FASSETT'S LOCOWEED RECOVERY LAND ACQUISITION PLAINFIELD TUNNEL CHANNEL LAKES STATE NATURAL AREA
PROPOSAL NARRATIVE
WAUSHARA COUNTY, WI

Wisconsin is submitting a proposal for a $180,500 Recovery Land Acquisition Grant for 98.8 acre fee title acquisition and a 2-acre conservation easement near the Village of Plainfield in Waushara County that would contribute to the recovery of Fassett's locoweed (*Oxytropis campestris var. chartacea*). Fassett's locoweed was listed as a federally-threatened species in 1988 and has a recovery priority number of 9. Endemic to Wisconsin, Fassett's locoweed, only occurs at eight sites in three counties. Its habitat, shoreline areas of land-locked seepage lakes, is threatened by current land-use patterns and vegetation changes.

The primary objective of the Fassett's locoweed Recovery Plan (1991) is to "protect lake shorelines with populations of Fassett's locoweed, in all cases pursuing the strongest, appropriate method". The largest population of locoweed is found at Plainfield Lake where an estimated 125,800 plants were found in 2007. Weymouth Lake has continued to have a growing locoweed population as the lake level has dropped over the last few years. In recent years the population has reached over 1,000 plants, with good reproduction evident.

The grant would assist in acquisition of 98.8 acres, including about 800 feet of shoreline, at Weymouth Lake. Currently there is no permanent protection of the Weymouth Lake locoweed population. The grant would also assist in the purchase of an easement on 2 acres (about 300 feet of shoreline) immediately adjacent to current Department of Natural Resources (DNR) ownership on Plainfield Lake. Both properties lie within the DNR's Plainfield Tunnel Channel Lakes State Natural Area acquisition boundary.

Fassett's Locoweed

PROJECT STATEMENT

NEED:

Section 6 funds are needed to assist in acquisition of 98.8 acres at Weymouth Lake (Figures 1a and 1b) and to purchase a two-acre conservation easement on 300 feet of shoreline on Plainfield Lake (Figure 2).

This project will contribute to the recovery of Fassett's locoweed *(Oxytropis campestris)* by helping to protect shoreline habitat of viable locoweed populations. Protection of these sites is a specific Priority 1 Task of the Fassett's Locoweed Recovery Plan.

The sites lie within Wisconsin's Central Sand Hills Ecological Landscape, located in central Wisconsin at the eastern edge of what was once Glacial Lake Wisconsin. The landforms here are a series of glacial moraines that were later partially covered by glacial outwash. The area is characterized by a mixture of farmland, woodlots, wetlands, small kettle lakes, and cold water streams, all on sandy soils. Historic upland vegetation consisted of oak-forest, oak savanna, and tallgrass prairie. Fens were common in this area and occurred along with wet-mesic prairie, wet prairie, and rare coastal plain marshes. The major forested type is oak-hickory, with smaller amounts of white-red-jack pine, maple-basswood, lowland hardwoods, aspen-birch, and spruce-fir. There are numerous small kettle lakes and ponds associated with the glacial outwash. There are many soft-water lakes with a firm bottom that are being developed for recreational uses. Although the lakes and rivers of the Ecological Landscape are fairly clean, it has the poorest groundwater rating of all the ecological landscapes according to Wisconsin DNR.

Weymouth Lake is a small undeveloped lake, and is inaccessible by public road. The shoreline is owned by just two landowners. Subpopulations of locoweed are found on the western and northern shoreline of this lake. This site is the last remaining high quality and naturally reproducing Fassett's site without permanent protection. This property also includes shoreline at Fiddle Lake, a two-acre shallow lake, with suitable Fassett's habitat. Eighty of the 98.8 acres are under a Managed Forest Law agreement with the DNR.

Plainfield Lake contains about 5,400 feet of shoreline with about 300 feet of shoreline on the easement parcel. Current zoning would allow for an additional home to be built on the two acre parcel. Plainfield Lake contains the largest numbers of locoweed of the 8 lakes it occurs on.

Protection of these two parcels would help meet recovery goals for Fassett's locoweed. If not acquired and protected this property could developed for housing sites or used for incompatible recreational uses. Such development is likely to result in disturbance and adverse effects to the Fassett's locoweed population on the lake. Under current ownership the landowners have been good stewards of the land, however such cooperation is not guaranteed with future landowners.

OBJECTIVE:

The objectives are to 1) purchase a total of 98.8 acres with 800 feet of shoreline on Weymouth Lake and 1,300 feet on Fiddle Lake and 2) purchase a two-acre conservation easement on Plainfield Lake that includes 300 feet of shoreline.

EXPECTED RESULTS OR BENEFITS:

Benefits to Recovery of Fassett's Locoweed:

The expected benefit of this project is the permanent protection and appropriate land management of significant Fassett's locoweed populations. Permanent protection would help recover this species since it would provide habitat and protection for the locoweed. Permanent protection would also allow for Department management of invasive species, such as canary grass, spotted knapweed, and sweet clover that degrade locoweed habitat and can reduce locoweed population numbers. While shading and competition by trees and other plants, especially invasive species are the primary natural threats, trampling by humans and disturbance from off-road vehicles pose far more serious threats to these sensitive plants. Permanent protection would prevent incompatible land use that could greatly impact the health of the locoweed population.

Fassett's locoweed was named after botanist Norman Fassett, who first described the species, it only occurs on the fluctuating shorelines of six lakes in the Central Sands area of Wisconsin (Portage and Waushara Counties) and on two lakes in northwest Wisconsin (Bayfield County). It is adapted to the sandy shores of shallow seepage lakes whose shorelines fluctuate widely over months or years depending on rainfall and drought patterns. When the shore is exposed, locoweed seeds in the seed bank germinate, grow, flower, and drop seeds.

The plant requires open, sunny habitat and relies on periodic flooding to kill shade-producing trees that invade the shoreline in dry years. Locoweed survives inundation – up to years at a time – by persisting in the lake bottom's seed bank until the water levels drop. It is possible for this plant to disappear from a site and reappear 20 years later when conditions become favorable.

Monitoring efforts at Weymouth Lake have shown fluctuating populations, with a large number of flowering plants (up to 1,000 plants) and evidence of reproduction. The lake has two subpopulations of locoweed with one on the west side of the lake (on the parcel to be acquired) having up to 350 plants, and the other concentration on the north side of the lake. The landowners on the north side of the lake have historically been very difficult to communicate with so the long-term plans for this property remain unknown.

According to Natural Heritage Inventory data, Dr. Kama Almasi, a professor from University of Wisconsin -Stevens Point, conducted locoweed population counts at Plainfield Lake in 2006 and found 202,900 plants. In 2007 125,800 plants were counted. About 65% of the plants were reproducing. The majority of the plants were found on land currently owned by the state, but a number of plants were also found on adjacent private property. Populations and suitable habitat are found both on the north and south shorelines of the lake, including on the 2-acre parcel to be acquired.

Benefits to Rare Plants, and Wildlife:

The Department's Natural Heritage Inventory data base contains the following recent records for **Weymouth Lake** and within a 1-mile buffer:

Scientific Name	Common Name	State Rank
Plants		
Carex sychnocephala	Many-headed Sedge	Special Concern
Minuartia dawsonensis	Rock Stitchwort	Special Concern
Oxytropis campestris var. chartacea	Fassett's Locoweed	State-endangered
Amphibian		
Lithobates catesbeianus	American bullfrog	Special Concern

This site also supports exceptional habitat for wild turkey, ruffed grouse and white-tailed deer. The site has quality older white pine stands with understory of blueberry, bracken fern, Canada mayflower, false Solomon's seal and wild sarsaparilla. Uplands close to Weymouth Lake shoreline are dominated by bur, black and red oak, with an understory of Pennsylvania sedge, little bluestem and various goldenrods and asters. The red and white pine plantations, and oak woods at this site could be restored to barrens habitat to provide habitat for local known Karner blue butterfly populations as well as other barrens dependent species. The northern sedge meadow cover surrounding Fiddle Lake on the north end of the property is dominated by bulrushes, tussock sedge, wool grass, grass-leaved goldenrod, and other high quality sedge meadow species. It may also support populations of sedge wren, swamp sparrow, and muskrat. The drier areas of this lakeshore could easily support Fassett's locoweed populations.

The Department's Natural Heritage Inventory data base contains the following recent records for **Plainfield Lake** and within a 1-mile buffer:

Scientific Name	Common Name	State Rank
Plants		
Carex crawei	Crawe Sedge	Special Concern
Carex sychnocephala	Many-headed Sedge	Special Concern
Oxytropis campestris var. chartacea	Fassett's Locoweed	State-endangered

Uplands immediately adjacent to the shoreline of Plainfield would be primarily restored to oak savanna to benefit associated species such as Karner Blue Butterflies, red-headed woodpeckers, and eastern kingbirds. No breeding bird surveys have been conducted.

There is currently one small home on the northern part of the easement parcel, and one additional home could be built on the parcel.

Function

The habitat at Plainfield Lake and Weymouth Lake fills a critical role in the life cycle of this plant as it is dependent on the fluctuating water levels of seepage lakes. Fluctuations in lake levels provide ideal habitat for this species by killing competing woody species during high water levels and creating ideal germination conditions at low water levels. Legume seeds can survive for many years in the seed bank and when lake levels are high the locoweed is only present in the seed bank.

The shoreline at Plainfield Lake and Weymouth may require habitat management if the lake level does not fluctuate to kill off woody and herbaceous species that become established in low water years. If woody or herbaceous invasives become a problem, manual control methods would most likely be used.

Connectivity
The purchase of a conservation easement on Plainfield Lake and the acquisition of property along Weymouth Lake would add to the 203 acres already protected at Plainfield Tunnel Channel Lakes State Natural Area. This State Natural Area currently protects three lakes in a string of 13 lakes and ponds lying in a "tunnel channel" created by a melt water river flowing beneath the glacial ice. The lake basins were created from buried blocks of ice left behind when the tunnel collapsed.

The Plainfield Lake property lies immediately adjacent to a property recently purchased by the State in 2008 using North American Wetland Conservation funds.

All landowners are willing sellers. Department of Natural Resources staff has worked with the landowners for a number of years and have a good relationship with them. Section 6 funds would allow the negotiations with the landowners to be finalized.

Both properties fall within the approved State Natural Area project acquisition boundary.

Benefits for the Public:
The Weymouth Lake property has a grass covered drive that once lead to a homesite that would provide excellent access for the public to hike, hunt, and enjoy rare species and wetland and savanna flora and fauna. The site will also provide excellent opportunities for research and education on Fassett's locoweed, associated species, and geology.

Because the Plainfield Lake property currently has a home on it which would limit hiking or hunting availability, access would be limited primarily to scientific research.

Plainfield Tunnel Channel Lakes State Natural Area is highlighted in *Wisconsin Naturally* – A guide to 150 State Natural Areas.

APPROACH:

#1 Priority Fee Title Acquisition- Weymouth Estates Tree Farm, Inc.- 98.8 acres with about 800 feet of shoreline on Weymouth Lake and 1,300 feet on Fiddle Lake. Eighty acres of the property are enrolled in Managed Forest Law (MFL). A timber cruise will be conducted in the upcoming months to determine the value of the timber. The first of the 25-year MFL agreements on this property began in 1988. The property is being appraised by the Department after the family made an offer to sell to the Department. The site is also currently listed on the open market with a realtor.

#2 Priority Conservation Easement– Ellyson Family – 2 acres with about 300 feet of shoreline. The property is listed for sale, currently has one small cottage on the property and can be divided into an additional one-acre homesite. The property is dominated by oak savanna habitat, with a biologically diverse sedge meadow shoreline. The Ellyson family has their entire property for sale and contacted the DNR regarding the sale of a conservation easement.

Once appraisals have been completed and an appraisal value has been certified by the Department offers will be made. The Department will comply with the federal standards for land acquisition.

Wisconsin's cost share (50%) will be from the Knowles-Nelson Stewardship Fund, a State of Wisconsin ten-year bonding program that provides land acquisition funds for the Department, local units of government, and conservation organizations.

Upon approval of funding and signing an offer to purchase, the Department will secure Natural Resource Board and Governor's approval. The properties will be included within the Plainfield Tunnel Channel Lakes State Natural Area and will be managed by the Department of Natural Resources as part of the Bureau of Endangered Resources State Natural Area program. The property will be permanently protected, and it will be noted on the deed that there is a federal interest in the acquired property.

This proposal requests cost share for only the land costs and not associated acquisition costs. If Section 6 funds cannot be used for the priority properties noted, other locoweed properties will be sought for the use of the funds.

LOCATION:

The Weymouth Lake property is located in Town of Oasis, Waushara County, Wisconsin (T20N R9E, Section 16. SW1/4SE1/4, Section 21, NW1/4NE1/4). The acquisition area is located on Figure 1a.

Plainfield Lake is located in Town of Oasis, Waushara County, Wisconsin (T20N, R9E, Section 18, NW1/4SE1/4). The acquisition area is located on Figure 2.

ESTIMATED COST:

98.8 acres (acquisition)	$ 346,000
2 acres (conservation easement)	$ 15,000
Total	$ 361,000
Federal Share (50%)	***$ 180,500***
State Share (50%)	$ 180,500

If full funding is not available the Department would take partial funding.

FIGURE 1a

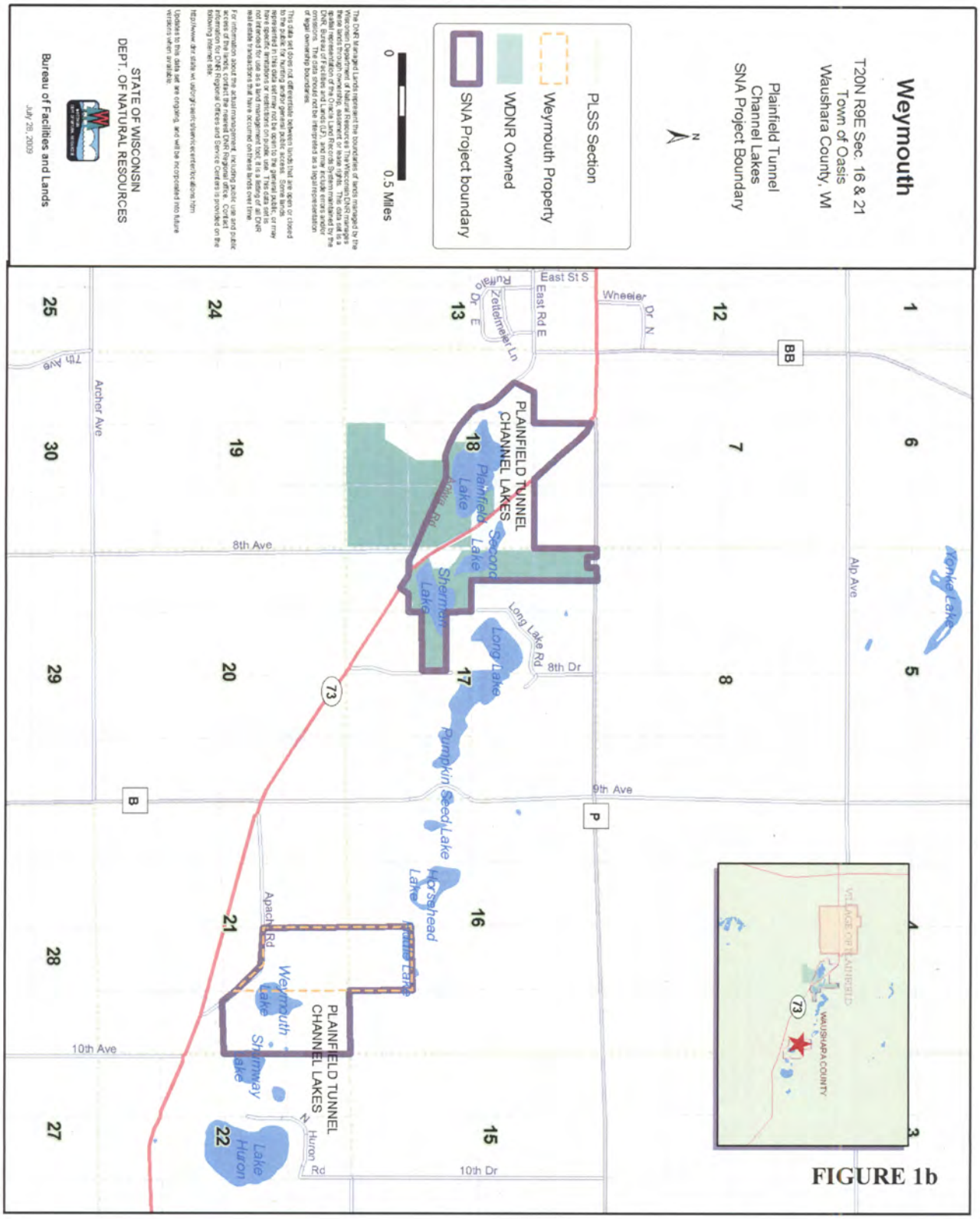


FIGURE 1b

FIGURE 1b

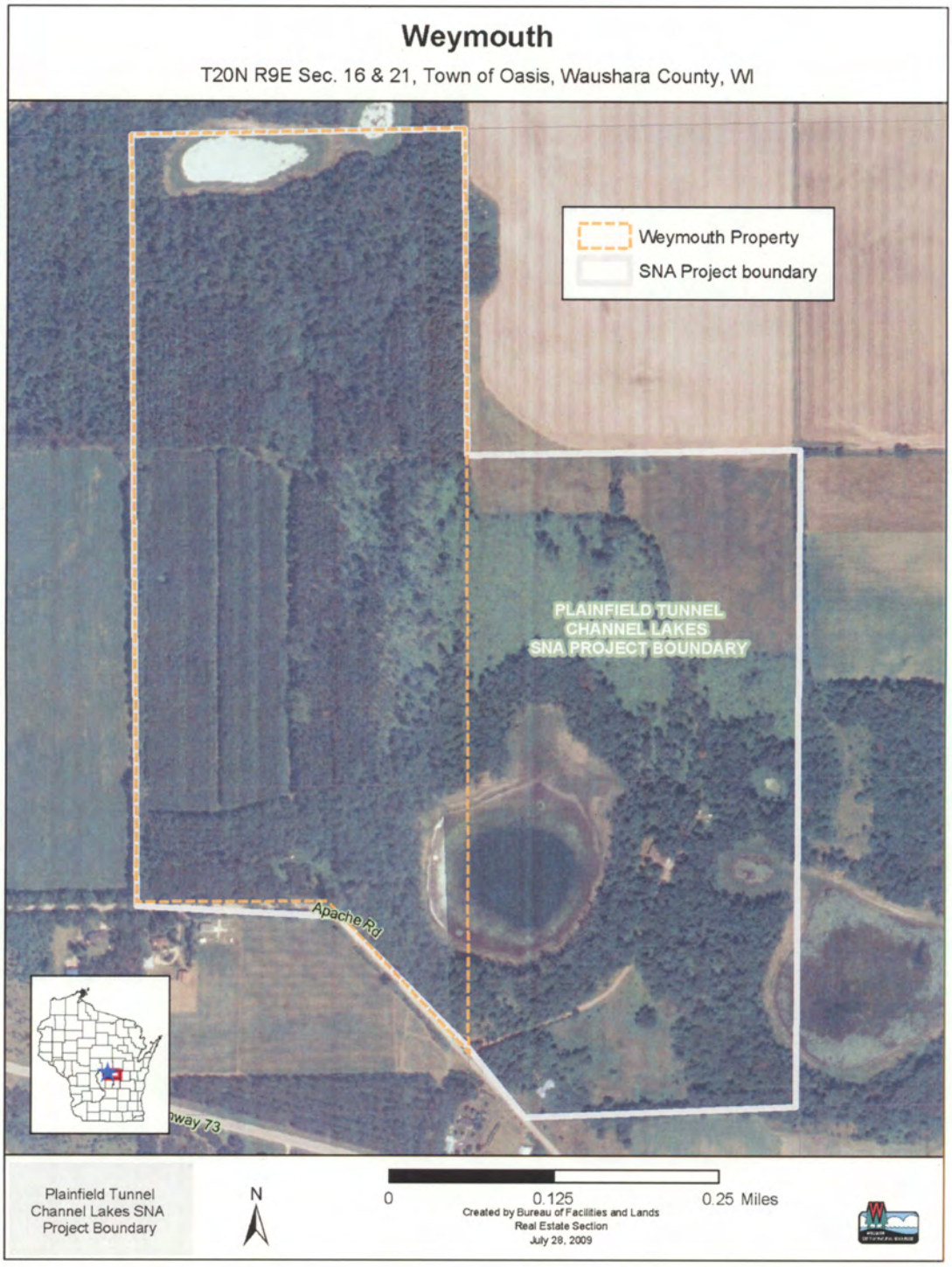
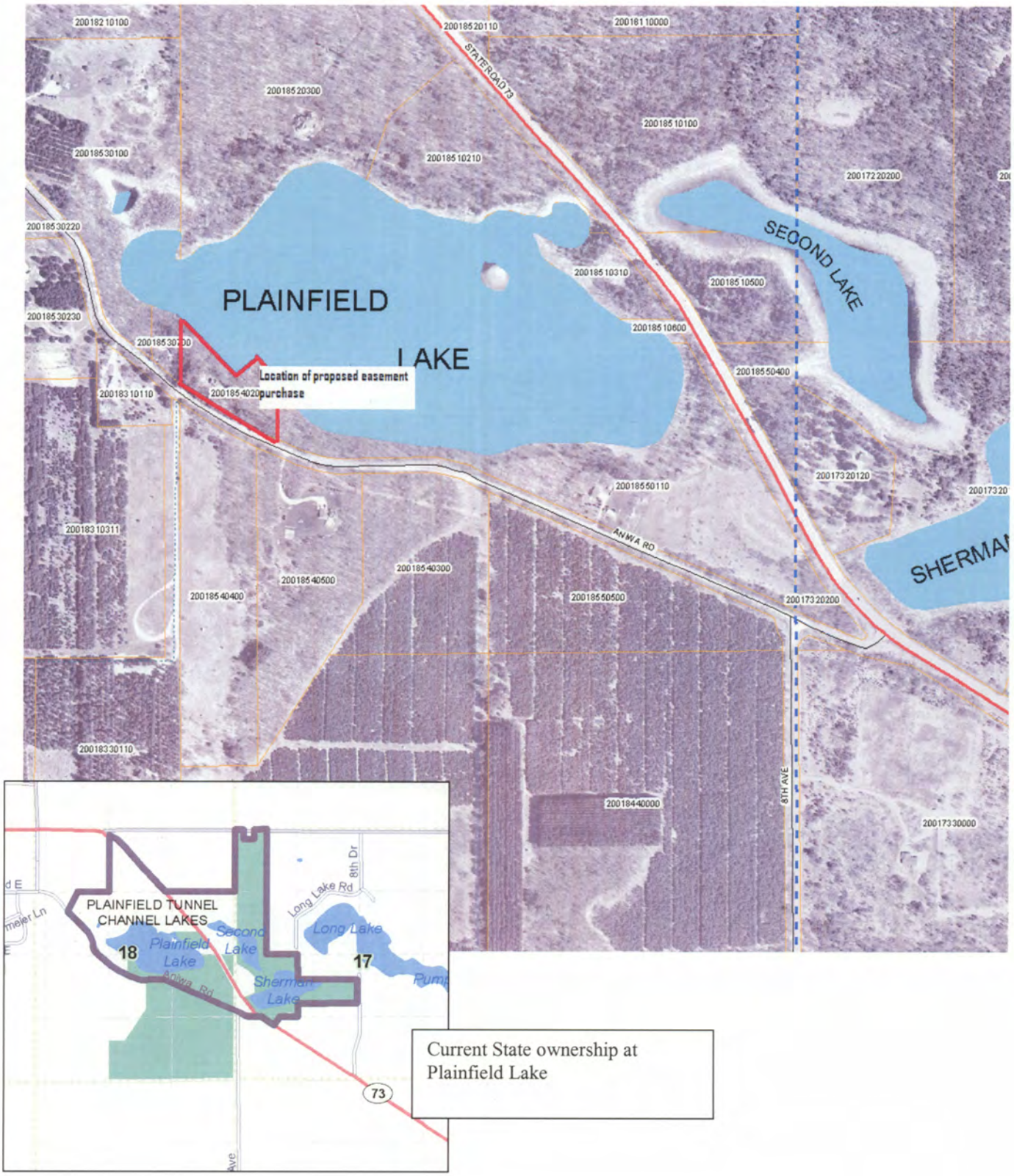

Weymouth
T20N R9E Sec. 16 & 21, Town of Oasis, Waushara County, WI
Weymouth Property
SNA Project boundary
PLAINFIELD TUNNEL
CHANNEL LAKES
SNA PROJECT BOUNDARY
Apache Rd
Plainfield Tunnel
Channel Lakes SNA
Project Boundary
N
0
0.125
0.25 Miles
Created by Bureau of Facilities and Lands
Real Estate Section
July 28, 2009

FIGURE 2



Current State ownership at Plainfield Lake

PHOTOS OF WEYMOUTH LAKE SITE

West side of lake

South side of lake

Sedge meadow at Fiddle Lake

Oaks in upland around Weymouth Lake

COMPLIANCE

On an annual basis, the Department signs an U.S. Fish and Wildlife Service, Division of Wildlife and Sport Fish Restoration "Assurances" Form certifying that the agency complies with a number of federal laws, i.e. the Intergovernmental Personnel Act of 1970, Wild and Scenic Rivers Act of 1968, etc.

Attachment 6 to the Sport Fish and Wildlife Restoration Program Funding Option Grants in Wisconsin (F-95-P and W-160-P) describe the Wisconsin statutes, rules, and procedures to insure compliance with federal requirements associated with the Sport Fish and Wildlife Restoration Acts. In addition, Part 523 of the Federal Aid Handbook provides further guidance on those requirements generally applicable to grant programs. *NEPA Guidance to States Participating in The Federal Aid Program* and Wisconsin guidance document titled *How to Complete the National Environmental Policy Act (NEPA) Compliance Checklist* (Attachment 16) serves as the guidance for insuring compliance with the National Environmental Policy Act. The following narrative supplements Attachment 6 and Part 523 by providing additional procedural information on several compliance subject areas.

Section 106 of the National Historic Preservation Act and 36 CFR Part 800: Protection of Historic Properties: Under Section 106 of the National Historic Preservation Act, any project receiving federal funds must be reviewed to determine if the action may impact significant cultural resources. The U. S. Fish and Wildlife Service, Division of Federal Aid, has authorized the WDNR to act as an agent for the FWS to initiate the Section 106 process with the State Historic Preservation Officer. The Wisconsin Historical Society's Museum Archaeology Program has agreed to assist the WDNR with Section 106 compliance for federally assisted activities that have the potential to impact cultural resources and lands acquired with federal funds.

All tracts of land proposed for acquisition as part of this grant proposal will be reviewed by a qualified professional (archeologists and/or architectural historians). The qualified professional documents the results of his/her research and makes a determination that the potential project impact will constitute one of three possible findings: "no effect", "effect, no adverse effect", or "adverse effect". The finding determination (including all the essential information needed to support the finding) is sent to the State Historic Preservation Officer for concurrence. A copy of the documentation and SHPO concurrence is retained in the individual land file maintained in the Bureau of Facilities and Land. If a cultural resource survey is required and the survey is conducted with Federal Aid in Sport Fish or Wildlife Restoration funds, a copy of the survey will be sent to the FWS Regional Office.

National Environmental Policy Act:

In Wisconsin, all land acquired with federal funds are acquired from willing sellers. The Governor has the authority to utilize eminent domain, but only with approval of the legislature. If any land is proposed for purchase with federal funds using eminent domain, an Environmental Assessment will be prepared and approved by the Fish and

Wildlife Service prior to signing an option. The Department's property managers contact private landowners within a project boundary on a periodic basis to inform them that the Department is interested in purchasing their land. The Natural Resources Board reviews each tract of land proposed for acquisition and the public is invited to comment on all proposed acquisitions. Finally, the Governor approves each tract of land acquired.

Any land acquired through funds received as part of this grant proposal would be utilized only for the specific purpose for which they were purchased. The Department does not generally allow changes in land use on properties that have been purchased with Fish and Wildlife Service funding.

The department has an extensive public involvement process related to land acquisition. Public involvement is invited in the Feasibility Study process for the establishment of new department properties, and in the Master Planning process

Activities funded in this grant comply with the Department of Interior and Fish and Wildlife Service categories of actions, which are excluded from NEPA documentation. Section 1.4, Categorical Exclusions, states that categorical exclusions are classes of actions which do not individually or cumulatively have a significant effect on the human environment. Subsection 1.4A lists 4 types of actions that are categorical exclusions under NEPA. The acquisition of land under this project is considered a categorical exclusion under FR Volume 62, Number 11, Section 1.4A(4). Number 4 under 1.4A is "The acquisition of real property obtained either through discretionary acts or when acquired by law, whether by way of condemnation, donation, escheat, right-of-entry, escrow, exchange, lapses, purchase, or transfer and that will be under the jurisdiction or control of the United States." We believe land acquired as part of this proposal qualifies as a categorical exclusion under Section 1.4A(4). We believe the potential for adverse impacts is minimal.

Other compliance issues, (i.e., cultural resources or endangered species) may also trigger the need for environmental assessment documentation.

Endangered Species Review: The responsibility for reviewing proposed projects for possible impacts to state and federally listed endangered and threatened species is assigned to the Department's Regional Offices. The concept behind this decentralized review is that the people that know the project and the local project site are the most knowledgeable to assess impacts. Trained staff in the central office and field staff throughout the Department use the *Endangered Resources Screening Guidance For the Wisconsin Department of Natural Resources* (Attachment 14) to screen actions for impacts to federally listed species, species proposed for listing, candidate species, and proposed or designated critical habitat and document results.

Implementation of this grant will not jeopardize the continued existence of any state or federally listed threatened and/or endangered species or result in the destruction or adverse modification of critical habitat of the species. In fact, any land acquisition should have a positive impact on endangered species, if, for example acquisition and protection

by DNR prevents damaging private sector development on the land. Thus, for this grant, we recommend a "no effect" or "may affect but is not likely to adversely affect" determination.

Performance Reporting:

A narrative style interim performance reports will be submitted to the FWS on an annual basis. A final report, including a Land Summary Statement (LSS) and supporting documents, will be submitted within 90 days of the grant period end date. The final performance report will include 1) the LSS; 2) appraisal review certifications; 3) Statement of Just Compensation; 4) documents showing date Governor signed the option (this establishes Department commitment); 5) recorded deeds/easements with covenant language; 6) transaction summary (Form 2200-12); and 7) tract map. In addition, the following will be submitted under the noted conditions: 8) justification statement when the land acquired is outside the current property boundaries; and 9) documentation of vendor donation. When an individual tract of land is valued in excess of $1M, prior to purchasing the land the Department will consult with the Fish & Wildlife Service to determine appraisal procedures, documentation, and reporting requirements.