

DRAFT
Feasibility Study and Environmental Analysis:

PROPOSED BOUNDARY EXPANSION
FOR THE
PERSHING WILDLIFE AREA,
TAYLOR COUNTY

August 2008

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INTRODUCTION: THE FEASIBILITY STUDY AND ENVIRONMENTAL ANALYSIS PROCESS

This is a combined Feasibility Study and Environmental Analysis (EA) that includes the required information for both types of studies, to avoid unnecessary duplication. Both the Feasibility Study and the EA function to provide the public and decision-makers with a factual, unbiased analysis of a proposal, and must identify reasonable alternatives in order to help make an informed decision.

A Feasibility Study is used to determine whether it is feasible to establish, acquire, develop, and manage new property. The study takes into account the physical and biological environment and its capabilities, the views of the public and of landowners adjoining the property, and the availability of funding and staffing to accomplish the project's purpose adequately. Furthermore, a Feasibility Study presents boundary alternatives, general land management strategies, and ensures integrated ecosystem management principles are considered.

The Feasibility Study also must meet the requirements of the Wisconsin Environmental Policy Act (WEPA) and its implementing codes. Certain DNR actions require an Environmental Assessment (EA) or Environmental Impact Statement (EIS). The Pershing Wildlife Area boundary expansion study requires an EA under NR 150 of Wisconsin's Administrative Code. The EA process is used to evaluate the likely impacts of a proposed project on the human environment. The EA also helps determine whether an activity's impacts will be significant so as to warrant a full Environmental Impact Statement process.

The Department held a public informational meeting Saturday, May 31, 2008 from 1 p.m. to 4 p.m. at the Gilman High School cafeteria. Based on the feedback received, the Department will focus this study on the proposed 7,000-acre boundary expansion alternative. The Final Feasibility Study will be available for a minimum two-week review and comment period in early August. All comments received will be summarized and incorporated into the study as needed. The Department anticipates forwarding the revised document, along with the summary of public comments, to the Natural Resources Board for their consideration at the October NRB meeting.

Questions, ideas or comments on this property expansion project should be directed to:

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EXECUTIVE SUMMARY

This feasibility study considers the boundary expansion of the Pershing Wildlife Area in Taylor County. The existing property consists of two units totaling approximately 7,900 acres. The proposed expansion will create a common boundary by focusing on the 6,080 acres between the two units, and add an additional 920 acres to the northwest corner of the northern unit. This alternative has the potential to maximize the open landscape between the units and to increase access to the existing property in seven locations. It provides an opportunity to acquire over 13 miles of the Fisher River corridor and feeder streams and over two miles of Shoulder Creek.

In 1953, the Pershing Wildlife Area was established as a public hunting ground. The primary goals were to manage intensively for the production of waterfowl and sharp-tailed grouse, to provide public hunting and trapping, and to accommodate other limited, compatible, nature-oriented uses. The need for this expansion project focuses on the opportunity for increasing the amount of sustainable open landscape habitat and managing for quality grassland and wetland habitat. This action will benefit Wisconsin's wildlife species of greatest conservation need and is consistent with the conservation actions recommended in the Department's *Land Legacy Report*, *Statewide Sharp-tailed Grouse Management Plan*, and *Wildlife Action Plan*.

Through acquisition the Department can:

- manage for quality large-scale grassland areas to support sharp-tailed grouse, waterfowl and many non-game species;
- restore, protect and enhance acres of wetland and miles of stream corridor habitat;
- facilitate species movement through blocking;
- improve property management capabilities;
- expand recreation opportunities for hunting and trapping as well as compatible uses such as wildlife viewing, bird watching and photography; and
- improve public access for both hunting and non-hunting use of the property.

On May 31, 2008, the Department held a public informational meeting in Gilman, Wisconsin to discuss the proposed expansion alternatives. Comments received to date are in favor of the 7,000 acre alternative; however, the project is not without concerns. Specifically, there is concern regarding the potential impact that state acquisition of land will have to the Town of Pershing's tax base. The Department considered these comments in drafting this study and will provide another opportunity for public comment. Based on information gathered from Department resource specialists and received from public comments, the Department will determine the feasibility of the project and the need for an environmental impact statement process.

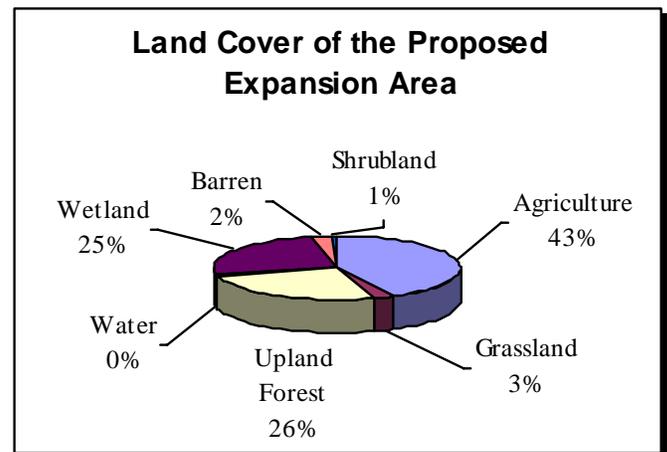
PROPOSED PROJECT

Project Description

The Department is proposing a boundary expansion of the Pershing Wildlife Area, Taylor County, to improve wildlife habitat and public recreational use of the property. The current property consists of two units totaling approximately 7,900 acres. The proposed boundary expansion includes acquiring through fee title 6,080 acres between the established units and an additional 920 acres on the northwest edge of the northern unit for a total proposed expansion boundary of approximately 7,000 acres. Estimated acquisition cost of the project is \$8.4 million. Funding for the project will largely come from Knowles-Nelson Stewardship. However, the Department may also consider the use of easements with public access or the use of federal funds such as North American Wetlands Conservation Act (NAWCA). Refer to the *Proposed Expansion Area, 7,000 Acre Alternative* map in the Appendix.

The northern unit contains several large flowage and wetland areas, a central area of open grass and brush land along with hardwood areas and wooded upland aspen forest on the east and west. The southern unit is managed for a larger area of open landscape with grassland and upland brush areas predominating. Existing land use in the proposed expansion area is summarized below:

Land Cover	Proposed Expansion Area (acres)
Agriculture	2,984
Grassland	177
Upland Forest	1,833
Water	34
Wetland	1,764
Barren	169
Shrubland	57
TOTAL	7,018



The Pershing Wildlife Area is located on the south boundary of the North Central Forest ecological landscape with predominant “heavy” soils. (Refer to “Regional Perspective” section for discussion on ecological landscapes.) It is also considered to be in a habitat “transition zone”, which is an area that transitions from forest lands in the north to agricultural farmland in the south. Many of the private lands surrounding the current project boundary were formerly maintained and operated as large family farms. However, because much of the area is a marginal landscape for agriculture, there has been a declining predominance of family owned and operated farms. There are currently six active farms in the proposed expansion area with farm fields being utilized for cash cropping.

Several flowages exist on the property including Monson, Holzer, Redman and Ellis flowages on the northern unit and Sotak and Witt flowages on the southern unit. While no flowages are located on the proposed expansion area, Shoulder Creek, Fisher River and their tributaries provide important aquatic habitats for the Pershing Wildlife Area.

County Highway M runs east-west through the 6,080 acre portion; Gilman Road connects north and south. Several town roads exist in the expansion area, which would serve as internal property roads to improve public access. The 920 acres on the northwest can be accessed via Elk Avenue, Beech Drive, Spur Road, Peaceful Avenue and Sunny Side Road.

Project Goals

In 1953, the Pershing Wildlife Area was established as a public hunting ground with a goal to manage intensively for the production of waterfowl and sharp-tailed grouse, to provide public hunting and trapping, and to accommodate other limited, compatible, nature-oriented uses. Presently, the Pershing Wildlife Area is managed for three distinct habitat types: wetlands, brush-prairie and forest. Expanding the property boundary contributes to these management goals.

Through acquisition the Department can:

- manage for quality large-scale grassland areas to support sharp-tailed grouse, waterfowl and many non-game species;
- restore, protect and enhance acres of wetland and miles of stream corridor habitat;
- facilitate species movement through blocking;
- improve property management capabilities;
- expand recreational opportunities for hunting and trapping as well as compatible uses such as wildlife viewing, bird watching and photography; and
- improve public access for both hunting and non-hunting use of the property.

Refer to the “Needs” section for additional discussion.

Property Designation

The proposed project is a boundary expansion of the Pershing Wildlife Area. Wisconsin State Statutes section 23.09(2)(d)15 provides legislative authority and direction for the acquisition and management of wildlife areas. The Department's authority to manage fish and wildlife populations is found in State Statutes 29.011 and 29.014. Administrative code N.R. 1.51 designates the purpose and use of State Wildlife Area properties.

Need

Acquiring the 6,080 acres between the existing units and the 920 acres on the northwest corner of the northern unit contributes to improved resource and property management, improved public access and increased recreational opportunities. This action will benefit Wisconsin's wildlife species of greatest conservation need and is consistent with the conservation actions recommended in the Department's *Land Legacy Report*, *Statewide Sharp-tailed Grouse Management Plan*, and *Wildlife Action Plan*.

Resource Management

Expanding the property boundary increases the opportunities for the Department to create and maintain permanent upland prairie, upland brush and high quality wetland habitats that are required for a suite of wildlife species listed as threatened, endangered or special concern on a local, state, national or global level. Managing more intensively for those habitats should result in greater security for not only special concern species, but also those that are relatively abundant and common. Selected species that will benefit include the sharp-tailed grouse, waterfowl (nesting mallards and blue-winged teal), harriers, red-tail hawks, fox, coyote, short-eared owls, cottontail rabbits, numerous song bird species, and reptiles and amphibians.

Notable among this selected species list is the beneficial impact the proposed expansion will have on the sharp-tailed grouse population. In the late 1940s and early 1950s, the Department began sharp-tailed grouse management in northern Wisconsin in response to concerns of diminishing habitat. Sharp-tailed grouse require a specific habitat for dancing grounds, nesting areas, brood areas, and wintering sites. This habitat ranges from prairie with grasses and forbs; to brush prairie with small, low shrubs and open woodland; to woodlands with young forests containing coniferous trees like jack pine and deciduous hardwoods like aspen. To date, the state's sharp-tailed grouse habitat exists in patches separated by large areas of unsuitable habitat (WDNR Grouse 2007).

The Pershing Wildlife Area is one of nine statewide Department properties managed for sharp-tailed grouse. The 2007 "Wisconsin Sharp-tail Grouse Status Report" indicates that the total number of dancing males on the nine managed tracts in Wisconsin increased from 137 in 2006 to 194 in 2007 (a 42% increase), yet has been gradually declining since the high count of 362 in 1998. Results show a similar trend for the Pershing Wildlife Area with numbers increasing from 16 in 2006 to 28 in 2007, yet still lower than 43 recorded in 1997 (Fandel 2007).

The Department is currently updating its *Sharp-tailed Grouse Management Plan*. With regard to population and habitat goals, the North Central Forest Ecological Landscape is identified as a primary sharp-tailed grouse conservation area for management and restoration. Pershing Wildlife Area's sharp-tailed grouse population, along with others in the North Central Ecological Landscape, is an important component of the overall statewide population from a metapopulation perspective. A permanent loss of the local populations in and around Rusk, Price and Taylor counties would result in additional risk on the remaining populations in the Northwest Sands and portions of the Superior Coastal Plains Ecological Landscapes and could increase the risk of

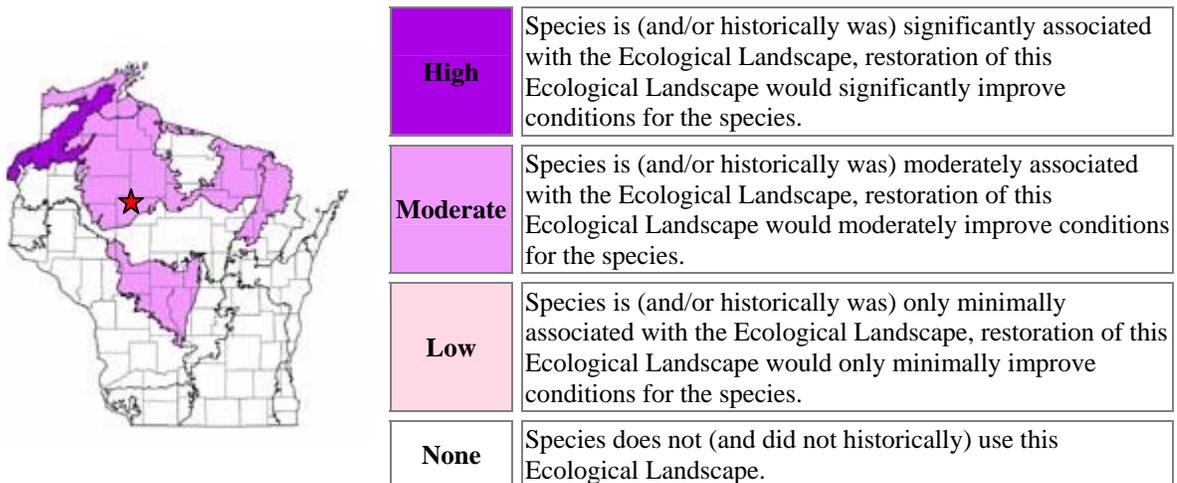
statewide extirpation due to an unforeseen disease outbreak or weather event on those populations in the Northwest (Hull 2008).

The Department’s *Wildlife Action Plan* (WDNR 2005) further describes the sharp-tailed grouse among the “Species of Greatest Conservation Need” and illustrates the importance of this area of the state in maintaining important habitats for the species. The table below lists the species assessment scores for the sharp-tailed grouse. Each criterion provides a measure of species’ vulnerability and was scored on a scale of 1 through 5 (with 5 being the highest).

Species Assessment Scores	
State rarity	4
State threats	4
State population trend	4
Global abundance	3
Global distribution	2
Global threats	3
Global population trend	3
Mean risk score	3.3
Area of importance	3

Source: WDNR Wildlife Action Plan: Sharp-tailed Grouse Species Profile,
<http://dnr.wi.gov/org/land/er/wwap/explore/profiles.asp?mode=detail&species=ABNLC13030§ion=scores>

The following illustrates the probability of sharp-tailed grouse occurring in each of Wisconsin’s Ecological Landscapes.



Source: WDNR Wildlife Action Plan: Sharp-tailed Grouse Species Profile,
<http://dnr.wi.gov/org/land/er/wwap/explore/profiles.asp?mode=detail&species=ABNLC13030§ion=landscape>

In addition to the intensive management for sharp-tailed grouse, the property is managed for wetland habitat types to support waterfowl and associated fur-bearers. Throughout the proposed expanded boundary area are many acres of wetland and miles of stream corridor habitat. The Department's "Reversing the Loss" report (2000) notes the importance of Wisconsin wetlands for providing critical habitat for wildlife, water storage to prevent flooding and protect water quality, and providing recreational opportunities. Some of the wildlife that will benefit the most from wetland protection and enhancement include: ducks, geese, swans, wading birds, shorebirds, turtles, frogs, salamanders, aquatic furbearers and a variety of aquatic insects. The report further states that wetlands are interspersed with many other major community types; therefore, restoring the health of the wetlands also benefits the overall health and functioning of the other ecological systems in the same watershed.

Additionally, Department researchers have demonstrated that indexes of biotic integrity in Wisconsin streams increase significantly in association with decreasing agricultural activity (particularly row crops) in the watersheds of those streams. Therefore, acquiring several thousand acres of land and retiring areas currently in cultivation would improve the biotic integrity of the Fisher River and its tributaries. Reducing sediment and nutrient runoff from these marginal agricultural lands would also increase diversity and production of aquatic invertebrate and fish species downstream (Neuswanger 2008).

Property Management

The proposed boundary expansion joins two management units and will simplify property management. Conducting activities such as prescribed burning and water level management on the consolidated units will be more easily accomplished by wildlife management staff and create less concern for private land impacts by neighboring landowners. In the case of prescribed burning for grassland and brush land habitat maintenance, staff may find that owning a larger, more contiguous land base offers more opportunities to burn both larger parcels and more parcels because of reduced smoke management impacts. Similarly, in the instance of water level management of impoundments, there would be less concern of flooding or other impacts to private lands if more acres were owned in close proximity to the managed flowages.

Recreation Potential

Expanding the project boundary improves both staff and public access to some parts of the existing property. Areas on both the north and south units of the current property have town roads that come very close to the property, but end before actually providing an entry point. The proposed 7,000 acre expansion alternative offers potential to increase access to the existing property in seven locations. Through the creation of additional access points, staff will be able to access adjacent areas easier when conducting surveys or inspections. Improved access and increased acreage also increase recreation potential. Traditional wildlife opportunities such as hunting and trapping will be available as will the growing non-hunting activities of wildlife observation, bird watching and photography. Future development may include improvement for public access, such as parking lots and interior roads, or a designated trail that would take wildlife viewers, bird watchers or photographers through the grassland, wetland and forest communities. Any developments will comply with all required permits and approvals and will

be consistent with the property master plan. The Pershing Wildlife Area is located approximately a one-hour drive from the Eau Claire/Chippewa Falls area and slightly more than one-hour drive from Wausau. Refer to the *Regional View* map in the Appendix.

Management Goals

As a boundary expansion, lands acquired by the State within the proposed project will have similar classification and management goals to the Pershing Wildlife Area. The property master plan (1979) states that Pershing is being managed for sharp-tailed grouse and waterfowl. Based on the master plan, a total of 12 shallow impoundments, flooding 640 acres, have been constructed; a total of 106 potholes have been dug. This habitat favors breeding and production of waterfowl with migrant ducks and geese also using the area. Sharp-tailed grouse habitat is dependent upon intensive management such as the use of prescribed fire. A total of 18.5 miles of permanent firebreak have been built with incorporation into access road and dike construction.

The property master plan further describes the recommended management program as follows: “The property is designed to develop and maintain habitat for sharp-tailed grouse. Wetland habitat types for waterfowl and associated fur-bearers will also be developed and managed. The primary public use of the area will continue to be hunting and trapping. Use levels projected are not anticipated to detract from the property goal.”

The primary emphasis of management for lands acquired within the proposed boundary expansion would be to provide open landscape habitats that are beneficial for a large variety of wildlife species, including sharp-tailed grouse. Approximately 50% (3,495 of the 7,000 acres) of this proposed boundary expansion area is in open upland or treeless condition due to past and current agricultural practices. It is the combined condition of open landscape and land actively farmed that creates a habitat conducive to increasing the viability of the local sharp-tailed grouse population as well as the larger regional metapopulation.

Management of the proposed boundary expansion area will be consistent with that stated in the property master plan. Grassland, brush lands, wetland and open water areas will be developed and/or managed in areas that are suitable for that type of habitat considering the limitations of the specific site features. At this time, no intensive recreational developments have been designated. Any future development will be consistent with the property master plan.

In general, in upland areas that were cropped or pastured prior to state ownership, the Department intends to develop open grasslands by seeding those areas to native grasses and forbs. Maintenance of established grass sites will be accomplished through periodic mowing and prescribed burning to keep woody vegetation from encroaching and taking over the site.

Areas that have established upland brush may be maintained using prescribed burning or may be converted to native type grassland cover through a variety of means including herbicide treatment, mowing and/or burning followed by no-till seeding. Lowland brush areas and vegetated wetland types (i.e. sedge meadows) will be maintained primarily through periodic

prescribed burning although mowing may be utilized during the frozen months or extremely dry conditions.

Some properties within the proposed expansion boundaries are known to contain degraded or drained wetland areas. Under state ownership, the intent would be to improve or restore the converted wetland areas to provide maximum benefit for a variety of wildlife species and maintain them in an open aspect.

ENVIRONMENTAL DESCRIPTION

Property Perspective

Physical

As identified through the use of Wisconsin DNR WebView (2008), the entire proposed boundary expansion area lies within the North Central Forest Ecological Landscape, and more specifically, the Jump River Ground Moraine land type association (212Xd05). (Refer to “Regional Perspective” section for discussion on ecological landscapes.) The characteristic landform pattern of the Jump River Ground Moraine is undulating moraine and stream terraces. Soils are predominantly somewhat well-drained silt loam over dense, acid sandy loam till.

Based on interpretation of the NRCS Web Soil Survey, soils within the expansion area are rated “very limited” for building site development meaning the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design or expensive installation procedures. Poor performance and high maintenance can be expected. Further interpretation of the farmland classification indicates areas designated prime farmland; some are designated farmland of statewide importance. Refer to the *Hydric Soils Group* and *Prime Farmland* maps in the Appendix.

The property master plan (1979) describes there are twelve impoundments constructed within the property area. They comprise a surface water area of approximately 640 acres during normal water levels with a maximum fill potential near 716 acres. Maximum depths of the flowages range from four to eight feet; substantial areas in all the flowages are less than three feet.

No additional impoundments are located in the proposed boundary expansion area. However, the area does include portions of the Fisher River, Shoulder Creek and several unnamed tributaries. Both streams are small, with widths averaging 15-20 feet, and intermittent during the summer months reflecting the “heavy” nature of area soils that do not store enough water to sustain permanent stream flow in mid-summer. The Fisher River, Shoulder Creek and their tributaries do not provide recreational fishing and offer limited nursery habitat for warm-water game fish. However, they provide habitats for the complete life cycle of many species of non-game fish (Neuswanger 2008).

The Fisher River is a tributary to the Chippewa River; Shoulder Creek a tributary to the Jump River. Both the Fisher River and Shoulder Creek are considered Priority Navigable Waterways

in NR 1.07 Wisconsin Administrative Code. The Fisher River and the unnamed tributary to Shoulder Creek from Monson Flowage are also listed as an Area of Special Natural Resource Interest (ASNRI) as described in NR 1.05 Wisconsin Administrative Code (Kleist 2008).

Biological

Wildlife

The Pershing Wildlife Area is managed for sharp-tailed grouse and waterfowl. Numbers from a study on the sharp-tailed population trends on managed lands indicate 28 dancing males on the Pershing Wildlife Area with the majority occurring on the northern unit (Fandel 2007). Two blinds have been established for observing spring sharp-tailed grouse dancing activities.

Among the breeding waterfowl species listed is mallard, blue-winged teal, wood duck, green-winged teal, ring necked duck, black duck and hooded merganser. Migrant geese and ducks also use the area. Furbearers such as muskrat, otter, and to some extent mink and beaver, are associated with the flowages, streams and marsh edges. The wooded areas and edge habitats attract deer, ruffed grouse and snowshoe hare.

Wildlife staff compiled a list of species of ecological concern on the Pershing Wildlife Area including the Blanding's Turtle, Wood Turtle and a number of Wisconsin Special Concern Birds listed below (Cold 2008). Results of the formal Endangered Resources environmental review are noted in the NHI section.

Wisconsin Special Concern Birds			
Common Name	Scientific Name	Status	Source
Bobolink	<i>Dolichonyx oryzivorus</i>	CB	WBBA
Field Sparrow	<i>Spizella pusilla</i>	CB	WBBA
Eastern Meadowlark	<i>Sturnella magna</i>	CB	WBBA
Brewer's Blackbird*	<i>Euphagus cyanocephalus</i>	CB	WBBA
Sedge Wren*	<i>Cistothorus platensis</i>	CB	WBBA
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	CB	WBBA
Northern Harrier	<i>Circus cyaneus</i>	CB	WBBA
Short-eared Owl	<i>Asio flammeus</i>	PB/WR**	WDNR/WFWR
Blue-winged Teal	<i>Anas cyanoptera</i>	CB	WBBA
Sharp-tailed Grouse	<i>Tympanuchus phasianellus</i>	CB	WBBA/WDNR
Black Tern	<i>Chlidonias niger</i>	CB	WBBA
American Bittern	<i>Botaurus lentiginosus</i>	PRB	WDNR
Least Bittern	<i>Lxobrychus exilis</i>	PB	WDNR
Bald Eagle	<i>Haliaeetus leucocephalus</i>	CB	WDNR
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	PB	WBBA

Whip-poor-will	<i>Caprimulgus vociferous</i>	PRB	WBBA***
* USFWS Region 3 species of management concern.			
** 1981 winter concentration on record per K. & J. Luepke, WFWR			
***The Pershing block held the highest rank for all of Taylor Co. during the WBBA project period for this species.			

Status Codes

- CB: Confirmed breeder- nesting birds located on site
- PB: Possible breeder. Observed in suitable habitat during breeding season
- PRB: Probable breeder- multiple territorial birds observed in season on site
- WR: Periodic winter range for irruptive concentrations

Source Codes

- WBBA: Wisconsin Breeding Bird Atlas Project 1995-2000
- WSO: Wisconsin Society for Ornithology records
- WFWR: Wisconsin Foundation for Wildlife Research records
- WDNR: Wisconsin DNR - Field observations of Wildlife Mgmt. staff for Rusk & Taylor Co.

Natural Heritage Inventory

Staff in the Bureau of Endangered Resources conducted an environmental review of the proposed project area (ERIR Log #08-021; complete results are on file with the Property Manager).¹ Endangered resources information is collected for the project area and for an area within one mile of the project’s location (two miles for aquatic species). The following are documented within and around the project area:

Endangered Resources documented within and around the project area:		
Common Name	Scientific Name	Listing
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Special Concern in WI; Federally protected by the Bald & Golden Eagle Protection Act
Large roundleaf orchid	<i>Platanthera orbiculata</i>	Special Concern in WI
Vasey’s pondweed	<i>Potamogeton vaseyi</i>	Special Concern in WI

Historical records of rare species known to occur within the vicinity of the project site:		
Common Name	Scientific Name	Listing
Greater Prairie Chicken	<i>Tympanuchus cupido</i>	Threatened in WI
Osprey	<i>Pandion haliaetus</i>	Threatened in WI
Prickly hornwort	<i>Ceratophyllum echinatum</i>	Special Concern in WI

¹ Natural Heritage Inventory Data is exempt from State of Wisconsin Open Records Law. The data is considered sensitive for several reasons and thus not appropriate for general public distribution.

Cultural

Results of a Department check on the cultural resource data base identified one site, Donald Mission Church Cemetery, located within T32N R4W Section 10. The site is protected against disturbance by Wisconsin Statutes 157.70. Any plans for developing such areas must receive **prior** review and approval through DNR and/or the Wisconsin Historical Society (Dudzick 2008).

Regional Perspective

Ecological Landscapes

Taylor County is comprised of two ecological landscapes: the North Central Forest (65.2%) and Forest Transition (34.8%). The Pershing Wildlife Area is located in the southwestern portion of the North Central Forest Ecological Landscape. Landforms of the **North Central Forest** are characterized by end and ground moraines with some pitted outwash and bedrock controlled areas. Soils consist of sandy loam, sand and silt. The vegetation is mainly forest with the dominant forest type being northern hardwood comprised of sugar maple, basswood, and red maple, and also including some scattered hemlock and white pine pockets within stands. Both forested and non-forested wetland community types are present as are some agriculture areas. This ecological landscape includes many small drainages and lakes. The Jump River, located in Taylor County, is listed among the major rivers of the North Central Forest (WDNR Ecological Landscapes 2006). The North Central Forest Ecological Landscape has also been identified in the Department's "Sharp-tailed Grouse Management Plan" as a primary sharp-tailed grouse conservation area for management and restoration.

The **Forest Transition** Ecological Landscape lies along the northern border of Wisconsin's Tension Zone, through the central and western part of the state, and supports both northern forests and agricultural areas. While the northern boundary of this ecological landscape is located just to the south of the Pershing Wildlife Area, much of the surrounding area in the vicinity of the wildlife property exhibits characteristics of this ecological type. Soils are diverse, ranging from sandy loam to loam or shallow silt loam, and from poorly drained to well-drained. Considering this ecological landscape lies along the Tension Zone, plant life is characteristic of both northern and southern Wisconsin (ibid.)

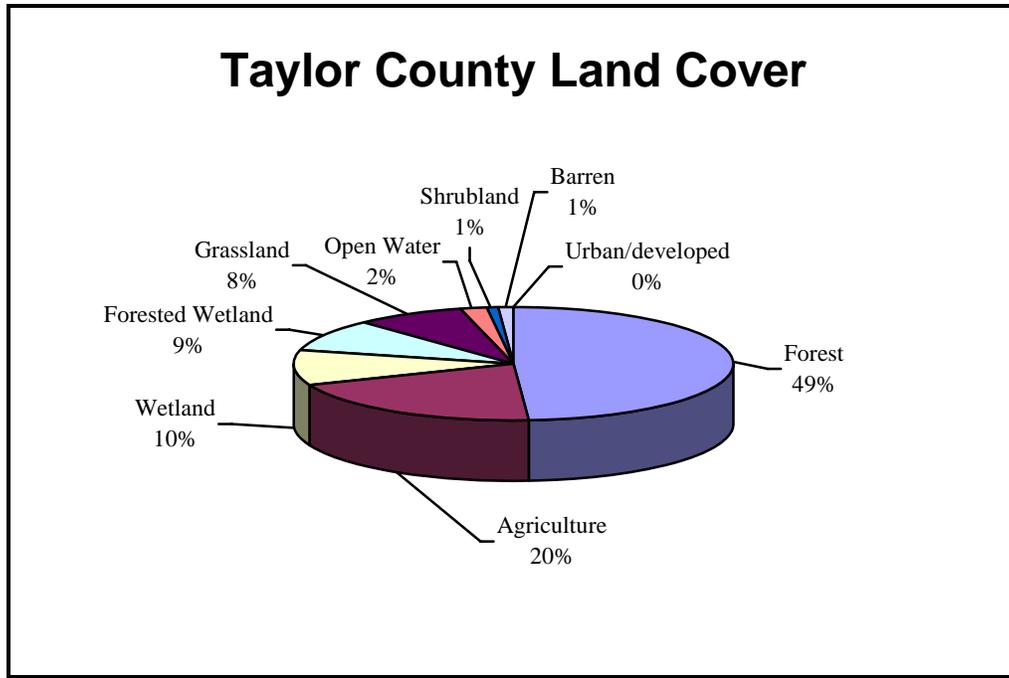
Land Use and Ownership

In September 2007, Taylor County adopted a comprehensive plan prepared by the Northwest Regional Planning Commission (NWRPC). Within the report is a discussion of existing land uses describing Taylor County as primarily rural in nature, with large areas of farmland and forest and a few established incorporated municipalities. A breakdown of existing land use and acreage is as follows:

Taylor County Existing Land Use Categories		
	Acres	Percent
Forest	260,120.05	41.33%
Agriculture	142,021.18	22.56%
Federal	120,443.31	19.14%
Open Space	38,035.55	6.04%
Residential	28,495.07	4.53%
County	19,121.55	3.03%
State	8,383.17	1.33%
Water	7,901.02	1.26%
Government/Institutional	2,793.33	0.44%
Commercial	1,305.05	0.21%
Manufacturing	742.26	0.12%
Communications/Utilities	59.26	0.01%
Town	11.11	0.00%
TOTAL	629,431.91	100.0%
<i>Source: NWRPC, Taylor County Comprehensive Plan, 2007.</i>		

A description of the land use classification system used in estimating the land use categories defines “forest” as forest lands under private or industrial ownership (mixed residential activity may also occur within this area); “agriculture” as predominate land use is agriculture where the lands include croplands, livestock grazing, and dairy farming; “federal” as federal owned forest lands; and “open space” as private and public owned non-wooded undeveloped lands, fallow fields.

The fact that Taylor County is divided between the North Central Forest and Forest Transition Ecological Landscapes is reflected in the county’s land use. Much of the forested area is in the north and north central portion of the county and includes part of the Chequamegon-Nicolet National Forest. Large tracts of agricultural and open space lands are found throughout the county, but are most prominent in the southern and western portions. The following chart illustrates a general view of Taylor County’s land cover (NWRPC 2007).



Source: NWRPC, Taylor County Comprehensive Plan, 2007.

Included among the county's forested areas are over 120,000 acres of the Chequamegon Unit of the Chequamegon-Nicolet National Forest (CNNF). The State owns an additional 8,500 acres including the Pershing Wildlife Area, Rib River Fishery Area, Diamond Lake State Natural Area and a number of State Natural Areas within the CNNF. The nearly 20,000 acres of county forest land are located in the northeastern corner of the county. According to the 2002 Census of Agriculture, Taylor County had 1,056 farms averaging 244 acres. Of the land in farms, an estimate of 51.8% was cropland, 36.6% woodland and 11.6% other (NASS 2002).

With a population of 19,680, Taylor County is among the state's least populated counties (based on 2000 Census data). An estimated 20.2 persons are living per square mile compared to statewide 98.8 persons per square mile. A 2006 population estimate has Taylor County at 19,605 which represents a decline (-0.4%) from April 1, 2000 to July 1, 2006. Statewide the population has increased 3.6% in the same timeframe.

The City of Medford is the largest municipality in the county with a population of 4,350. Medford is the county seat and is also the economic and industrial center of the area. Roughly one in every five of the county's residents lives in the city. Other population centers include the Village of Rib Lake (878), Village of Stetsonville (563) and Village of Gilman (474). As noted in the NWRPC report (2007) residential land use development is largely single-family homes; recreational, seasonal and occasional housing units are also classified as residential and make up a small percent of the total.

Socioeconomics

Data for the 2005 employment and wage distribution by industry in Taylor County indicates Manufacturing; Trade, Transportation, Utilities; and Education and Health as the top industries based on percent of total employment and percent of total payroll, respectively (DWD 2006).

The report further notes that nearly two in every three jobs in Taylor County are associated with a manufacturing firm. Wood products manufacturing is the largest industry sub-sector in the county. Food manufacturing is the second largest industry sub-sector with the third largest sub-sector, merchant wholesalers, directly tied to food production.

Taylor County's comprehensive plan (2007) additionally discusses the importance of agriculture to the county's economy. The report states that agriculture provides jobs for 2,545 Taylor County residents (nearly 21% of Taylor County's workforce) and accounts for \$286 million in economic activity (nearly 18% of Taylor County's total economic activity). Taylor County's agriculture includes hundreds of family-owned farms, related businesses and industries that provide equipment, services and other products farmers need to grow, process, market and deliver goods to consumers. Included among the county's diverse agricultural activities are: production dairy, meat animals, crops, ginseng, horticulture, Christmas trees, mink pelt production (Wisconsin is #1 producer in the US), berries, exotic animals and organic farms.

Existing Recreation Opportunities

With 494 miles of stream including four major rivers, 283 lakes (88 named and 195 unnamed), and thousands of acres of federal, state and county forest land, Taylor County offers numerous opportunities for game fish and pan fish and for its noted small game, deer, bear and waterfowl hunting. The county's major rivers include the Jump, Yellow, Black and Rib. Several segments of the Jump River have been designated as "Exceptional Resource Waters" (ERW) while several segments of the Yellow River have been designated as "Outstanding Resource Waters" (ORW). Other miles of stream have been ranked among the Northern Rivers Initiative based on their high ecological significance, outstanding natural scenic beauty, and special recreational and/or cultural values: Jump River, Yellow River, Mondeaux River, Fisher River and Shoulder Creek.

The Chequamegon Waters Flowage, a 2,714 acre impoundment of the Yellow River, is the county's largest water body. The flowage is located within the boundaries of the CNNF and as such has the majority of its 34-mile shoreline in public ownership. It offers numerous convenient boat access sites that are used throughout the year and is well-regarded for its bass and northern pike fishing. Other important recreation opportunities provided on the flowage and the CNNF include waterfowl hunting, trapping, wildlife viewing, wild rice gathering, hiking and camping. While the Yellow River is the largest tributary, eleven other streams also flow into the reservoir creating a very rich habitat for a variety of waterfowl and wildlife.

The Pershing Wildlife Area is the largest state-owned property in the area and offers opportunities for hunting, trapping, fishing and wildlife viewing. Several State Natural Areas are located throughout the county with many of them occurring within the CNNF. State Natural Areas are generally associated with scientific research and/or environmental education and

accommodate low-impact activities such as hiking, bird watching and nature study. The longest unbroken stretch of the National Scenic Ice Age Trail – 60 miles – runs through Taylor County.

Approximately 18,500 acres in Taylor County are enrolled in Wisconsin’s Managed Forest Law (MFL) program with an “open” status, meaning they are open to public hunting, fishing, cross-country skiing, sightseeing, and hiking (WDNR Tax 2008). Taylor County’s forest and park system offers hunting as well as camping, swimming, picnicking, and both motorized and non-motorized trail opportunities. The Pine Line Trail, a rail-to-trail project stretching 26.2 miles from Medford in Taylor County to Prentice in Price County, is open seasonally for hiking, cycling and jogging from April 1 to November 30 and snowmobiling/ATV use from December 1 to March 31. Private campgrounds, resorts and other points of interest are located throughout the county. Private game preserves offer additional hunting opportunities.

PROPOSED COSTS

Boundary Expansion Costs

The Department anticipates using fee title for the proposed boundary expansion with funding from Stewardship. However, the Department will also consider the use of easements with public access and/or the use of federal funds such as North American Wetlands Conservation Act (NAWCA) as appropriate. Based on the current market value of \$1,200 per acre for non-waterfront lands, the total project cost estimate for the 7,000-acre boundary expansion project is \$8.4 million. **All land acquisition is on a willing-seller basis with costs spread out over many years as owners have interest in selling and funds are available.**²

It should be further noted that if the Natural Resources Board (NRB) approves this project, it is unlikely that the Department will attempt to acquire all the private property within the proposed boundary expansion area. Many private landowners are already managing their land consistent with the Department’s overall management goals for the Pershing Wildlife Area.

Staffing and Operation Costs

Existing DNR wildlife staff assigned to work in Rusk and Taylor counties that will be regularly involved with land management activities on an expanded Pershing Wildlife Area consists of one full-time biologist, two full-time wildlife technicians and one six-month limited term employee. Additional wildlife staff from within the Upper Chippewa Area and Northern Region presently assist on special projects such as prescribed burning and sharp-tail grouse surveys and will continue to do so with newly acquired lands.

² In Wisconsin, State law provides for payments from the DNR that fully replace or exceed the property taxes that would have been collected if the land were not acquired by the DNR. Therefore, the potential impact on property taxes from DNR ownership of land is negligible. In addition, each town, village or city gains the benefits of natural resource protection and outdoor recreation that public lands offer to all (WDNR Public Land and Property Taxes, PUB-LF-001 99 REV).

Forestry staff and their specialized equipment from both Medford and Ladysmith will continue to provide assistance with prescribed burning activities during the spring and fall burn seasons and provide forest management support with timber sale establishment within the wildlife area. Other DNR staff such as water regulation specialists and construction engineers will provide their expertise and guidance on appropriate development projects.

Considering that the acquisition of parcels within the proposed expanded project boundary is a very long term process, and will be conducted as property and funding is available, it is difficult to predict or portray actual management costs that might be involved in a specific year or for the duration of the project. In addition, techniques that will be utilized for development or maintenance of property acquired in the future may be highly variable and subject to changes in technology and focus that affects overall expenditures. Below are the estimated average costs associated with commonly occurring management activities:

Current cost estimates for common management activities:	
Prescribed burning	\$20-30 per acre
Warm-season grass establishment	\$150-200 per acre
Parking lot construction (50' X 60')	\$2,000-3,000 each
Road building (16' graveled and ditched)	\$8,000-10,000 per mile
Fencing, posts & wire	\$3,000 per mile
Boundary & information sign posting	\$300-400 per mile
Brush mowing	\$12-15 per acre
Aerial herbicide application	\$75 per acre
Permanent fire break construction	\$3,000 per mile
Flowage development	Large specialized projects such as new flowage development require engineering design, competitive bidding and permit authorization. Cost is highly variable depending on site characteristics and project design making it difficult to estimate on an average basis.

Construction of a new cold storage garage and three-season work site is about to begin on the Pershing Wildlife Area for storage of tractors, implements, trailers and a variety of other management tools and equipment. This structure is being built to replace one that was lost in a fire about five years ago and is a separate project from this feasibility study. The new building will also provide a base of operations for staff conducting field work activities on the wildlife area from late March through early November.

Recreation Development Costs

At this time, limited recreation development is being considered. Future development may include improvement for public access, such as parking lots and interior roads. Based on acquisition and available funding, the Department may consider improvements for non-hunting opportunities such as a trail that would take wildlife viewers, bird watchers and photographers

through the grassland, wetland and forest communities. Any developments will comply with all required permits and approvals and will be consistent with the property master plan. General cost estimates are listed above.

Funding Sources

As new parcels are acquired, wildlife management staff will utilize a variety of funding sources to develop and/or maintain the wildlife habitat potential of the acquired lands. Currently, most general wildlife management work is funded through the Segregated Fish and Wildlife Account derived from the sale of hunting and fishing licenses. Some projects such as wetland development and grassland establishment or maintenance are commonly funded through bi-annual requests from specialized accounts derived from the sale of state waterfowl and turkey stamps as well as sharecrop revenues.

Monies are also allocated from the Stewardship fund to provide for supplies and services needed in identifying property access and boundary lines as well as posting of lands purchased with this funding source. Some types of habitat maintenance activities are also allowed utilizing the Stewardship derived dollars.

As the opportunity presents, wildlife management staff will have the option of entering into temporary sharecrop agreements with private parties to utilize agricultural lands on an interim basis until permanent wildlife habitat can be established. Farming on state wildlife areas can be done on a “crop-shares” basis or bid out as a contract with the payment going to the statewide wildlife management sharecrop fund. As they are available and we become aware of them, new funding sources and donations will be used in habitat and property development and maintenance activities on the Pershing Wildlife Area.

PUBLIC INVOLVEMENT

One purpose of a feasibility study is to gather public opinion about the need for the project and explore the public's desires and concerns about the project. Throughout the spring, the Department was active in contacting property owners, community members and local government officials. In early May, the Department mailed a total of 388 letters announcing the proposed project and upcoming public meeting: 316 letters to all property owners within a one-mile radius of the proposed boundary expansion, and 72 letters to all public officials from the area and other interested persons.

Approximately 65 people attended the public informational meeting on May 31, 2008 in Gilman, Wisconsin to discuss the proposed boundary expansion alternatives. At this meeting, the Department received both positive and negative feedback. The positive comments focused on the potential of the project to increase wildlife habitat and compatible wildlife related recreational opportunities. The negative comments were related to impacts on the local property tax base under the former Payment in Lieu of Taxes (PILT) program, which is in effect for lands purchased by the State prior to 1992 under Wis. Stats. §70.113. Concern was also expressed that

the State's existing PILT program for new acquisitions might result in lower property taxes being paid to local townships. As of June 13, 2008, the Department received 15 written comments in favor of the 7,000-acre alternative, 4 against any additional acquisition and 1 that was neutral. No comments referencing the 3,500-acre alternative were received.

Department staff followed-up with the Pershing Town Board by attending their monthly board meeting in July to answer specific land acquisition questions and how the PILT program works under current state law, Wis. Stats. §70.114. Department staff were able to effectively answer the questions and concerns on the impact of any new public land acquisitions and explain the subsequent effects to the municipalities' real estate tax base. Any lingering concerns regarding the impact of future DNR land acquisitions shifted away from the PILT programs towards personal preferences for the best use of local lands.

When completed, the draft feasibility study will be available for a minimum two-week public comment period; comments will be included in the final feasibility study. The Department anticipates presenting the study to the Natural Resources Board for their consideration at the October 2008 NRB meeting.

EVALUATION OF PROJECT SIGNIFICANCE

Environmental Effects and Their Significance

The potential long-term environmental effects of the proposed Pershing Wildlife Area boundary expansion outweigh any short-term environmental effects associated with management practices. Expanding the boundary between the existing units will create continuity for more efficient long-term property management and administration. The property boundary associated with the expansion will have fewer perimeter miles to sign and/or fence and will improve public accessibility. The expanded property boundary will also allow Department staff to more easily carry out management activities such as prescribed burning and water level management with fewer impacts to neighboring private landowners.

Expanding the property boundary increases the potential for the Department to create and manage for specialized habitats such as permanent upland grass, upland brush or high quality wetlands. Long-term beneficial impacts associated with managing for quality grasslands include improving the population viability and nesting areas for all grassland species, especially sharp-tailed grouse and waterfowl. The sharp-tailed grouse is listed as a Species of Special Concern in Wisconsin and is present on the Pershing Wildlife Area. The Department has the opportunity to expand the property, manage for this distinct and limited habitat, and potentially merge the isolated populations from the north and south units. Increasing the amount of open landscape and managing the quality grassland areas not only contributes to the population viability and security for the sharp-tailed grouse, but also for other grassland species, water fowl and many non-game species.

Long-term beneficial impacts associated with improving the wetland areas affect many vertebrate and invertebrate species. The Department's "Reversing the Loss" report (2000) notes the importance of Wisconsin wetlands for providing critical habitat for wildlife, water storage to prevent flooding and protect water quality, and providing recreational opportunities. Management will increase waterfowl habitat therefore increase numbers locally and seasonally. Restoring the health of the wetlands benefits the overall health and functioning of other ecological systems in the same watershed. Additionally, acquiring several thousand acres of land and retiring areas currently in cultivation would improve the long-term biotic integrity of the Fisher River and many of its tributaries.

In order to achieve these habitats, the Department anticipates using a variety of management tools including herbicide application, planting native grasses and forbs utilizing a no-till seeder, and periodic mowing and prescribed burning. Any negative short-term environmental effects associated with these management tools will be minimized by following the appropriate Department Manual Code (Pesticide Application-Manual Code 4230.1; Prescribed Burn Handbook 4360.5). Precautions will be taken to avoid disturbances during the breeding season.

Management activities to improve or restore converted wetland areas could include using heavy equipment to plug ditches, break drain tile lines, excavate filled areas and spread viable wetland soil that contains local native wetland vegetation seeds and root stock. Some management activities, such as prescribed burning and herbicide use, have the potential to create short-term

environmental effects; however, those effects are minimal compared to the long-term beneficial improvements to the wildlife habitat. All management will be in accordance with the Department's "Reversing the Loss" report (2000), which discusses strategies for protecting and restoring wetlands in Wisconsin. Department staff will complete any required permitting and approval processes.

Approximately 3,000 acres of agricultural land (much of which is classified as "farmland of statewide importance") are located within the proposed boundary that could potentially be removed from production. Considering all land transactions within the boundary are on a willing-seller basis, any financial impacts to the landowner of taking land out of production would be considered on an individual basis by the landowner prior to selling. Upon acquisition, the Department of Natural Resources makes an annual payment in lieu of real estate taxes to replace property taxes that would have been paid if the property had remained in private ownership. The payment is made to the local taxing authority where the property is located. Because DNR pays a fair share of aid on all lands purchased since January 1, 1992, *there is no loss of property tax revenue in the taxation district due to DNR ownership* (WDNR PILT 2008).

Results of a Natural Heritage Inventory screening indicate several endangered resources documented within and around the project area, especially in the wetland habitats. Department acquisition would not negatively impact these resources. Management will follow Department best management practices to minimize impacts to onsite wetlands and waterways.

Results of a Department check on the cultural resource data base identified one site, Donald Mission Church Cemetery, located within T32N R4W Section 10. The site is protected against disturbance by Wisconsin Statutes 157.70 and will not be impacted by acquisition or management. Environmental effects associated with recreational use, including hunting, bird watching, and wildlife photography, are anticipated to be minimal.

Significance of Cumulative Effects

Expanding the Pershing Wildlife Area and managing for open landscape features would have positive cumulative effects on a large variety of wildlife species. Managing for a large, open grass and brush land area requires periodic burning or disturbance by other method every several years. Prescribed burning is an effective land management technique with many benefits: improvement of wildlife habitat by creating edge and increasing productivity; controlling vegetative competition; restoration of fire dependent plant and animal communities; control of forest insects and diseases; and control of non-native invasive species. Wetlands also benefit from occasional prescribed burns, which reduce invasion of shrubs and invasive species and improve native wildlife habitat.

Significance of Risk

Land management on the Pershing Wildlife Area focuses on providing open landscape areas such as grassland, brush lands, wetland and open water areas. Some of the management

activities pose potential risks, however, those risks are minimized by following Department approved procedures and management practices. While the use of fire for prescribed burns carries the potential risk of wildfire, the benefits associated with this established land management technique exceed the risk. Additionally, techniques used in wetland restoration and water level management for impoundments have some associated risk of flooding. Those risks will be minimized by following established best management practices and receiving prior approval and permitting.

Not managing for open landscape areas presents a potential risk of diminishing limited sharp-tailed grouse habitat, which could result in diminishing population numbers. The Department is in the process of updating its *Sharp-tailed Grouse Management Plan*, which will address the feasibility of keeping potential areas open, how much it will cost, and what it will mean for the overall statewide sharp-tailed grouse population. Preliminary findings suggest that parts of the North Central Forest Ecological Landscape are important as a primary sharp-tailed grouse conservation area in achieving population and habitat goals.

Significance of Precedent

The proposed boundary expansion and management are not precedent setting. Through acquisition the Department can manage for quality grassland areas to support Sharp-tailed grouse, waterfowl and many non-game species; restore, protect and enhance acres of wetland and miles of stream corridor habitat; improve property management through blocking; and improve public access and recreation opportunities. Management will be consistent with that stated in the property master plan and will not conflict with local, state or federal agencies.

Significance of Controversy

On May 31, 2008, the Department held a public informational meeting in the Village of Gilman. Approximately 65 people attended the meeting to learn more about the proposed boundary expansion alternatives and to ask questions. Department staff set up display materials and presented a brief overview of the property, the proposed alternatives and how the payment in lieu of taxes (PILT) works.

The PILT presentation led to a lively discussion focused on the fairness of taxes paid on the existing Pershing Wildlife Area. Meeting participants disagreed with statute 70.113 used to determine the PILT payment on public lands acquired prior January 1, 1992. Some local residents are in opposition to the boundary expansion based largely on the PILT issue and the perceived effects additional land acquisition would have on surrounding assessed values. Department staff followed-up at the Town of Pershing's July board meeting to answer and clarify some of those concerns.

PILT issues aside, the Department received a number of positive comments regarding the 7,000-acre boundary alternative and its effect on the quality of the environment. A number of area landowners spoke out in favor of the Department acquiring additional land and were pleased

with the Department's foresight in planning for future needs. Another landowner spoke of recently selling his property to someone interested in having the Pershing Wildlife Area as a neighbor.

As of June 13, 2008, the Department received 15 written comments in favor of the 7,000-acre alternative, 4 against any additional acquisition and 1 that was neutral. The comments for "no expansion" were based on the PILT issue and how the taxes would impact the Town of Pershing. No comments referencing the 3,500-acre alternative were received.

ALTERNATIVES

No Action

The Department could take no action and maintain the Pershing Wildlife Area at its current size. Although development pressure in this rural area is relatively low, several landowners have approached the Department with interest in selling. Additionally, Pershing Wildlife Area is one of only nine properties managed statewide for Sharp-tailed grouse. Not expanding the boundary could be considered a missed opportunity to increase limited sharp-tailed grouse habitat and provide blocking for better resource and property management.

Mid-range Alternative

Increase the property boundary by approximately 3,500 acres. This alternative would help maintain open space between the two units and consolidate the acquisition boundary between the north and south units from the current 12 miles to 6.5 miles. It offers the potential to increase access to the existing property in three locations. This alternative provides an opportunity to acquire over five miles of the Fisher River corridor and feeder streams. Refer to the *Proposed Expansion Area, 3,500 Acre Alternative* map in Appendix.

Preferred Alternative

Expand the Pershing Wildlife Area boundary 7,000 acres (6,080 acres between the existing units; 920 acres on the northwest corner of northern unit). This alternative has the potential to maximize the open space between the two units and to increase access to the existing property in seven locations. It provides an opportunity to acquire over 13 miles of the Fisher River corridor and feeder streams and over two miles of Shoulder Creek. Through acquisition the Department can promote improved resource and property management, improved public access and increased recreational opportunities. Refer to the *Proposed Expansion Area, 7,000 Acre Alternative* map in the Appendix.

PROJECT FEASIBILITY DETERMINATION

To be determined based on review and input from the public.

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APPENDIX

List of Appendix items:

- Environmental Analysis Certification
- Proposed Expansion Area Maps
- List of Public Contacts and Comments