regulations, and management practices.

Objective 5.

Complete at least six fishing access improvement projects on reservoirs annually, including access roads, boat ramps, parking, piers, jetties, and handicap access.

ISSUE 1

Fishing access and amenities associated with public reservoirs need to be improved.

Strategy 1. Improve shoreline angler access by implementing the "Nebraska Angler Access Program" plan.

 **Tactic 1.** Prioritize, select and implement projects.

Strategy 2. Develop, maintain and improve motorboat access.

Tactic 1. Develop a statewide motorboat access plan.

Tactic 2. Prioritize, select and implement projects.

Tactic 3. Seek alternative funding (e.g., third-party agreements).

ISSUE 2

Operation and maintenance is often insufficient at many reservoirs.

Strategy 1. Improve and maintain amenities for anglers such as fish cleaning stations, boat docks, etc. to retain current anglers.

Tactic 1. Allocate agency staff and funding for operations and maintenance needs.

Tactic 2. Coordinate with Parks and Wildlife Divisions for operations and maintenance needs with a formal review/resolution process.

Objective 6.

Promote Nebraska reservoir fishing on state and national levels.

ISSUE 1

There is a lack of public awareness and appreciation of Nebraska reservoir fishing opportunities.

Strategy 1. Provide appropriate information to the public.

Tactic 1. Utilize agency Marketing and Information and Education staff.

Tactic 2. Conduct periodic information meetings or workshops to distribute fishery information.

Tactic 3. Use other natural resource agency and fishing club newsletters for distribution of reservoir fishery information.

Tactic 4. Maintain and improve both the fishing forecast and outdoor report systems.

References

Gabelhouse, D. W. 1995. *Nebraska statewide angler survey*. Unpublished report, NGPC, Lincoln, NE.

Hurley and Duppong Hurley (2005). *2002 licensed angler survey: Summarized results*. Unpublished report, NGPC, Lincoln, NE. 30 pp.

Miller, G. 1968. *Statewide (1967) fishing pressure estimates obtained from a voluntary post card questionnaire and correlated information*. Unpublished report, NGPC, Lincoln, NE. 8p.

Morris, J.W. 1977. *Nebraska postal fishing creel census*. Final report, D-J Project F-4-R-22, NGPC, Lincoln, NE. 10p.

Nebraska Department of Economic Development. 2009. *Attendance at Selected Nebraska Attractions 2005-2007*.

SCORP. 1991. *State comprehensive outdoor recreation plan*. NGPC, Lincoln, NE..

Zuerlein, G. 1984. *Nebraska statewide fishing survey*. NGPC report, Lincoln, NE. 116p.

U. S. Department of the Interior, Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. *2006 National survey of fishing, hunting, and wildlife-associated recreation*. 81 pp.

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Table 1. Listing of Reservoirs Program waterbodies. Part A: Flood control reservoirs / Part B: Irrigation and power reservoirs.

PART A) FLOOD CONTROL RESERVOIRS								
Lake Code	Name of Reservoir	Acres	Lake Code	Name of Reservoir	Acres	Lake Code	Name of Reservoir	Acres
5721	Midlands	11	5480	Merganser 25A	41	5725	Standing Bear	135
5275	Wilson Creek 2X	15	5255	Hedgefield	44	5070	Rockford	150
3345	Pilger Dam	15	3327	Chalkrock WMA	44	5280	Burchard	150
1065	Carter P. Johnson	15	3200	Grove Lake	45	5535	Kirkmans Cove	160
5320	Swan Creek 2A	16	5447	Wolf Wildcat	45	3355	Leigh Lake	154
5495	Wild Plum	16	6440	Pioneer Trails Lake	45	5120	Olive Creek	175
5365	Redtail	17	5450	Clatonia 3A	46	3325	Summit Lake	190
5235	Donald Whitney	17	5510	Red Cedar	50	5130	Stagecoach	195
1660	Agate Pond	20	5520	Meadowlark	55	5265	Yankee Hill	208
5260	Killdeer	20	5726	Youngsman	60	5325	East Twin	210
5455	Buckley 3F	22	6435	Prairie Lake	65	5115	Conestoga	230
5525	Smith Creek	22	5421	Lonestar	75	1400	Oliver	250
5360	Mayberry	25	3330	Buckskin Hills	75	3705	Lake Yankton	250
5460	Cub Creek 9B	25	5445	Big Indian 11A	76	5728	Zorinsky	255
3125	Pibel Lake	25	5230	Arrowhead	77	5555	Wehrspan	256
5240	South Diamond	26	5470	Czechland	85	5420	Bruning	258
5515	Walnut Creek	26	5505	Iron Horse Trail	85	1355	Smith Lake	300
5465	Cub Creek 12A	27	3340	Maskenthine	90	5710	Carter Lake	300
5440	Timber Point	28	5550	Swan Creek 5A	95	5135	Wagon Train	315
5475	Cottontail	29	5745	Holmes	100	5105	Bluestem	326
5727	Whitehawk	30	5485	Wildwood	103	5720	Cunningham	390
5722	Shadow	30	3350	Powder Creek	104	3335	Willow Creek	700
6460	Liberty Cove	35	1225	Walgren Lake	113	5125	Pawnee	740
5500	Wilson Creek 4F	38				5512	Lake Wanahoo	640
3535	Skyview Lake	40				5110	Branched Oak	1,800
5552	Swan Creek	40						

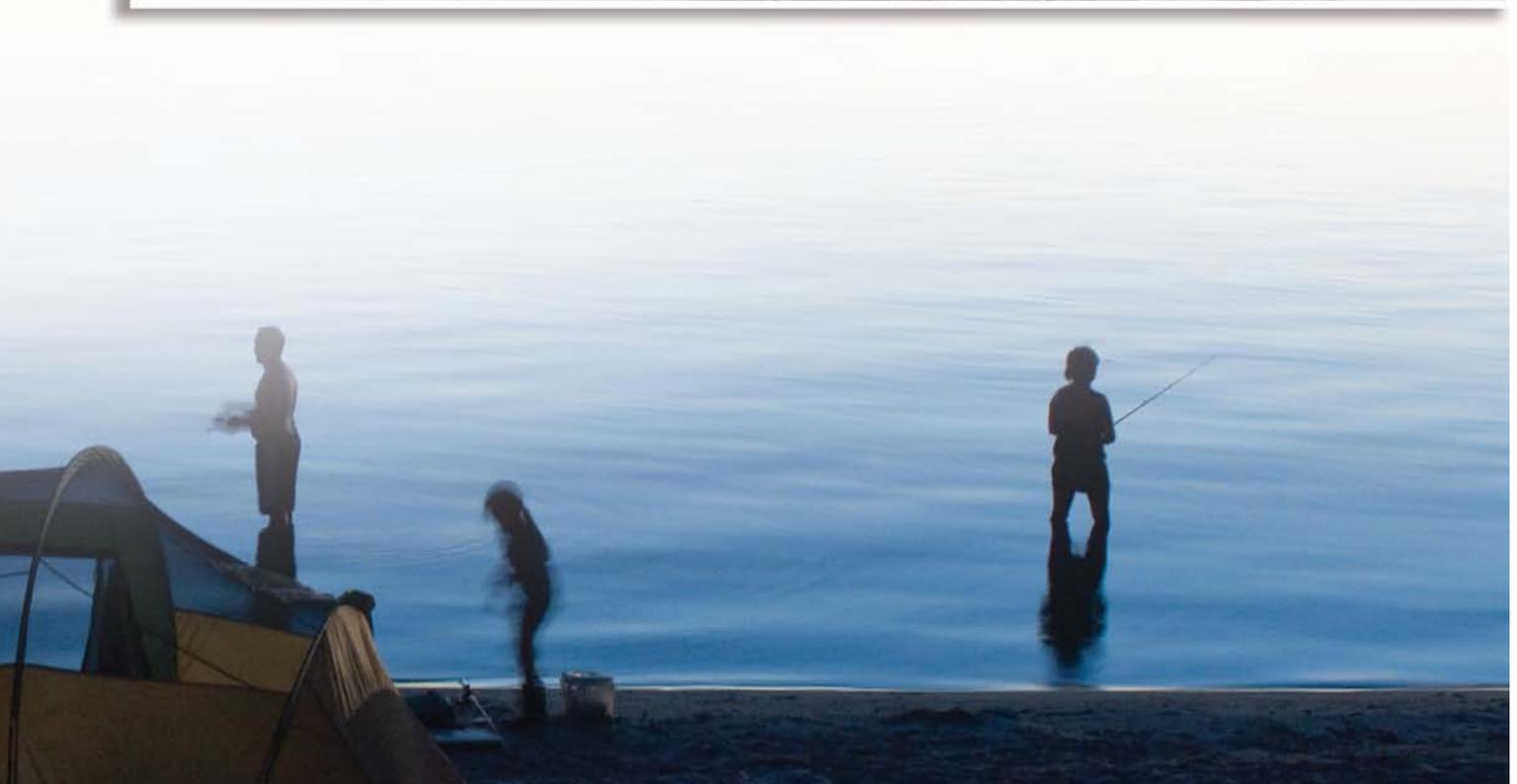
74 reservoirs; 10,934 total surface acres; mean size 148 acres



PART B) IRRIGATION AND POWER RESERVOIRS

Lake Code	Name of Reservoir	Acres	Lake Code	Name of Reservoir	Acres
1800	Dodd Dam	11	2785	Davis Creek	1,145
2250	Valentine Mill Pond	20	6530	Elwood	1,330
6500	Farwell South Reservoir	40	1600	Box Butte	1,600
3445	Lake Ericson	70	4565	Lake Maloney	1,600
1810	Bennet Reservoir	100	4910	Red Willow	1,628
6536	Phillips Canyon	142	4900	Enders	1,707
6525	Gallagher Canyon	182	4905	Medicine Creek	1,850
1655	Little Lake Alice	199	1645	Lake Minatare	2,153
3440	Lake North	200	6535	Johnson Lake	2,189
1650	Lake Winters Creek	235	6925	Sherman	2,845
6527	Plum Creek Canyon	252	2740	Merritt	2,905
6526	Midway Complex	609	4560	Sutherland	3,000
4545	Lake Ogallala	650	4920	Swanson	4,974
3430	Lake Babcock	700	2780	Calamus	5,127
1640	Big Alice Lake	784	6915	Harlan County	13,500
1805	Whitney Reservoir	900	4540	Lake McConaughy	30,000
4555	Jeffrey Lake	1,100	3710	Lewis and Clark Lake	30,000

34 reservoirs; 113,747 total surface acres; mean size 3,345 acres



Community and Urban Lakes

A key to recruiting anglers!

“Purpose and Direction” - Since 2004, this program has had the most strategies (15) and the highest percentage of strategies (47 percent) completed of all waterbody types. During the 11 years since the Urban Fisheries Program was first established, 26 small city park ponds and lakes have been rehabilitated through the Community Lake Enhancement and Restoration program – a joint effort between the agency, the University of Nebraska-Lincoln, and the Nebraska Department of Environmental Quality. Most of the cities that wanted to have their ponds or lakes rehabilitated have done so by now. Only 10 percent of licensed anglers fished city park ponds in 2002, but these bicycle-accessible waterbodies provide excellent opportunities to recruit youth to fishing. Management of these waterbodies has been decentralized and assumed by District Management biologists. They remain important sites for Recruitment Development and Retention events, but the main focus will turn to helping cities help themselves.

Introduction

“Community and Urban Lakes” are defined as those lakes that have a primary purpose of providing recreation and are located within one mile of a city or community (bicycle accessible). In Nebraska, about 100 lakes are within one mile of a community and about 80 of these are located within city parks.

In 1929, the agency formed a seining crew with the primary responsibility of seining fish (primarily from Sandhills lakes) and stocking them into city impoundments. This was discontinued in 1971, because it was determined that the program was not cost-effective. After its termination, the Commission did not have a program for community and urban lakes, so most of the responsibility for the management of these lakes was left to the cities. In 1999, the Urban Fisheries Program was created by the Commission. The need for

this program was identified in *Focusing on the Future* (1996).

There has been an increasing shift in Nebraska’s population from rural to urban areas. In 1950, 31 percent of the population lived in Lancaster, Douglas, and Sarpy Counties (Nebraska Department of Health 1993). Today, more than half of the state’s population lives in these three counties. This has caused an increased demand on and for fishery resources in these counties and may be partly responsible for declining angler participation in urban areas. In 1985, it was estimated that 28 percent of the urban population in Nebraska fished (U.S. Department of the Interior 1989). By 2006, the percentage had declined to an estimated 12 percent participation (U.S. Department of the Interior 2008). It is important to note that even at this low rate of participation, urban residents comprise 57 percent of Nebraska’s anglers (U.S. Department of the Interior 2008). According to Hurley and Hurley (2005), an estimated 9.1 percent of licensed anglers fished city park lakes in 2002.

Since 1999, the Urban Fisheries Program has been working to improve recreational fishing opportunities in cities and communities statewide and to expose more urban residents to fishing. More management attention has been given to city park lakes, with increased fish stockings and restrictive fish harvest regulations becoming uniform. Access has been improved through the construction of fishing piers and jetties. Funding (Nebraska Environmental Trust grants and Environmental Protection Agency Section 319 allocations for the Community Lake Enhancement and Restoration Program; Nebraska Aquatic Habitat Program projects) has been obtained to rehabilitate city lakes not providing quality angling opportunities. Additionally, fishing clinics and events for youth and families were held to introduce urban residents to fishing in their communities.

The scope of the community and urban lakes program includes management, education, and coordination with city administrators and other state agency personnel.

Goal

The goal is to optimize the use of community and urban lakes for fishing and aquatic education.

Objective 1.

To improve and maintain public fishing opportunities and aquatic resources in 75 percent of the urban and community lakes.

ISSUE 1

Many of these waters do not contain desirable habitat.

Strategy 1. Improve aquatic habitat.

Tactic 1. Renovate lakes containing undesirable fish communities.

Tactic 2. Manage aquatic vascular plants and algal blooms.

Tactic 3. Manage water quality and quantity to support fish (e.g., chemical treatments; aeration; alternative water sources).

Tactic 4. Assist communities with proper lake design, construction, and maintenance.

 **Tactic 5.** Assist communities in developing rehabilitation projects for ponds that no longer provide adequate habitat.

ISSUE 2

It is difficult to maintain quality fishing opportunities in densely populated areas.

Strategy 1. Maintain fish populations at levels to provide catch rates of at least one fish per hour.

Tactic 1. Develop stocking strategies to improve and maintain catch rates.

Tactic 2. Develop fishing regulations that help to improve and maintain high angler catch rates.

Strategy 2. Improve compliance with fishing regulations.

Tactic 1. Coordinate with cities to ensure all regulations are clearly defined and posted in appropriate locations.

Tactic 2. Simplify fishing regulations to improve understanding.

 **Tactic 3.** Increase enforcement efforts in urban areas.

ISSUE 3

Many cities do not have fishable lakes.

Strategy 1. Provide assistance to communities to make fishable lakes available.

Tactic 1. Develop new funding mechanisms to assist communities with new lake construction.

Tactic 2. Use existing funding mechanisms (e.g., Open Fields and Waters program) to make existing private lakes available for public fishing.

Tactic 3. Develop memorandums of understanding to allow public access for fishing on any community lakes where public fishing is currently restricted.

ISSUE 4

There is often a lack of accessible areas on urban and

community lakes.

Strategy 1. Improve shoreline access for anglers.

Tactic 1. Construct new, or improve existing, Americans with Disabilities Act-compliant fishing piers and jetties.

Tactic 2. Control excess aquatic vegetation which interferes with angling.

Tactic 3. Improve shoreline access by grading, placement of rip-rap, terrestrial vegetation removal, and other appropriate techniques.

Tactic 4. Construct new, or improve existing, boat ramps.

ISSUE 5

City personnel often have limited knowledge of proper lake management techniques.

Strategy 1. Educate city personnel on the proper use of lake management techniques.

Tactic 1. Work with city planners and developers to construct quality lakes.

Tactic 2. Develop and distribute educational materials (Nebraska Lake Management guide, videos, brochures, webpage) on proper lake management.

 **Tactic 3.** Provide workshops on proper lake management.

Tactic 4. Develop management plans for each urban lake.

Objective 2.

To increase fishing participation in urban areas by adults from 12 percent to 25 percent, and by youth from percent to percent.

ISSUE 1

A low percentage of urban residents fish.

Strategy 1. Encourage participation in fishing.

 **Tactic 1.** Implement and/or assist with RDR, Education, and Marketing doctrine activities. In particular, identify and intensively manage select urban waters to be utilized by the Family Fishing Nights, Fishing Buddies, and similar programs identified in the Recruitment Development and Retention plan.

Tactic 2. Expand the fishing tackle loaner program to more communities.

Tactic 3. Continue and expand the put-and-take trout stocking program in urban lakes.

 **Tactic 4.** Increase fish stocking efforts in areas where heavy use has resulted in depleted sport fish populations that are no longer self-sustaining (restore and maintain fish populations in popular fishing lakes to ensure continued use).

References

Hurley, K. D., and K. L. Hurley. 2005. *Nebraska licensed angler survey*. Nebraska Game and Parks Commission. Lincoln, Nebraska.

Nebraska Department of Health. 1993. *1993 vital statistics report*. Lincoln, NE. 153 p.

Nebraska Game and Parks Commission. 1996. *Focusing on the Future: A Plan for Nebraska's Fish, Wildlife and Parkland Resources*. Lincoln, NE. pp 172-177.

U.S. Department of the Interior, Fish and Wildlife Service, and U.S. Department of Commerce, Bureau of the Census. 2008. *2006 National Survey of fishing, hunting, and wildlife-associated recreation, Nebraska*. Washington, DC.

U.S. Department of the Interior, Fish and Wildlife Service, and U.S. Department of Commerce. 1989. *1985 National Survey of fishing, hunting, and wildlife-associated recreation, Nebraska*. Washington, DC.

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Public Pits and Ponds

Unique fishing opportunities!

“Purpose and Direction” - The total statewide area for these waterbodies covers less than 2,000 acres and only 12 percent of licensed anglers fished public pits in 2002. Therefore, it is not surprising that they have not been a management priority. Only one strategy was completed or partially completed since 2004. Pits and ponds can produce high-quality fishing. The deep, clear water in pits can support fish species (e.g., smallmouth bass, rock bass, redear sunfish, and yellow perch) that do not commonly thrive in most other waterbody types. Pits along I-80 could recruit more nonresident anglers if they were more accessible and travelers knew about the fishing opportunities these pits provide. Promotions that inform anglers of these fishing opportunities could be effective.

Introduction

It is important to Nebraska anglers to be able to utilize every body of water that is capable of providing sport-fishing. Fortunately, Nebraska is blessed with an abundance of small bodies of standing water that provide recreational fishing. Some of the most important of these small waters are found on areas outside of municipalities on lands that are open to public access. Examples of these areas would include Nebraska Game and Parks Commission State Recreation Areas, Wildlife Management Areas, and Natural Resource District lands.

The small waters found on these areas include impoundments (i.e. water bodies created by damming) less than 15 acres in size and pits created by excavation (e.g. sandpits, gravel pits, borrow pits). These waters are found in 39 counties throughout Nebraska. Currently there are over 200 of these small ponds and pits that have a combined surface area of over 1,800 acres. At least 21 species of fish are found in these waters throughout the state. The most common species are warmwater fish; largemouth bass, bluegill, crappie, and channel catfish. However coolwater species such as walleye, northern pike, smallmouth bass, and muskellunge are found in

some of these public pits and ponds. Rainbow trout are stocked in some of these waters, at least during coldwater periods of the year.

A 2002 mail survey of Nebraska licensed anglers indicated that these public pits and ponds are an important resource (Hurley and Duppong-Hurley 2005). Of the anglers surveyed, 11.3 percent indicated they had fished public pits. Largemouth bass, bluegill, crappie, and channel catfish are the species most commonly pursued by public pit and pond anglers. Angler surveys on seventeen Interstate 80 lakes in 2005 found that those waters supported 9,693 angler trips that year. Anglers caught 13,647 fish from those pits. Catch rates for anglers seeking largemouth bass were 0.82 bass/angler-hour; anglers seeking bluegills caught 1.62 bluegills/angler-hour, and anglers seeking channel catfish caught 0.18 catfish/angler-hour. Since 1985, Nebraska anglers have recorded catching from 75 to 161 fish annually from public pits and ponds that qualify for the Master Angler program (**Figure 1**).

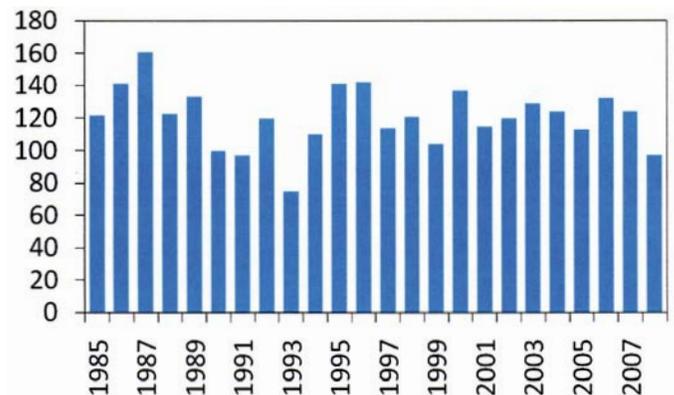


Figure 1. Annual number of Master Angler Awards issued for fish caught from public pits and ponds.

The State Comprehensive Outdoor Recreation Plan produced in 1991 estimated that non-fluctuating artificial lakes were capable of supporting an annual average of 60 angler trips/acre. That would mean that the acreage of public pits and ponds in Nebraska could support about 109,000 angler trips annually. The best estimate available for the actual number of angler trips made to public pits and ponds comes from a mail survey done in 1981 and 1982 (Zuerlein 1984). This survey estimated that 117,000-218,000 angler trips were made annually to public pits and ponds. This would indicate that the angler demand exceeds supply. Current estimates of angler use and success on public pits and ponds are needed.

The Commission is responsible for managing these small public waters to produce healthy aquatic

environments that support fish and recreational use. On lands that the Commission does not own or control (e.g., NRD lands), management assistance is provided. Successful management of these waters can support quality fish populations capable of satisfying Nebraska anglers.

Goal

The goal is to create, maintain, enhance, and promote the fishery resources of Nebraska's pits and ponds open to public access.

Objective 1.

To maintain and enhance aquatic habitat in public pits and ponds.

ISSUE 1

Habitat is not always sufficient to support desirable fish communities.

Strategy 1. Identify, investigate, prioritize, and implement habitat improvements.

Tactic 1. Complete a minimum of six habitat improvement projects on public pits and ponds annually (e.g., nutrient control, vegetation management, community restoration).

Strategy 2. Establish and maintain communications to address habitat concerns both inside and outside the boundaries of these areas (i.e., watershed management).

Tactic 1. Coordinate the development and implementation of agency management plans.

Tactic 2. Work with other agencies to ensure implementation of best management practices within the waterbody and its watershed.

Objective 2.

To acquire access to additional pits and ponds.

ISSUE 1

Supply (number of public pits and ponds) and quality of access does not meet demand (number of angling trips).

Strategy 1. Identify and prioritize potential pit and pond acquisitions and creations.

Tactic 1. Communicate with agencies or individuals involved in pit or pond construction. Encourage the development of fish habitat and angler access during construction.

 **Tactic 2.** Lease private pits and ponds through the Open Fields and Waters program.

Tactic 3. Work with other entities to create angler access agreements.

Objective 3.

To increase public awareness of public pit and pond resources.

ISSUE 1

There is a lack of knowledge and awareness of the availability of and access to public pits and ponds.

Strategy 1. Improve knowledge and awareness of fishing opportunities.

 **Tactic 1.** Increase promotion and signage of interstate lakes to make anglers aware of fishing opportunities and how to reach each area.

Tactic 2. Maintain a current list of all pits and ponds open to public access in the fishing guide.

Tactic 3. Include public pits and ponds in the annual fishing forecast.

ISSUE 2

There is a lack of understanding by the public regarding pit and pond management.

Strategy 1. Inform and educate the public about management of public pits and ponds using all appropriate communication tools.

Tactic 1. Educate agency staff and the public about the role of fish stocking and the dangers of un-authorized introductions by the public.

Tactic 2. Encourage selective harvest and compliance with all regulations.

Objective 4.

To improve angler access to public pits and ponds.

ISSUE 1

Some pits and ponds provide limited or poor angler access.

Strategy 1. Improve angler access.

 **Tactic 1.** Implement the "Public Waters Angler Access" Program.

Tactic 2. Develop boat access on public pits and ponds where it is needed. Determine appropriate motor restrictions for these waters, and make these restrictions consistent for public pits and ponds across the state.

Tactic 3. Provide rental fishing boats on pits and ponds in State Recreation Areas.

Objective 5.

To manage public pits and ponds more intensively.

ISSUE 1

Fisheries management on these areas is limited and infrequent.

Strategy 1. Conduct standard fisheries surveys on at least 40 public pits and ponds and develop or update management plans on at least 20 public pits and ponds, annually.

 **Tactic 1.** Allocate more staff time (e.g., use integrated workforce; re-describe position(s); create new positions; develop contracts).

Tactic 2. Prioritize public pits and ponds according to greatest need for more intensive management and most potential for improvement.

Strategy 2. Conduct angler surveys to assess use, catch, and opinions.

Tactic 1. Allocate more staff time (e.g., use integrated workforce; re-describe position(s); create new positions; develop contracts).

Tactic 2. Incorporate survey information and public input into management strategies.

Objective 6.

To enhance the quality of fishing on public pits and ponds.

ISSUE 1

Due to their small size, public pits and ponds are prone to over-fishing.

Strategy 1. Manage for harvest that can be sustained on pits and ponds without reducing the quality of fish populations.

Tactic 1. Implement and evaluate regulations to enhance and maintain high quality fish populations.

Tactic 2. Ensure angler compliance with regulations by targeting selected areas for concentrated enforcement.

Tactic 3. Encourage selective harvest and compliance with all regulations.

Strategy 2. Investigate and implement intensive management techniques to increase fish biomass in pits and ponds.

Tactic 1. Use stocking to maintain or enhance fish populations.

Tactic 2. Use stocking to develop unique fish communities by stocking different species combinations.

Tactic 3. Use fish feeders to attract fish and increase fish growth rates.

ISSUE 2

A lack of maintenance detracts from the quality of outdoor recreation.

Strategy 1. Increase maintenance of neglected areas.

 **Tactic 1.** Allocate more staff time (e.g., use integrated workforce; re-describe position(s); create new positions; develop contracts).

Tactic 2. Enlist volunteers (e.g., “Adopt a Lake”; Boy Scouts and Girl Scouts; school clubs; fishing clubs).

References

Hurley, K. L. and K. L. Duppong--Hurley 2005. *2002 licensed angler survey: summarized results*. Nebraska Game and Parks Commission.

Zuerlein, G. 1984. *Statewide fishing survey*. Unpublished report, Nebraska Game and Parks Commission. 116pp.

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Private Ponds and Sandpits

High-quality fishing at little cost to us!

“Purpose and Direction” - Creation of a Private Waters program in 1999 has produced a relatively high completion/ partial completion rate (42 percent) for strategies since 2004. Private pits and ponds had the lowest percentage (18 percent) of strategies with no action taken of any waterbody type. One program specialist provides most of the management assistance to about 700 landowners per year, but the development of a comprehensive pond management guide in 2005 has allowed thousands of pond owners to help themselves. Costs for this program (including Open Fields and Waters) are less than \$100,000 per year. This is a small price to pay, considering 44 percent of licensed anglers fished private pits and ponds in 2002. We should stay the course with this program.

position was created in 2000. Establishing this private waters program was one of the main goals for the initial Private Pits and Ponds program for “Focusing on the Future”. This program has facilitated the improvement of water and land management practices utilized by pond/pit owners across the state.

Fishing access is limited on most private ponds and pits. Although small ponds should not be managed for substantial increases in fishing pressure if quality fisheries are to be maintained, many ponds are presently underutilized and could support more fishing. There is a need to continue to collect detailed information on the kind and amount of public usage on private ponds and pits along with expectations of both the users and owners.

Goal

The goal is to enhance recreational sport fishing on private waters by increased management assistance, access and education.

Introduction

Private ponds and sandpits are an important component of fishable waters in the state. According to the 2002 Nebraska Game and Parks Commission statewide licensed angler survey approximately 41.3 percent of angler’s fished private ponds and pits (Hurley and Duppong Hurley 2002). Information compiled in 1968 indicated there were about 27,500 farm ponds in existence (Feit, 1967-1970 Commission farm pond annual reports) and about 3,200 sandpits were reported to have been constructed prior to 1994 (Burchett, 1993 University of Nebraska-Lincoln mineral operations review). An unknown number of ponds and pits have been constructed since then. Many sandpits have extensive housing developments around them and are now part of “home associations”.

Numerous technical assistance requests are received every year by agency staff regarding various management issues in private ponds and pits. These requests include such needs as sampling the waterbodies to assess condition of the fishery, eradicating undesirable fish populations, stocking fish, and/or simply answering pond/pit fish management questions. A Private Waters Specialist

Objective 1.

Quantify the number, size, location, and angler use of private ponds and pits statewide by 2014.

ISSUE 1

There is limited information on how many total waterbodies exist, where they are located and their total acres of fishable water.

Strategy 1. Develop an inventory of private ponds and pits.

Tactic 1. Work with other agencies to develop a database of ponds, pits and private lake associations.

Tactic 2. Use database for future correspondence with pond and pit owners.

ISSUE 1

Insufficient information exists about angler use on and landowner attitudes for private waters.

Strategy 1. Determine angler use and landowner attitudes on private ponds and pits.

Tactic 1. Periodically conduct angler and owner surveys to determine trends in usage, expectations, and program accomplishments.

Objective 2.

Provide technical assistance to private pond and pit owners.

ISSUE 1

Owners of private ponds and pits lack sufficient knowledge and means to adequately manage these waterbodies for quality fishing.

Strategy 1. Provide owners of private ponds and pits technical assistance and information.

 **Tactic 1.** Coordinate/conduct on-site management assessments, fish renovations, and fish stockings for qualified waters.

 **Tactic 2.** Respond to informational requests using a variety of media (e.g., the “Nebraska Pond Management” guide; telephone; e-mail; pond guide series on the agency website).

Strategy 2. Assist private pond and pit owners to secure the means to construct and/or enhance fisheries.

 **Tactic 1.** Help private landowners secure funding for pond construction (e.g., Natural Resources Conservation Service; Natural Resources Districts; Farm Service Agency).

Tactic 2. Facilitate use of “Wild Nebraska” program funds for installation of drawdown structures (valve, boards, etc.) in dams to manipulate water level and cattle exclusion fencing around ponds.

ISSUE 2

Fisheries management expectations for private ponds and pits are variable and some are unrealistic.

Strategy 1. Work with pond and pit owners to determine realistic management goals.

Tactic 1. Communicate appropriate fisheries management options using a variety of technical resources (e.g., the “Nebraska Pond Management” guide; private aquaculture list; private consultant list; pond guide series on the agency website).

Tactic 2. Communicate the availability of the “Private Waterbody Management Authorization” which allows landowners to use special management options (e.g., exemptions from statewide regulations; fish renovations; fish removal; sampling by consultants).

 **Tactic 3.** Develop educational programs/projects/materials on the management of sandpits.

Tactic 4. Work with other agencies (e.g., Natural Resources Districts; Natural Resources Conservation Service; Farm Services Agency; County Extension) to develop pertinent educational materials/programs (e.g., conservation buffer program) for both aquatic and terrestrial habitats.

Objective 3.

Increase access to private ponds and pits so that 50% of licensed anglers fish these waterbodies.

ISSUE 1

Anglers want more access and harvest while landowners normally want controlled access and harvest.

Strategy 1. Increase access to private ponds and pits.

Tactic 1. Improve landowner and angler understanding of the liability issue (recreational liability act) and explain agency policies.

Tactic 2. Educate owners and anglers regarding the amount of fishing pressure that a waterbody can support.

Tactic 3. Educate anglers on responsibilities and ethics and how certain activities can adversely affect landowner attitudes about access.

 **Tactic 4.** Continue to promote the Open Fields and Waters program that financially compensates landowners who allow public fishing access.

Tactic 5. Pursue agreements with landowners for public fishing access without financial compensation in exchange for intensive fisheries management assistance.

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Sandhills Lakes

Remote, natural, and Nebraska's best pike and panfish fishing!

“Purpose and Direction” - Since the mid-1990s, Sandhill lakes have received considerable attention from the agency. The Fisheries Division capital construction budget had funds allocated to purchase Sandhill lakes. Research conducted by South Dakota State University has investigated how fish populations function in these waterbodies. Public access to Sandhill lakes has been improved, particularly for lakes located on the Valentine National Wildlife Refuge. Sandhill lakes are important ice fishing destinations. Considering the abundance of Sandhill lakes with high-quality fishing opportunities now accessible to the public; our understanding of fish population dynamics in Sandhill lakes; and that only 18 percent of licensed anglers fished Sandhill lakes in 2002, these waterbodies will not be a high priority for further acquisition, development, or research in the near future. However, impacts of piscivorous birds on fish communities in Sandhill lakes need to be evaluated.

radical management practices enhancing sport fish populations should be approached with caution. A wide variety of shorebirds and waterfowl utilize Sandhills lakes, as well as other species of wildlife. While this program deals primarily with enhancement of fishing opportunity, the needs of other wildlife must be considered as we proceed with operational planning on Sandhills lakes. However, in some cases fishing opportunity can be increased at no expense, and to the benefit of other wildlife species.

The main problem related to work on Sandhills lakes is the relatively poor access. County roads forming the one-mile square grids so common in eastern Nebraska are absent in the Sandhills. There are, instead, windmill trails punctuated with an occasional blowout. While this limited access is part of the beauty of the land, it can make fisheries management (and fishing) more difficult. It is also the main reason our inventory of these water bodies is limited. McCarraher completed an extensive review of these lakes in 1977. His publication, “Nebraska's Sandhills Lakes,” is currently the best information available. However, much of the data in this publication were collected in the 1950s and 1960s. Changes in water levels and water chemistry have made much of this data obsolete. Developing a current inventory of Sandhills lakes is an important objective in this strategic plan. The inventory needs to include the lake name, location, size, water chemistry, fisheries potential, and other biological information.

McCarraher estimated that 1,500 lakes occurred in the Sandhills, with less than half of these capable of supporting fish. Identifying those lakes offering the best potential for a return on our investment would be a formidable challenge. Our investment would primarily include fish management activities and access development. The benefit would be satisfied users (primarily anglers) and the preservation or enhancement of a unique ecosystem.

The typical Sandhills lake is shallow, heavily vegetated, and very productive. In some cases, water quality (high pH and/or alkalinity) limits biological production, but in lakes with “sweet” water of adequate depth fish thrive. Historically, largemouth bass, northern pike, yellow perch, crappie, bluegill, and black bullhead have provided the bulk of the fishing. Panfish (yellow perch, bluegill and black crappie) are the fish of choice for most Sandhills lakes anglers. The northern pike presents a unique challenge in fish management of Sandhills lakes. Superbly adapted for life in these systems, northern pike are loved by some and hated by

Introduction

The Sandhills region of Nebraska is a unique ecosystem of grass-covered sand dunes. Although this area is considered semi-arid, it is hardly a desert. Nestled among the valleys in the hills are numerous lakes and wetlands. While these lakes are generally shallow and heavily vegetated, many support fish. The lakes that will support fish are the main focus of the Sandhills lake program. The program scope has been defined as the research, management, conservation, associated recreational use, and habitats of Nebraska's Sandhills lakes. Other uses such as hunting, trapping, boating, and birdwatching will be addressed by this program only as they relate to fisheries management of Sandhills lakes.

The Sandhills are a fragile ecosystem. Irrigation development in the 1970s resulted in severe erosion problems and, in most cases, a slow healing process. Any

others. In many lakes northern pike are an important part of the fish community. However, some lakes can be managed effectively without northern pike as a primary predator. The challenge is to determine when and where northern pike are the best management option.

One fish that is undesirable in all Sandhills lakes is the common carp. Carp have been a nemesis of fish managers and anglers since they found their way into the Sandhills. They tend to overpopulate and stir up bottom sediments through their feeding habits. This reduces rooted vegetation, which leads to a reduction in sport fish populations and poor quality habitat for many wildlife species. The carp's ability to invade new habitats during high water makes it difficult to control. Management of carp populations is an important part of any Sandhills lake project.

In summary, the main components of this program are to improve our lake inventory, improve access to lakes, and manage fish populations more effectively. By accomplishing these objectives we will satisfy more anglers. In addition, these objectives can be accomplished without damage to Sandhills lake ecosystems and, in fact, can benefit wildlife species.

The original plan was developed in 1996 and was intended to be a working document. During the initial 14-year period, progress has been made on several objectives. The most significant includes the completion of several research projects (South Dakota State University) on the biology of Sandhills lake fish populations, acquisition of several Sandhills lakes, the access to both Blue and Crescent lakes in Garden County, and vehicle and boat access improvements on the Valentine National Wildlife Refuge.

Goal

The goal is to maximize fishing opportunity while preserving the Sandhills lake ecosystem.

Objective 1.

Complete an inventory of water quality and fishing potential of Sandhills lakes by 2014.

ISSUE 1

There is a lack of knowledge of water quality and fisheries potential.

Strategy 1. Design a plan to collect needed information.

Tactic 1. Assign budget dollars using third-party pass-through for work or develop new sources of cooperative funding (e.g., State Wildlife Grants; Nebraska Environmental Trust Fund ; Turner

Foundation; Natural Resources Districts).

Tactic 2. Summarize existing information related to Sandhills lakes (university studies, government agency activities, private efforts).

Objective 2.

Make private lake owners more effective managers.

ISSUE 1

Landowners of Sandhills lakes lack sufficient knowledge to manage their fisheries.

Strategy 1. Provide technical information and assistance to landowners.

Tactic 1. Develop web-based information and education materials on Sandhills lake management.

Tactic 2. Increase technical assistance to lake owners.

Objective 3.

Improve fishing access to Sandhills lakes.

ISSUE 1

Many state-owned (meandered) Sandhills lakes are not open to public fishing.

Strategy 1. Determine the status of access to meandered lakes and secure public access.

Tactic 1. Inventory access status to meandered lakes.

Tactic 2. Pursue access to meandered lakes and acquisition of Sandhills lakes on Board of Educational Lands and Funds lands through legislation or other means.

Tactic 3. Work with landowners and U.S. Fish and Wildlife Service that control Sandhills lakes to allow public fishing.

ISSUE 2

Most Sandhills lakes are privately owned and not open to public fishing.

Strategy 1. Secure access to privately-owned lakes for public fishing.

 **Tactic 1.** Encourage voluntary acquisition of access to lakes through fee title, lease (e.g., Open Fields and Waters), easements, or donations.

Tactic 2. Educate anglers on land and resource ethics to reduce problems associated with public use.

Tactic 3. Publish recreational liability act information in the Fishing Guide to improve landowner and angler understanding of liability issues,

ISSUE 3

Angler access to Sandhills lakes is limited and difficult.

Strategy 1. Develop improved access to select lakes.

 **Tactic 1.** Use Public Waters Angler Access Program funds, SFR MBA funds, and Cooperative Agreements

with other agencies.

Tactic 2. Use recreational road funds for access to Sandhills lakes.

Tactic 3. Use aerial photographs, soil survey maps, possibly National Wetlands Inventory, other sources to inventory potential lake access development sites.

Objective 4.

Develop and maintain fishable populations in select Sandhills lakes.

ISSUE 1

Most Sandhills lakes lack effective fisheries management.

Strategy 1. Improve fisheries management on select Sandhills lakes.

Tactic 1. Develop a survey schedule to update biological data.

Tactic 2. Develop management plans for each lake.

 **Tactic 3.** Conduct research to evaluate various management practices.

ISSUE 2

Adequate fisheries habitat is limited in many Sandhills lakes.

Strategy 1. Improve fisheries habitat in select Sandhills lakes.

Tactic 1. Evaluate fisheries habitat improvement techniques (e.g., spawning structures).

Tactic 2. Improve fish habitat by dredging, aeration, erosion control, water level manipulation with wells and water control structures, vegetation control/enhancement, and fencing or modified grazing practices.

ISSUE 3

Certain species limit the quality of sport fish populations.

Strategy 1. Minimize the impacts of competitive species.

 **Tactic 1.** Control common carp and black bullhead with predators, through renovation, and/or installation of fish control structures.

 **Tactic 2.** Document and mitigate (e.g., changing U.S. Fish and Wildlife Service depredation policies) the impacts of fish-eating birds on fish populations.

Objective 5.

Determine acceptable impacts of fisheries management and human use on Sandhills lake ecosystems.

ISSUE 1

Changes in fish communities and human use can impact the ecology of a Sandhills lake system.

Strategy 1. Minimize impacts of management actions.

Tactic 1. Complete an environmental assessment

analysis before undertaking development activities.

Tactic 2. Document the impacts of management actions on native flora and fauna; develop guidelines for what is acceptable.

Strategy 2. Minimize impacts of human use.

Tactic 1. Determine acceptable levels of and develop guidelines for human use.

Tactic 2. Use regulations to control public use (e.g., allow ice-fishing only).

Objective 6.

Quantify angler use, catch and harvest on Sandhills lakes.

ISSUE 1

There is a lack of adequate angler data.

Strategy 1. Collect needed information, to include fishing effort, catch and harvest rates, and angler attitudes and desires.

Tactic 1. Use computer surveys, mail surveys, creel surveys, tournament data, angler diaries to collect the appropriate data.

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State Parks

Where people and nature meet.

“Purpose and Direction” - Nebraska's state parks will experience persistent heavy utilization, necessitating continued sound management practices. Managers must act with proactive and adaptive management routines to address growing maintenance and operational needs, in an environment of diminishing budgets. Through increased agency collaboration, improved efficiency, and sound management practices, individual state parks should strive towards sustainability. Many recreational and educational development opportunities exist within our state park system. Expansion or reduction of services or facilities should be considered viable when they are consistent with visitor trends, reflect sound resource stewardship principals, achieve financial sustainability, and mesh with the agency's overall mission.

Introduction

Over the past 90 years, Nebraska has set aside and established eight state parks that collectively represent some of the state's greatest natural, cultural, and recreational assets. These state parks include: Chadron State Park (1921), Niobrara State Park (1927), Ponca State Park (1934), Fort Robinson State Park (1955), Indian Cave State Park (1962), Platte River State Park (1982), Eugene T. Mahoney State Park (1991), and Smith Falls State Park (1991).

Nebraska's state park system is administered by the Nebraska Game and Parks Commission's Division of Parks. The classification of State Parks is defined by state statute as: *“Public use areas containing statewide significant scenic, scientific, and/or historical values and being of sufficient size to allow adequate development with infringing upon the primary values.”*

The goal of Nebraska's Parklands Program is to provide the people of Nebraska with a balanced and diversified state park system that complements other public and private recreational opportunities; that provides a high level of accessibility that is consistent

with the preservation and stewardship of natural, cultural and recreational resources; and, that assures a satisfied, proud and appreciative constituency.

State Parks systems in the Midwest and Great Plains states have a fairly common background for development. The park systems were generally all initiated after the turn of the century, with park development being greatly accelerated during the Depression years of the 1930s. Prior to that time, public parks were primarily urban concerns.

In 1921, Nebraska established the State Park Board to manage its one area, Chadron State Park. In 1923, state park administration was transferred to the University of Nebraska's Department of Horticulture and Arbor Lodge State Historical Park and Victoria Springs State Recreation Area were added to the system. In 1929 the Nebraska Game, Forestation and Parks Commission was created by the legislature with parkland management responsibilities transferred to the new Commission. The Commission's Land Management Division undertook the park land administration function for the next 30 years. During the 1959 session of the Unicameral, the Division of State Parks was added to the Nebraska Game and Parks Commission's organizational chart and charged with the administration of state parks, recreation areas, historical parks and wayside areas.

Since its establishment, 52 new areas were added to the system as well as another public land use classification, State Recreation Trails. State wayside areas were excluded as a park land category with those sites becoming recreation areas or transferred to other governmental agencies.

Nebraska's state park system is comprised of eight state parks, 11 state historical parks, 61 state recreation areas and two state recreation trails. In total, the system's 82 areas encompass 138,807 acres of land and water, which in 2010, hosted an estimated 9,802,430 visitor-use-days of recreation. In 1976, the system was comprised of only five state parks, eight historical parks, 54 recreation areas, and 25 wayside areas (ownership of 17 were subsequently transferred to the Nebraska Department of Roads). Visitation in the system during 1976 was estimated at 6,543,857. During the same period, the cost of operating and maintaining the larger and more sophisticated park system has increased, as has the system's ability to generate revenues. In 1976, park expenditures totaled \$2,985,693 and revenues from collection of user fees and concessions totaled just \$467,090. Comparative figures for 2010 operations reflect expenditures of \$22,902,547 and revenues of

\$17,101,742.

Nebraskans have grown to appreciate their park system and visiting state parks has become a family tradition. This popularity with both residents and non-residents, alike, has been well documented by the Nebraska Department of Travel and Tourism, with many of the state park and recreation areas being included among the State's most popular attractions.

This popularity makes our State Park Program the backbone of Nebraska's tourism industry. The Department of Economic Development has determined that each dollar spent by tourists in Nebraska is re-spent in the state to produce an additional \$1.70 in business and income, creating an overall economic impact of \$2.70. In 2010, the total economic benefit from State Parks was \$30,008,029.

Future management planning needs to be consistent with visitor trends. Change is increasingly becoming the norm in the park and recreation profession – changing demographics with aging populations enjoying longer and more active lifestyles; rapidly advancing technologies offering a multitude of new recreational opportunities; and, growing numbers of park visitors from culturally diverse backgrounds, bringing with them new values, new desires and new expectations.

Americans are living increasingly sedentary lifestyles due in large part to indoor, technology-based, recreation alternatives such as TV, video games, and the Internet. This less healthy lifestyle and lack of outdoor activity is attributing to obesity, diseases such as diabetes and heart disease, and a disconnection from the outdoors especially with children and younger adults. This sedentary lifestyle combined with longer work hours, more scheduled activities for children and less free time, will present future challenges for all forms of outdoor recreation. To help meet these challenges, there will be new opportunities and partnerships in State Parks.

State Parks provide people with recreational opportunities that can contribute to better physical and mental health. Walking, hiking, biking, swimming, kayaking, canoeing, playgrounds, hunting, and other types of outdoor recreation, provide exercise and a greater sense of well-being. Parks also offer areas of solitude, relaxation, family time, and a gateway to a wide diversity of outdoor experiences. These diverse outdoor experiences will foster family connections, develop a greater appreciation and knowledge of the nature, provide opportunities to learn outdoor skills, and build lifelong state park visitors.

Existing events and programming within the Recruitment Development and Retention Actions Plans (i.e. Missouri River Outdoor Expo at Ponca State Park and Outdoor Heritage Shooting Complex at Platte River State Park) are long-term investments towards the future of outdoor recreation. State Parks will continue to

explore and implement educational and recreational opportunities that offer high potential for the development of new constituents and park users. Non-consumptive park activities (i.e., watchable wildlife) that complement budget driven operational changes (such as the creation of natural areas), hold high promise for the future.

As these societal changes evolve, they are taking place in an environment where the public's attitude about government is changing, as well. Increasingly, the public of perception of government is "too large, too costly, and too wasteful". In response, the State Parks Division has developed and implemented a park system restructuring plan that is designed to prioritize management objectives, streamline operations, pursue alternative funding sources, reduce staff, and more actively involve public and private partnerships in individual park management plans.

The manner in which State Parks are funded has also changed over time. In 1990, the park system's operating budget was funded 54.2 percent from the state's General Fund and only 45.8 percent from park-generated revenues (park permits, camping fees, cabin rentals, etc.). By 2010, park cash accounted for fully 69.9 percent of the parks' budget with less than 30 percent coming from the General Fund.

Budget reductions that began in 2002 have created a backlog of deferred maintenance that is estimated at 30 million. Budget shortfalls have also created an accumulation of equipment and furnishings that are in need of replacement. These issues are being compounded by increased operational costs. Through adaptive management and collaborative planning, park administrators and managers will need to evaluate existing facilities, equipment and furnishings, park operations, and future expansion to determine long-term sustainability.

The concept of park users who benefit directly from their activities paying a greater portion of the cost for operating state parks is neither new nor unique to Nebraska. Thirty-seven states across the nation utilize park entry permits to support their respective park systems. The average cost of an annual park permit in 2010 among the 37 states was \$41. Nebraska's annual park permit at just \$20 is quite modest and has not been raised since 2005. The permit was raised to \$25 during the 2011 legislative session effective for 2012. While the increase in the annual park permit will generate additional funding for State Parks, alternative funding sources still need to be developed.

To achieve long-term financial sustainability, a stable funding base will need to be combined with sound management planning. This will include a business plan approach inclusive of a cost/benefit analysis of all park operations and services. This plan will need to identify

ways to improve the effectiveness and efficiency of State Parks while maintaining stewardship and protection of natural, cultural, and recreational resources.

This evolving landscape opens many opportunities for park professionals to more fully involve the people they serve. The State Park component of *Focusing on the Future* has incorporated the input of many private citizens interested in the future of their state park system. Through its implementation, the park system will position itself to maximize these opportunities through enhanced receptivity to partnerships, volunteerism, citizen advisory participation, donations, privatization, cooperative agreements, corporate sponsorships, and a wealth of other innovative ideas, all focused on supporting the cost-effective development and operation of Nebraska's State Park System.

Goal 1

The goal is to position state parks for a cross-divisional, cooperative approach to recreation and resource management.

Objective 1.

Ensure the long term stewardship of resources within state parks by updating operational plans and procedures to include recreation and resource based best management practices.

ISSUE 1

Existing operational plans are outdated and do not reflect changes to recreational trends and resource management practices.

Strategy 1: Develop a template for updated operational plans that can be applied across the system.

Tactic 1: Coordinate operational plan needs across divisions with agency staff and existing partners.

Tactic 2: Evaluate existing operational park plan information for use in updated documents when applicable.

Strategy 2: Identify recreational trends, user expectations, constituent demographics and visitation patterns that affect our state park areas for inclusion in park operational plans.

Tactic 1: Use Statewide Comprehensive Outdoor Recreation Plan information, bi-annual park user survey data and other existing agency data to prioritize user preferences and expectations.

Tactic 2: Identify park specific trends, populations and visitation patterns.

Tactic 3: Survey neighboring state park agencies, National Association of State Park Directors, and National Recreation and Park Association to track user

trends both regionally and nationally.

Strategy 3: Identify best practices related to recreation and resource based management principles that reflect agency mission and directives.

Tactic 1: Work cross-divisionally to identify best practices related to natural resource management.

Tactic 2: Continue work with horticulture staff to identify areas for reduced grounds maintenance to establish and showcase native habitats and wildflower plantings.

Tactic 3: Research best management practices when developing and maintaining recreational resources to ensure long-term stewardship and sustainability of the natural resources environments.

Tactic 4: Discuss existing resource management practices utilized within individual park areas to implement across system.

ISSUE 2

Individual park areas lack comprehensive information regarding onsite resources.

Strategy 1: Identify onsite resources of individual park areas for inclusion in operational plans.

Tactic 1: Work cross-divisionally with agency staff and outside partners to survey and inventory natural and cultural resources.

Tactic 2: Continue work with Natural Heritage Program to evaluate threatened and endangered species and unique habitats.

Tactic 3: Work with Engineering Division to update existing Parks Division infrastructure inventory.

Tactic 4: Investigate feasibility to incorporate resource inventory data into a Geographic Information System mapping system.

Goal 2

The goal is to retain existing customers while increasing new user base.

Objective 1.

Enhance the quality and diversity of outdoor recreational and educational experiences.

ISSUE 1

Visitor service programs differ from park to park or are altogether lacking.

Strategy 1: Work with other divisions, agencies and partners to enhance visitor service programs (i.e., naturalist, Recruitment Development and Retention, cultural, expos and related special events).

Tactic 1: Identify existing agency programs and program coordinators and maintain an active database.

Tactic 2: Evaluate success of existing programs and develop templates using qualified staff to assist training for program expansion.

Tactic 3: Utilize agency staff expertise and resources to develop and provide programming.

Tactic 4: Continue development of partnerships with state agencies, friends groups, communities and individuals to provide funding assistance and volunteer hours to offset costs of visitor service program development and management.

Tactic 5: Utilize **S**tatewide **C**omprehensive **O**utdoor **R**ecreation **P**lan information, bi-annual park user survey data and other existing agency data to ensure we are providing opportunities that meet user preferences and expectations.

Strategy 2: Prioritize development of opportunities that are consistent with agency mission and initiatives (**R**ecruitment **D**evelopment and **R**etention Action Plans, Natural Legacy Plan, etc.).

 **Tactic 1:** Utilize information from operational plan to develop recreational and educational opportunities that promote unique natural and cultural resources (i.e., wildlife observation blinds, interpretive trails and watchable wildlife programming).

Tactic 2: Utilize knowledge and skills of regional district staff, partners and volunteers to develop active naturalist programs within all state park areas.

Tactic 3: Work with Fisheries and Wildlife Divisions to expand and/or enhance park fisheries and opportunities for managed hunts.

Strategy 3: Develop a visitor services coordinator position responsible for creating new programs and promoting continuity between each park's recreational and educational opportunities.

Tactic 1: Define what skill set is necessary and develop a list of duties to be assigned with position.

Objective 2.

Maximize park awareness and promotion opportunities to invite higher participation.

ISSUE 1

Coordination with other divisions and outside partners isn't adequate to maximize promotion of park areas and opportunities.

Strategy 1: Market park areas and opportunities more effectively and efficiently.

Tactic 1: Utilize all modern technology within available financial resources to market message, products and services (i.e., development of smartphone apps).

Tactic 2: Develop local and regional partnerships to share in exchange of tourism related information and coop marketing programs (i.e., Exit 426 – Mahoney State Park).

Tactic 3: Assign staff to attend local and regional

meetings that bring agencies, groups and individuals together for promotion of tourism.

Tactic 4: Work with agency's Marketing Committee to develop a formal plan to promote the growth of special events, lodging availability, group function opportunities, resale outlets and park programming.

Tactic 5: Appoint a marketing liaison to work with Information and Education Division to coordinate marketing strategies and needs to ensure consistency of message and information.

ISSUE 2

Public information is lacking related to overall economic impact and value of the State Park System.

Strategy 1: Define the overall economic impact and value of the State Park System and utilize information to educate the legislature, general public and partners.

Tactic 1: Work with Department of Economic Development to identify the value of state park areas to local, regional and statewide economies.

Tactic 2: Work with agency marketing committee to create promotional strategies that provide a defined identity of state park area benefits to create greater unity with current users while working to broaden user base.

Tactic 3: Develop material to educate public about how their park entry permit dollars are being applied to operations and development for an improved park system.

Goal 3

The goal is to develop a budget that provides adequate funding to address park operations, future developments and staffing needs while focusing on reduction of our deferred maintenance backlog.

Objective 1.

Develop a budget prioritization system that reflects current trends and financial environment while providing for the continued protection, use and interpretation of state park facilities and resources.

ISSUE 1

General fund appropriations are unpredictable in the current financial environment and require Parks Division to become more reliant on user fees, alternative funding sources, partnerships and best management practices.

Strategy 1: Evaluate the cost effectiveness, efficiency and practicality of park operations and services.

Tactic 1: Analyze one-, three- and five-year expenditure trends for individual park operations and

staffing.

Tactic 2: Evaluate existing operations and programs to determine cost of service, revenue, economic impacts and benefits. Recommend continuation, elimination or privatization for each.

Tactic 3: Identify user trends and visitation from operational plan to determine merits of continuing off season programs and services.

Tactic 4: Ensure all new activities and special events are financially sustainable through cost/benefit analysis prior to implementation.

Strategy 2: Maintain and enhance current stable income sources to maximize revenue.

 **Tactic 1:** Expand systems that increase the availability of park entry permits for purchase by the public (i.e. internet sales and self serve daily permits) while working to ensure a simplified purchasing process.

Tactic 2: Prioritize development or expansion of income producing services at high visitation park areas in order to bolster park cash fund balances.

Tactic 3: Annually evaluate parks fees in relation to operation and management cost, visit input, survey data and industry trends to determine need for price increases.

Tactic 4: Continue to monitor existing centralized reservation system and point of sale system to ensure systems are operating in most effective and efficient manner possible.

Tactic 5: Develop resale management policies and procedures, inclusive of staff input, to maximize revenue opportunity at each park.

Strategy 3: Seek alternative funding avenues to offset reduced general fund appropriations.

Tactic 1: Continue surveying park users and general population to determine level of support for alternative funding sources.

Tactic 2: Work to build legislative and public support for alternative funding sources.

Strategy 4: Expand partnerships for assistance in conducting and financing park programs, operations and maintenance.

Tactic 1: Challenge staff to seek local partnership opportunities with businesses, friends groups, youth organizations, communities and individuals.

Tactic 2: Encourage Superintendents to develop non-profit friends groups, if not already established, to assist in providing financial, political and staffing support.

Tactic 3: Expand existing state agency partnerships to market agency message, products and services to their established groups (i.e., A Walk in the Park partnership with Department of Health and Human Services).

ISSUE 2

Parks Division has an extensive backlog of deferred maintenance needs for facilities and infrastructure.

Strategy 1: Create a comprehensive inventory of deferred maintenance projects.

 **Tactic 1:** Work with Engineering Division to assess, prioritize and maintain a comprehensive list of deferred maintenance projects and associated budgets at each park area.

Strategy 2: Actively work to reduce the deferred maintenance backlog by securing adequate funding and utilizing best management practices.

Tactic 1: Utilize best management practices to identify projects where old infrastructure can be replaced with new, cheaper facilities that meet user demands and lower operational expenses (i.e. converting swimming pools to splash pads).

Tactic 2: Work collaboratively with LB 309 Task Force to maintain support for building renewal projects.

Tactic 3: Aggressively seek foundation funding to address large ticket deferred maintenance projects.

Tactic 4: Establish partnerships with volunteers and friends groups to raise funds and/or donate labor for identified projects.

Tactic 5: Work collaboratively with Nebraska State Legislature to enhance current funding sources and to build support for alternative funding initiatives that address deferred maintenance.

ISSUE 3

Park maintenance equipment, vehicles and furnishings have exceeded serviceable life spans requiring extensive repairs.

Strategy 1: Develop a systematic replacement schedule for operational plans to upgrade vehicles and large equipment inclusive of long-term costs such as fuel and maintenance, changes in management practices, visitor trends and collaborative agency efforts.

Tactic 1: Identify and prioritize vehicles and equipment for replacement within each park based on fuel efficiency, required maintenance and annual use while considering cost comparisons of leasing versus owning.

Tactic 2: Identify changes to management practices that can be implemented to reduce overall equipment costs, fuel consumption and maintenance (i.e. reduced mowing and natural areas, habitat improvement project and wildflower plantings).

Tactic 3: Work cross divisionally through collaborative teams to create a regional list of specialized equipment and develop a schedule for shared use.

Strategy 2: Replace furnishings and equipment before they exceed their cost effective lifespan.

 **Tactic 1:** Establish a three-, five- and seven-year replacement schedule for furnishings and equipment.

Strategy 3: Utilize more energy efficient vehicles to undertake certain park operation and maintenance needs.

Tactic 1: Identify opportunities within park

operations where hybrid and electric vehicles or equipment may be utilized for a cost savings.

Objective 2.

Ensure all facility development and renovation is undertaken with cost effective construction practices, implements energy efficient designs and utilizes low maintenance materials to minimize long term costs.

ISSUE 1

Park infrastructure and facilities are not always developed and renovated in the most cost effective and efficient manner.

Strategy 1: Solicit input from field staff and outside partners during the design process to improve maintenance and operation needs.

Tactic 1: Establish a standard review process on all infrastructure and facility design inclusive of field staff, Operations Division and Administration.

Tactic 2: Conduct onsite reviews at project area at 50-75 percent design with field staff, other divisions and/or partners.

Strategy 2: Develop projects only when deemed cost efficient, have practical maintenance requirements and promote long term sustainability.

Tactic 1: Work with Budget and Fiscal Division on existing operational budgets to conduct a cost/benefit analysis of all proposed development projects to ensure they will be financially sustainable.

Tactic 2: Work collaboratively with Nebraska Department of Energy and similar partners to identify financing for energy efficient construction processes.

Tactic 3: Utilize user trends to determine where developments are warranted.

Tactic 4: Maximize use of agency integrated workforces and partners during construction to reduce contracted labor costs.

Strategy 3: Evaluate existing infrastructure and facilities to determine if systems can be altered to produce future cost savings.

Tactic 1: Work with Engineering and Operations Divisions, LB 309 Task Force and outside partners to develop a comprehensive list within each state park of potential cost saving alterations to utilities, building designs and other support systems.

Goal 4

The goal is to broaden staff effectiveness, efficiency and communication through commitment to our human resources.

Objective 1.

Enhance staff development through high quality training and continuing education opportunities.

ISSUE 1

Staff training opportunities are limited by time and budget constraints hampering the division's ability to ensure park resources and visitor services are undertaken using best management practices.

Strategy 1: Provide adequate staff training to facilitate professional growth, resource protection and proper delivery of service to our customers.

Tactic 1: Survey park users and staff to identify service deficiencies and management training needs.

Tactic 2: Identify existing public and private training opportunities with a focus on customer service training, resource awareness, budgeting and grant writing.

Tactic 3: Create a set-aside budget for staff to attend training opportunities.

Tactic 4: Require staff attending training opportunities to submit a summary of information at the conclusion to be shared with staff throughout the system.

Tactic 5: Evaluate feasibility of creating an off-season internal training program utilizing existing staff skill sets (i.e., grant writing, interpretive programming development, communication techniques, customer service, operational procedures and maintenance skills).

Objective 2.

Provide consistent and effective communication to achieve high work efficiency, effective management and quality customer service.

ISSUE 1

Lack of internal and external communication capabilities presents barriers for staff effectiveness and efficiency.

Strategy 1: Evaluate communication system capabilities to determine needs and train staff with appropriate skills and techniques.

Tactic 1: Review current channels and means of communication to ensure that an effective statewide network exists; is functioning with proper equipment and software and that staff is trained to utilize the networks (i.e., providing Superintendents with cell phones).

Tactic 2: Establish training protocol for staff in development of effective communication skills.

Tactic 3: Identify online training and coursework for effective communication and arrange for staff to participate.

Strategy 2: Enhance reporting and review processes related to work accomplishments, work challenges and project needs.

Tactic 1: Continue improvement of communication

capabilities within park offices by providing up-to-date software, equipment and technologies.

Tactic 2: Establish reporting protocol for field staff to report biweekly work accomplishments, project needs and challenges.

Tactic 3: Establish administrative progress reports for project requisitions and purchasing processes so status reports can be provided to field staff.

Strategy 3: Further facilitate review processes that solicit staff input on policy change.

Tactic 1: Develop protocol to solicit staff input on proposed policy changes to ensure review provides field staff perspective to effectively evaluate impacts of implementation.

ISSUE 1

Current employee evaluation processes do not adequately set performance standards and expectations.

Strategy 1: Revise employee evaluation processes to clearly address performance standards and expectations.

Tactic 1: Update performance evaluations for staff to define agency and divisional expectations as well as park specific duties.

Tactic 2: Establish a protocol for dealing with substandard performance to encourage positive and timely improvement, or to implement staged disciplinary actions for lack of progress.

Objective 3.

Compile park information into a comprehensive master document to provide effective and efficient access to information for project implementation.

ISSUE 1

Comprehensive master park documents need updating to adequately tie together individual plans, protocols and guidelines.

Strategy 1: Develop an all-inclusive manual for park management that utilizes existing and updated information to ensure strategic and successful implementation of priority projects.

 **Tactic 1:** Work cross divisionally to identify all current plans, protocols and guidelines necessary to facilitate proper management of staff, resources and operations. Document will include operational, financial and emergency management plans, agency and division policy and previously developed park restructure plan.

Tactic 2: Provide the necessary incentives, tools and budget authority to successfully implement priority projects at individual Nebraska State Parks.

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State Historical Parks

Where people seek, learn and experience Nebraska history

“Purpose and Direction” - Nebraska State Historical Parks are a critical link to Nebraska’s past. Innovation, marketing and partnerships will be key to the future of State Historical Parks. To provide users with an exciting visit, staff will need to meet the needs of new and changing audiences and engage them by updating the way the past is presented. Staff training and cross divisional efforts will be essential to maintain integrity of the historical resources while changing the way these parks operate to ensure financial viability.

Introduction

The Nebraska Game and Parks Commission is charged by state law with providing "for the development and administration of a balanced state park system and to provide non-urban park areas for the inspiration, recreation, and enjoyment primarily of resident populations." In charging the Commission with this responsibility, the legislature recognized the need to identify and protect Nebraska’s fragile and unique historical and cultural resources for the benefit of future generations.

The Nebraska Legislature defined state historical parks in NE Revised State Statutes Section 37-338 as *“sites which, in the opinion of competent, recognized authorities, are of notable historical significance to the State of Nebraska, of a size adequate to develop the full interpretive potential of the site, and which may be equipped with limited day-use facilities when such facilities do not detract from nor interfere with the primary purposes and values thereof.”*

The Commission’s Division of State Parks owns 10 state historical parks: Arbor Lodge, Ashfall Fossil Beds, Ash Hollow, Bowring Ranch, Buffalo Bill Ranch, Champion Mill, Fort Atkinson, Fort Hartsuff, Fort Kearny and Rock Creek Station. An 11th property, Bluewater Battlefield, is another historic site protected by the Commission. The Commission operates all but Ashfall Fossil Beds, which is managed by the University of Nebraska State Museum through a cooperative agreement. Six of these parks have been recognized with either National Historic Landmark or Place status. The

parks primary mission is to maintain cultural resources, while providing outdoor recreation opportunities. This coincides with the Commission’s agency mission for the stewardship of outdoor recreation resources in the best long-term interest of the people and those resources.

Challenges facing state historical parks into the future include reduced funding, outdated displays and interpretation material, staff training and a growing backlog of deferred maintenance projects. Multiple years of reduced budgets have required staff to shift focus on park operations resulting in displays not being updated to meet changing audience preferences, reduced staff training on the most up-to-date methods to properly care for and interpret resources, and increased structural deficiencies of buildings and aging equipment. All of these operational changes have limited park staff’s ability to properly maintain resources to ensure sustainability in the long-term.

The way to address these challenges is to become innovative in marketing to increase visitation. Displays and interpretative materials must use modern technology and become more interactive for the users. Niche markets such as weddings at Arbor Lodge, kids camps at Fort Hartsuff, crane packages at Fort Kearny and creating a passport program for historical parks must be examined and seriously considered. Sharing lessons learned by Superintendents must be incorporated into practice and sharing displays should be considered. Incorporation of cross divisional efforts to include interpretation of natural resources should be highlighted at the areas to showcase native prairies and ecosystems of the past. The use of new and existing partnerships and volunteers will become increasingly important to meet the goals outlined below. This document outlines the ways historical parks must change to thrive in the future.

Goal 1

The goal is to operate State Historical Parks in a manner that is consistent with the mission of the Commission.

Objective 1.

Develop operational plans relevant to historical park’s cultural and natural features, recognizing the unique qualities of each individual park.

ISSUE 1

Current operational plans are outdated and need to reflect current and changing management.

Strategy 1: Create operational plan template for use across the system.

Tactic 1: Coordinate operational plan needs across divisions with agency staff and existing partners.

Tactic 2: Evaluate existing operational park plan information for use in updated documents.

Strategy 2: Determine which aspects of development and operation can be streamlined to ensure consistent management of the resources.

Tactic 1: Hold historical park staff meetings to address operation, maintenance and development of historical facilities.

Tactic 2: Work with Engineering Division to create long-term maintenance plans for historical buildings and the surrounding areas.

Objective 2.

Evaluate existing resources within State Historical Parks.

ISSUE 1

A standardized evaluation process does not exist regarding the resources.

Strategy 1: Create an evaluation process that meets the needs of each Historical Park.

Tactic 1: Research current evaluation processes of other State Historical Park systems to create an evaluation process of the resources.

Tactic 2: Compile information from evaluation process and create centralized database on current artifacts.

Tactic 3: Work with Information and Technology Division to update computer software programs to meet the needs of evaluating and maintaining resources within the parks.

Objective 3.

Evaluate and prioritize deferred maintenance projects to reduce current backlog of needs.

ISSUE 1

Structural deficiencies may exist due to deteriorating facilities and continued deferred maintenance.

Strategy 1: Evaluate all buildings and visitor centers to determine structural deficiencies.

Tactic 1: Work with Engineering Division to assess and prioritize deficiencies at each area.

Tactic 2: Work with Budget and Fiscal Division to identify funding mechanisms to address priority projects.

Strategy 2: Actively work to reduce the deferred maintenance backlog by securing adequate funding.

Tactic 1: Work collaboratively with LB 309 Task

Force to maintain support for building renewal projects.

Tactic 2: Aggressively seek foundation funding to address large ticket deferred maintenance projects.

Tactic 3: Work with volunteers and friends groups to raise funds and/or donate labor for identified projects.

Tactic 4: Work collaboratively with Nebraska State Legislature to enhance current funding sources and to build support for alternative funding initiatives that address deferred maintenance.

Objective 4.

When applicable update facilities to meet Americans with Disabilities Act Transition Plan.

ISSUE 1

Many areas are not fully accessible and don't meet needs of State Historical Parks clientele.

Strategy 1: Evaluate areas to determine accessibility deficiencies.

Tactic 1: Work with Engineering Division to determine area needs and update information within each area's Operational Plan.

Tactic 2: Utilize LB 309 Task Force money, when appropriate, to update accessibility of built environments.

Goal 2

The goal is to interpret, preserve and protect Nebraska State Historical Parks to educate visitors for an enriching experience.

Objective 1.

Promote best management practices to preserve the resources of each historical park.

ISSUE 1

Existing best management practices related to preservation of resources are not being updated to address changes.

Strategy 1: Provide Commission staff with current management practices.

Tactic 1: Research best practices related to preservation of cultural resources.

Tactic 2: Discuss current best management practices utilized within individual park areas.

Tactic 3: Investigate financial feasibility to update areas with alarm systems and automatic dialers.

Objective 2.

Expand programming that is consistent with agency mission.

ISSUE 1

Interpretive displays have become outdated or non-existent and do not address trends of current visitors.

Strategy 1: Evaluate current displays to determine existing interpretive opportunities.

Tactic 1: Inventory existing displays and determine how long they have been at the area.

Tactic 2: Research feasibility of having qualified partners evaluate displays and provide recommendations.

Tactic 3: Develop outside partnership to train staff and volunteers in artifact accession and handling.

Tactic 4: Work cross divisionally to determine additional needs for interpretive displays.

Tactic 5: Develop plan to share artifacts with other parks when deemed appropriate for “fresh” displays.

Tactic 6: Develop schedule to rotate stored artifacts more frequently.

Strategy 2: Update existing audio/visual programs with new images and soundtracks.

Tactic 1: Identify all programs that were created at least five years ago and update the imaging and soundtracks.

Tactic 2: Work with Information and Education Division to update all imaging and soundtracks to ensure it meets with the current branding efforts of the Commission.

Tactic 3: Work with Information and Education Division to add sound to displays when deemed appropriate by Superintendent.

Strategy 3: Convert slide programs to DVD or other current technology.

Tactic 1: Work with Information and Education and Information Technology Divisions to identify all slide programs and examine the ability to convert to other “smart” technologies when appropriate.

Strategy 4: Examine feasibility of additional uses of historical parks.

 **Tactic 1:** Assess the feasibility of using visitor centers for cross-divisional programming and needs.

 **Tactic 2:** Research the concept of “niche” markets within each park to capitalize on unique features of each area (i.e. Weddings at Arbor Lodge, kid camps at Fort Hartsuff, crane packages at Fort Kearny, family camps at Fort Atkinson or Rock Creek Station).

ISSUE 2

Staff needs assistance in creating new displays to interpret the local history.

Strategy 1: Determine the need for creating new interpretive displays.

Tactic 1: Identify local museums and county historical societies that would be interested in assisting.

Tactic 2: Work with Wildlife Division to include interpretation of the natural environment of the area into

displays.

Tactic 3: Provide quality staff training dealing with development and implementation of interpretive programs.

Tactic 4: Actively seek to acquire pertinent artifacts and memorabilia that adds to the existing resources of the parks.

Strategy 2: Develop technology based opportunities to provide interpretation to visitors.

Tactic 1: Work with Information and Education Division to develop virtual tours on Commission’s website to highlight historical parks.

Tactic 2: Work with Information Technology Division to create an interactive computer program for kids to participate in.

Tactic 3: Work with Information Technology Division to provide interpretive activities that visitors can download from the website to take with them on their trip.

ISSUE 3

Increased programming and special events will require State Historical Park staff to improve internal communications within and outside Parks Division for assistance.

Tactic 1: Develop special events/programming needs list at each park on a quarterly basis.

Tactic 2: Utilize needs list for presentation at district meetings for inclusion in Workforce Integration Plans when projects warrant agency wide assistance.

Tactic 3: Use Agency’s Workforce Integration Plan template to develop a model used to identify projects appropriate for sharing of staff resources within Parks Division.

Objective 3.

Expand living history re-enactment opportunities within parks.

ISSUE 1

Staff’s ability to provide for living history re-enactment must rely on volunteer assistance.

Strategy 1: Look to expand existing living history re-enactment opportunities.

Tactic 1: Share success stories that use volunteers for living history re-enactments and learn from one another on how to best use the skill sets of volunteers.

Tactic 2: Work with Information Technology Division to expand the web presence of the Living History Volunteer website.

Tactic 3: Provide training and incentives for volunteers to provide quality programs.

Tactic 4: Better use the Humanities Council and their assets to further the mission of the park areas.

Goal 3

The goal is to adequately secure stable funding to provide the needed assets to preserve and interpret the current historical parks.

Objective 1.

Better utilize partners to secure alternative funding to address unmet needs.

ISSUE 1

Existing budgets may not currently meet the needs of the Historical Parks.

Strategy 1: Identify partners to supplement existing budgets and develop innovative approaches to obtaining funding.

Tactic 1: Work with Engineering Division to identify which projects would qualify for LB 309 Task Force money.

Tactic 2: Investigate federal programs, such as The Experience Works program, for assistance.

Tactic 3: Review list of project needs and research grant opportunities to meet the identified needs.

Tactic 4: Utilize information from State Historical Parks that have existing friends groups and train other staff on how to create groups to assist in raising and securing funds for the development of the parks.

Objective 2.

Develop a budget prioritization system that reflects current trends and financial environment while providing for the continued protection, use and interpretation of state park facilities and resources.

ISSUE 1

General fund appropriations are unpredictable in the current financial environment and require Parks Division to become more reliant on user fees, alternative funding sources and best management practices to maintain or expand the current level of services.

Strategy 1: Evaluate the cost effectiveness, efficiency and practicality of park operations and services.

Tactic 1: Analyze one-, three- and five-year expenditure trends for individual park operations and staffing.

Tactic 2: Evaluate existing operations and programs to determine cost of service, income, economic impacts and benefits. Recommend continuation, elimination or privatization for each.

Tactic 3: Identify operational plan user trends and visitation to determine merits of continuing off season programs and services.

Tactic 4: Ensure all new activities and special events

are financially sustainable through cost/benefit analysis prior to implementation.

ISSUE 2

Maintenance equipment and vehicles have exceeded serviceable life spans requiring extensive repairs.

Strategy 1: Develop a systematic replacement schedule for operational plans to upgrade vehicles and large equipment inclusive of long-term costs such as fuel and maintenance, changes in management practices, visitor trends and collaborative agency efforts.

Tactic 1: Identify and prioritize vehicles and equipment for replacement within each park based on fuel efficiency, required maintenance and annual use while considering cost comparisons of leasing versus owning.

Tactic 2: Identify changes to management practices that can be implemented to reduce overall equipment costs, fuel consumption and maintenance (i.e. reduced mowing and natural areas, habitat improvement project and wildflower plantings).

Tactic 3: Work cross divisionally through collaborative teams to create a regional list of specialized equipment and develop a schedule for shared use.

Objective 3.

Explore alternatives to State Park Entry Permit funding at State Historical Parks.

ISSUE 1

Current income from park entry permit isn't sufficient to address operational needs.

Strategy 1: Determine feasibility of removing current park entry permit requirements at State Historical Parks and replacing with alternate income.

 **Tactic 1:** Identify how much park cash fund authority each park currently receives and compare to historic visitation numbers at each park area to determine if a per person entry fee would produce higher incomes.

Tactic 2: Utilize existing alternative funding document to pursue avenues to offset park cash funds if deemed appropriate.

Goal 4

The goal is to provide training to preserve, protect and interpret historical resources at each park.

Objective 1.

Ensure staff and volunteers has current and adequate training in preserving, protecting and interpreting historical resources.

ISSUE 1

Not all staff and volunteers have current training on best practices related to preserving, protecting and interpreting artifacts.

Strategy 1: Train staff and volunteers in preserving, protecting and interpreting the cultural resource.

Tactic 1: Provide in-service training and opportunity for professional growth through continuing education from history and museum organizations such as American Association for State and Local History and local museums.

Tactic 2: Work to create a partnership with Nebraska State Historical Society to provide staff training regarding the handling of artifacts and interpretation of the resources.

Tactic 3: Develop a skills sharing program for the staff.

Tactic 4: Work with staff on a quarterly basis to identify training needs and opportunities.

Tactic 5: Partner with college and university staff members to provide updated training whenever possible and to partner or sponsor different park areas.

ISSUE 2

When hiring new staff or recruiting volunteers it is necessary to require a specified skill set.

Strategy 1: Develop mandatory criteria for new hires and suggested criteria for volunteers to ensure stewardship of historical parks and resources.

Tactic 1: Work with Personnel Division to review current job description to determine what areas need updating for hiring qualified staff at State Historical Parks.

Tactic 2: Recruit volunteers that have living history experience for re-enactments or a history background when possible for interpretation.

Tactic 3: Develop partnerships with college and university programs to obtain interns with history and interpretation education.

Goal 5

The goal is to promote historical parks through multiple avenues to retain and attract new visitors.

Objective 1.

Encourage broad-based marketing of the events and activities offered at State Historical Parks.

ISSUE 1

Not all agency staff are aware of events and opportunities available at State Historical Parks.

Strategy 1: Develop procedures related to marketing of events and activities.

Tactic 1: Ensure all State Historical Park staff are utilizing the calendar of events to promote activities and events.

Tactic 2: Work with Information and Education Division staff to use agency email blasts and other avenues to market events.

Tactic 3: Coordinate with agency's Marketing Committee to showcase events and opportunities with adequate advanced notification.

Tactic 4: Investigate feasibility of reallocating a portion of current funds to Information and Education Division to hire a part-time parks marketing liaison.

ISSUE 2

Not all available outlets are aware of the events and activities taking place at the historical parks.

Strategy 2: Expand marketing of events and opportunities to the general public.

Tactic 1: Work with local news outlets on a rotational basis to provide information on events and activities.

Tactic 2: Work with agency's public information officers to develop press releases about events and activities.

Tactic 3: Work to create relationships with local news outlets, including radio, print and television, to highlight upcoming events and activities.

Tactic 4: Work with Nebraska Department of Travel and Tourism and Nebraska State Historical Society to market activities.

ISSUE 3

Creative marketing should be employed to encourage visitation to State Historical Parks.

Tactic 1: Investigate offering incentives, such as discounts or coupons, to visit historical parks, prioritizing locations close to other State Parks or State Recreation Areas.

Tactic 2: Partner with communities to host local events (i.e. fun runs, music events, productions).

Tactic 3: Partner with Department of Travel and Tourism and private industry to develop packaged regional tours that include visits to historical parks.

Tactic 4: Strive to participate in programs such as the Great Park Pursuit and Travel and Tourism Passport Program to increase visitation.

Tactic 5: Develop and incorporate a Historical Park Pathway into existing Recruitment, Development and Retention efforts.

Tactic 6: Partner with the Humanities Council for the 150th Celebration of Nebraska by developing a traveling Chautauqua program and creating a passport program.

Goal

The goal is to expand volunteer programs within historic parks.

Objective 1.

Expand non-profit friends groups to assist in providing financial, political, maintenance and staffing support for park programs and facilities.

ISSUE 1

Historical parks have needs that cannot be met by current staff.

Strategy 1: Expand friends groups for historic parks to address staffing shortfalls.

Tactic 1: Arbor Lodge State Historical Park and Fort Atkinson State Historical Park will share experiences related to creating and maintaining successful friends group.

Tactic 2: Identify interested parties that would be beneficial for each area.

Tactic 3: Work with Information and Education Division to market groups and functions through social media outlets.

Objective 2.

Volunteer recruitment and recognition needs to be upgraded to fully maximize use of volunteers in historic parks.

ISSUE 1

Volunteer recruitment materials are not available to staff.

Strategy 1: Provide volunteer recruitment and retention materials to staff.

Tactic 1: Develop manual with information on where to and how to recruit volunteers, what volunteers can provide and other relevant material.

Tactic 2: Share information amongst Superintendents related to successful recruitment and retention of existing volunteers.

ISSUE 2

Volunteer recognition needs to occur as a method to retain volunteers.

Strategy 1: Provide staff incentives and options on volunteer recognition.

Tactic 1: Develop protocol for distribution of incentives to volunteers and identify budget for purchasing needs.

Tactic 2: Plan recognition cookouts and other events to publicly thank volunteers. Request press and agency photographers to cover the event to market available

opportunities.

Objective 2.

Additional volunteer opportunities exist within the parks that should be taken advantage of.

ISSUE 1

Staff time is limited and it will be necessary to create additional volunteer groups to take on some of the responsibilities of maintaining the areas.

Strategy 1: Identify opportunities that volunteer groups could do to assist operation and maintenance at the park and solicit additional assistance.

Tactic 1: Review staff duties and determine if any of those activities can be undertaken by volunteer assistance.

Tactic 2: Market identified activities to the general public via the new Volunteer Database System.

Tactic 3: Partner with school and scout groups, county museums and others to solicit volunteer assistance.

Tactic 4: Work cross divisionally to identify existing volunteer program outside parks and utilize when appropriate.

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State Recreation Areas

Providing quality recreational opportunities through management and conservation of Nebraska's resources

“Purpose and Direction” - Nebraska State Recreation Areas provide outdoor recreation opportunities that are close to home and meet many of our user's recreational preferences. To provide visitors with an enriching experience, staff will need to engage in additional programming and address the backlog of deferred maintenance projects. Staff training, cross divisional efforts and improved marketing will be necessary to retain existing customers while establishing a new user base. Utilizing partnerships and volunteers will become increasingly important to safeguard financial sustainability of the areas.

Introduction

Recreation areas are defined in NE Revised State Statute Section 37-338 as “*areas with a primary value for day use, but with secondary overnight-use facilities or potential, and which have reasonable expansion capability and are located in accordance with sound park management principles*”.

Nebraska's 61 state recreation areas vary in size from less than 100 acres to more than 40,000 acres. These areas hosted nearly six and a half million visitors in 2010, or more than 65 percent of the park system's total visitation for the year. The majority of Nebraska's state recreation area lands and waters are the property of the federal government, public power and irrigation districts, or natural resources districts and are leased to the agency for the administration of their recreation and wildlife values. Developments at these areas range from primitive to modern and most offer extensive overnight opportunities in addition to day-use.

State recreation areas are largely water-oriented, which provide recreational use on natural lakes, sandpit lakes, irrigation and power reservoirs, flood control impoundments, and rivers and streams. Approximately 93 percent of all recreation areas contain water suitable for recreational activities. Demand on the water bodies is increasing with additional power boats, personal watercrafts and other activities such as windsurfing,

waterskiing and fishing and this can cause user conflict at the areas.

In the past two decades, technological advances and changing visitor desires have introduced many new activities at the areas, which have an impact on traditional uses and activities. According to the 2009 Park User survey, the majority of our users are overnight guests who stated camping was the number one reason they came to the areas, but they are participating in many activities while they are camping at the areas. Campground registrations have increased and demand for modern full service hook up sites are at a premium.

Park professionals will be challenged in coming years to find innovative ways of accommodating rapidly changing technology and associated demands, while at the same time continuing to meet the needs and expectations of growing numbers of users. More people are recreating close to home and recreation areas provide a viable option for most Nebraskans. Due to reduced staff and budgets, programming at parks has decreased and structural deficiencies of buildings and aging equipment continue to challenge operations within state park recreation areas.

To deal with these challenges, state recreation areas will need to increase interpretive programming, identify and keep up with current trends in outdoor recreation and communicate more effectively to meet the needs of the visitors. Fostering cross divisional communication will assist existing staff to more efficiently manage their areas in the best long term interest of the people and the resources of the areas. The use of new and existing partnerships and volunteers will be extremely important in the way the areas are operated in the future.

Goal 1

The goal is to preserve, protect and operate State Recreation Areas in the best long-term interest of the people and the resources.

Objective 1.

Update operational plans to ensure the protection and conservation of the recreation area resources, including cultural, fish, wildlife and water assets.

ISSUE 1

Current operational plans are outdated and need to reflect current use patterns while recognizing changing user preferences and agency directives.

Strategy 1: Create an operational plan template for use across system.

Tactic 1: Coordinate operational plan needs across divisions with Commission staff and existing partners.

Tactic 2: Evaluate existing operational park plan information for use in updated documents.

Tactic 3: Coordination across divisions to complete an inventory of existing resources at each area.

Objective 2.

Promote best management practices to preserve and protect state recreation areas.

ISSUE 1

Best management practices for recreation areas exist and should be distributed to staff.

Strategy 1: Provide Commission staff with current management practices.

Tactic 1: Disseminate current management practices that may be beneficial to recreation area staff.

ISSUE 2

The Commission has a number of recreation areas that may need to be reclassified or eliminated due to streamlining as recommended by Administrative Study Committee.

Strategy 1: Use best management practices to determine, on an agency-wide basis, if additional classification of areas are needed.

Tactic 1: Work with all divisions to determine if there are state recreation areas that need to be reclassified. Reclassification categories could include Natural Areas, Boating Access Areas, or Fishing Access Areas.

Tactic 2: Examine legislative protocol to create new classifications within the agency if warranted for reclassification.

Tactic 3: Develop a plan to divest division of areas that are inappropriate as state recreation areas.

Objective 3.

Develop a five-year priority program to correct the backlog of deferred maintenance in recreation areas.

ISSUE 1

Due to existing budget constraints, a backlog of deferred maintenance has occurred at state recreation areas.

Strategy 1: Evaluate all recreation areas' needs regarding deferred maintenance.

Tactic 1: Work with Engineering Division to

compile and prioritize a list of deferred maintenance of each area, including costs associated with each item.

Tactic 2: Work with Engineering and Budget and Fiscal Divisions to prioritize and develop funding plan on how to proceed with identified deficiencies.

Strategy 2: Actively work to reduce the deferred maintenance backlog by securing adequate funding and utilizing best management practices.

Tactic 1: Utilize best management practices to identify projects where old infrastructure can be replaced with new, cheaper facilities that meet user demands and lower operational expenses.

Tactic 2: Work collaboratively with LB 309 Task Force to maintain support for building renewal projects.

Tactic 3: Aggressively seek foundation funding to address large ticket deferred maintenance projects.

Tactic 4: Work with volunteers and friends groups to raise funds and/or donate labor for identified projects.

Tactic 5: Work collaboratively with Nebraska State Legislature to enhance current funding sources and to build support for alternative funding initiatives that address deferred maintenance.

Objective 4.

Update criteria for acquisition or rejection of new areas and elimination of existing recreation areas.

ISSUE 1

There is a need to update protocol for evaluating areas to be acquired or eliminated.

Strategy 1: Update methodology to acquire or reject potential new recreation areas.

Tactic 1: Work across divisions to update criteria for acquiring or rejecting potential land for state recreation areas, including financial sustainability, compliance with our agency's mission and Legislative mandates to assist in funding the operations of the area.

Tactic 2: Work with Realty Division to create a standardized approach to acquire or reject property based on updated criteria.

Tactic 3: Solicit input from field staff for their review and input on criteria.

Strategy 2: Update existing criteria to ensure elimination of existing state recreation areas is in the best long-term interest of the Commission.

Tactic 1: Review existing criteria with cross-divisional input to ensure equitable consideration of all area resources.

Tactic 2: Engage outside partners from original criteria development to provide feedback on updated elimination criteria to ensure consideration of partner resources (Travel and Tourism, State Historic Preservation Office, etc.).

Tactic 3: Solicit input from field staff on criteria for elimination based on field conditions.

Objective 5.

Development or reduction of facilities should take place when warranted at recreation areas.

ISSUE 1

Due to changing demographics and trends in recreation, there are specific needs that have not been addressed by recreation areas across the state.

Strategy 1: Identify potential needs and feasibility to develop or reduce facilities.

Tactic 1: Use information in the current Statewide Comprehensive Outdoor Recreation Plan (SCORP) to identify trends and popularity of recreational assets in Nebraska.

Tactic 2: Perform a cost/benefit analysis for non-traditional recreational pursuits, which would include land acquisition feasibility, costs of staff, maintenance and development of the area, to ensure activities are sustainable.

Tactic 3: Investigate adding picnic shelters and event structures at identified major state recreation areas that could serve alternative recreational uses.

Tactic 4: Evaluate the need to modernize, update and add campgrounds to recreation areas that adequately serves visitor demand.

Goal 2

The goal is to ensure responsible fiscal management to fulfill the Commission's mission for State Recreation Areas.

Objective 1.

Develop a budget prioritization system that reflects current trends and financial environment while providing for the continued protection, use and interpretation of state park facilities and resources.

ISSUE 1

General fund appropriations are unpredictable in the current financial environment and require Parks Division to become more reliant on user fees, alternative funding sources, partnerships and best management practices to maintain or expand the current level of services.

Strategy 1: Evaluate the cost effectiveness, efficiency and practicality of park operations and services.

Tactic 1: Analyze one-, three- and five-year expenditure trends for individual park operations and staffing.

 **Tactic 2:** Evaluate existing operations and programs to determine cost of service, revenue, economic impacts and benefits. Recommend continuation, elimination or privatization for each.

Tactic 3: Identify operational plan user trends and visitation to determine merits of continuing off season programs and services.

Tactic 4: Ensure all new activities and special events are financially sustainable through cost/benefit analysis prior to implementation.

Strategy 2: Maintain and enhance current stable income sources to maximize revenue.

Tactic 1: Expand systems that increase the availability of park entry permits for purchase by the public (i.e., internet sales and self serve daily permits) while working to ensure a simplified purchasing process.

Tactic 2: Prioritize development or expansion of income producing services at high visitation park areas in order to bolster park cash fund balances.

Tactic 3: Continue to monitor existing centralized reservation system and point of sale system to ensure systems are operating in most effective and efficient manner possible.

Strategy 3: Investigate partnership opportunities to assist development and maintenance of areas.

Tactic 1: Recruit corporate partnerships to assist in events as well as developing park areas.

Tactic 2: Work with foundations and state, federal and local agencies to find financial assistance through other programming that meets the mission of the Commission.

Strategy 4: Identify grant funding opportunities for existing needs at recreation areas.

Tactic 1: Compile a list of area needs and utilize information to research grant opportunities.

Strategy 5: Seek alternative funding avenues to offset reduced general fund appropriations.

Tactic 1: Continue surveying park users and general population to determine level of support for alternative funding sources.

Tactic 2: Work to build legislative and public support for alternative funding sources.

ISSUE 2

Park maintenance equipment, vehicles and furnishings have exceeded serviceable life spans requiring extensive repairs.

Strategy 1: Develop a systematic replacement schedule for operational plans to upgrade vehicles and large equipment inclusive of long-term costs such as fuel and maintenance, changes in management practices, visitor trends and collaborative agency efforts.

Tactic 1: Identify and prioritize vehicles and equipment for replacement within each park based on fuel efficiency, required maintenance and annual use while considering cost comparisons of leasing versus owning.

 **Tactic 2:** Identify changes to management practices that can be implemented to reduce overall equipment

costs, fuel consumption and maintenance (i.e., reduced mowing and natural areas, habitat improvement project and wildflower plantings).

Tactic 3: Work cross divisionally through collaborative teams to create a regional list of specialized equipment and develop a schedule for shared use.

Strategy 2: Replace furnishings and equipment before they exceed their cost effective lifespan.

Tactic 1: Establish a three-, five- and seven-year replacement schedule for furnishings and equipment.

Strategy 3: Utilize more energy efficient vehicles to undertake certain park operation and maintenance needs.

Tactic 1: Identify opportunities within park operations where hybrid and electric vehicles or equipment may be utilized for a cost savings.

Objective 2.

Continue to conduct annual fee reviews and make appropriate adjustments.

ISSUE 1

Issue 1: Fee increases in the park system do not coincide with annual cost of living and the cost of doing business increases.

Strategy 1: Develop an annual fee review structure to determine if fees need to be increased and by how much.

Tactic 1: Work with field staff to create a fee structure review process.

Objective 3.

Increase concession opportunities where appropriate to make profit at areas.

ISSUE 1

There are potentially untapped areas where concession opportunities exist that need to be examined.

Strategy 1: Research the need for additional concessionaires within the system.

Tactic 1: Determine where and how additional concessionaires can be profitable and beneficial for the agency ensuring minimal time requirements from staff to oversee the concessionaires.

Tactic 2: Investigate if identified areas for additional concessionaires would be better served by an agency run concession.

Tactic 3: Determine potential for additional income producing activities such as temporary concession permits.

Objective 4.

Expand or enhance revenue generating re-sale opportunities where visitation warrants.

ISSUE 1

There are many opportunities to increase revenue

streams within existing offerings that aren't currently being capitalized upon.

Strategy 1: Identify the opportunities available to increase revenue streams.

Tactic 1: Examine potential of buying re-sale items in bulk to decrease costs to any one recreation area.

Tactic 2: Provide additional re-sale opportunities at areas if warranted due to visitation and staff availability.

Tactic 3: Examine the potential of additional programming that would require a fee to increase revenue.

Goal 3

The goal is to provide quality visitor services, education and programming at State Recreation Areas.

Objective 1.

Maintain a strong commitment to enhancing quality services to meet the recreational needs of a diverse population.

ISSUE 1

Trends on how people recreate and user preferences are changing.

Strategy 1: Provide safe, educational and enjoyable experiences for visitors.

Tactic 1: Use Statewide Comprehensive Outdoor Recreation Plan and park user survey data to determine types of experiences visitors want at recreation areas.

Tactic 2: Continue the Park User Survey on a bi-annual basis and include Superintendent input on content of the survey to ensure we capture usable data.

ISSUE 2

Changing ethnic demographics of Nebraska need to be incorporated in how recreation areas are managed.

Strategy 1: Multi-cultural interpretive materials may be necessary at specific recreation areas.

Tactic 1: Identify areas that warrant bi-lingual materials.

Tactic 2: Partner with Nebraska Department of Travel and Tourism and Nebraska Department of Health and Human Services to utilize existing bi-lingual materials and resources.

ISSUE 3

Certain disabled constituents either remain unaware of or are incapable of accessing state recreation areas.

Strategy 1: Continue implementation of the Division's Americans with Disabilities Act Transition Plan.

Tactic 1: Work with Engineering Division to

identify accomplishments from past three years and needs for the next five years to meet the goals in the Transition Plan.

Tactic 2: Work with Information and Education Division to market projects that have been developed to meet plan needs.

Strategy 2: Promote areas that are fully accessible to special populations.

Tactic 1: Work with Information and Education Division to promote areas that are accessible.

Objective 2.

Encourage state recreation areas to provide interpretive programming to foster a strong public commitment to environmental stewardship.

ISSUE 1

Not all recreation areas have taken advantage of providing interpretive programming for visitors.

Strategy 1: Develop formal interpretive programs for recreation areas.

Tactic 1: Work with Wildlife and Fisheries Divisions to identify areas where interest may warrant such programs.

Tactic 2: Work collaboratively with Wildlife Division's Outdoor Education Specialists to create curriculum and materials for programs.

Tactic 3: Work across divisions to train state recreation area staff on administering interpretive programs.

Tactic 4: Work with the Master Naturalist Program to have volunteers provide interpretive programming for areas.

Goal 4

The goal is to strive to market State Recreation Areas to broad segments of the population.

Objective 1.

Promoting the multitude of activities the general population can participate in at state recreation areas should be increased.

ISSUE 1

The general public is unaware of all the activities available and benefits of the recreation areas.

Strategy 1: Encourage local communities to use recreation areas for special events.

 **Tactic 1:** Work with local Chamber of Commerce and partners hosting public events within communities to develop special events or use the recreation area for

existing events.

Tactic 2: Work with Information and Education Division to market opportunities.

Tactic 3: Work with Engineering Division and Nebraska Department of Roads to update roadside directional signs on state and county rights-of-way.

Strategy 2: Work with *NEBRASKALand* staff to do additional stories on recreation areas and the special events at the areas.

Tactic 1: Identify and provide story ideas and information to *NEBRASKALand* writers for stories.

Tactic 2: Provide information to blog writers and social media leads so they can blog about recreation area opportunities and special events.

Strategy 3: Embrace social media avenues to market to an alternate segment of the population.

Tactic 1: Work with Information and Education to update or create Facebook pages with at least one new post a day about activities occurring in each park area.

Tactic 2: Recruit volunteers to assist in developing and updating social media sites.

ISSUE 2

There is a communication gap within and outside parks division in regards to the events that are occurring within recreation areas.

Strategy 1: Determine the hierarchy of the dissemination of information regarding events.

Tactic 1: Identify a chain that provides event information in a timely manner.

Tactic 2: Utilize ngpc.everyone@nebraska.gov email to get out information about events occurring at each recreation area.

ISSUE 3

Greater facilitation of information to administration and the leadership of the state is needed to better understand the benefits state recreation areas provide.

Strategy 1: Develop a report for Administration, State Legislature and outside partners about recreation areas.

Tactic 1: Create a template that includes opportunities, benefits and economic impact to be utilized across the system.

Tactic 2: Continue monthly special event and activity reporting to maintain current data for report needs.

Goal 5

The goal is to expand existing volunteer programs for State Recreation Areas.

Objective 1.

Develop non-profit friends groups to assist in providing financial, political, maintenance and staffing support for recreation area programs and facilities.

ISSUE 1

State recreation areas have needs that cannot be met by current staff.

Strategy 1: Create friends groups for state recreation areas.

Tactic 1: Create a packet of information on how to start a friends group and maintain the partnership.

Tactic 2: Solicit advice of State Historical Parks that have successful friends groups.

Objective 2.

Volunteer recruitment and recognition needs to be upgraded to fully maximize use of volunteers in recreation areas.

ISSUE 1

Volunteer recruitment materials are not available to staff.

Strategy 1: Provide volunteer recruitment and retention materials to staff.

Tactic 1: Develop informational sheets on where to recruit volunteers, how to recruit volunteers, what volunteers can do for the park areas and other information pertinent to staff for volunteer efforts.

Tactic 2: Share information on successful recruitment and retention of existing volunteers to one another.

ISSUE 2

Volunteer recognition needs to occur to retain volunteers and show appreciation of their contributions.

Strategy 1: Provide staff incentives and options on volunteer recognition.

Tactic 1: Develop protocol and items for distribution of incentives to their volunteers.

Tactic 2: Plan recognition cookouts or other events to publicly thank their volunteers and request press and NGPC photographers to cover the event to maximize opportunities.

ISSUE 3

Campground host program may require revamping to get quality individuals to participate.

Strategy 1: Look at a tiered approach to campground hosts.

Tactic 1: Examine other state park campground host programs and look at those that offer a tiered approach to campground hosts.

Tactic 2: Explore feasibility of providing incentives to campground hosts.

Tactic 3: Determine if a new structure will work to fit areas needs.

Tactic 4: Explore the concept of no longer allowing a campground host to stay for the entire summer unless there is a lack of interest at an area.

Strategy 2: Identify improvements needed to take advantage of campground host program at all recreation areas.

Tactic 1: Investigate feasibility of creating campground host separate campsite area.

Tactic 2: Determine cost/benefit analysis of providing full hookups to campground hosts.

Objective 3.

Identify additional volunteer opportunities that may exist within recreation areas.

ISSUE 1

Limited staff resources make it necessary to create additional volunteer groups to take on some responsibilities of maintaining a park area.

Strategy 1: Examine feasibility of new programs for volunteers.

Tactic 1: Identify different activities that could be done by volunteers and create additional programs to meet these needs.

Goal 6

The goal is to ensure that staff is professional, knowledgeable, and service-oriented to maximize the recreational opportunities available at State Recreation Areas.

Objective 1.

Provide staff current training in park management, park design and resource protection.

ISSUE 1

Staff isn't updated on changing trends related to management and design.

Strategy 1: Examine existing management information for use in staff training.

Tactic 1: Conduct a needs assessment of staff to identify training needs.

Tactic 2: Create a training manual and plan based off of needs assessment of staff.

Tactic 3: Provide information to staff regarding research and resources available to provide knowledge and training on park management.

Tactic 4: Develop a leadership skills sharing program which includes training and on-going mentoring

of superintendents.

Tactic 5: Support staff involvement in professional associations, community organizations and other educational avenues that could benefit the management of the park area.

Tactic 6: Explore different avenues on how to meet with staff that limits travel (i.e., skyping, webinars).

Strategy 2: Look at developing relationships with colleges and universities to assist in training staff on current park management.

Tactic 1: Identify colleges and universities that have specific courses that could be beneficial to staff.

Tactic 2: Create partnerships with colleges and universities to provide information to staff.

ISSUE 2

Staff would benefit from a formal New Employee Orientation program for new hires.

Strategy 1: Create New Employee Orientation program.

Tactic 1: Work with Personnel Division to create orientation program.

Tactic 2: Utilize Employee Orientation and design park specific information where needed.

Objective 2.

Provide staff the support needed to operate and maintain quality recreation areas.

ISSUE 1

There are different needs each area has in regards to the business side of the operation.

Strategy 1: Determine the needs of the park areas.

Tactic 1: Coordinate and prioritize park needs in regards to accounting issues, computer requirements, law enforcement assistance, etc.

Tactic 2: Work with communications plan to improve ongoing discussion related area needs.

ISSUE 2

Park staff needs opportunities to exchange ideas and ways to improve on park management on an annual basis.

Strategy 1: Provide opportunity to have an annual parks meeting that allows for time to exchange ideas.

Tactic 1: Hold annual parks meeting that specifically has a period of time blocked out to discuss new ideas that parks are doing, what parks have learned from the past year, and how parks have done different projects and other management ideas.

ISSUE 3

Law Enforcement presence is dwindling at recreation areas and support is needed to enforce issues at recreation areas.

Strategy 1: Work with Law Enforcement Division to determine the changes occurring within the Commission.

Tactic 1: Work with Law Enforcement Division to develop a plan that addresses how to operate effectively and efficiently with Law Enforcement's dwindling presence.

Objective 3.

Set minimum staffing requirements on abilities of staff to ensure quality park management standards are met.

ISSUE 1

Recruiting and retaining academically prepared, career-oriented park professionals is becoming increasingly difficult.

Strategy 1: Work with Personnel Division to re-write job descriptions as needed to meet minimum requirements created.

Tactic 1: Determine what minimum staffing and abilities are for recreation areas.

Tactic 2: Provide information to Personnel Division for use with update job descriptions.

Objective 4.

Education concessionaires to ensure they are knowledgeable of Nebraska Game and Parks Commission policies, regulations, services, programs and natural and cultural resource values.

ISSUE 1

Concessionaires are not employees of the Commission and at times lack sufficient knowledge to meet the mission of the Nebraska Game and Parks Commission.

Strategy 1: Develop information for concessionaires to educate them on Commission policies, regulations, services and programs.

Tactic 1: Compile a list of concessionaires and provide staff training from the areas that manage concessionaires.

Tactic 2: Work cross divisionally to create guidance document that provides information to the concessionaires so they can further the mission of the Commission.

Goal

The goal is to develop an external communications plan to ensure consistent operations and marketing of State Recreation Areas to outside partners.

Objective 1.

State recreation areas should be sensitive to land use of adjacent areas.

ISSUE 1

External activities from local communities and federal lands that are nearby state recreation areas affect the areas.

Strategy 1: Ensure park staff has representation at meetings regarding external development when it could affect the area.

Tactic 1: Actively seek participation in federal and local planning initiatives that may affect recreation areas.

Tactic 2: Review local agendas of City Councils and County Boards for zoning changes, rescue/fire services and law enforcement changes that may affect recreation areas.

Tactic 3: Create procedures on how to identify external changes that may affect recreation areas and how to react to these changes.

Objective 2.

Objective 2: State recreation areas should inform local communities about opportunities and activities at the areas.

ISSUE 1

Many local communities are unaware of the activities or the development that takes place at the park areas.

Strategy 1: Ensure park staff has close working relations with local communities regarding the activities, development and operational plan of the area.

Tactic 1: Provide a copy of the operational plan of the area to local community decision makers for review.

Tactic 2: Seek input from local communities/ counties regarding the development of adjacent land uses and incorporate their input into operational planning.

Review Team

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State Recreational Trails

Where people go to get off the beaten path

“Purpose and Direction” - Public feedback on Nebraska’s state recreational trails points to increased demand and use, requiring proactive maintenance and management to ensure that state park system guests’ needs are met. Reduced operating budgets demand creative and adaptive methods to provide quality opportunities for a variety of trail users. Training area managers on efficient and effective methods of operation is required to meet future goals of the trail system. Collaboration within the agency to encourage watchable wildlife opportunities along trails, interpretation and education of the natural environment, state recreational trails will continue to meet the agency’s mission while providing an enjoyable activity within the state park system that can be financially viable.

a variety of activities within the agency’s parklands. Findings from the 2009 Park User Survey show 21.7 percent of respondents rated bicycling as very important to their park visit. Hiking was rated by 21.5 percent of park users as very important and horseback riding rated very important to 12.5 percent of visitors. Trail related outdoor recreation activities are clearly popular, whether for sport, recreation, exercise or simple enjoyment to our park system users.

The agency is currently engaged in a cutting edge project for state park system trails to provide visitors consistent and comprehensive trail information. When completed, all trails will be mapped through a Geographic Information System. Users will be able to view and print interactive maps on the agency’s website or download information directly to their personal Global Positioning System units or smartphones. Utilization of the Geographic Information System trails inventory will also be an important management tool for identifying areas for new trail development or rerouting within the current system.

Future challenges for the agency’s recreational trails include reduced funding to maintain trails in a sustainable manner, ability to keep up with increased demand from users and lack of information on best management practices on design, maintenance and operation of trails. To address these challenges, staff training will be needed on how to design, develop and maintain new and existing trails within the system as well as information on how to best utilize the Geographic Information System trails mapping system to assist their management decisions. Reduced budgets and staffing require development of partnerships with agencies, volunteer groups and communities for maintaining and sustaining our current trail system.

The most important issue to be addressed for the future of state recreational trails is the on-going need to fill the State Trails Coordinator position. This position has been left vacant since 2002 with duties tasked to Planning and Programming Division of State Parks. To deal with increased demand and expanded trail programming, responsibilities for overseeing the program and management of over 1,200 miles of trail will require a fulltime employee to ensure visitor’s needs are being met in a dependable and safe manner.

Introduction

There are currently trail opportunities in 32 of the 82 parkland areas and two designated state recreational trails outside of park areas. These offerings provide visitors 534 miles of developed trails for a variety of pursuit. Present-day trends show that trails have become increasingly popular with users when visiting the state park system areas. Trails are designed for many users, including hikers, recreational bicyclists, equestrians, snowmobilers, cross country skiers, mountain bikers, and water enthusiasts. The agency manages 10 designated water trails that provide users the opportunity to paddle or float nearly 550 miles of Nebraska waterways. Our two state recreational trails include the Cowboy Nature and Recreation Trail and the Lied Platte River Bridge. The Cowboy Trail was donated to the state of Nebraska in 1994 and by 2010, 195 miles of the 321 miles have been developed. The trail from Norfolk to Valentine allows for hiking, biking and equestrian use. The Lied Platte River Bridge is located near South Bend and includes a 1,800 feet long bridge over the Platte River, three miles of trails and two trailheads.

Nebraskans are increasing their utilization of trails for

Goal 1

The goal is to develop, maintain and operate State Recreational Trails in the best long-term interest of the people and the resources.

Objective 1.

Promote planning, development and operation of trails within agency parklands that is consistent with agency mission and directives.

ISSUE 1

Current recreational trail design, construction and operation standards and management best practices aren't distributed to staff in a timely manner.

Strategy 1: Research and compile current federal and state standards, plans and publications related to trail development and operation into a comprehensive manual to provide effective and efficient access to information for project implementation.

Tactic 1: Update state and federal standards and provide them to agency staff in a manual for easy field reference.

Tactic 2: Provide staff with Nebraska's current state trails plan, A Network of Discovery: Comprehensive State Trails Plan.

 **Tactic 3:** Research, compile, and distribute a reference guide of existing resources regarding best practices of trail development and operations to staff.

ISSUE 2

Operational plans need updating to reflect increased user demand and changing preferences.

Strategy 1: Coordinate trail operational plans in conjunction with park specific plan updates, and develop trail specific operational plans when state recreational trails exist outside park boundaries.

Tactic 1: Use Statewide Comprehensive Outdoor Recreation Plan recommendations, state trails plan public input session information, bi-annual park user survey data and other existing agency data to prioritize user preferences and expectations for state recreational trails.

Tactic 2: Identify park specific trends, populations and visitation patterns related to trail use (i.e., Platte River State Park has large mountain bike user group).

 **Tactic 3:** Work cross-divisionally with agency staff and outside partners to assess and inventory resources along existing and proposed trail corridors for potential expansion of programming (i.e., natural and historical interpretive signage, watchable wildlife trails, Recruitment Development and Retention).

Tactic 4: Identify existing trail opportunities and

ensure they are consistent with park area goals and operations.

Tactic 5: Utilize the Geographic Information System Trails Inventory to plan potential trail connections and new developments.

ISSUE 3

Staff training for recreational trail development and operation is inadequate to ensure staff's ability to meet user demands.

Strategy 1: Provide high quality training opportunities to staff for development and operation of recreational trails.

 **Tactic 1:** Host annual trail development and operation sessions in conjunction with existing agency-wide training opportunities.

Tactic 2: Research and provide staff information about educational sessions and hands-on training opportunities hosted by outside organizations.

Objective 2.

Utilize federal funding more effectively and expand partnership opportunities for trail development and operation.

ISSUE 1

To offset reduced budgets, agency staff should fully utilize federal trail funding opportunities (Recreational Trails Program, Land and Water Conservation Fund, and Transportation Enhancement).

Strategy 1: Educate staff about federal funding sources, application processes and grant procedures on a bi-annual basis.

Tactic 1: Compile grant funding opportunity information and distribute to park areas.

ISSUE 2

Staff hasn't adequately pursued partner funding for trail development and operations.

Strategy 1: Develop and maintain a comprehensive list of foundation funding opportunities.

Tactic 1: Research and compile a master list of trail funding opportunities through non-profit foundations for distribution.

Strategy 2: Solicit partnerships for trail development and operation.

Tactic 1: Develop trail sponsorship opportunities to present potential partners (i.e., adopt-a-trail mile program).

 **Tactic 2:** Research and approach partners identified as having a common interest and message about trail sponsorship (i.e., health industry, outdoor gear providers, Nebraska Horse Council).

ISSUE 3

Volunteer opportunities for trail related activities are currently underutilized.

Strategy 1: Expand partnerships for assistance in conducting trail programs, operations and maintenance and associated amenities.

Tactic 1: Identify existing user groups and facilitate discussion related to ongoing maintenance.

Tactic 2: Develop opportunities for individuals, groups, and communities to adopt-a-trail on all or a portion of a trail.

Tactic 3: Encourage field staff to host annual National Trails Day events at each area related to trail cleanup, development of new sections identified through operational planning or general ongoing maintenance.

Objective 3.

Develop uniformed signage for agency trail systems to provide users a consistent experience across the system.

ISSUE 1

Trail signage currently varies from area to area or is non-existent.

Strategy 1: Develop uniformed signage standards for interpretive design, safety, access, trail use and difficulty.

 **Tactic 1:** Form a cross divisional committee to evaluate current needs and create uniformed signage standards.

Tactic 2: Educate staff on sign needs and purpose for a variety of users.

Strategy 2: Purchase and install uniformed signage at park areas.

Tactic 1: Evaluate area needs and prioritize parks for implementation.

Tactic 2: Determine budgetary constraints and purchase park area signage when funding is available.

Tactic 3: Utilize Recreational Trails Program Educational Funds to purchase interpretative signage throughout the system.

Goal 2

The goal is to educate the public about Recreational Trails within agency parklands.

Objective 1.

Continue development of interactive web based inventory of recreation trails within Commission parklands.

ISSUE 1

Geographic Information System Trails Inventory needs expansion to include all agency areas and potential partner trail systems.

Strategy 1: Develop and maintain comprehensive inventory of trail types, lengths, uses, and locations for easy public access.

Tactic 1: Continue implementation of Geographic Information System Trails Inventory to include all agency trail opportunities.

Tactic 2: Investigate feasibility of expanding Geographic Information System Trails Inventory to include partner trails system after agency inventory is complete.

Objective 2.

Work cross-divisionally with agency staff and partners to develop trail marketing strategies.

ISSUE 2

Not all park users are aware of recreational trail opportunities within agency areas.

Strategy 1: Work with Agency Marketing Committee and partners to create strategies to inform public of trail opportunities.

Tactic 1: Work with marketing committee to promote existing trail opportunities as a package with existing area programs and services.

Tactic 2: Partner with state agencies to promote opportunities (Travel and Tourism, Department of Roads, and Department of Health and Human Services).

Tactic 3: Educate agency staff about recreational trail opportunities.

Tactic 4: Ensure trail website content is presented in a useable format with current information.

Tactic 5: Actively promote trail etiquette, safety, and general information via brochures and agency website.

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Information Technology

Effective use of technology enhances productivity.

“Purpose and Direction” - Technology is used agency wide to communicate and collaborate, to manage operations and finances, to access and deliver information and services. Now more than ever, state government relies on information technology to conduct business, serve citizens and enable the delivery of agency services. The importance of Information Technology continues to grow as technology advances. Technology is used to facilitate transfer of information necessary to meet the Commission’s guiding principles and accomplish conservation and statutory functions. Information Technology is critical to the successful operation of the Nebraska Game and Parks Commission.

Introduction

In 2008, the Information Technology Division within the Nebraska Game and Parks Commission was formed. Prior to this consolidation, the Information Technology staff consisted of two Full-time Employees in a centralized role and several staff throughout the agency performing information technology-related duties for their respective divisions. The consolidation of Information Technology functions within the Commission brought all Information Technology staff together to form a single Information Technology Division. In addition, a contract has been put in place with the Office of the Chief Information Officer for an Information Technology Manager. This relationship is saving the Commission approximately 20 percent of the cost of a Full-time Employee. This contract is also improving our partnership with Office of the Chief Information Officer and provides the Commission better access to the states’ consolidated services.

The consolidation and creation of the Information Technology Division at the Commission has provided many benefits for the agency. The Information Technology Division has created a team of Information Technology professionals working together who are able use their expertise to collaborate and provide more

effective solutions. By bringing all technical staff together in one division, they are able to rely on each other to solve common problems more quickly. In addition, technical research can be shared within the Information Technology Division reducing duplication of efforts.

Now more than ever, state government relies on information technology to conduct business, serve citizens and enable the delivery of agency services. The Information Technology Division is customer driven and service oriented in order to provide the highest quality technical support. The Information Technology Division provides a robust, reliable and secure information technology infrastructure to support the vision and mission of the the Commission.

The importance of the Information Technology Division will continue to grow as technology advances. Agency employees are dependent on technology to complete their daily work. Information Technology provides effective and efficient digital solutions and makes sure that all systems are up and running. Technology is used agency wide to communicate and collaborate, to manage operations and finances, to access and deliver information and services. In this age of dynamic technological change, the Information Technology Division is critical to the successful operation of Nebraska Game and Parks Commission. Information Technology must be flexible and continue to grow as technology expands and the needs for technology solutions increase.

Goal

The goal is to provide technical solutions and support for the Commission by promoting the use of information technology to deliver services, improve agency operations and provide information more efficiently.

ISSUE 1

There is not a centralized inventory of Information Technology assets.

Strategy 1: Create an Information Technology capital asset management system for the Nebraska Game and Parks Commission.

Tactic 1: Work with each division to create a centralized inventory for all for agency computer

hardware and software.

Tactic 2: Once a centralized inventory is established, it will be easier to manage Information Technology assets. Updates to the centralized inventory will occur for all new computer hardware and software purchases.

ISSUE 2

Computer hardware and software need better tracking.

Strategy 1: Standardize agency computer hardware and software.

 **Tactic 1:** Create standardized hardware configurations for computer purchases.

Tactic 2: Ensure all employees have the latest version of software suites, such as Microsoft Office Professional, Adobe Creative Suite, etc.

Tactic 3: Use a standardized procedure to manage software licenses.

Strategy 2: Create a centralized control to ensure software license compliance.

Tactic 1: Once a centralized inventory is established, it will be used to track software licenses ensuring proper allocation and avoiding the financial risk of being out of compliance.

Tactic 2: The asset management system will include warranty information to avoid paying for equipment repairs that should be covered by the vendor or manufacturer. The system will provide the ability to manage warranty information.

ISSUE 3

Information Technology authorizes all computer-related purchases, however Information Technology needs to provide direction on how often computer hardware and software is updated

Strategy 1: Create and implement a life-cycle replacement strategy to consolidate and standardize purchases of hardware and software.

Tactic 1: Evaluate the age and versions of computer hardware and software.

 **Tactic 2:** Plan and schedule computer purchases. This strategy would standardize costs; making costs regular and predictable.

Tactic 3: Accelerate deployments and upgrades. Keeping computers up-to-date would solve problems such as inability to get vendor support, availability of hardware drivers (e.g., for printers) and inability to support new releases of application software.

Tactic 4: Consolidation of the purchases for new hardware and software would result in discounted pricing for the agency, saving money for each division.

ISSUE 4

When hardware and software is not standardized, it is more time consuming to support, therefore more costly

to maintain.

Strategy 1: Standardize desktop and office application software purchases.

 **Tactic 1:** Use bulk purchasing for hardware and software to obtain discounted rates.

Tactic 2: Use desktop imaging for all computer purchases providing quicker deployment and improved technical support.

Tactic 3: Use the inventory system to easily manage when purchases are made.

Tactic 4: Use the inventory system to track licenses for all agency software purchases.

ISSUE 5

Data for the Nebraska Game and Parks Commission needs to be stored securely and backed up off-site.

Strategy 1: Implement managed domain services to provide back-up and storage as well as disaster recovery and restoration service for agency data.

 **Tactic 1:** Work with each division and the Office of the Chief Information Officer to implement domain services which will provide secure data storage and off-site back-up.

Tactic 2: Once each division has adequate data storage and back-up, then agency file servers can be removed or reallocated.

ISSUE 6

Agency file servers are inadequate for current needs and will need to be replaced.

Strategy 1: By using domain services the need to replace some servers will be eliminated.

Tactic 1: Evaluate agency file servers and replace with domain services where feasible.

Tactic 2: Utilize existing resources in state government to avoid duplication of services.

ISSUE 7

Disaster recovery plan needs to be implemented.

Tactic 1: Sharing disaster recovery facilities and establishing a collaborative approach to disaster recovery will help managing costs.

Tactic 2: By using domain services, anti-virus licenses, management and protection is included.

ISSUE 8

Agency computers need to be secure against known vulnerabilities in operating system and application software.

Tactic 1: Ensure all agency computers are up-to-date

Tactic 2: By using domain services, anti-virus licenses, management and protection is included.

ISSUE 9

Technology decisions need to be centralized while meeting the requirements of each office.

Strategy 1: Reestablish and formalize agency Information Technology committee to make agency-wide recommendations.

Tactic 1: Formalize an agency-wide Information Technology committee to make recommendations to the Information Technology Division for policies and standards as well as assist in the resolution of agency-wide Information Technology issues.

Tactic 2: Use agency technology experts to facilitate communication within each division and help ensure all employees' technology concerns are met.

ISSUE 10

Software applications need to be updated and used throughout the agency.

Strategy 1: Work with multi-divisional groups to create software applications capability of meeting the needs of several divisions.

 **Tactic 1:** Create multi-divisional work groups to address application needs and create solutions that will meet the needs of multiple divisions.

Tactic 2: Identify critical needs for software application development.

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Appendix

Topic Categorization of Public Input Responses

Survey Number and Topic

- 8.1Lack of funding; raise park entry permit.
- 8.2Volunteer organizations.
- 8.3Cooperation with specific park foundations.
- 8.4Deer seasons.
- 8.5Officers need to be “armed.”
- 9.1Need standardization of rules among all parks.
- 9.2Need more covered shelters in campgrounds.
- 9.3Need tent areas with electrical hookups so they don’t use RV areas.
- 9.4Need more RV full hookup sites; offer WiFi.
- 9.5Allow camping organizations to promote activities in parks and ear-mark funds raised to needed improvements.
- 10.1Create program for public hunting and fishing access to private lands.
- 10.2Construct “Outdoor Campus” facilities to recruit new hunters and anglers.
- 10.3Use non-traditional labor force to implement management.
- 10.4Establish a Youth Conservation Corps to assist with maintenance and repairs.
- 10.5Ask Unicameral to increase support; 1/6 cent sales tax.
- 11.1Less restriction on alcohol use; no fines if hanging out by campsite and not causing trouble.
- 11.2Develop program to promote and/or endorse legitimate outfitters.
- 12.1Pursuing available grants and federal assistance.
- 12.2Build new trails and use locals to get different groups into our parks.
- 12.3Work out short- and long-term goals for slimmer budgets.
- 12.4Develop plan to use volunteers for park upkeep.
- 12.5Provide current and future services.
- 14.1Increase programming and variety of events to increase use.

Survey Number and Topic

- 14.2Embrace technology and increase connectivity for users.
- 14.3Increase marketing to include all populations, not just hunters and anglers.
- 14.4Engage inner city youth through outreach programs.
- 14.5Increase use of partnerships to reach goals.
- 15.1Seek increase in general fund support.
- 15.2Increase emphasis on attracting and retaining young anglers and parents.
- 15.3Increase emphasis on enforcing Game and Parks regulations.
- 19.1Too much demand on streams.
- 19.2Continue efforts to acquire wetlands.
- 19.3Provide cash incentives to protect riparian areas.
- 20.1Continue to improve existing fisheries and habitats and create new ones.
- 20.2Keep outdoor programs going and don not target just kids but also adults.
- 20.3Continue trail development and coordinate between communities.
- 20.4Need to keep and build support for sustainable funding and diversify sources; employ grant writers; incremental fee increases.
- 20.5Continue to partner and collaborate with like-minded groups and agencies.
- 21.1Make river-flow protection high priority; complete statewide assessment on minimum streamflows needed.
- 21.2Maintain adequate funding; use innovative partnerships to broaden base of funding.
- 21.3Continue efforts to provide public access to private lands and protect recreation use of WMAs from development.
- 21.4Remain aggressive in using good wildlife management practices; provide increased opportunities for deer hunters; deal with depredation on case by case basis.

Survey Number and Topic

- 21.5Focus on environmental education, including introducing hunting and fishing; support hands-on public programs like Adopt-a-Stream.
- 26.1Continue implementation of RDR plan.
- 26.2Fuel reduction in pine forest ecosystems to improve habitat and reduce threat of wildfire.
- 26.3Forest management in all native forests and provide technical assistance on private lands.
- 26.4Purchase additional public lands for WMAs; work with NGO partners to increase hunting and fishing access.
- 26.5Expand access for hunting on private lands; continue Open Fields and Waters.
- 28.1Niobrara River needs to be preserved.
- 28.2Continue building Nebraska Natural Legacy Program.
- 28.3Seek dedicated funding for conservation; Legislature an increasingly unreliable source of funds.
- 28.4Landowner assistance needed and important.
- 28.5Certain parcels would be great additions to State Parks or WMAs.
- 30.1Reduce administrative costs; eliminate programs with low C:B ratio; use private groups for biological and environmental work.
- 30.2Liberalize alcohol rules; responsible adults want adult beverages without sneaking them in.
- 30.3Expand role of conservation officers; educators, instructors, leaders in getting more people out in outdoor recreation.
- 30.4Wants Commissioners who show up at sportsmen's events; best set of Commissioners in my long lifetime.
- 30.5Get more open land and opportunities for "little guy"; make it easy and affordable.
- 33.1Improve quality of bow-hunting opportunities; season infringed on by increasing firearm seasons.
- 33.2More public access to hunting areas; too much land leased by outfitters leaving no place for new and old hunters to hunt.

Survey Number and Topic

- 33.3Continue and expand existing mentoring programs; youth and adult recruitment and retention.
- 33.4Increase number of conservation officers; fill vacant positions.
- 33.5Increase pheasant and quail populations throughout the state.
- 34.1Need more private property access.
- 34.2Encourage sport of hunting and fishing, especially among young and ladies; they are the future of the sport.
- 34.3Fees for licenses and permits should go to wildlife management rather than lodges, bicycle trails, etc.
- 34.4Negative propaganda of PETA and animal rights groups.
- 35.1Employ more conservation officers across state; current number spread too thin.
- 35.2Keep up education efforts to get youth into outdoors; good job lowering cost of youth permits.
- 35.3Rethink decision to allow alcohol back into parks; will greatly impact the quiet, family-oriented environment.
- 35.4More antlerless permits; give a bonus antlerless permit with every permit issued in Republican unit.
- 35.5Manage for trophy deer; length limit on bucks.
- 36.1Improve walleye populations across state.
- 36.2Improve water quality for better walleye management in certain lakes.
- 36.3Better enforcement needed.
- 36.4Stop or limit spring walleye fishing during the spawn at Lake McConaughy.
- 36.5Re-address slot-limits at all areas in Nebraska; should they be statewide.
- 37.1Continue to ban alcohol in parks; safety and boating and family friendly issues.
- 37.2Permits through internet system make it difficult to get permits in some locals; make it easier not harder to get permits.

Survey Number and Topic

- 37.3Improve habitat and accessibility to allow access to quality upland game bird (pheasant) hunting.
- 37.4Maintain and increase law enforcement presence.
- 38.1Extend deer firearm season to 14 days.
- 38.2Pheasant and quail management; need to shorten season to last Saturday in October through December 31.
- 38.3Increase total number of conservation officers and reallocate to highly used park areas of state.
- 38.4Reduce cost of permits for women as well as youth to promote interests.
- 38.5Seek improvement of habitat for wildlife, even if at cost of maintenance reduction for lesser used park areas.
- 39.1Deer hunters should be required to shoot a doe to earn a buck; Implement an Earn-a-Buck Program.
- 39.2Move deer rifle season out of the rut period and extend season dates.
- 39.3Raise bag limit of Canada geese to four per hunter.
- 39.4Allow archery as a legal method of take during deer firearm season.
- 39.5Attempt to control panfish populations (have more) such as crappie and bluegill in state lakes.
- 40.1Pheasant populations in Nebraska need to be improved.
- 40.2Trophy deer management: do something to harvest more does and fewer small bucks.
- 40.3Increase tourism to parks.
- 40.4Many ideas of Commission come from people ingrained in system and resist change; local rural staff don't get listened to.
- 40.5Some conservation officers could use some public relations work; top heavy with biologists and they could use some public relations work also.
- 41.1Short on numbers of Game Wardens.
- 41.2Recruitment of new hunters needed; no longer have places to take kids hunting; commercialized hunting will be death of a way of life.
- 41.3Stocking more fish like white bass and walleye is essential and top priority; overharvest the problem.

Survey Number and Topic

- 43.1Idea of changing conservation officers duties to mostly education is a bad idea; need more enforcement of the laws along with education.
- 43.2Expand firearm training and shooting programs; more public ranges are needed.
- 43.3Need more Hunting Safety Instructors certified; needs to include actual shooting instruction; program is boring.
- 43.4Need a doe for a buck tag program; does checked before a buck tag issued.
- 45.1Eliminate 15 inch walleye at Harlan County; possession of one per day hurts fish population.
- 45.2Stock more walleye in Harlan County; stock wipers every year at moderate levels to help control gizzard shad.
- 45.3Add more conservation officers; regulations don't matter if there isn't anyone to enforce them.
- 45.4Quit catering to non-residents; believe the resident youth program is good and working.
- 45.5Eliminate October rifle season; interferes with archery hunting; continue late season in January to harvest does.
- 46.1Need better pheasant and quail hunting.
- 46.2Back to basics; spend too much money on big deals like Mahoney State Park, need basic camping, fishing and hunting.
- 46.3Too many deer and not enough pheasants and quail; have not shot a mallard duck for 10 years.
- 46.4Support farmers and ranchers promoting fee hunting on their property; Help find good place to hunt at fair price; SD farmers make money letting me hunt.
- 46.5Need more bullheads; Keep up the city pond put and take stocking programs.
- 48.1Responsibility for deer population reduction if necessary lies with Commission; should have fought LB836.
- 48.2Hunting and fishing as agricultural activities; assist landowners with population studies and management practices so farmers and ranchers have additional income opportunity.
- 48.3Use standardized permits on paper; change online printing to online ordering of permits; stop multiple printing of permits and tags.

Survey Number and Topic

- 48.4No special permits should be issued encouraging drinking in parks; gatherings where lots of attendees are allowed to buy or be furnished alcohol by special permit shouldn't be allowed or encouraged.
- 48.5No birds: no permit sales: no agency income; reward or encourage landowners to farm for game; like in ND and SD.
- 50.1Need clean water inflows into lakes; better runoff controls.
- 50.2Habitat or lake restoration.
- 50.3Better education and reminders of water transfer from lake to lake by boats.
- 50.4Bait fish release into lakes; need better education and reminders.
- 50.5Need some way of keeping Master Angler fish in lakes and still receive award and or bonus for catch and release on walleye.
- 52.1Lands for hunting, hiking and horseback riding still constricting; much of public land is walk-in; need some public lands assessable to ATVs, and/or vehicles.
- 52.2Access to quality shooting facilities; A plan to comprehensively assess facilities across state and a development plan are needed.
- 52.3Pheasant and quail populations have suffered; good initiatives are underway.
- 52.4Printed materials; electronic media; signage need to be assessed for right balance to cost with a customer-friendly approach.
- 52.5Economic uses of agency lands (farming; grazing, forestry); need to assess if there are impediments to economic uses that do not negatively impact targeted cases or species; does rent or income go to agency or Legislature?
- 53.1Mule deer numbers and age ratio; need limited doe kill in Calamus West, Calamus East, and Sandhills and Keya Paha units; point restriction on mule deer bucks should be used to increase buck/doe ratio.
- 53.2Maintain present antelope permit and buck permit numbers to increase buck quality and numbers.
- 53.3Need more conservation officers present to cut down on poaching, trespassing and bag limit violations in western half of state.

Survey Number and Topic

- 53.4Continue to acquire more private land for public hunting use.
- 57.1Routinely see unsafe boating practices at Fremont Lakes and failure to obey size and bag limits on fish; only checked once in 23 years by a conservation officer while hunting and fishing in Nebraska.
- 57.2Care and maintenance of parks; budget issues are obvious; maintenance has declined over last 10 years.
- 57.3Pheasant hunting in eastern Nebraska has declined almost to extinction; at peak of CRP program populations seemed good; need to get back to peak CRP.
- 57.4Keeping the public interested in the outdoors; they work and pay to protect what they value; need to keep outdoors in their lives; Greg Wagner does great job on Channel 6.
- 57.5Two widely publicized deaths related to boating intoxicated; enforcement with stiff penalties helps curb this; suggest Legislative change allowing impoundment or seizure of boat involved.
- 58.1Stock pheasants due to severe winter kill.
- 58.2Provide giant ragweed to landowner (i.e., Hirschbach in Cedar County) good food plots.
- 59.1Recommend Hungarian partridge season be set to coincide with prairie grouse season; give more opportunity to take Hungarian partridge.
- 59.2Noxious weed control needed; in violation of Nebraska's noxious weed law; looks bad; NGPC doesn't mow its ditches or keep trees out as required by law.
- 59.3Deer population out of control; complete overhaul of deer regs; increase bag limits, reduce fees, lessen restrictions on landowner's rights to cull excess deer.
- 59.4Don't buy any more land until you control weeds on land you already own.
- 60.1Keep alcohol out of parks; give families a place to spend some time.
- 60.2Keep alcohol out of parks.
- 60.3Partner with water users to maintain a steady or consistent fishery.
- 60.4Provide more public hunting opportunities to promote the sport and control game populations.

Survey Number and Topic

- 60.5Study South Dakota's model for pheasant populations.
- 62.1Pheasant management; need to dedicate efforts to bring population back to respectable numbers.
- 62.2Pheasant management: numbers need to be improved to bring back out-of-state hunters; lose huge to Kansas and other states.
- 62.3Whitetail management improved with Earn-a-Buck Program; require doe harvest before buck harvest.
- 62.4Lack of public lands to hunt; develop and fund system similar to Kansas.
- 62.5Allow beer and wine consumption in parks; focus on enforcing current state laws for DUI, MIP and public intoxication.
- 64.1Increase number of wardens and their field presence to maintain their primary role of education, and landowner/public interface.
- 64.2Test public's/legislature's attitude about opening road right-of-ways to hunting; Hopefully NGPC stay neutral on this; maybe no dove hunting or only in west of state.
- 64.3Love North Dakota's law rep open to hunting if not posted.
- 64.4Not convinced lack of habitat mosaic is responsible for low pheasant densities in Southwest Nebraska; need DNA work comparing South Dakota birds to ours.
- 64.5Public hunting opportunities; if more money exists for leasing walk-in areas, I suggest wardens be used to lineup more land/work with landowners.
- 71.1Need to follow some of procedures used to increase pheasant numbers similar to North and South Dakota.
- 71.2Need to do more to control turkey numbers.
- 71.3Need to do more to control deer numbers.
- 71.4Archery season for deer should not have blocked out dates; archery permits not allowed to hunt during rifle season even though maybe in areas with no rifle permits.
- 71.5Have travelled state and visit with lots of people; for most part 98 percent of all personnel are very user friendly but remaining 2 percent give NGPC a black eye.

Survey Number and Topic

- 74.1Expand hunter and angler RDR; increase non-game checkoff; introduce small percentage of state sales tax.
- 74.2Management of threatened habitats and associated species; continue implementation of Natural Legacy Program.
- 74.3Environmental literacy; expand environmental educating programs and outdoor skills programs to increase awareness and knowledge of public.
- 74.4Increase collaborative efforts with PF, RMEF, NRLS, UNL-Extension and other groups and agencies.
- 74.5Deer management; address overabundance issues of whitetails in eastern Nebraska by increasing bag limits, expanding seasons, reducing fees, promoting deer exchange, improving access, collaborating with landowners, and increasing recruitment of resident and non-resident hunters.
- 75.1Youth education; Last child in the Woods; must be greater efforts to accelerate developing outdoor interest in future generations.
- 75.2Hunting and fishing access become more limiting annually; Affordability for average user is especially critical for hunters.
- 75.3Regulation of guides and outfitters to equalize some of the access issues; access for pay needs oversight.
- 75.4Protection of water resources; Instream protection of quantity and quality of our stream resources will be basis of wetland future and use for hunt and fish.
- 75.5Stabilization of funding for conservation programs; a study and pursuit of a broadened agency funding support must find a way to involve all citizens to pay the bills.
- 81.1Use of crossbow allowed for deer harvest for all hunters.
- 81.2Need better and more crappie lakes and habitats; don't like to leave the state to fish for crappie.
- 83.1Water management/protection; secure instream flows on Niobrara and elsewhere, to preserve wildlife and ecological health.
- 83.2Assist statewide planning for new energy development, wind farms, and transmission lines, to minimize harm to wildlife and habitats.

Survey Number and Topic

- 83.3 ...Increase and stabilize funding for management of state's public lands and waters; grow contributions from non-hunting/fishing users.
- 84.1Develop adequate and stable funding base to provide for additional staff and facilities at SRAs.
- 84.2Develop strategy for increasing funding levels to protect park resources and upgrade facilities.
- 84.3Fill vacancies in parks.
- 84.4Enforce commercial guiding laws currently outlawing these activities on public lands.
- 85.1NGPC should incorporate science in all management decisions.
- 85.2NGPC should consider effects of poor water quality on Nebraska's fish and wildlife.
- 85.3NGPC should implement planning for limited water in future (20-100 years).
- 85.4NGPC should continue and expand standardized monitoring programs of fish and wildlife.
- 85.5NGPC should expand current efforts of applied research.
- 87.1Alcohol in parks; Do we want more trouble due to alcohol? More conservation officers injured, to need more money for law enforcement to monitor alcohol consumption.
- 87.2Put more priority into law enforcement; retirements and staff leaving NGPC; need more people hired in this area.
- 87.4When NGPC issues permits for fishing tournaments, can conservation officers watch parking lots during event; including nighttime catfishing tourneys?
- 90.1NGPC needs to increase land base available for hunting; will not take my child to WMA because of the pressure.
- 90.2NGPC needs to stop haying park lands until the nesting season is completed.
- 90.3Wetland management: appreciate commitment to wetland management; please increase stocking rates to achieve management goal rather than to feed cows that do not achieve management goal.
- 90.4Rainwater Basin acquisition; please increase priority of roundout acres within RWB.
- 90.5Partner coordination to expand granting opportunities - expand federal and non-federal grants opportunities NAWCA, WREP, etc.

Survey Number and Topic

- 91.1Need additional field conservation officers in many areas of state; present number not adequate and will lead to depletion of wildlife populations.
- 91.2Fisheries size limits and bad limits need to be standardized across the state; regulations are confusing to general public; metro areas may be an exception.
- 91.3Deer seasons in SCAs need to be reduced in number of days hunters may pursue these animals; should not be held after the first of the year; problem areas need to be managed with special depredation season with reduced price special permit.
- 91.4Drinking of alcoholic beverages should not be allowed on state areas; provide family-oriented areas without disturbances that alcohol bring.
- 91.5Improve the overall perception of the NGPC to general public; conduct more public meetings across state on numerous subjects; consider public input.