

Environmental Assessment Dam Reconstruction

**Straight Lake State Park
Luck, Wisconsin**



Prepared for:

**State of Wisconsin
Wisconsin Department of Administration
Division of State Facilities
DSF Project No. 10A4H**

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Environmental Assessment

Dam Reconstruction Straight Lake State Park

**Luck, Wisconsin
State Project Number 10A4H**

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Contents

	<u>Page No.</u>
Introduction	1
General	1
Project Summary	1
EA Process	1
Scoping Letter	1
Draft EA.....	2
I. Description of Proposed Action	3
A. Title of Proposal	3
B. Location	3
C. Project.....	3
D. Estimated Cost and Funding Source	8
E. Project Schedule.....	8
II. Existing Environment.....	9
A. Physical	9
Land Use	9
Topography	9
Soils.....	9
Utilities	10
Stormwater Control.....	10
Surface Water.....	10
Wetlands.....	11
Flood Plains.....	12
Groundwater	12
Air	12
Environmental Contamination	13
B. Biological	13
1. Flora.....	14
2. Fauna.....	14
3. High-quality Examples of Natural Communities at the Site	14
C. Social	15
Economic.....	16
D. Other (archaeological, historical, etc.)	17
III. Proposed Environmental Change.....	18

A.	Manipulation of Terrestrial Resources	18
B.	Manipulation of Aquatic Resources	18
C.	Structures	19
D.	Other	19
	Hazardous Materials.....	19
	Utilities	20
	Noise	20
	Topography	21
	Traffic and Parking	21
IV.	Probable Adverse and Beneficial Impacts.....	22
A.	Physical Impacts.....	22
B.	Biological Impacts.....	22
C.	Socioeconomic Impacts.....	23
	1. Social	23
	2. Economic	24
D.	Other (archaeological, historical, etc.)	25
	Archaeological/Historic.....	25
V.	Probable Adverse Impacts That Cannot Be Avoided	26
VI.	Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity.....	27
VII.	Irreversible or Irrecoverable Commitments of Resources if Action is Implemented	28
A.	Financial	28
C.	Construction Materials	28
D.	Land Area	28
E.	Archaeological and Historic Features or Sites.....	28
VIII.	Alternatives	29
IX.	Evaluation.....	31
A.	As a result of this action, is it likely that other events or actions will happen which may significantly affect the environment? If so, list and discuss. (Secondary effects).....	31
B.	Does the action alter the environment so a new physical, biological, or socioeconomic environment would exist? (New environmental effect).....	31
C.	Are there existing environmental features that would be affected by the proposed action scarce, either locally or statewide? If so, list and describe. (Geographically scarce).....	31
D.	Does the action and its effects require a decision which would result in influencing future decisions? Describe. Is the decision precedent setting?	31

E.	Discuss and describe concerns which indicate a serious controversy? (Highly controversial).....	32
F.	Does the action conflict with official agency plans or with any local, state or national policy, if so, how? (Is the action inconsistent with long-range plans or policies?).....	33
G.	While the action itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment? (Cumulative impacts).....	33
H.	Will the action modify or destroy any historical, scientific, or archaeological site?	33
I.	Is the action irreversible? Will it commit a resource for the foreseeable future? (Does it foreclose future options?).....	34
J.	Will action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns?	34
K.	Other	34
X.	Determination	35
XI.	References	36

List of Tables

Table 2-1	Population Data for Polk County and the State of Wisconsin
Table 2-2	Employment and Income Data for Polk County and State of Wisconsin
Table 3-1	Estimate of Wetland Areas to be disturbed during Construction

List of Figures (Text)

Figure I-1	Approximate 100-Year Flow Event Water Surface along Straight River
Figure I-2	Proposed Sheet Pile Location
Figure I-3	Proposed Sheet Pile Geotechnical Cross-Section
Figure I-4	Proposed Spillway Crossing (Plan View)
Figure I-5	Proposed Spillway Crossing (Profile View)
Figure I-6	Proposed Spillway Crossing (Cross-Section View)

List of Appendices

Appendix A – Figures

Appendix B – Scoping Letter and Public Responses

Appendix C –EA Distribution List

Appendix D – Site Photographs

Appendix E – WDNR Endangered Resources Review (ERR) Request

Appendix F – Archaeological Survey Report and Website Search Information

Appendix G –Final Design Drawings for Dam Reconstruction

Appendix H – Affidavits of Publication

Appendix I – Draft EA Public Comment

Appendix J – Native American Tribal Correspondance

List of Figures (Appendix A)

Figure 1	Project Location Map
Figure 2	Site Map
Figure 3	Floodplain Map
Figure 4	Wetland Indicators Map - WDNR
Figure 5	Wetland Locations Map - Onsite Delineation
Figure 6	BRRTS Sites Near Project Site
Figure 7	Wetlands Disturbed During Construction

Glossary of Acronyms

AHI	Architectural History Inventory
AST	Aboveground Storage Tank
bgs	Below Ground Surface
BMPs	Best Management Practices
BRRTS	Bureau of Remediation and Redevelopment Tracking System
cfs	Cubic Feet Per Second
DOA	Department of Administration
DSF	Division of State Facilities
DSPS	Department of Safety and Professional Services
EA	Environmental Assessment
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
LUST	Leaking Underground Storage Tank
MSL	Mean Sea Level
NRCS	Natural Resources Conservation Services
SHWIMS	Solid and Hazardous Waste Information System
SOTW	SHWIMS on the Web
SF	Square Feet
USGS	United States Geologic Survey
USDA	United States Department of Agriculture
UST	Underground Storage Tank
WDNR	Wisconsin Department of Natural Resources
WEPA	Wisconsin Environmental Policy Act
WHI	Wisconsin Historical Inventory

Introduction

General

The State of Wisconsin Department of Administration's (DOA) Division of State Facilities (DSF) retained Ayres Associates to prepare an Environmental Assessment (EA) for the proposed Dam Reconstruction at Straight Lake State Park near Luck, Wisconsin. Refer to Appendix A, Figures 1 and 2 for the project location and site map of the proposed project. The EA is prepared in accordance with the Wisconsin Environmental Policy Act (WEPA), sec. 1.11 Wisconsin statutes, and Wisconsin Administrative Code Chapter NR 150. The purpose of the EA is to identify potential positive and negative impacts of the project on the physical, biological, social, historic, and economic environments.

Project Summary

Straight Lake State Park and Straight Lake Wildlife Area are contiguous properties located in Polk County, Wisconsin. They are owned and managed by the Wisconsin Department of Natural Resources (WDNR). The properties are also located within the Ceded Territory recognized by Lac Courte Oreilles Indians v. State of Wis., 775 F. Supp. 321 (W.D. Wis. 1991). The properties are situated about 70 miles northwest of Eau Claire, WI, near the Town of Luck. The region surrounding Straight Lake State Park and Straight Lake Wildlife Area is primarily rural with an abundance of forests, farms, and scattered rural residential development. State Highways 48 and 35 run nearby, providing easy access from urban centers in western Wisconsin and the Minneapolis/St. Paul region of Minnesota.

Existing lake levels in Straight Lake are dependent on a small, earthen dam approximately 360 feet long by 5.7 feet high on the eastern shoreline of Straight Lake. Constructed in the 1880's during the Wisconsin logging era, the dam is now out of compliance with Wisconsin Chapter NR 333, which governs dam design and construction for dams having a structural height of more than 6 feet and a maximum storage capacity of 50 acre-feet. Removing this dam is not a desirable option, as water levels on the lake would be adversely affected and would impact aquatic and shoreline habitat in Straight Lake. This EA covers the proposed reconstruction of the existing earthen dam, which includes installation of a 375 foot sheet pile core reinforcement, approximately 20 feet offset (downstream) of the existing dam.

EA Process

The Wisconsin Environmental Policy Act (WEPA) compliance process began in November 2011 with authorization by the DSF to prepare an Environmental Assessment (EA). The EA team consists of representatives of DSF, WDNR, and Ayres Associates as both the design and EA contractor.

Scoping Letter

A scoping letter to solicit input on potential impacts of the project was submitted to potentially interested parties on November 30, 2011. A copy of the scoping letter and responses received is included as Appendix B.

EA

Based on input from the EA team, and the scoping process, Ayres Associates prepared the EA. A public notice of availability was provided in the *Inter-County Leader* on January 18, 2012, and the *Polk County Ledger* on January 19, 2012 to request public input prior to finalizing the EA. Affidavits of publishing from the above-listed newspapers are included in Appendix H. Copies of the EA were made available to the general public at Luck Public Library in Luck, Wisconsin, along with being electronically provided to the individual recipients listed in Appendix C. The EA was also made available online at:

www.ayresprojectinfo.com/StraightLakeDamEA

EA Public Review Period

The EA was made available on January 23, 2012, for a 15-day public review period. Interested parties were invited to submit comments on the adequacy of the EA. All comments for incorporation into the EA were directed to:

Dennis Johnson, PE
Ayres Associates
3433 Oakwood Hills Parkway
Eau Claire, WI54701
JohnsonD@ayresassociates.com

There was one comment received during the public comment period (included in Appendix I), which was supportive of the project.

The EA was submitted under separate cover by the WDNR to the St. Croix Chippewa Indians of Wisconsin, and Great Lakes Indian Fish and Wildlife Commission on February 1, 2012 for review and comment. Responses to the WDNR indicated that there are no issues with the proposed project. The letters submitted to both parties, and their responses are included as Appendix J.

Due to the nature of the comments received during the EA, and a preliminary finding of no significant impact (FONSI) for the project, the DSF and WDNR staff determined that a public meeting to discuss the findings of the DEIA was not necessary.

EA Approval

Based on the findings of the Draft EA and the quantity and magnitude of comments received during the public comment period, the decision of this Final EA is that requirements have been met, with a "FONSI." Pursuant to section NR 150.22(2)a. of the Wisconsin Administrative Code, the assessment of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action, and therefore the environmental impact statement process is not required prior to final action by the WDNR. The certification signed by the WDNR WEPA Compliance Evaluator is included in Section X of this document.

I. Description of Proposed Action

A. *Title of Proposal*

Straight Lake State Park – Dam Reconstruction

DSF Project # 10A4H

B. *Location*

This project is located on the eastern side of Straight Lake in the E ½ of Section 13, T36N, R17W, in the Town of Luck and the W ½ of Section 18, T36N, R16W, in the Town of Bone Lake in Polk County, Wisconsin. The project is located just north of the intersection of 270th Avenue and 120th Street.

C. *Project*

Purpose and Need (Objective, History, and Background)

Acquired in 2005, Straight Lake is one of the Wisconsin Department of Natural Resources (WDNR) newest properties. The property has a total area of approximately 2,850 acres and is split between state park and wildlife area. Use of the state park is restricted to non-motorized recreation and consists of hiking, fishing, rifle and muzzle loader deer hunting, snowshoeing, camping, picnicking, and group camping.

Constructed in 1880's during the Wisconsin logging era, the dam located on the eastern shoreline of Straight Lake is now out of compliance with Wisconsin Chapter NR 333 which governs dam design and construction for dams having a structural height of more than 6 feet and a maximum storage capacity of 50 acre-feet. Removing this dam is not a desirable option, as water levels on the lake would be adversely affected and would impact aquatic and shoreline habitat in Straight Lake.

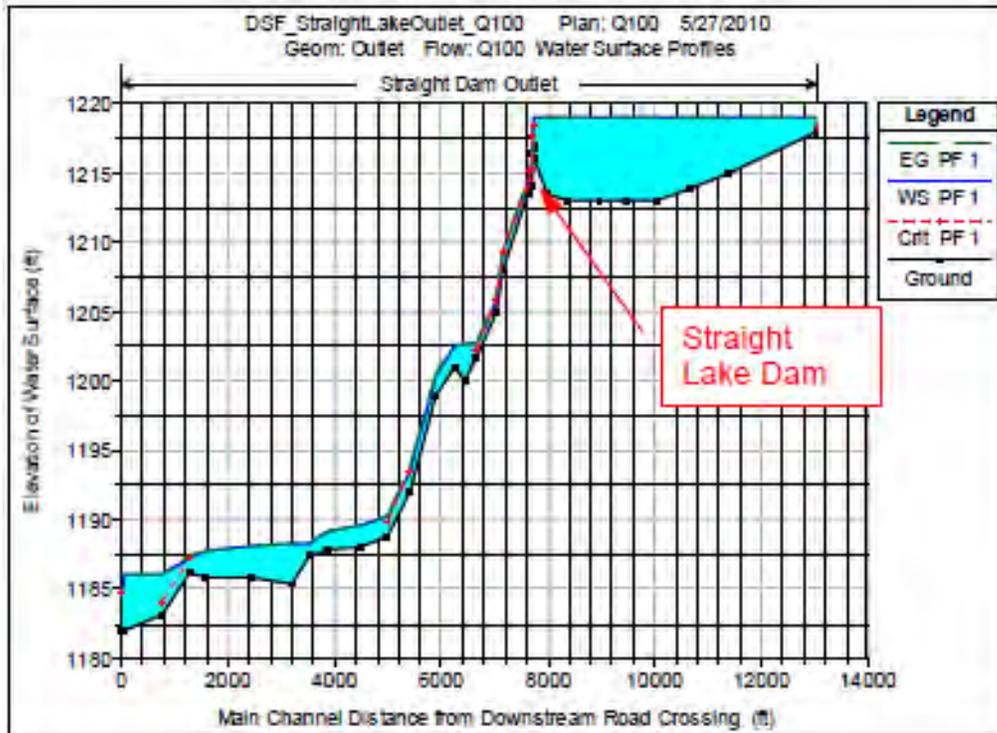
The Straight Lake State Park and Wildlife Area Master Plan, completed in 2009, noted that the Straight Lake Dam required future reconstruction and that “engineering studies and design work for the dam redevelopment need to be completed”.

In 2010, an architectural and engineering firm was hired by the DOA to develop a solution for rebuilding the dam. From the alternatives that were developed (See Section VIII), the option to repair the dam with a sheet-pile core approximately 20 feet away on the downstream side of the existing dam was selected in order to minimize the number of trees that would require removal during construction activities. Advantages of the sheet-pile dam construction include: 1) maintaining and/or exceeding the structural integrity of the existing dam, 2) preserving the rustic and wilderness appearance of sporadic tree groupings near the existing dam, 3) the ability to use curved contours and random placement of rocks during dam construction, and 4) minimizing impact to the existing Ice Age Trail, which will remain in its current location over the existing dam embankment. Replacement of this dam is essential to maintaining the major feature of Straight Lake State Park. The following paragraphs provide the design details and conceptual renderings of the proposed sheet-pile core reinforcement alternative.

Project Design Features

The elevation at the top of the existing embankment is 1220 feet, with a structural height of approximately 5.7 feet. The existing dam's storage is 600 acre-feet. Figure I-1 shows that the lake's current elevation and maximum pool elevation are primarily due to the man-made impoundment rather than a natural lake formation.

Figure I-1: Approximate 100-Year Flow Event Water Surface along Straight River



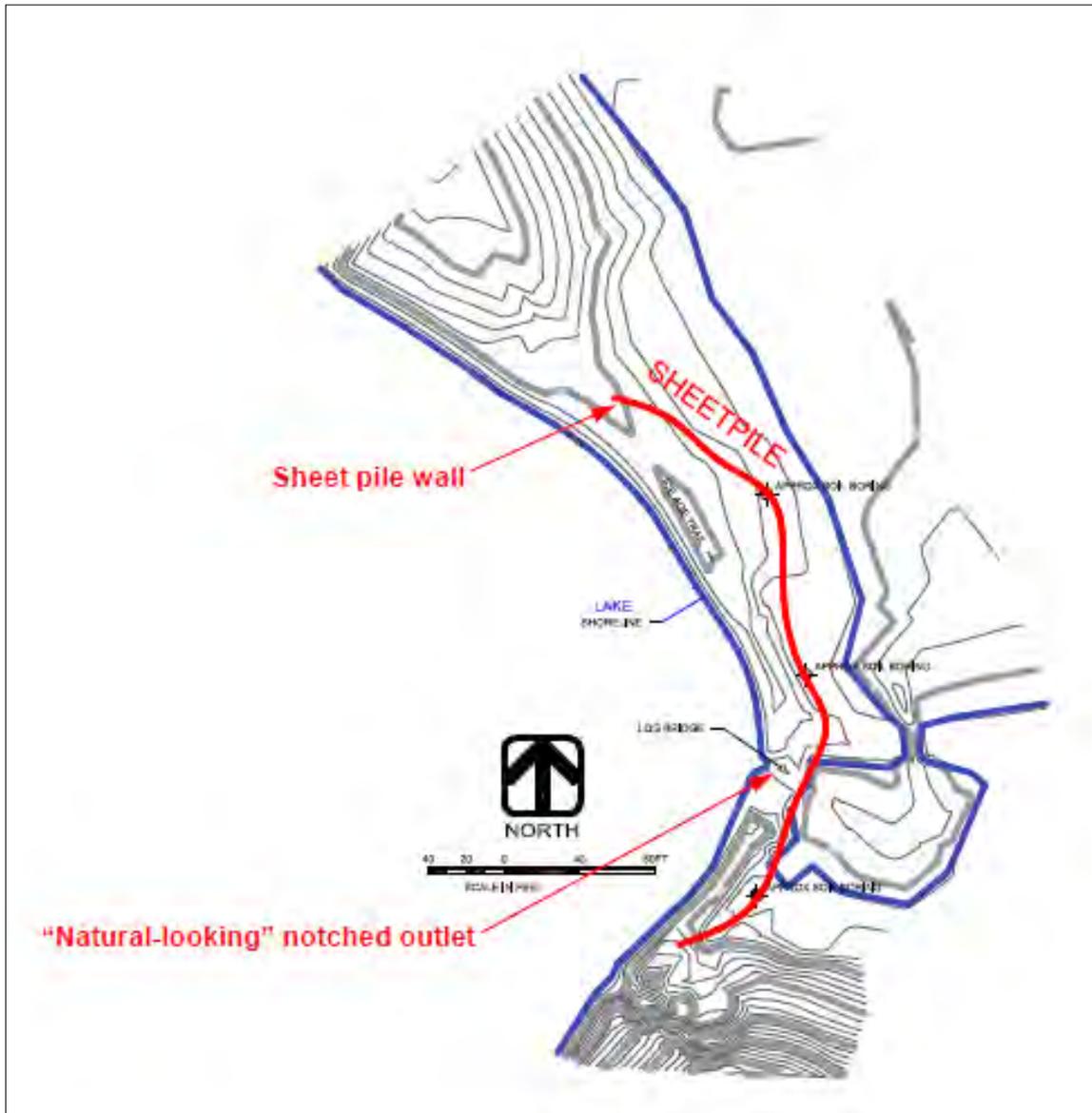
Source: Straight Lake State Park Dam Evaluation (Ayres Associates, December 2010)

Once constructed, the sheet pile core wall will have approximately 375 feet of crest length, at least one foot of freeboard, and an average depth of fourteen feet into the sub surface. The sheet pile will be constructed so that the top of sheet pile (elevation 1220 feet) is constant, and the top of grade will vary from 1220 to 1222 to blend into the surrounding topography, and generate the appearance of naturally occurring variations in elevation. The sheet pile is impervious to burrowing animals and will be constructed to maintain stability during a 500-year storm event even if erosion removed all supporting material down to elevation 1213 feet. This design approach also provides sufficient anchoring to account for high water level and wind loading criteria. In addition, the existing fisheries and wetland habitat would remain unaffected since the normal lake elevation will not change.

The 100-year storm event peak discharge into Straight Lake from the surrounding watershed is approximately 530 cubic feet per second (cfs). Flood water storage in Straight Lake and the adjoining wetlands reduces the peak discharge at the dam to 184 cfs. The lake level is expected to rise from a normal pool elevation of 1217.0 feet above Mean Sea Level (MSL) to approximately 1218.9 feet MSL during the 100-year storm event.

Figures I-2 and I-3 show the proposed sheet pile location within the embankment, and geotechnical cross-section, respectively.

Figure I-2: Proposed Sheet Pile Location



Source: Straight Lakes State Park Dam Evaluation (Ayres Associates, December 2010)

Following installation of the sheet pile core wall, soil and stones will be placed from the base of the sheet piling to just below the top of the sheet piling to protect against overtopping. The stone and sheet pile will then be buried with native soils, and trees will be planted to give the appearance of sporadic groupings. Rocks will be placed in seemingly random locations along the sheet pile core wall to maintain the rustic and natural appearance of the existing dam location.

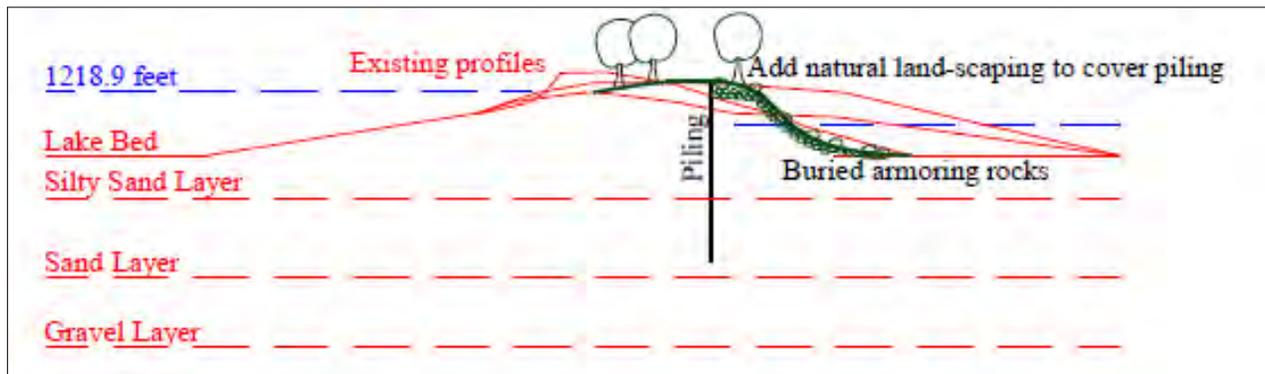
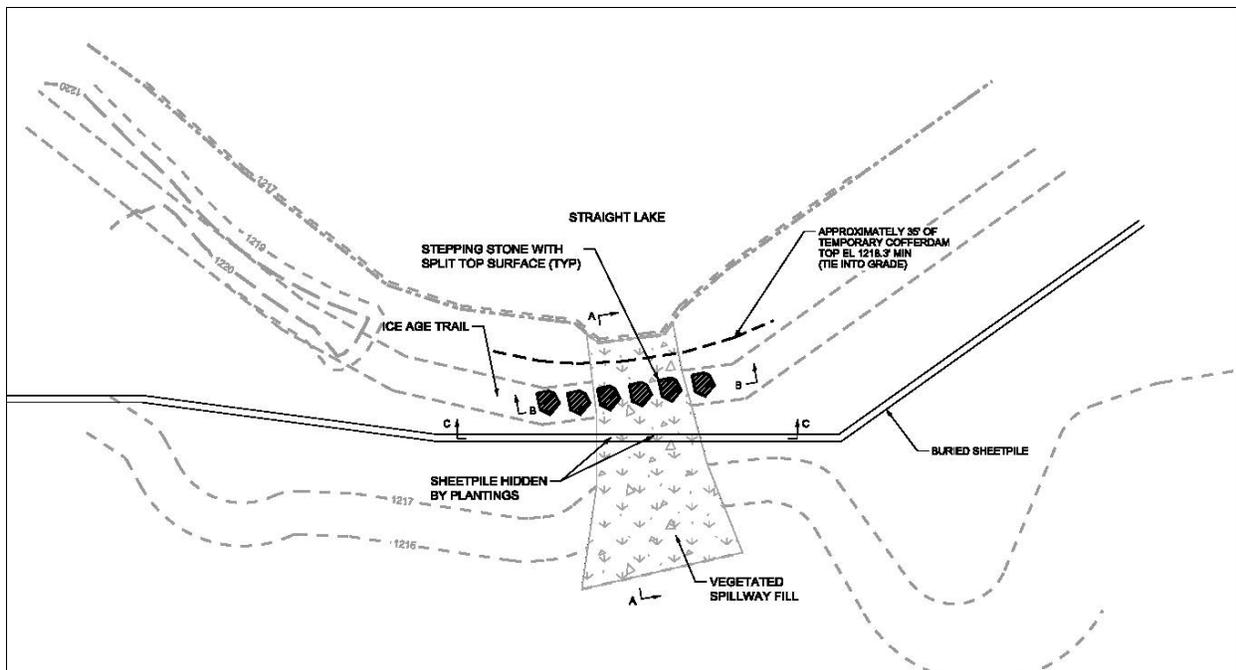


Figure I-3: Proposed Sheet Pile Geotechnical Cross-Section

Source: Straight Lake State Park Dam Evaluation (Ayres Associates, December 2010)

The outlets for the new dam will be notched into the sheet pile wall. A natural looking primary outlet will be constructed for conveyance of water during “normal” water levels in Straight Lake (approximately 1217 ft. MSL). A coffer dam will be installed on the upstream side of the existing embankment to provide a dry working area for constructing the outlet. A natural looking, smaller, secondary (diversionary) outlet will be constructed for conveyance of water during construction, and a 100-year flood event (at finished condition). Surface water levels in Straight Lake will not be affected during construction of the outlets. Refer to Figure I-4 for a plan view of the proposed spillway crossing (also refer to Appendix G, Sheet C602).

Figure I-4: Proposed Spillway Crossing (Plan View)



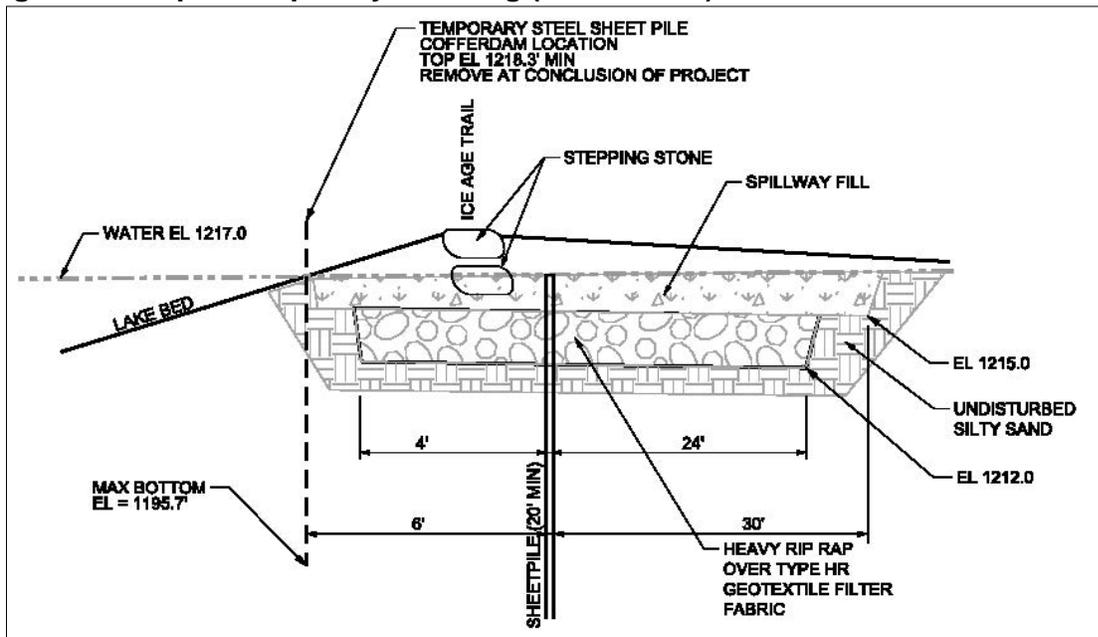
Source: Straight Lake State Park Dam Reconstruction, Sheet C602, Final (Ayres Associates, May 4, 2012)

The path of the existing Ice Age Trail will not be realigned as part of the project. To accommodate the new outlet(s) which will be constructed, natural stream crossings will be provided which have a dry footpath during normal water levels. Refer to Figures I-5 and I-6 below for plan and section views of the proposed spillway crossing(s). During

flood events the stepping stone crossings would have to be closed. Characteristics of the footpath design are as follows.

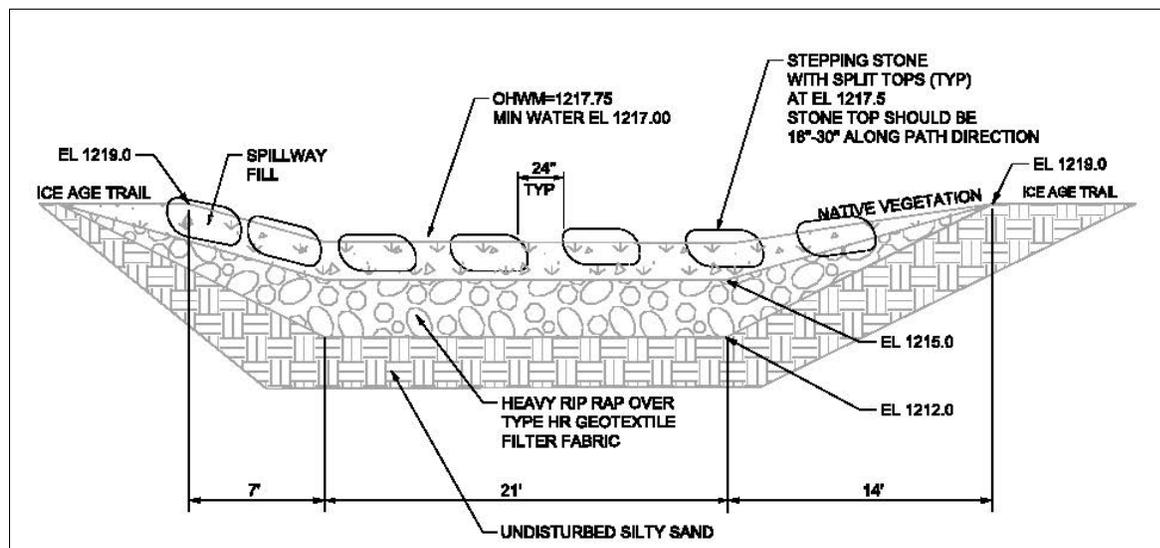
- No footpath rocks within the channel will be higher than the crest of embankment. The footpath must cross the channel downstream of the crest and the rocks cannot be so high that they function as the dam's crest themselves.
- Spacing between footpath stones will be approximately 12 to 18 inches to allow the base flow to pass without wetting the rock's upper surfaces. Constant wetting of the upper surfaces would encourage slippery moss to grow, therefore the upper rock faces will ideally be moss-free and dry for most of the year.
- Footpath stones will be of sufficient mass such that they do not move downstream during annual ice breakup and spring flooding. Rock sizes will be at least 24 inches in horizontal diameter, based on initial design estimates. Vertically, the rocks will tie into the sub-grade rocks.
- Sub-grade rocks will line the channel up to the 100-year flood elevation, with a minimum diameter of 11-inches at the 30 percent passing grain size. Subgrade rocks will be a minimum of one-foot thick over the entire length of the channel. A two-foot thick layer will be placed at start and end of the spillway for a total of fourteen feet of channel length.
- Soil will be placed over the one-foot thick layer of sub-grade rocks to allow vegetation to naturally soften the channel edges. The two-foot thick layer of sub-grade rocks will not be covered by soil. Trees will be planted sufficiently far from the channel such that they cannot fall into the channel if over toppled.

Figure I-5: Proposed Spillway Crossing (Profile View)



Source: Straight Lakes State Park Dam Reconstruction, Sheet C602, Final (Ayres Associates, May 4, 2012)

Figure I-6: Proposed Spillway Crossing (Cross-Section View)



Source: Straight Lake State Park Dam Reconstruction, Sheet C602, Final (Ayres Associates, May 4, 2012)

The intention during construction is to provide a stable stream crossing as aesthetically similar to the Ice Age Trail as possible.

D. Estimated Cost and Funding Source

The estimated total project cost is \$379,500. This amount will be funded using stewardship borrowing.

E. Project Schedule

The anticipated project schedule calls for the start of construction in September 2012, with final completion targeted for December 2012.

A/E Selection	November 2011
Bid Date	May 2012
Start of Construction	September 2012
Substantial Completion	December 2012

II. Existing Environment

A. *Physical*

Land Use

Land ownership surrounding Straight Lake State Park is a mix of 1) rural residential / recreation land; and 2) agricultural parcels ranging in size from 2.5 to 200 acres. The housing density of the sections (1 square mile) surrounding Straight Lake State Park, at approximately 6 dwelling units per square mile, is significantly lower than the Polk County average of 23 per square mile.

Most of the surrounding area's land cover is wooded uplands and lowlands with approximately 30% of the land cleared for agricultural use as field crops and some row crops. The surrounding area farms have also been divided and sold to others for year-round homes or to out-of-state residents as second or seasonal homes, future retirement homes or recreation land. An 80-acre parcel abutting the northwest side of the Straight Lake State Park property is owned by Camp Forest Springs, which operates the Oak Forest Center as an adult retreat facility.

The eastern shore of Straight Lake is undeveloped and exhibits diverse habitats. A mix of wooded areas including conifers and swamp hardwoods are present near the project site. In addition, there are several types of mapped wetlands within and/or surrounding the proposed project area.

Primary recreational uses of the eastern shoreline are fishing, hunting, bird watching, and hiking.

Refer to Appendix D for photographs of site features of the proposed construction site and adjacent areas.

Topography

The topography in the project construction area is relatively flat as the existing dam is present in the low-point/flow path of the Straight River basin. The lake surface elevation is approximately 1217 ft. above MSL, and water elevation on the downstream side of the spillway is approximately 1215 ft. MSL.

Topography in the area immediately surrounding the construction area varies. The area high point 750 ft. to the southeast of the dam is approximately 1260 ft. MSL (0-6 percent slope) along the hiking trail, and construction access route. The high point 1,100 ft. to the northeast of the dam is approximately 1320 ft. MSL (0-10 percent slope).

Soils

Soils in the project area are mapped on United States Department of Agriculture, Natural Resources Conservation Services (NRCS) soil survey maps as Fluvaquents, wet (Fe) which has a typical setting in floodplains and toe slopes. Soils in upland areas near of the dam area are mapped as Chetek sandy loam, 12 to 20 percent slopes, eroded

(ChD2), which has a typical setting in outwash plains and stream terraces on shoulders and back slopes of rising topography.

On April 10, 2010, three soil borings were advanced to a depth of 25 feet below ground surface (bgs) at the existing dam location. Soil boring locations are shown in Figure 1-2. The generalized soil profile indicates that soil in the area consists of glacial till overlying outwash with native clay and silt soils of medium to stiff consistency, and native sand and gravel soils ranging from loose to very dense relative density borings (RVT, May 2010).

Utilities

Power lines are present which run parallel to the existing foot path towards the existing dam area. There are three locations which the overhead power lines cross the footpath between the access point on the 120th Street cul-de-sac, and the construction area at the existing dam. The overhead power lines will be de-energized and removed prior to beginning the project.

Stormwater Control

No stormwater control devices are in place, or servicing the proposed project site. Stormwater naturally drains to low areas through sheet flow without any manmade channelizing or pipe devices.

Surface Water

Straight Lake is a shallow 107 acre undeveloped drainage lake with a maximum depth of 12 feet. The lake serves as the headwaters for the Straight River which exits the eastern portion of Straight Lake and flows eastwardly. Rainbow Lake is a small landlocked seepage lake located approximately 0.25 miles southeast of Straight Lake and has a maximum depth of 17 feet. A 2005 fisheries survey was conducted by the WDNR for each of the surface water bodies with the following results:

Straight Lake

Largemouth bass and Northern pike were the most common gamefish collected. Bluegills were the most common panfish along with Yellow perch and pumpkinseed. Other fish present were fathead minnow, black bullhead, bluntnose minnow, white sucker, golden shiner and central mudminnow.

Rainbow Lake

Black crappie were the only game or panfish collected. Based on the survey results, it is likely that fish winterkill conditions occur on a frequent basis.

Straight River

Sampling of the Straight River indicates that the majority of fish are warm water minnows, specifically, creek chub, black nose dace, northern red bellied dace, white sucker, common shiner, brassy minnow, fathead minnow, golden shiner and blacknose dace.

Wetlands

There are two wetlands types currently mapped by the WDNR, near the project construction site. The wetland types are summarized below.

Wetland ID:	49423693585
Current Wetland Code:	S6H
Wetland Class:	Scrub/shrub
Subclass:	Broad-leaved evergreen
Hydrologic Modifier:	Standing water, Palustrine

Wetland ID:	49423693632
Current Wetland Code:	W0H
Wetland Class:	Open Water
Subclass:	Subclass unknown
Hydrologic Modifier:	Standing water, Palustrine

Refer to Appendix A, Figure 3 for the Wetland and Wetland Indicators map for the area near the project site.

Field activities were also conducted in November 2011 to identify potential wetland areas near the project site. Results of the field activities indicated four potential wetland areas near the proposed project site, and in close proximity to the proposed route for construction equipment to the project site. Wetland areas identified near the project site are summarized below.

Wetland Area 1

Wetland 1 is a shallow marsh wetland that is present along the edges of Rainbow Lake near the project site. The western end of Rainbow Lake is located approximately 1200 feet northeast of the intersection of 270th Avenue and 120th Street. Wetland locations are shown in Appendix A, Figure 5.

Wetland 1 is vegetated with hummock sedge, spike-rush, wool-grass, giant goldenrod, rattlesnake manna grass, and bluejoint grass. The upland adjacent to Wetland 1 is dominated by Kentucky bluegrass, red clover, and red pine. The upland observation point for Wetland 1 did not meet criteria for wetland vegetation, hydrology, or soil. The unnamed lake has relatively steep sides, and the upland surrounding the lake is significantly upslope from the wetland.

Wetland Area 2

Wetland 2 is a small wet meadow wetland in a closed depression approximately 60 feet northwest of the northwestern end of the unnamed lake on the project site. Wetland 2 is dominated by hummock sedge, and the vegetation met hydrophytic vegetation criteria. The upland observation point associated with Wetland 2 is vegetated with Pennsylvania sedge, wood fern, and red oak, which did not meet the criteria for hydrophytic

vegetation. The upland adjacent to Wetland 2 did not meet any wetland hydrology or hydric soil indicators.

Wetland Area 3

Wetland 3 is a riparian forested wetland on the north and south sides of the Straight River on the east end of Straight Lake. This wetland is dominated by bluejoint grass, reed canary grass, cattail, hummock sedge, and tag alder. The upland adjacent to Wetland 3 is dominated by bracken fern, Pennsylvania sedge, red oak, and red pine.

Wetland Area 4

Wetland 4 overall is the wet meadow and bog wetland at the perimeter of Straight Lake. See Appendix A for the approximate locations of the different wetland types. The wetland observation points for Wetland 4 were in the wet meadow portions of the wetland and were dominated by reed canary grass, rattlesnake manna grass, lake sedge, and tag alder. The wet meadow portions of the wetland occurred at the interface of the upland and open water at Straight Lake's shore. The bog portion of Wetland 4 is a floating mat of sphagnum moss just offshore of the eastern end of Straight Lake. Due to the water depth of Straight Lake, this area was inaccessible during the site visit and vegetation observations were made from shore. The bog area appeared to be dominated by sphagnum moss and tamarack, with other bog plant species likely present. The upland adjacent to Wetland 4 is dominated by bracken fern, Pennsylvania sedge, red oak, and yellow birch.

Refer to Figure 5 for the areas in the vicinity of the proposed construction area which were identified during the field activities. These areas will be verified during the spring growing season, as the initial site visits were conducted when the vegetation was dormant.

Flood Plains

According to Federal Emergency Management Agency (FEMA) Flood Plain maps, the project site is located within a "Zone A" high risk flood plain with a 1% annual chance of flooding and a 26% chance of flooding every thirty years

Refer to Appendix A, Figure 4 for the Floodplain Map for the geographical area near the project site.

Groundwater

On April 10, 2010, three soil borings were advanced to a depth of 25 feet below ground surface (bgs) at the existing dam location. Groundwater was encounter between 2.0 and 2.5 feet bgs in each of the three borings (RVT, May 2010).

Air

Chapter NR 400 of the Wisconsin Administrative Code regulates air quality for new construction sites. Contaminants regulated by this chapter are the "criteria pollutants", which include particulate matter, sulfur dioxide, organic compounds, nitrous oxides, and

carbon monoxide. Hazardous air pollutants and visible emissions are also regulated. If an ambient monitor measures criteria pollutant concentrations or dispersion modeling indicates concentrations within the National Ambient Air Quality Standards (NAAQS), the region is designated as “an attainment area” for that pollutant. The nearest air monitoring station in proximity to the project site is located in Eau Claire, Wisconsin, which monitors the air quality of the county on regular intervals. All monitored pollutant concentrations from that monitoring station are currently within ambient air quality standards. The air quality at that monitoring station is “good”, according to monitoring station data provided on December 30, 2011.

Environmental Contamination

Standard environmental databases were reviewed for potential environmental concerns within the project site. Findings of the review are discussed in the following paragraphs.

BRRTS

The Wisconsin Department of Natural Resources Bureau of Remediation and Redevelopment Tracking System (BRRTS) data base for the subject property and surrounding area was searched on December 30, 2011. There are no remediation sites listed within a 1-mile radius of the project site.

Refer to Appendix A, Figure 6, for the BRRTs Map which indicates registered contaminated sites for the geographical area near the project site.

SHWIMS (Solid and Hazardous Waste Information System)

SHWIMS on the Web (SOTW) provides access to information on sites, and facilities operating at sites, that are regulated by the Wisconsin DNR Waste Management program. Activities that occur at Facilities include landfill operation, waste transportation, hazardous waste generation, wood burning, waste processing, sharps collection and many more. SHWIMS was searched for sites listed as Superfund sites and generators of hazardous/toxic waste on December 30, 2011. No sites were identified within 1-mile of the project area.

Registered Storage Tanks

The Wisconsin Department of Safety and Professional Services (DSPS) database was searched for sites with registered above-ground storage tanks (ASTs) and/or underground storage tanks (USTs) on December 30, 2011, (the DSPS online database was last updated in February 2010). There are no known USTs or ASTs currently located within 1-mile of the proposed project site.

B. Biological

An(ERR Log #11-501) request was submitted to the Wisconsin Department of Natural Resources on November 23, 2011, for information on threatened, endangered, and special concern species that may be in the general area or impacted by the project. A response was received from the WDNR on January 3, 2012. According to WDNR and

the U.S. Fish and Wildlife Service, there may be threatened or endangered flora and fauna species that are located within or around the project area. General provisions/measures as described by the Endangered Resources Review (ERR) response for the protection of flora, fauna, and High Quality Examples of Natural Communities are provided below.

1. Flora

According to the ERR response, although there is a protected flora species recorded within the vicinity of the project area. It is an older record and suitable habitat no longer appears present. Therefore, no impacts are anticipated.

2. Fauna

Due to the proximity of the project site to Straight Lake and surrounding forested and wetland areas, birds, mammals, insects, reptiles, and amphibians may frequent the project site. The use of the site varies between species as some may be foraging for food or locating spent scraps from humans, and others may be using the area surrounding the project site for nesting. Evidence and sightings of deer, raccoons, squirrels and birds were noted within the project site boundaries during the site visit. Although these were the animal species documented on the project site, other species such as fox, hawks, opossum, turtles, bats, and snakes, among others, are expected to occur or have been documented in or around the project site.

Additional information listed in the ERR Response by the WDNR, regarding fauna potentially present at the project site are summarized below.

Birds

According to the ERR review response there are actions that will need to be taken to comply with state and/or federal endangered species laws. Protected bird species have been recently confirmed nesting near the project area. Due to the high level of disturbance expected in the path of machinery and surrounding areas of the dam itself, timeline restrictions must be observed to avoid potential impacts. *To avoid the nesting season of all the species, all construction activity must occur between August 15th and March 15th, and ideally between October 1st and March 15th.*

Fish

There were no threatened, endangered or protected fish species in the vicinity of the project site identified by the ERR response from the WDNR.

3. High-quality Examples of Natural Communities at the Site

According to WDNR and the U.S. Fish and Wildlife Service, there may be high-quality examples of natural communities that are located within or around the project area. These include Southern dry-mesic forest; Lake-deep, hard, drainage; Tamarac (poor) swamp; Northern sedge meadow; Alder thicket; Ephemeral pond; and Hardwood swamp.

According to the ERR response, “some or all of the above listed Natural Communities will likely be impacted by this project, but the dam reconstruction is for the conservation purpose of maintaining current lake levels, which is important for many plant and animal species. The WDNR recommends that the construction footprint be minimized to the greatest extent possible to avoid undue impacts to these unique communities”.

C. Social

Land ownership surrounding the Straight Lake State Park is a mix of 1) rural residential / recreation land; and 2) agricultural parcels ranging in size from 2.5 to 200 acres. The housing density of the sections (1 square mile) surrounding Straight Lake State Park, at approximately 6 dwelling units per square mile, is significantly lower than the Polk County average of 23 per square mile.

The WDNR acquired Straight Lake in 2005 along with the existing dam at the east end of the lake where the Straight River exits. Local historical records indicate that the logging dam was built in the 1880's, and that the dam likely washed out in the 1920's. Sometime in the 1950's or 1960's, a local farmer dumped field rock in the breach of the dam.

Past owners of the property have been the Boy Scouts of America who used it as a camp. The Boy Scouts of America sold it to a developer who started to build a golf-equestrian community. When this development failed, the Brunkow family purchased the property for utilization in a timber business. The Brunkow family sold it to the State of Wisconsin in 2005.

Current use on the state park is restricted to non-motorized recreation and consists of hiking, fishing, rifle and muzzle loader deer hunting and snowshoeing.

Due to the relatively early stages of development, and lack of infrastructure at the property, active records are not maintained by the WDNR to establish the annual number of visitors to the park.

Given the lack of data regarding the park, it is assumed that both local residents from Polk County and persons from throughout Wisconsin are considered typical visitors to the property. Table 2-1 below provides data regarding residents of both Polk County and the State of Wisconsin.

Table 2-1 –Population Data for Polk County and the State of Wisconsin

Category	Polk County	Wisconsin
Population, 2010	44,205	5,686,986
Population, percent change, 2000 to 2010	7.0%	6.0%
Population, 2000	41,319	5,363,675
Persons under 5 years, percent, 2010	6.1%	6.3%
Persons under 18 years, percent, 2010	23.8%	23.6%
Persons 65 years and over, percent, 2010	16.0%	13.7%
Female persons, percent, 2010	49.8%	50.4%
White persons, percent, 2010	96.8%	86.2%

Black persons, percent, 2010	0.2%	6.3%
American Indian and Alaska Native persons, percent, 2010	1.0%	1.0%
Asian persons, percent, 2010	0.4%	2.3%
Native Hawaiian and Other Pacific Islander, percent, 2010	<0.5%	<0.5%
Persons reporting two or more races, percent, 2010	1.0%	1.8%
Persons of Hispanic or Latino origin, percent, 2010	1.5%	5.9%
White persons not Hispanic, percent, 2010	96.1%	83.3%
Living in same house 1 year & over, 2005-2009	90.4%	84.7%
Foreign born persons, percent, 2005-2009	1.3%	4.4%
Language other than English spoken at home, percent age 5+, 2005-2009	2.8%	8.2%
High school graduates, percent of persons age 25+, 2005-2009	91.6%	89.0%

Source U.S. Census Bureau: State and County QuickFacts (Updated Friday, 23 Dec 2011)

Economic

There is no existing economic environment at the project site, as it is currently undeveloped with no active fee collection for use, and there are no staff or workers dedicated to the site.

Table 2-2 provides employment and income data for residents of Polk County and Wisconsin as of 2010. Polk County resident per capita income was \$24,674 compared to \$26,447 for State of Wisconsin residents, respectively.

Table 2-2 – Employment and Income Data for Polk County and State of Wisconsin

Category	Polk County	Wisconsin
Per capita money income in past 12 months (2009 dollars) 2005-2009	\$24,674	\$26,447
Median household income, 2009	\$47,782	\$49,994
Persons below poverty level, percent, 2009	9.9%	12.4%
Private nonfarm establishments, 2009	1,120	140,861
Private nonfarm employment, 2009	12,445	2,355,879
Private nonfarm employment, percent change 2000-2009	6.0%	-2.4%
Non-employer establishments, 2009	3,238	310,178
Total number of firms, 2007	4,606	433,797
Black-owned firms, percent, 2007	<100	2.6%
American Indian- and Alaska Native-owned firms, percent, 2007	<100	0.6%
Asian-owned firms, percent, 2007	1.0%	1.6%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	<100	No data available
Hispanic-owned firms, percent, 2007	<100	1.3%
Women-owned firms, percent, 2007	27.3%	25.9%
Manufacturers shipments, 2007 (\$1000)	958,520	163,563,195
Merchant wholesaler sales, 2007 (\$1000)	134,275	59,996,244
Retail sales, 2007 (\$1000)	423,199	72,283,321
Retail sales per capita, 2007	\$9,580	\$12,904
Accommodation and food services sales, 2007 (\$1000)	41,813	9,247,311
Building permits, 2010	91	10,864
Federal spending, 2009	\$276,888	\$52,557,003

Source U.S. Census Bureau: State and County Quick Facts (Updated Friday, 23Dec2011)

D. Other (archaeological, historical, etc.)

A request for review of potential archaeological and historic features or sites was submitted to the State Historic Preservation Offices (SHPO) on November 22, 2011. Response from SHPO on November 29, 2011, indicates that there are no historic properties that may be affected by the proposed project.

A search within the Wisconsin Architecture and History Inventory (WHI) was also conducted for the site as part of the EA process, and submitted with the SHPO review request. No records were found for the project location.

The SHPO review request and response, and the results of the WHI search are included in Appendix F.

III. Proposed Environmental Change

A. Manipulation of Terrestrial Resources

Site development for construction includes removal of brush, trees and grassy vegetation; selective excavation of existing soils and rocks near the existing dam; percussion driving of sheet piling into the subsurface; and landscaping on the project site. It is expected that minimal soil will be removed from the site, and excavated materials will be used where possible to balance fill areas. Existing trees and brush will be selectively removed in order to maintain the current appearance as much as possible during construction. The mature White Pine trees to the south of the existing dam will be preserved and protected. Refer to Appendix G, Sheet C400 for the proposed tree protection plan.

The footpath which extends from the 120th Street(cul-de-sac) entrance on to the existing dam location will be sufficiently widened to allow construction vehicles to access the project area. This may involve selective tree cutting/removal, minor grading, and placement of gravel in low-lying muddy areas along the path leading to the existing dam.

Erosion control measures will be implemented in accordance with WDNRs technical standards for construction within and around the perimeter of the construction zone. The construction zone will be limited to the smallest possible size in order to minimize disruption of site soils.

The total footprint area of the proposed construction site for new the sheet pile core wall is 5420 square feet (0.12 acres).The total footprint area of the proposed temporary access road and staging area for construction equipment is 49,400 square feet (1.13 acres).Following completion of construction the access road and temporary staging area will be regraded and planted with native plant and grass species to establish vegetation.

B. Manipulation of Aquatic Resources

Wisconsin Administrative Code NR 151 includes performance standards for construction sites and post construction sites. The standards are intended to protect water quality by minimizing the amount of sediment and other non-point source pollutants that enter waterways. The standard regulations for construction site erosion control call for the limitation of sediment so that there is a reduction of 80 percent of the sediment load carried in runoff as compared to no sediment or erosion control measures.

Excavation is expected to be minimal; however, any materials removed during construction activities will be located within the construction zone limits. Excess materials will be removed from the site as soon as possible following completion of activities. A short-term increase in sediment runoff into the river is possible as it will take some time for vegetation to be established following construction.

However, erosion and siltation controls will be practiced while making improvements to the site. Best management practices (BMPs) meeting WDNR technical standards will be implemented during construction including silt fencing, sediment logs, and turbidity barriers. Refer to Appendix G for specific locations and details regarding placement of erosion and siltation controls. This will minimize the potential for sediment to enter Straight Lake and Straight River and protect fish habitat. Use of erosion control netting (also known as erosion control blankets, erosion control mats or erosion mesh netting) should be evaluated prior to use at the site as

implementation can have detrimental effects on local snake and other wildlife populations. Plastic netting without independent movement of strands can easily entrap snakes moving through the area, leading to dehydration, desiccation, and eventually mortality. Netting that contains biodegradable thread with the “leno” or “gauze” weave (contains strands that are able to move independently) appears to have the least impact on snakes.

Given the immediate proximity of wetland areas within the construction area there will be both temporary and permanent disturbance of wetlands. A summary is provided in Table 3-1 below:

Table 3-1 – Estimate of Wetland Areas to be disturbed during Construction

Type of Wetland Disturbance	Area	Description
Permanent	2,800 square feet (SF)	Downstream area of construction for sheetpile core wall and backfill.
Temporary	250 SF	Upstream area disturbed while constructing new spillway(s).
Temporary	2,200 SF	Downstream area utilized as a temporary access road. Swamp mats will be utilized to provide stability on the wetland area floor during transit of construction equipment from existing footpath to the construction area at the existing dam location.

Refer to Figure 7 for a depiction of the wetland areas to be disturbed during construction.

Construction of the new sheet pile core wall has been designed/modeled to maintain a maximum surface water elevation of 1218.9 ft. MSL which is consistent with the crest elevation (1219.1 ft. MSL) of the existing dam. The existing Straight Lake normal pool elevation (1217.0 feet MSL) will also be maintained by the new outlet structure.

C. Structures

The existing dam structure will not be impacted during construction. The installation of the sheet pile core wall downstream of the existing dam has been designed to maintain and/or supplement the integrity of the structure.

D. Other

Hazardous Materials

No historical dumping or hazardous materials have been reported in the general vicinity of the project site through database searches available. Based on current information, it is unlikely that hazardous materials exist within the site boundaries.

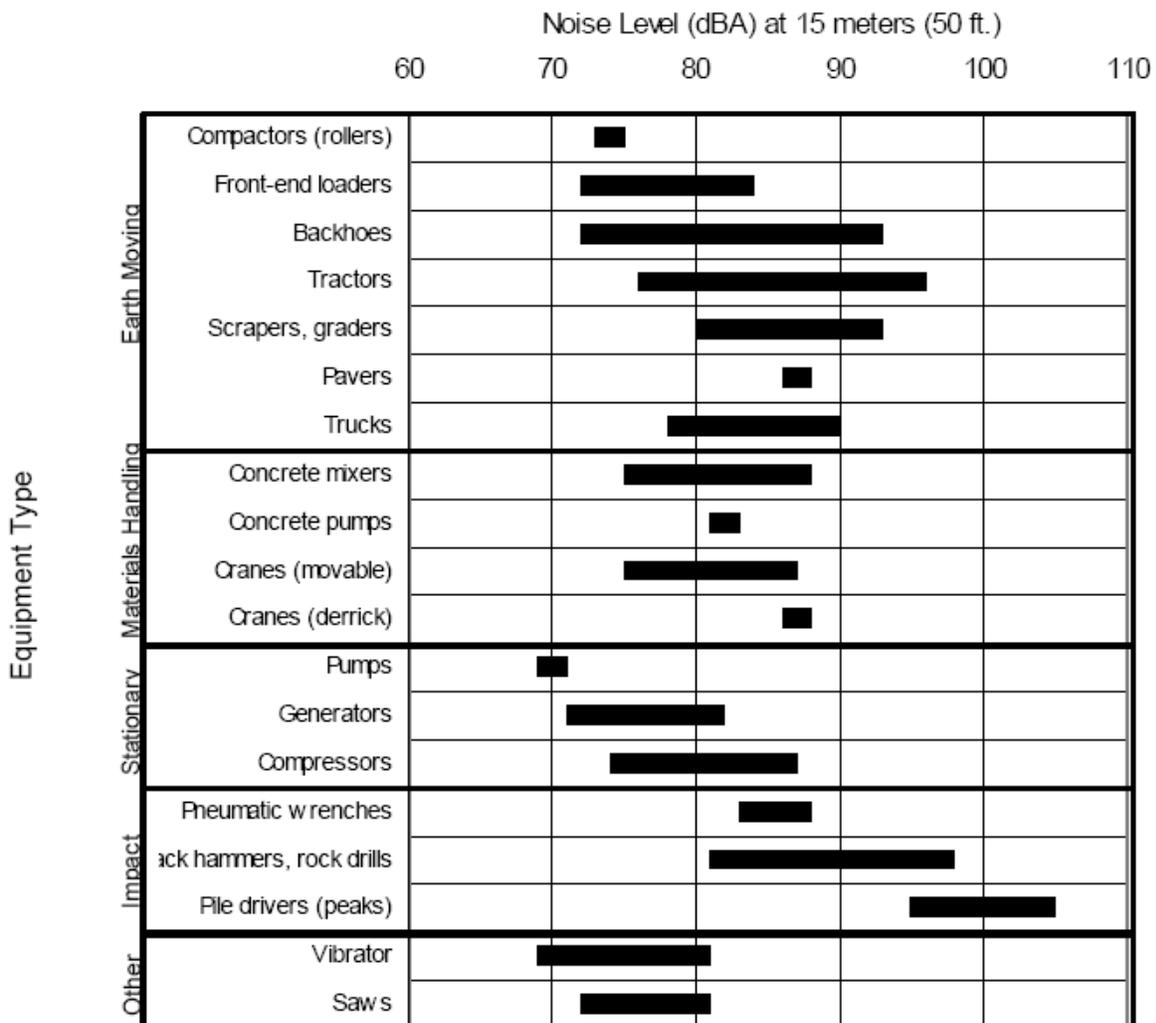
Utilities

The overhead power lines along the construction access route will be de-energized and removed prior to beginning the project. No other utilities are located in the vicinity of the project site.

Noise

Short-term noise impacts will occur during the construction period. Major construction elements that will produce elevated noise levels include equipment and material delivery, excavating, sheet pile driving, grading, and landscaping.

Anticipated noise will most directly impact wildlife near the location of construction, and those individuals utilizing the recreation areas of Straight Lake State Park (boaters, hikers, hunters, etc.).



Source: U.S. Report to the President and Congress on Noise, February 1972

The table above lists typical peak operating noise levels from construction equipment at a distance of 50 feet, grouping construction equipment by mobility and other operating characteristics. Earth moving equipment of limited size will be used for this project due to the site constraints. Residual noise levels in an outdoor residential setting are 44 decibels (dB) during the daytime, and 40 dB during the evening (U.S. Senate, February 1972).

On-going existing noise levels at the new dam structure will be consistent with existing levels, and will be dependent upon flow rate of water through the new spillway and use by the public.

Topography

Minor topographic changes will result from grading and surface disturbance due to excavation and construction activities. Grading around new construction will be kept to a minimum. The project will incorporate engineering controls to provide erosion control and stormwater pollution prevention methods. These practices will be carried out according to standards required by the WDNR. Best management practices will be used before and after construction, including silt fencing and erosion matting. These erosion control features will be inspected on a regular basis during construction to minimize rutting and erosion.

Minor changes in surface topography will result due to construction of the sheet pile core wall. Once constructed, the sheet pile core wall will have approximately 375 feet of crest length, with the top of sheet pile at a constant elevation of 1220 feet above MSL. The top of grade will vary in elevation from 1220 to 1222 to blend into the surrounding topography, and generate the appearance of natural undulations in the terrain. The natural variation in elevation of the existing dam embankment will not be modified as the sheet pile core wall is being constructed down gradient from the existing embankment. The exception to this is in the immediate location of the new spillway.

Traffic and Parking

Changes to traffic patterns will be limited to the duration of construction activities. An increase in traffic will occur due to vehicles accessing the site utilizing 270th Street from State Highway 35, or utilizing 120th Avenue from State Highway 48. Vehicles will park on-site during construction, in a manner which does not inhibit access to the park by visitors.

There will be no other environmental changes regarding traffic or parking as a result of the proposed project, as the project will not result in additional visitors to the site.

IV. Probable Adverse and Beneficial Impacts

A. Physical Impacts

Physical impacts for the proposed sheet pile core wall construction site will include selective tree removal, minor excavation and grading, construction of the sheet pile wall, landscaping, and removal of undergrowth in the vicinity of the project site. The area for soil disturbance will be minimized during construction and excavated materials will be used where possible to balance fill areas. With the exception of the natural spillway area(s) the construction site will return to the current condition and appearance through utilization and seemingly random placement of native materials. Physical changes to the site will not impact the existing natural setting of Straight Lake State Park nor the Ice Age Trail. The new sheet pile core wall will provide a beneficial impact to Straight Lake by maintaining and/or supplementing the structural integrity of the existing dam. When complete, the new sheet pile core wall will reduce the probability of dam failure, thereby protecting the physical setting of Straight Lake, which is a beneficial impact. In addition, the landscaping and stream crossing design is intended to blend with the surrounding natural environment to preserve the hiking experience along the Ice Age Trail.

Physical impacts along the construction access route will primarily consist of disturbance of soils, minor grading, selective tree removal, and increased surface area of the existing foot path (at finished condition). The proposed activities to prepare the construction access route will have minor physical short-term environmental impacts, and construction actions should not threaten water or soil quality provided that measures are taken to control erosion, including limiting site access and the size of equipment used. Environmental concerns are not expected to be encountered during soil grading and present little adverse or beneficial impacts to the site.

Noise impacts beyond short-term noise during construction periods at the project site are not anticipated as a result of this project. Following construction, vehicular traffic to the site is not anticipated to increase as a result of the project.

Short-term air impacts are expected from construction vehicle emissions. No long-term impacts to air quality are anticipated due to the project.

Construction traffic is not anticipated to have adverse physical impacts on roadways leading to the construction site (i.e. 120th Street and 270th Avenue) due to the current schedule for construction activities. Activities will not be conducted during the spring months when area roadways have historically experienced deterioration during construction events.

B. Biological Impacts

The long-term biological impacts as a result of the project include the loss of native grasses, scrub vegetation, wetlands, and some existing trees in order to accommodate the construction area, equipment staging area and vehicle access route. Construction of the new sheet pile core dam and temporary access route for construction will result in a short term disturbance of approximately 2,450 SF of wetland areas. The footprint of the new sheet pile core wall will result in the permanent disturbance of approximately 2,500 SF of wetland area immediately downstream of the existing dam area.

The removed vegetative features provide habitat for song birds and small mammals or other similar animals encountered in similar rural and natural environments. The grasses, trees, and wetland species requiring removal or temporary displacement for construction have been identified as potentially providing habitat for threatened and/or endangered species. As required in the ERR response letter, the construction activities will be conducted between August 15th and March 15th to minimize adverse impacts to potential nesting areas of protected bird species. Tree removal activities may have short-term effects on the terrestrial wildlife and avian habits within the localized project boundaries, but are not anticipated to greatly affect the Straight Lake State Park area, adjacent properties, or regional areas.

There are no anticipated short or long term impacts to dormant/hibernating herptiles or mammals as a result of percussive noise during sheet pile driving activities.

Swamp mats will be utilized in wetland areas to provide a relatively low-impact, temporary surface for transit of construction vehicles through wetland areas. Areas with trees, shrubs, grasses, and wetlands which are temporarily disturbed during construction will be re-vegetated with species that are native to the area.

Construction has the potential to allow the influx of soil sediments into Straight Lake, Straight River, and the surrounding riparian edges. If crushed rock is used for stabilization of the construction access route, the pH of waters may be affected by runoff into receiving waterbodies. The change in pH is anticipated to be negligible, to the point of being undetectable and well below the fluctuations allowed under NR 102.04 (4)(c) which states that the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum.

Mobilizing construction equipment will require some trimming or pruning of branches along construction access routes to allow the vehicles access to various areas of construction. If conducted appropriately, the health of the affected trees will not be altered. To avoid detrimental tree impacts, experienced personnel should be employed to conduct these activities.

C. Socioeconomic Impacts

1. Social

When construction is completed, the project will provide a long-term benefit to users of the park, through preservation of existing surface water levels in Straight Lake, as a result of increased structural stability of the existing dam. Preservation of the surface water level is a key aspect of maintaining Straight Lake as a resource for bird watching, hunting, fishing, hiking, and for people to enjoy the natural plant life and aesthetic beauty of the area.

Maintaining the water levels in Straight Lake is required for successful long-term implementation of the Master Plan developed in 2009 for the state park and wildlife area. As Straight Lake is the central amenity to the state park, impacts to the quality of the lake from decreased water levels (due to the potential failure of the existing dam) would adversely affect attendance at the Park, and implementation/utilization of aspects proposed in the Master Plan.

During construction, local traffic may be temporarily impacted. These impacts will be due to construction equipment, materials delivery, and minor increases in traffic volume from construction workers, and therefore, will be short lived. Care will be taken to limit these nuisances to the extent possible and to keep emergency access lanes clear. It is likely that there will be a short-term impact on pedestrian access to the construction site and through the area during the construction process. Pedestrians/hikers will be routed around construction areas and appropriate safety measures, including signage, will be in place as needed. Refer to Appendix G, Sheet C601, for the proposed hiking route signage to be posted for the Ice Age Trail.

An increase in noise during sheet pile driving is anticipated as part of this project, during construction activities. Noise may temporarily pose a nuisance to nearby residents, hikers on the Ice Age Trail and recreational users of the park.

The layout, elevation, and seemingly random placement of native materials during construction of the sheet pile core wall will minimize any adverse impacts to the appearance of the area for recreational users of the park, and hikers of the Ice Age Trail.

During construction, there is the potential for workers to be affected by the open hunting season allowed in the State Park; in particular the white tail deer rifle season. Given the long range capability of modern ammunition, special consideration for safety should be made to protect workers at the site. This could be accomplished by limiting hunting to areas of the park where a rifle shot cannot reach the construction zone, or by modifying the construction schedule to times when rifle use is not permitted. Consideration of the deer rifle season is not exclusive, and all hunting seasons and forms of firearms/weapons/ammunition allowed at the State Park should be considered for the safety of construction workers. Injuries and/or death of a construction worker is a potential significant social impact that will need to be controlled.

2. Economic

Beneficial economic impacts are both direct and indirect in nature. Short-term beneficial economic impacts include employment and retention of design, architectural, and construction team members. In addition, there will be a positive impact to the local and regional retail community resulting from purchase of food, lodging, fuel, equipment, and supplies during the construction phase.

Currently, there is a commitment of financial resources in the amount of \$379,500 that will be funded using stewardship borrowing. Based upon a January 2011 study titled "The Impact of Construction on the Wisconsin Economy" (C3, Jan. 2011), every \$1 spent directly on construction projects produces an overall economic impact of approximately \$1.92. Therefore, the commitment of \$379,500 may generate over \$728,000 in total economic impact. The same January 2011 study states that every \$1 million spent directly on construction projects generates about 17 jobs throughout the economy. Therefore, this project may generate over 6.4 full time positions during the course of construction.

Short-term expenses include costs for the design and construction of the structure(\$379,500). Long-term expenses will be incurred during for the inspection of the structure following flood events. As the new sheet pile core dam is classified as a “small dam” there are no requirements for periodic inspections.

Long-term beneficial economic impacts of the project include the minimization of potential revenue loss to the State of Wisconsin which could result from failure of the existing dam. The project will increase the structural integrity and lifespan of the dam, thereby protecting the water levels in Straight Lake which will attract fee paying visitors on a long-term basis.

D. Other (archaeological, historical, etc.)

Archaeological/Historic

A request for review of potential archaeological and historic features or sites was submitted to the SHPO on November 22, 2011. Response from SHPO on November 29, 2011, indicates that there are no historic properties that may be affected by the proposed project.

A search within the WHI was also conducted for the site as part of the EA process, and submitted with the SHPO review request. No records were found for the project area.

V. Probable Adverse Impacts That Cannot Be Avoided

An unavoidable impact of the proposed action is the commitment of energy, materials, and financial resources to design and construct the project. The approved budget for the project is \$379,500.

Adverse, unavoidable short-term impacts include noise and dust during construction. There will be some interference to foot traffic along the Ice Age Trail during construction of the sheet pile core wall, and along the existing footpath while the temporary construction equipment access route is being utilized. As a result, pedestrian/hiking traffic will need to be temporarily rerouted around construction activities for safety, which will result in some short-term inconveniences.

Long-term impacts would be the loss of some habitat for birds and small mammals that currently inhabit the areas in the immediate vicinity of the existing dam and along the temporary construction access route. These animals and birds would likely relocate to other natural areas in the vicinity of the project area. Construction activities will be conducted between August 15th and March 15th to minimize adverse impacts to potential nesting areas of protected bird species.

Noise impacts caused during the course of construction will be intermittent and short term in nature. Noise impacts will result from vehicular traffic entering and leaving the project site during the morning and evening when work shifts begin and end. Sheet pile driving activities will result in localized elevated decibel levels. There are no anticipated short or long term adverse impacts to dormant/hibernating herptiles or mammals as a result of percussive noise during sheet pile driving activities.

There will be a permanent disturbance of approximately 2,800 SF of delineated wetland areas downstream of the existing dam. The adverse impact to wetlands is directly attributed to the construction of the new sheet pile core wall, and cannot be avoided. These disturbances will not detract from the uses of Straight Lake as proposed in the Master Plan, which rely on a functional and stable dam structure. The need for wetland mitigation has not been determined to date, and will be finalized during the design and permitting phase for construction.

VI. Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

Short-term uses of the environment would be characterized as construction of the new sheet pile core dam and use of the project site by construction equipment and workers. As such, this short term construction provides a permanent long-term service and response to the need for a dam structure which is constructed according to modern design standards and current regulatory codes.

There will be short-term impacts to the environment during construction, which include increased noise levels, consumption of fuels and other building products, temporary rerouting of hikers utilizing the Ice Age Trail, and temporary disturbance of wetlands. These impacts will not exist in the long-term when the sheet pile core dam is complete and are required for long-term preservation of the ecosystem which is dependent upon the surface water levels in Straight Lake.

Short-term environmental impacts will occur in the immediate vicinity of construction as a result of wetland loss and disturbance of vegetation and trees. These impacts are not anticipated adversely affect the area on either a short-term or long-term basis, as there will be no significant net loss of biological productivity.

VII. Irreversible or Irretrievable Commitments of Resources if Action is Implemented

A. Financial

The estimated total project cost is \$379,500 that will be funded using stewardship borrowing. Long-term O&M costs are not anticipated for the new structure. If inspections or repairs are required in the future due to flooding or erosional scouring, these costs would be the responsibility of the owner of the structure. Anticipated long-term costs are not available for these events.

B. Energy

There will be a commitment of energy resources to construct the project including fossil fuel consumption used for sheet pile driving, grading, soil/rock placement, and site restoration. Energy that will irreversibly be consumed includes fuel and electricity used to run construction equipment and to operate construction material manufacturing plants and quarries.

There will be no long-term consumption of energy as a result of the project.

C. Construction Materials

Construction of the structure requires irretrievable commitment of building and furnishing materials. Potential irretrievable materials include fuel, steel, native soils, and native rocks. These resources are not scarce; thus, depletion of local, state or global supplies is not probable.

D. Land Area

This action of constructing the new sheet pile core dam is reversible as the new structure could be deconstructed and the land could be restored to a pre-construction setting.

E. Archaeological and Historic Features or Sites

A request for review of potential archaeological and historic features or sites was submitted to the SHPO on November 22, 2011. Response from SHPO on November 29, 2011, indicates that there are no historic properties that may be affected by the proposed project.

A search within the WHI was also conducted for the site as part of the EA process, and submitted with the SHPO review request. No records were found for the project area.

VIII. Alternatives

The DSF conducted analysis of five alternatives for construction at the existing dam location to bring the dam into compliance with NR333. These alternatives are described in detail in the December 2010 Dam Evaluation Report for Straight Lake State Park. The following paragraphs provide a summary description of each of the alternatives, and rationale for elimination or selection of each.

Alternative A–Not Selected – Raise the existing toe elevation to 1214 feet and reduce the structural height to 5.0 feet in an effort to keep the regulatory classification as a “small dam.” Some embankment slopes would be graded to 3H:1V, and the outlet channel and spillway would be armored as natural appearing as possible. This option would allow woody vegetation to remain on the embankment in non-critical areas as stipulated for Alternative B. The WDNR may be required to obtain a water resources permit for grading and riprap and a “new dam” permit may also be required. A probable opinion of construction cost for these tasks was estimated as \$33,000. This alternative was not selected due to number of trees which would require removal at the existing dam location during construction.

Alternative B– Not Selected – Add additional mass to the embankment to accommodate for root balls and burrowing animals. A restricted “treeless” area would be maintained, and inspections of the crest and critical seepage areas would be required. Beyond the initial WDNR approval for this “treeless” concept, a dam failure analysis and permits (dam, riprap, grading, and likely wetland) would likely be required for this alternative. The WDNR may be required to conduct additional stabilization analyses to prove validity of the “treeless” core concept. The minimum probable opinion of construction cost was estimated as \$68,000, but the new crest could be made more aesthetic (curved channel, undular surface, irregular edges, vegetative concealment, etc.) at a higher cost. This alternative was not selected due to the greater area of wetlands that would be permanently impacted during construction.

Alternative C– Selected Alternative – Add a sheet pile core wall to the existing dam and preserve embankment stability even with wind-throwing events and burrowing animals. This alternative offers the least disturbance to the Ice Age Trail appearance and the lake level could potentially be raised given the additional sheet pile contribution to stabilization. Beyond the initial WDNR approval for the “sheet pile core” concept, a dam failure analysis and dam permit would be required for this alternative. A probable opinion of construction cost for these tasks was estimated as \$249,000. This alternative was selected by the WDNR Bureau of Parks and Recreation because it was the least disruptive to the natural environment.

Alternative D– Not Selected – Legally abandon and remove the dam, though most of the existing embankment would remain in place. The lake level would drop about twelve inches from 1217feet (2010 May) to 1216 feet (post-removal). No dam failure analysis would be required but a WDNR permit to abandon the dam may be necessary, though this may depend on official legal designation as “a dam”. WDNR permits for grading and riprap may also be required. The minimum probable opinion of construction cost was estimated as \$38,000, but the excavation could be made more aesthetic (curved channel, irregular edges, vegetative concealment, etc.) at a higher cost (likely another \$20,000 for the crossing shown in the artistic renderings). This alternative was not

selected due to the adverse impact that the lowered surface water levels of Straight Lake would have on vegetation and wildlife.

Alternative E– Not Selected –Add a new dam downstream of the existing dam to create submergence. To qualify for the reduced hydraulic capacity of NR 333.07, the new dam must submerge the existing dam once the existing dam’s outlet reaches its current capacity. The construction costs for a new dam were estimated to equal or exceed \$249,000 and would also require significantly more permitting as a new dam (Chapter 31 and Chapter 30 permits). Wetland mitigation may also be required for the wetland disturbed by the new dam’s construction and inundation. This alternative was not selected due to the greater area of wetlands that would be permanently impacted during construction.

IX. Evaluation

A. As a result of this action, is it likely that other events or actions will happen which may significantly affect the environment? If so, list and discuss. (Secondary effects)

No. There are no significant negative secondary effects anticipated as a result of the dam reconstruction project. Stormwater runoff will be managed in accordance with WDNR standards. Following construction, habitat for threatened and/or endangered species is not likely to be impacted. Following completion of construction, noise, emissions, and traffic will not be significantly increased at the site.

B. Does the action alter the environment so a new physical, biological, or socioeconomic environment would exist? (New environmental effect)

Yes. Site conditions may change due to selective tree cutting activities, and expanded footprint of the existing path to be used for construction vehicle access. However, the overall proposed on-going use and environment will be similar to what currently exists at the site. It is expected that implementation of the project will benefit the function of Straight Lake State Park and those using it, due to long term-stability of the dam, lake outlet area, and surface water levels in the lake.

C. Are there existing environmental features that would be affected by the proposed action scarce, either locally or statewide? If so, list and describe. (Geographically scarce)

Yes. Straight Lake State Park offers multiple habitats including woodlands, marshes, and open water, allowing it to support diverse populations of birds and mammals. Sensitive environmental features, including wetlands and the potential habitat for several threatened and endangered bird species, and high quality natural area, exist in within the project area. These environmental features and sensitive areas will incur both temporary and permanent displacement as a result of construction activities. The proposed construction schedule is designed to avoid the nesting season and thus minimize potential adverse impacts to nesting bird species that inhabit this area.

D. Does the action and its effects require a decision which would result in influencing future decisions? Describe. Is the decision precedent setting?

Yes. The decision to build the project restricts future decisions or development at the location. As the new structure would be compliant with NR 333, any future construction in this area that affects the new sheet pile core wall would be subject to additional permitting and environmental analysis for potential effects to structural stability, surface water levels, flooding, and the environment, including wetlands and endangered species. The decision is not precedent setting. Decision criteria and permitting process follows established code and regulations.

***E. Discuss and describe concerns which indicate a serious controversy?
(Highly controversial)***

Topics raised which would be indicative of serious controversy were not identified during the course of this EA.

Correspondence was received from several members of the local community regarding the construction phase and final condition of the new sheet pile core wall. A paraphrased summary of comments/concerns raised during the Scoping Process is provided below.

- There is concern regarding the use of heavy equipment during travel, primarily on 120th Street and 270th Avenue at the proposed future park entrance. The roads are currently not able to handle extensive heavy equipment traffic, and the work may impact road conditions adversely.
- Preservation during and following construction (finished conditions) at the existing dam location is very important for both environmental and aesthetic reasons. The following aspects should be considered as part of construction, 1) preservation of the existing vegetation mat; excavate and replant if possible, 2) maintain the existing natural sounds of water flowing from the lake over the new structure, 3) construct the new dam in a manner which blends into the surrounding topography, and has the appearance of natural variations in elevation, 4) preserve as many existing trees and shrubs; excavate and replant if possible, and 5) utilize native rocks from the area in both the surface and subsurface.
- The permanent structure should blend seamlessly with the natural environment at all times of the year and should disappear into its setting.
- The temporary two-plank foot bridge currently over the outlet from the lake to the river should be replaced with a 40 inch to 48 inch wide structure that is permanent and that can handle the anticipated foot traffic from the Ice Age Trail and the Park itself.
- The dam should be constructed according to the existing subsurface conditions and should be appropriately anchored.
- Access to the trail should be maintained during construction and the trail should remain open at all times the Park is open. If the trail crossing over the outlet must be closed during construction, temporary signage with informational text and a map should be placed near the entrance and parking lot at 270th Avenue and 120th Street, at the trail parking lot at 280th Avenue and 130th Street, and at the dam site itself (on both sides of the outlet), directing trail users to the appropriate trail access point.

The scoping letter and responses can be viewed in their entirety in Appendix B.

A paraphrased summary of comments raised during the EA public review phase is provided below.

- The newly created State Park is a beautiful place that many people will utilize and enjoy.
- During construction, measures should be taken to prevent the potential spread of Oak Wilt by heavy machinery. Spraying the machinery with a bleach-based substance after use at the site may help to prevent the spread of the disease.
- Responses from the St. Croix Chippewa Indians of Wisconsin, and Great Lakes Indian Fish and Wildlife Commission indicate no issues with the Dam Reconstruction project.

F. Does the action conflict with official agency plans or with any local, state or national policy, if so, how? (Is the action inconsistent with long-range plans or policies?)

No. Given the presence of threatened, endangered, and/or protected bird species, the WDNR has placed a restriction on the acceptable construction schedule for the project. The project is currently scheduled to be constructed between August 15th and March 15th to maintain compliance with the WDNR restriction, and to comply with potentially applicable state and/or federal endangered species laws.

The proposed action is consistent with the long-range plans and/or policies as related to the Master Plan for Straight Lake State Park and Wildlife Area (WDNR, 2009)

G. While the action itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment? (Cumulative impacts)

No. Repeated actions of this type should not result in major or significant cumulative impacts. State of Wisconsin and WDNR requirements for stormwater runoff and methodologies for dam construction will be implemented. Construction materials are not scarce for this type of construction.

H. Will the action modify or destroy any historical, scientific, or archaeological site?

No. A request for review of potential archaeological and historic features or sites was submitted to the State Historic Preservation Offices (SHPO) on November 22, 2011. Response from SHPO on November 29, 2011, indicates that there are no historic properties that may be affected by the proposed project.

A search within the Wisconsin Architecture and History Inventory (WHI) was also conducted for the site as part of the EA process, and submitted with the SHPO review request. No records were found for the project location.

The SHPO review request and response, and the results of the WHI search are included in Appendix F.

I. Is the action irreversible? Will it commit a resource for the foreseeable future? (Does it foreclose future options?)

No. This action is reversible in the sense that the site improvements could be restored to current existing conditions. However, the project commits materials and financial resources that will not be recovered.

J. Will action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns?

No. The project should not result in any direct or indirect impacts on ethnic or cultural groups. Responses from the St. Croix Chippewa Indians of Wisconsin, and Great Lakes Indian Fish and Wildlife Commission indicate no issues with the Dam Reconstruction project. Social patterns for visitors to the site will not be altered as the outcome of the project will result in maintaining the current conditions for both environmental and physical setting, and intended use of the site. There will be short-term access limitation to the public during the construction period.

K. Other

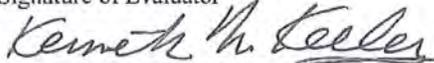
No other impacts are anticipated or have been identified.

Project Name: Straight Lake State Park Dam Reconstruction County: Polk

PRELIMINARY DECISION

In accordance with s. 1.11, Wis. Stats., and Ch. NR 150, Wis. Adm. Code, the Department is authorized and required to determine whether it has complied with s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code.

The Department has made a preliminary determination that the Environmental Impact Statement process will not be required for this action/project. This recommendation does not represent approval from other DNR sections which may also require a review of the action/project.

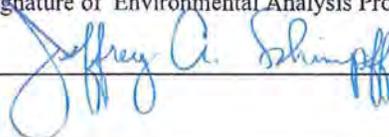
Signature of Evaluator 	Date Signed May 24, 2012
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FINAL DECISION

The public review process has been completed. The Department received and fully considered responses to the news release or other notice.

Pursuant to s. NR 150.22(2)a., Wis. Adm. Code, the attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action, and therefore the environmental impact statement process is not required prior to final action by the Department.

The Department has determined that it has complied with s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code. This decision does not represent approval from other DNR sections which may also require a review of the action/project.

Signature of Environmental Analysis Program Staff 	Date Signed May 24, 2012
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NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

XI. References

Ayres Associates, Dam Evaluation, Straight Lake State Park. December 2010.

Ayres Associates, Wetland Delineation Report, Straight Lake State Park Development and Dam Reconstruction. Draft. December 2011.

Ayres Associates, Straight Lake State Park Dam Reconstruction, Final Design. May 4, 2012

C3 Statistical Solutions, Inc., The Impact of Construction on the Wisconsin Economy, January 2011.

RVT Corp., Report of Geotechnical Exploration, Proposed Sheet Pile Cutoff Wall and Dam Embankment, Straight Lake State Park, May 2010.

United States Department of Agriculture – Natural Resource Conservation Service. 2008 Web Soil Survey. Polk County, Wisconsin.

U.S. Report to the President and Congress on Noise, February 1972. 92nd Congress, Senate Document No. 92-63

Wisconsin Administrative Code. Chapter NR 150. Madison, Wisconsin

Wisconsin Administrative Code. Chapter NR 400. Madison, Wisconsin

Wisconsin Department of Natural Resources. 2008. Surface Water Data Viewer-Floodplain Theme. FEMA Map for Polk County, Wisconsin.

Wisconsin Department of Natural Resources. 2008. Surface Water Data Viewer.

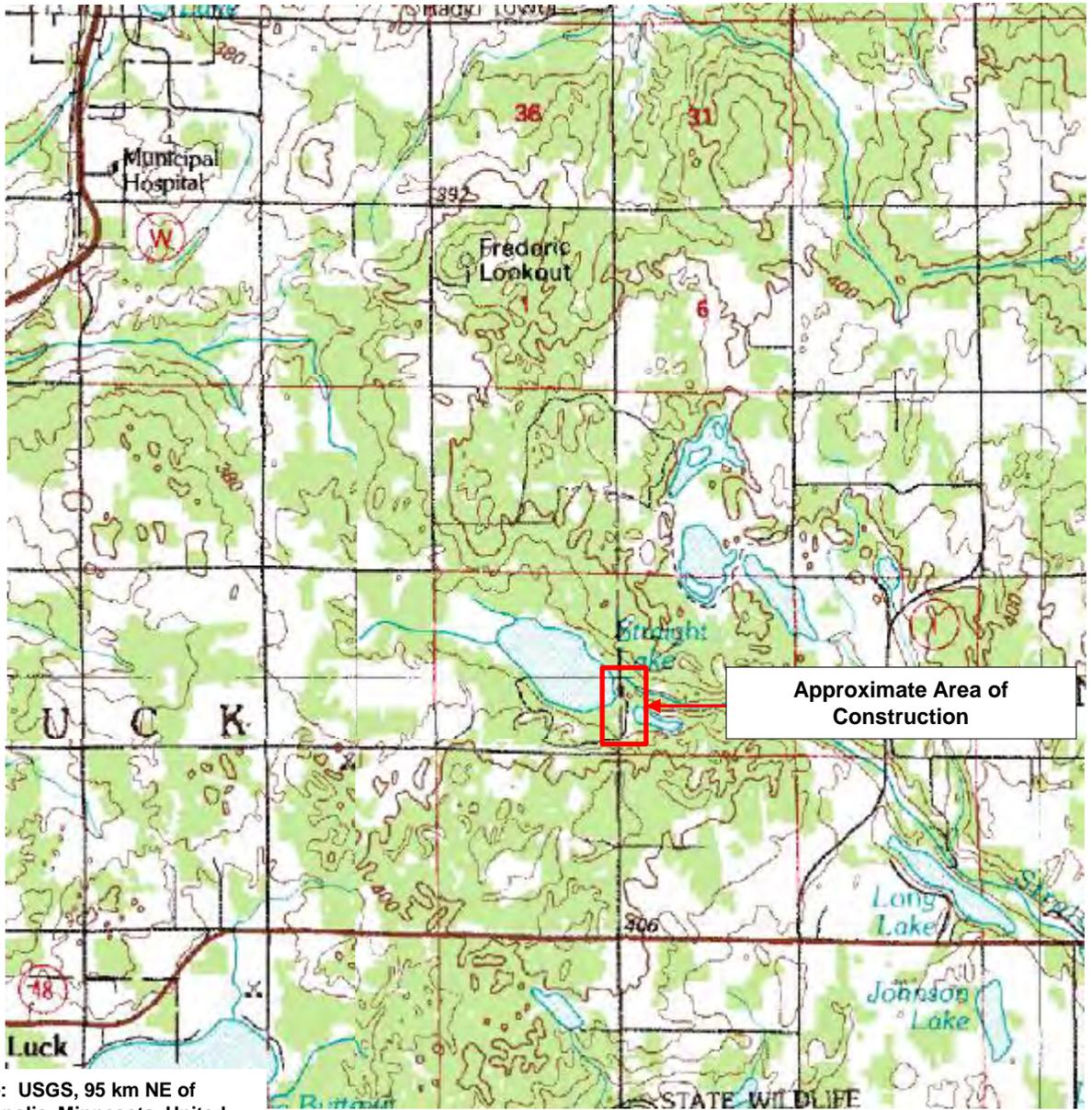
Wisconsin Department of Natural Resources Bureau of Records and Remediation Tracking System (WDNR BRRTS) database, September 2008.

Wisconsin Department of Natural Resources, Master Plan and Environmental Assessment, Straight Lake State Park and Wildlife Area. Draft. July 2009.

Wisconsin Historical Preservation Database. September 2008.

Appendix A

Figures



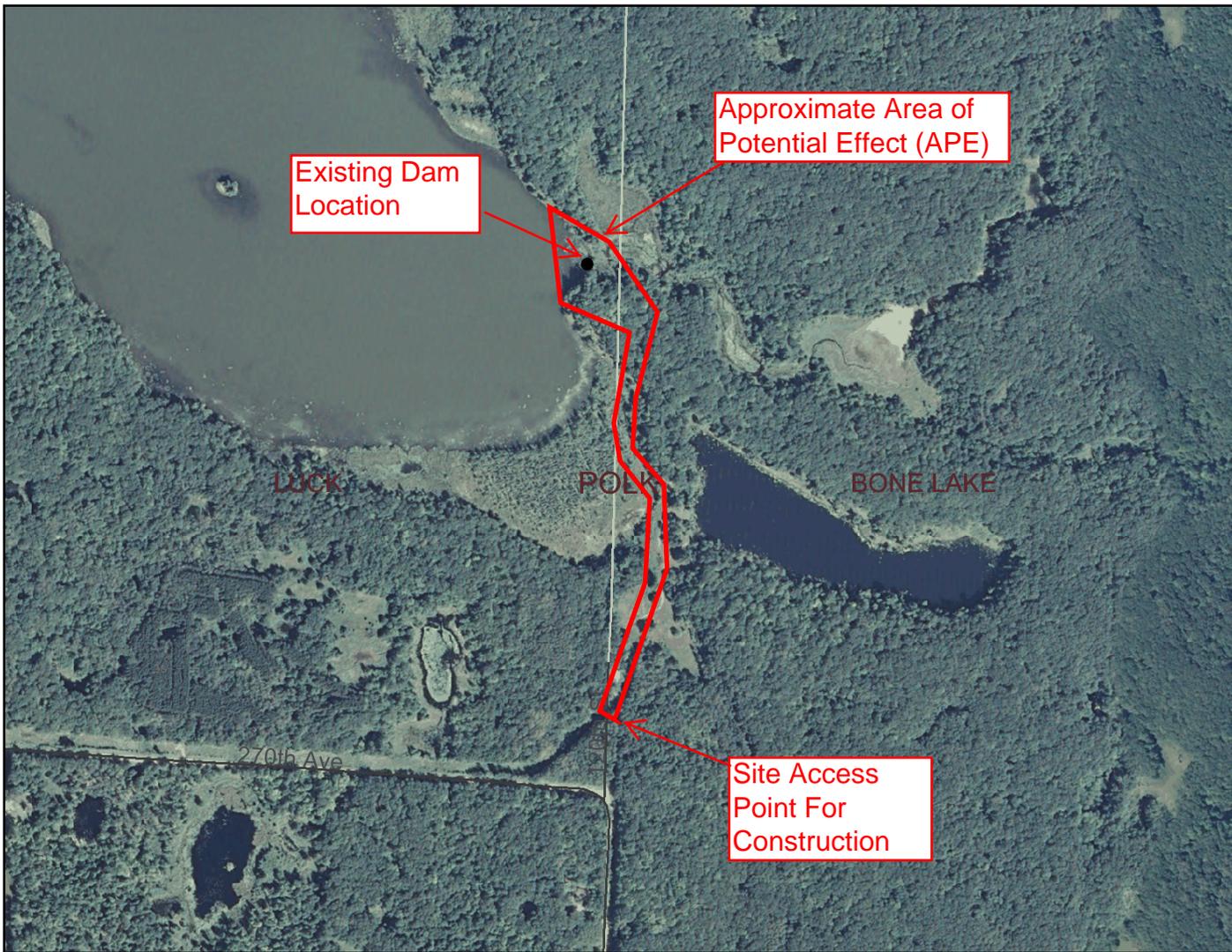
Source: USGS, 95 km NE of
 Minneapolis, Minnesota, United
 States, 1983

Figure 1 – Project Location Map
 Straight Lake State Park Dam Reconstruction
 DSF Project No. 10A4H
 Luck, Wisconsin 54853



Figure 2

Straight Lake Dam Reconstruction EA - Site Map



Legend

Major Highways

- Interstate
- State Highway
- U.S. Highways
- County Roads
- Local Roads

24K County Boundaries

Civil Towns

- Civil Town

Cities and Villages

- Village
- City

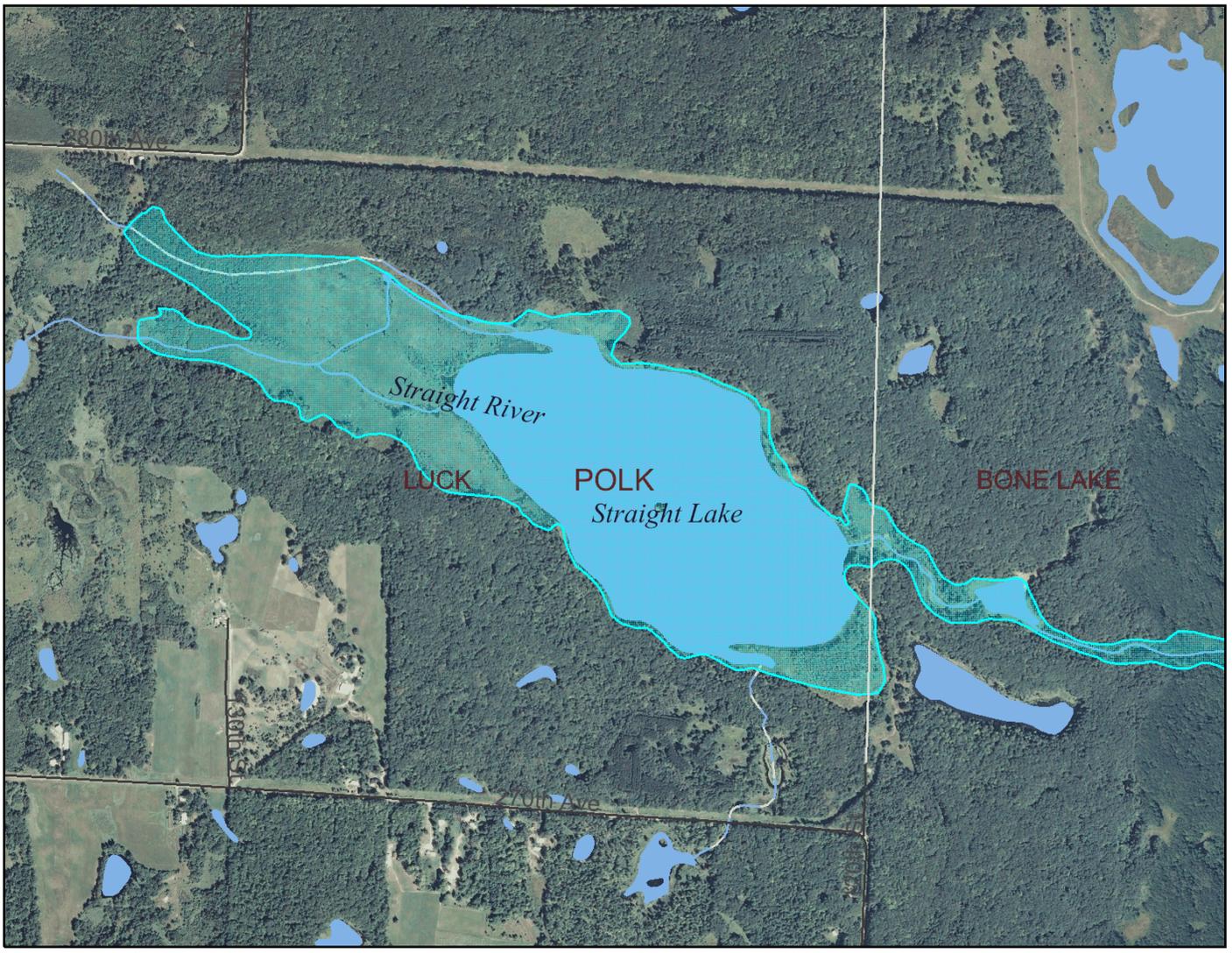
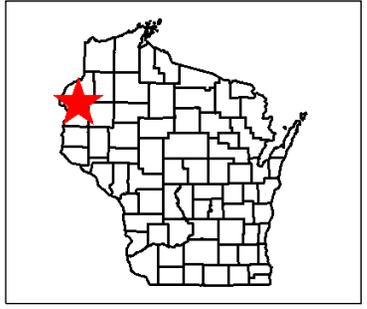


Scale: 1:8,971

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Figure 3

Straight Lake Dam Reconstruction EA - FEMA Flood Map



Legend

Analysis Points

- Flood Insurance Study
- Letter of Map Revision
- Case By Case Analysis
- Bridge
- OTHER

Analysis Lines

- Flood Insurance Study
- Letter of Map Revision
- Case By Case Analysis
- Bridge
- OTHER

Major Highways

- Interstate
- State Highway
- U.S. Highways
- County Roads
- Local Roads

24K County Boundaries

- Civil Towns
- Civil Town

Digital Flood Boundaries

- 100 Year Floodplain
- 500 Year Floodplain
- Floodway
- 24K Open Water
- 24K Rivers and Shorelines

Intermittent

- ~ Fluctuating
- ~ Perennial

Cities and Villages

- Village

N

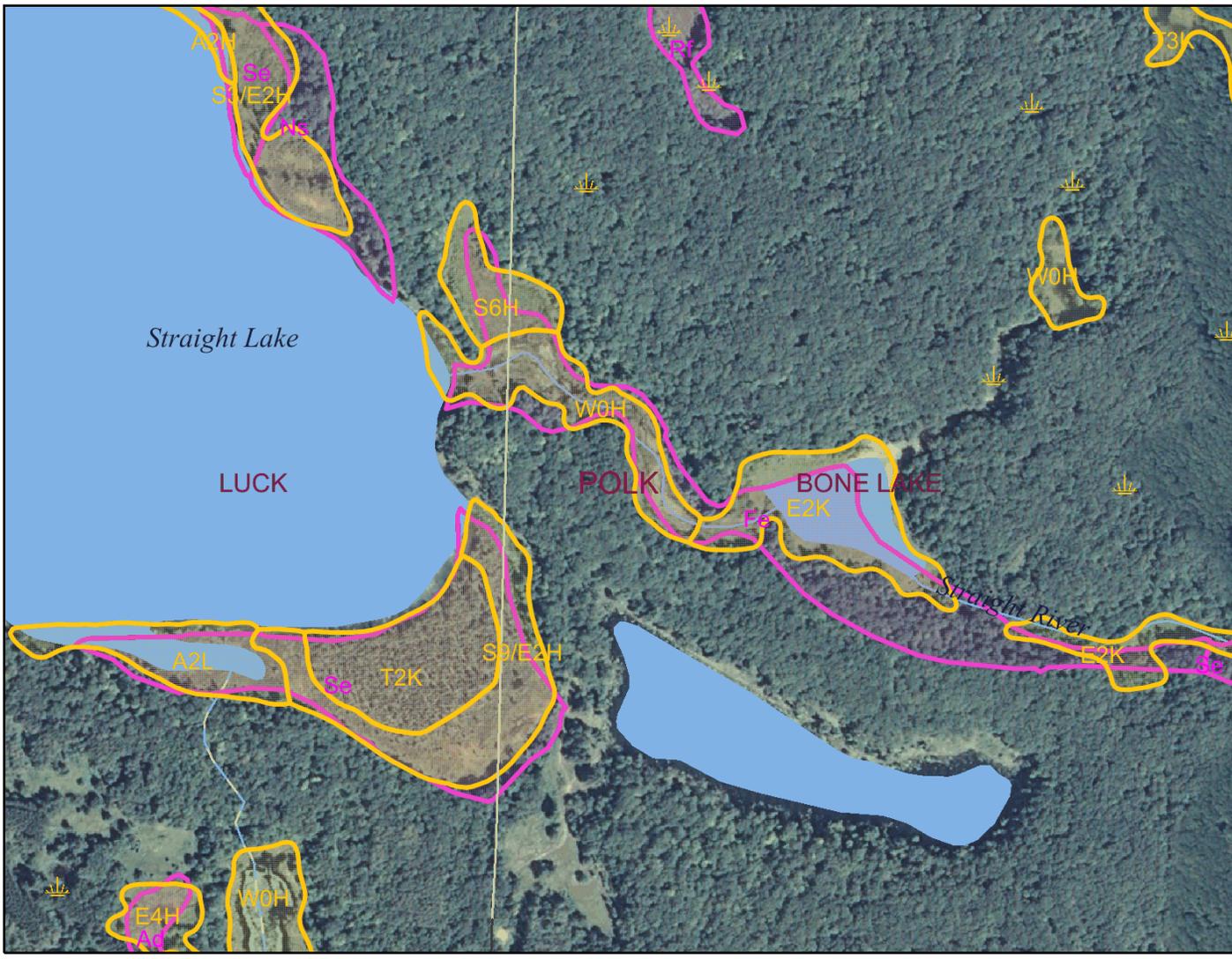
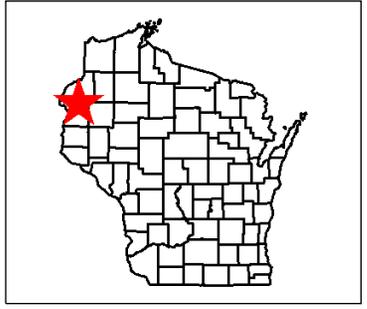
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Figure 4

Straight Lake Dam Reconstruction EA - Wetland Indicators



Legend

Major Highways

- Interstate
- State Highway
- U.S. Highways
- County Roads
- Local Roads

24K County Boundaries

Civil Towns

- Civil Town

USDA Wetspots

DNR Wetland Points

- Excavated Pond
- Dammed Pond
- Wetland Too Small to Delineate
- Filled Excavated Pond
- Filled Dammed Pond
- Filled Wetland Too Small to Delineate
- Filled or Drained Wetland

DNR Wetland Areas

- Upland
- Wetland
- Filled or Drained Wetland

Wetland Indicator Soils

- 24K Open Water
- 24K Rivers and Shorelines

Intermittent

- Fluctuating
- Perennial

Cities and Villages

- Village
- City

Scale: 1:6,708



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Legend

- Observation Points
- Intermittent Stream
- Wetland Boundary

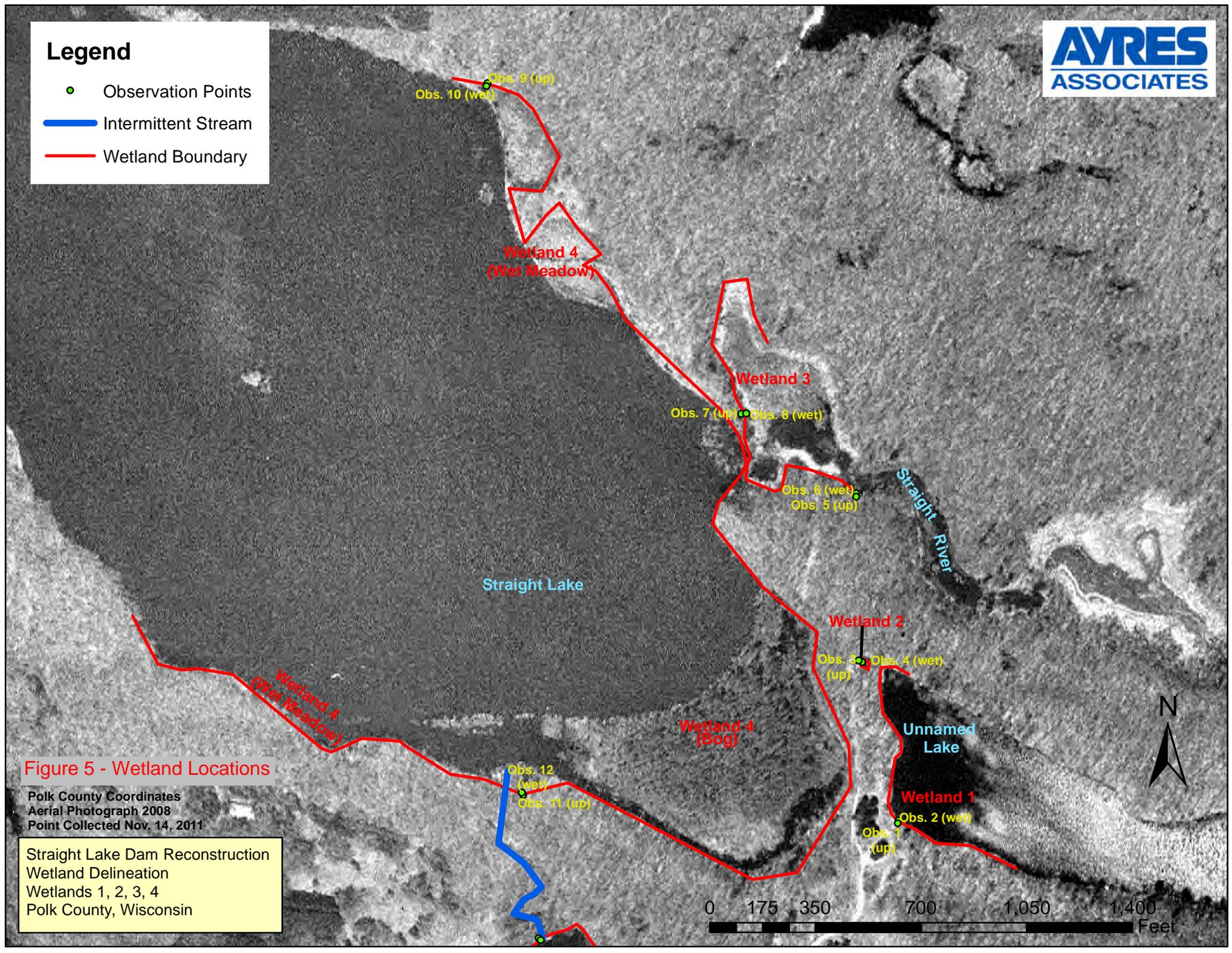


Figure 5 - Wetland Locations

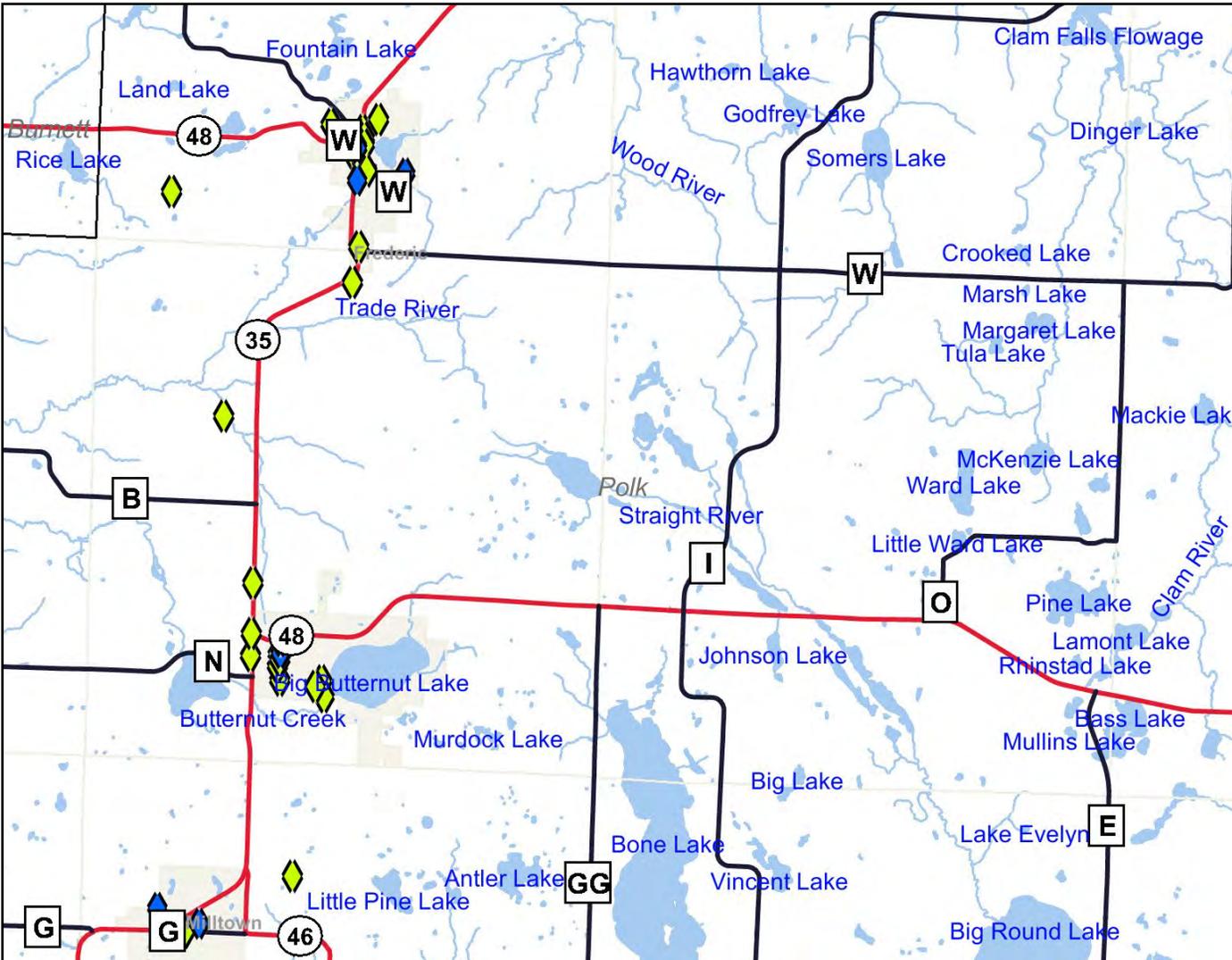
Polk County Coordinates
Aerial Photograph 2008
Point Collected Nov. 14, 2011

Straight Lake Dam Reconstruction
Wetland Delineation
Wetlands 1, 2, 3, 4
Polk County, Wisconsin

0 175 350 700 1,050 1,400
Feet

Figure 6

Straight Lake Dam Reconstruction EA - BRRS Sites



Legend

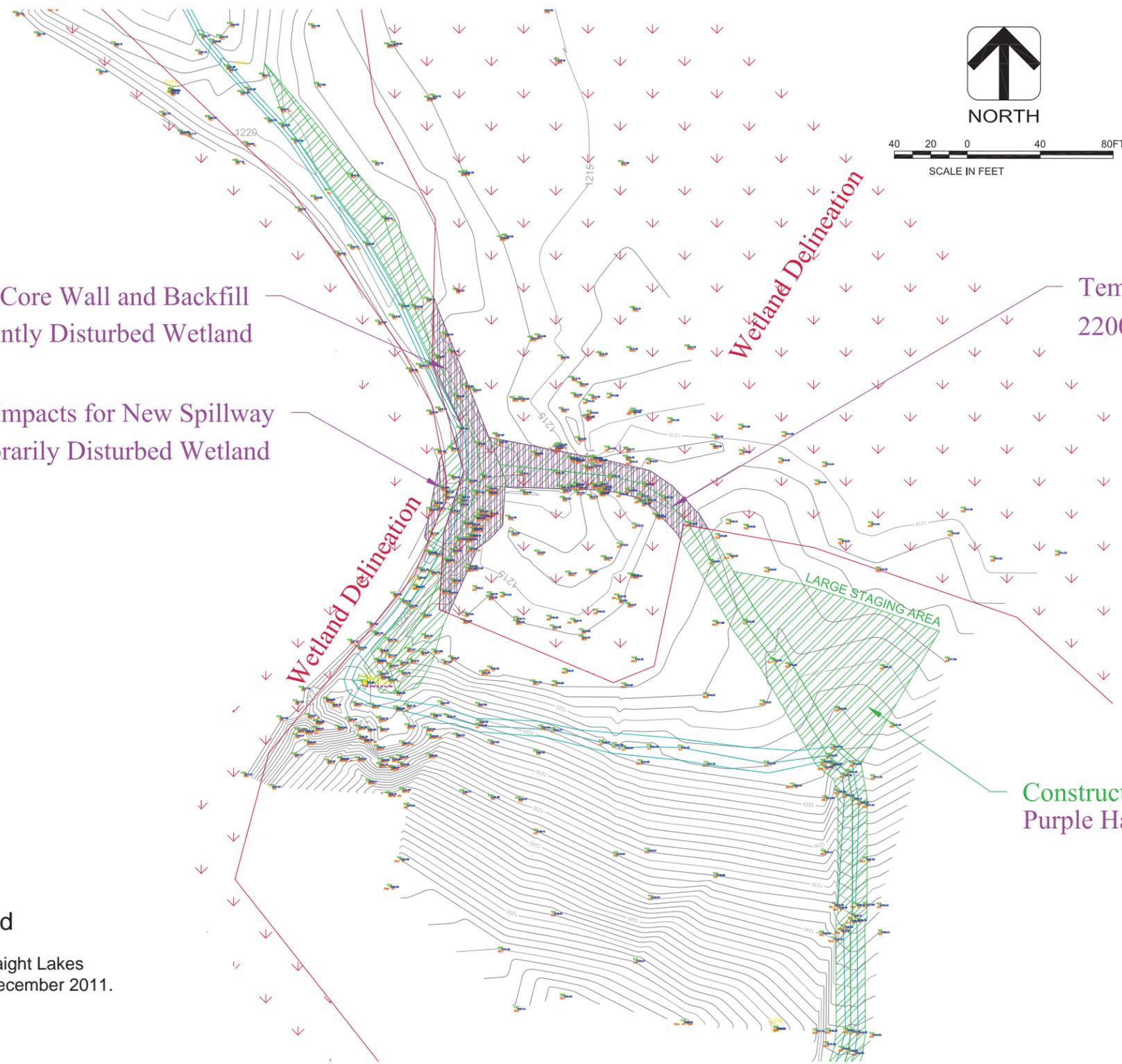
- Open Sites (ongoing cleanups)
- Closed Sites (completed cleanups)
- County Boundary
- Railroads
- County Roads (WDOT)
- County Trunk Highway
- State Trunk Highway
- US Highway
- Interstate Highways (WDOT)
- Interstate Highway
- Civil Towns
- Civil Town
- 24K Open Water
- 24K Rivers and Shorelines
- Municipalities
- Village
- City

Map created on Dec 30, 2011
 Note: Not all RR Sites have been geo-located yet.

Scale: 1:124,945



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.



Downstream Wetland Impacts for Sheetpile Core Wall and Backfill
2800 square feet of Permanently Disturbed Wetland

Temporary Access Road on Swamp Mats
2200 square feet of Temporarily Disturbed Wetland

Possible Upstream Wetland Impacts for New Spillway
250 square feet of Temporarily Disturbed Wetland

Construction Limits in Green
Purple Hatching Where Wetlands Are Impacted

Figure 7 - Areas of Wetland to be Disturbed

Source: Ayres Associates, Wetland Delineation Report, Straight Lakes State Park Development and Dam Reconstruction. Draft. December 2011.

Appendix B
Scoping Letter and Public Responses

November 30, 2011



Re: Scoping Letter
Environmental Assessment
Dam Reconstruction
Straight Lake State Park
Luck, Wisconsin
DSF Project Number: 10A4H

Potentially Interested Party:

The State of Wisconsin Department of Administration's (DOA) Division of State Facilities (DSF) has retained Ayres Associates to prepare an Environmental Assessment (EA) for the proposed Dam Reconstruction at Straight Lake State Park near Luck, Wisconsin. The EA will be prepared in accordance with the Wisconsin Environmental Policy Act (WEPA), sec. 1.11 Wisconsin statutes, and Wisconsin Administrative Code Chapter NR 150. An initial requirement of the EA is the scoping process. The intent of the scoping process is to identify potential impacts of the project on the physical, biological, social, and economic environments. Because you or your agency or group may have an interest in the project, we are inviting you to participate in the scoping process.

Proposed Project Action

Acquired in 2005, Straight Lake is one of the Wisconsin Department of Natural Resources (WDNR) newest properties. The property has a total area of approximately 2,850 acres and is split between state park and wildlife area. Use of the state park is restricted to non-motorized recreation and consists of hiking, fishing, rifle and muzzle loader deer season, snowshoeing, camping, picnicking, and group camping. The EA will cover the proposed reconstruction of an existing earthen dam on the eastern shoreline of Straight Lake.

Existing lake levels in Straight Lake are dependent on a small, earthen dam that is approximately 360 feet long by 6 feet high. Constructed in 1880's during the Wisconsin logging era, the dam is now out of compliance with Wisconsin Chapter NR 333 which governs dam design and construction for dams having a structural height of more than 6 feet and a maximum storage capacity of 50 acre-feet. Removing this dam is not an option, as water levels on the lake would be adversely affected and would impact waterborne and shoreline habitat in Straight Lake.

In 2010, an architectural and engineering firm was hired by the DOA to develop a solution for rebuilding the dam. From the alternatives that were developed, the option to repair the dam with a sheet-pile core approximately 20 feet away on the downstream side of the existing dam was selected in order to minimize the number of trees that would require removal during construction activities. Advantages of the sheet-pile dam construction include: 1) maintaining and/or exceeding the structural integrity of the existing dam, 2) preserving the rustic and wilderness appearance of sporadic tree groupings near the existing dam, 3) the ability to utilize curved contours and seemingly random placement of rocks during dam construction, and 4) minimizing impact to the existing Ice Age Trail which will remain in its current location over the existing dam embankment. Replacement of this dam is essential to maintaining the central amenity and focus of Straight Lake State Park.

The estimated total project cost is \$345,000 that will be funded using stewardship borrowing. The anticipated project schedule calls for the start of construction in March 2012, with final completion targeted for December 2012.

Refer to Figures 1 through 4 to see the area of potential effect, aerial photograph of the site, approximate layout of the proposed sheet-pile core wall, and cross-section of the proposed sheet-pile core wall.

EA Schedule

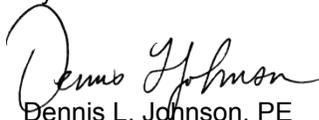
The Draft EA report will evaluate the potential positive and negative environmental impacts of the project in accordance with WEPA guidelines. Issues identified during the scoping process will be addressed in the report. As part of our standard EA process, Ayres Associates will perform research using available databases and resources to collect information pertaining to environmental, social, economic, cultural, or historic aspects of the project. The Draft EA report will be made available to the public for a 15-day comment period anticipated to start in January 2012, depending on project design and input status. A notice will be published in state and local media to announce the availability of the Draft EA and the beginning of a 15-day comment period. Following completion of the public comment period, any comments received will be considered and a public information meeting may be conducted based upon the nature and magnitude of comments received. Appropriate revisions will be incorporated into a Final EA report based on comments received during the comment period and public information meeting.

If you are interested in this project, we welcome any comments, suggestions, or other input you feel are pertinent. Please submit your comments related to this project and the associated EA in writing by December 14, 2011, for consideration in the Draft EA report. Send your comments to:

Dennis Johnson, PE
Ayres Associates
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
JohnsonD@ayresassociates.com

If no comments are received from you or your group, we will assume that there are no project issues that negatively impact you or that you would like to comment on. If you have any questions or concerns regarding this process, please contact me at 715.834.7643.

Ayres Associates Inc



Dennis L. Johnson, PE
Supervisor – Environmental Services

NEC:sem

Enclosures

RESPONSE FORM

Environmental Assessment Scoping Process
Dam Reconstruction
Straight Lake State Park
Luck, Wisconsin
DSF Project Number: 10A4H

I have the following comments regarding this project and items to be considered as part of the scoping process:

(Please write comment here. Attach additional pages if necessary.)

Please complete the following information and sign if submitting comments:

Name: _____

Title/Representing: _____

Address: _____

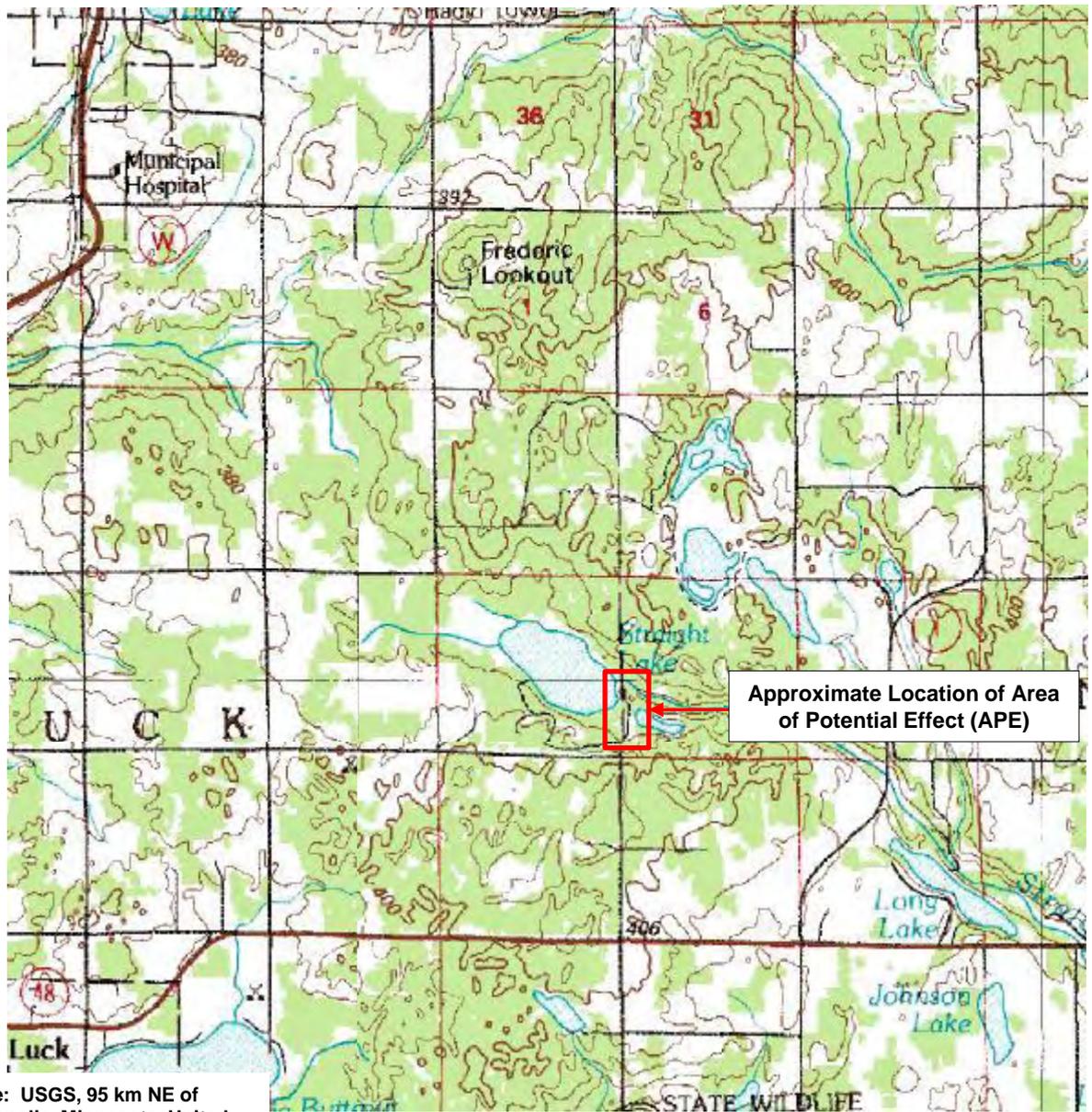
Telephone Number: _____

E-mail Address (optional): _____

Signature: _____

- I am interested in continuing my involvement in the public participation components of this project. Please continue to send me project notices.
- I am NOT interested in continuing my involvement in the public participation of this project. Please do NOT continue to send me project notices.

Please return this form by December 14, 2011, to: Dennis Johnson, PE
Ayres Associates
3433 Oakwood Hills Parkway
Eau Claire, WI 54701



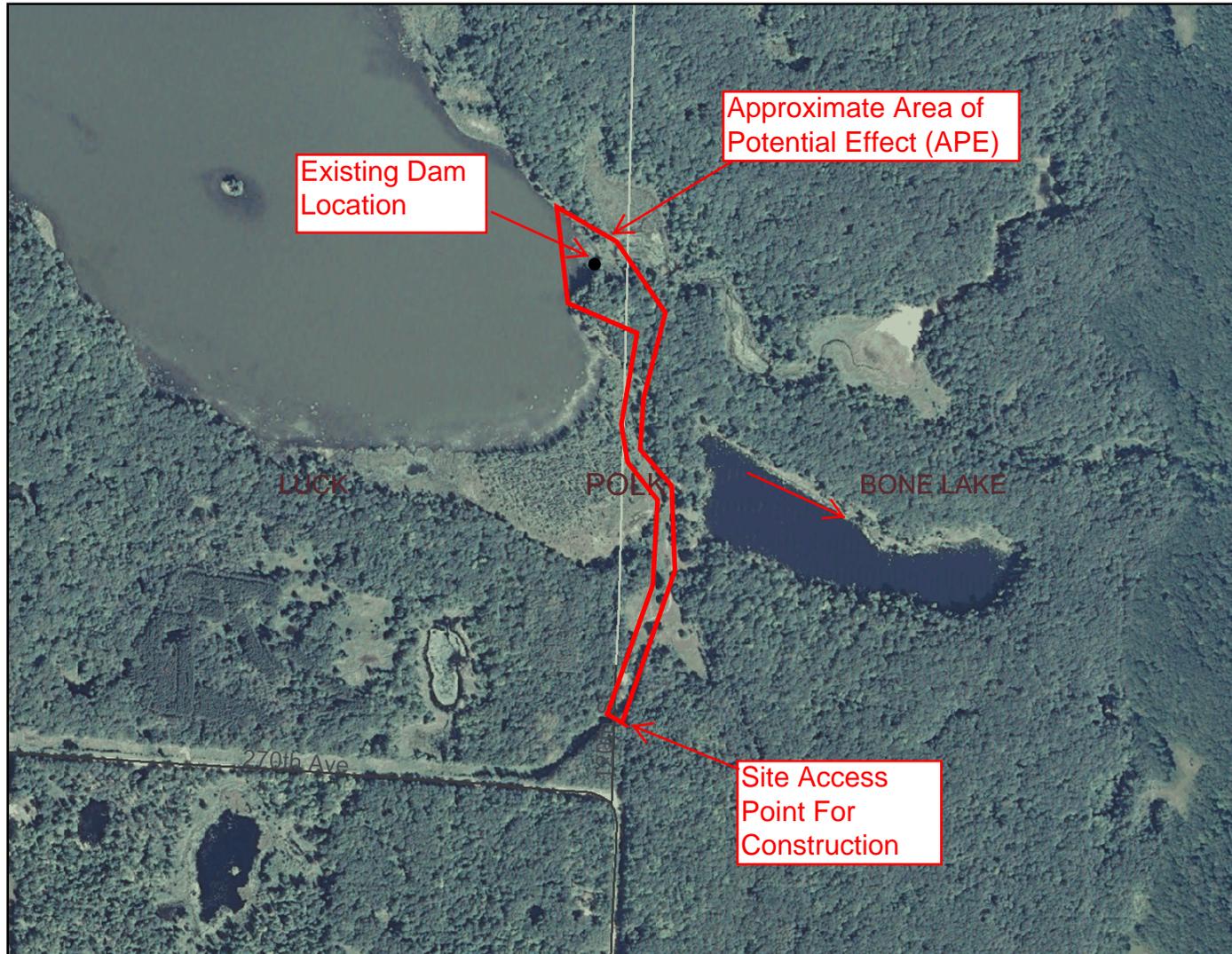
Source: USGS, 95 km NE of
 Minneapolis, Minnesota, United
 States, 1983

Figure 1 – USGS Quadrangle Map
 Straight Lake State Park Dam Reconstruction
 DSF Project No. 10A4H
 Luck, Wisconsin 54853



Figure 2

Straight Lake Dam Reconstruction - Aerial View



Legend

Major Highways

- Interstate
- State Highway
- U.S. Highways
- County Roads
- Local Roads

24K County Boundaries

Civil Towns

- Civil Town

Cities and Villages

- Village
- City



Scale: 1:8,971

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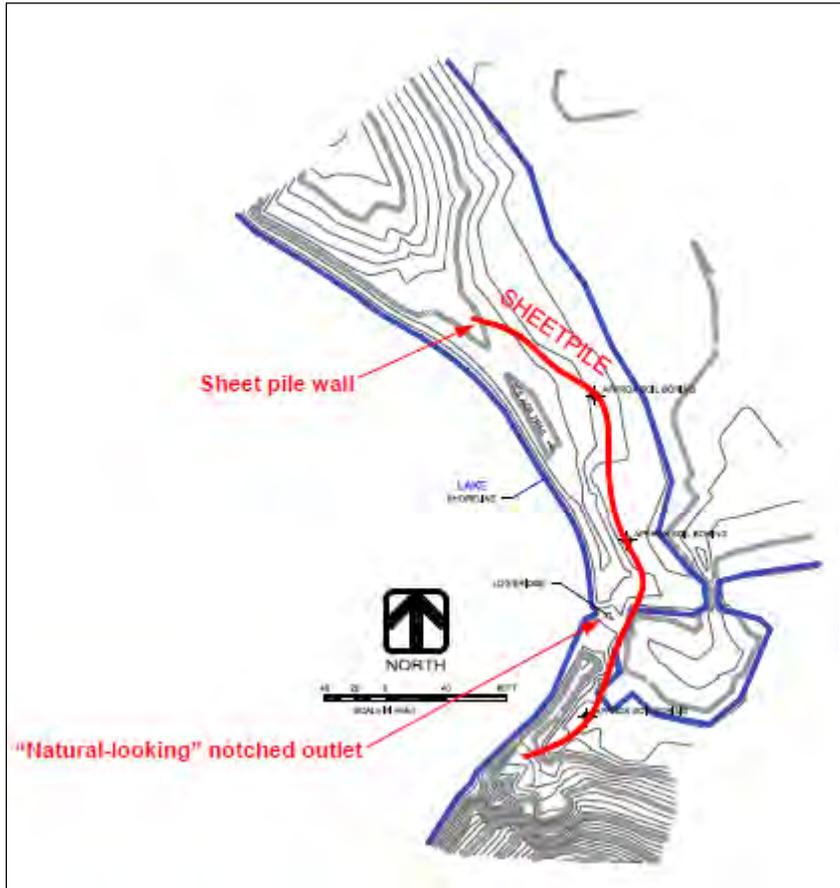


Figure 3 – Approximate Location of Sheet Pile Core Wall

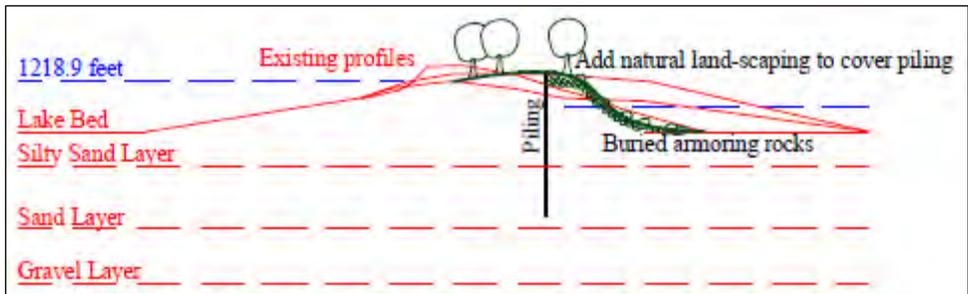


Figure 4 – Cross Section of Proposed Sheet Pile Core Wall

Carney, Neil

Subject: FW: Message from Governor Scott Walker

From: Governor@wisconsin.gov [mailto:Governor@wisconsin.gov]

Sent: Wednesday, November 30, 2011 1:38 PM

To: Johnson, Dennis

Subject: Message from Governor Scott Walker

Thank you for your e-mail message. I welcome you expressing your views and concerns to me, and I commend you for participating in your state government. I take into account the views of all of the citizens of Wisconsin, and I will keep your specific comments in mind during my service as your Governor.

If you would like more information about my positions on issues, or would like to read my public statements on issues, I encourage you to explore my website: www.walker.wi.gov. I like to respond individually to every letter and telephone call I receive; however, I cannot respond to each e-mail individually due to the volume. If your request is time sensitive, please call my office at (608) 266-1212. You may also write to me via conventional mail at Governor Scott Walker: PO Box 7863, Madison, WI 53707.

As noted on our website, please know that any communications may be subject to release under Wisconsin's public records law and that our policy is generally to release communications sent to this email address.

Once again, thank you for contacting me. Please feel free to contact me again if I can ever be of assistance to you.

Sincerely,

Scott Walker
Governor

Carney, Neil

Subject: FW: Environmental Assessment - Straight Lake State Park - Dam Reconstruction

From: John S. Helling [<mailto:rojohell@hotmail.com>]

Sent: Monday, December 12, 2011 9:34 PM

To: Johnson, Dennis

Cc: John S. Helling; Dean Dversdall; Brook Waalen; Marie Anne Westigard; Tim Malzhan

Subject: Environmental Assessment - Straight Lake State Park - Dam Reconstruction

Ayers Associates
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
Attn. Dennis Johnson, PE

Dear Mr. Johnson,

I am writing on behalf of the Ice Age Trail Alliance and its Indianhead Chapter. The Ice Age Trail Alliance generally supports the proposed Straight Lake Park and Wild Life Area dam as described in the Ayers Associates Scoping letter of November 30, 2011.

The Ice Age Trail Alliance and its Indianhead Chapter expect that the scope of work includes: a) a design which causes the permanent structure to blend seamlessly with the natural environment at all times of the year and to disappear into its setting; and, b) which also includes replacing the temporary two-plank foot bridge currently over the outlet from the lake to the river with a 40 inch to 48 inch wide structure that is permanent and that can handle the anticipated foot traffic from the Ice Age Trail and the Park itself. We also expect that the analysis has evaluated sub-surface conditions so that the dam will be properly anchored.

Further, the Ice Age Trail Alliance and its Indianhead Chapter request that access to the trail be maintained during construction and that the trail remain open at all times the Park is open. We further request that if the trail crossing over the outlet must be closed during construction, temporary signage with informational text and a map be placed near the entrance and parking lot at 270th Avenue & 120th Street, at the trail parking lot at 280th Avenue and 130th Street, and at the dam site itself (on both sides of the outlet), directing trail users to the appropriate Trail access point.

I am John Helling, President of the Ice Age Trail Alliance and a Volunteer in its Indianhead Chapter, Polk County. I have a cabin at 932 State Road 48, Luck, WI 54853. My phone number is 715 472 0472, and my e-mail is rojohell@hotmail.com. I wish to be included in the public participation components of this project. Please send me all future project notice.

Thank you, John S. Helling

Carney, Neil

Subject: FW: Straight Lake Park Dam concerns

From: Greg & Lisa Marsten [<mailto:marscafe@lakeland.ws>]

Sent: Wednesday, December 14, 2011 9:54 AM

To: Johnson, Dennis

Cc: Greg & Lisa Marsten

Subject: Straight Lake Park Dam concerns

Good day, Mr. Johnson -

My Name is Greg Marsten and I am an elected supervisor for the Town of Luck, where Straight Lake State Park is located.

I have been directed by our board to comment on the proposed dam replacement project, which concerns us ONLY due to possible heavy equipment travel, primarily on 120th Street and 270th Ave., off State Highway 48 at the proposed future park entrance.

The road is currently not able to handle extensive heavy equipment traffic, and we are notably concerned that the work may impact its condition adversely with the type of equipment being used for a project of such a scope.

Let me be clear, we have no marked concerns for the dam repair proper, but do feel it wise to raise possible flags only on the heavy equipment traffic surrounding this project.

Thank you for you time, and I ask that you respond to my query for our town records.

We wish you good fortune and appreciate your taking input on this ambitious project.

Sincerely,

Gregory Marsten - supv. Town of Luck

2491 170th St., Luck, WI 54853

(also : Dean Johansen - chair; Larry Wright - supv.)

Carney, Neil

Subject: FW: Auto Response

From: Rep. Severson [<mailto:Rep.Severson@legis.wisconsin.gov>]

Sent: Wednesday, November 30, 2011 1:43 PM

To: Johnson, Dennis

Subject: Auto Response

Thank you for contacting me, if you havent already included it, please send me your phone number and address. Please be aware that this is an auto-response but I wanted to confirm for you that I had received your email and I will respond back to you as soon as possible.

Thank you again for contacting me.

Sincerely,
Erik Severson
State Representative
28th Assembly District

RESPONSE FORM

Environmental Assessment Scoping Process
Dam Reconstruction
Straight Lake State Park
Luck, Wisconsin
DSF Project Number: 10A4H

RECEIVED
DEC 18 2011
AYRES ASSOCIATES

I have the following comments regarding this project and items to be considered as part of the scoping process:

(Please write comment here. Attach additional pages if necessary.)

see letter attached

Please complete the following information and sign if submitting comments:

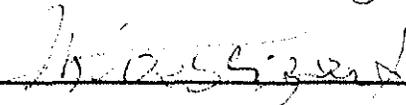
Name: MARIE-ANNE WESTIGARD

Title/Representing: Secy of TATA Indianhead Chapter

Address: 2866 State Rd. 35 - Frederic - WI 54837

Telephone Number: 715-472-8302

E-mail Address (optional): marianne.westigard@ycinc.com

Signature: 

I am interested in continuing my involvement in the public participation components of this project. Please continue to send me project notices.

I am NOT interested in continuing my involvement in the public participation of this project. Please do NOT continue to send me project notices.

Please return this form by December 14, 2011, to: Dennis Johnson, PE
Ayres Associates
3433 Oakwood Hills Parkway
Eau Claire, WI 54701

Straight Lake Dam proposal by Ayres Associates
Project #: 10A4H

Dec. 11, 2011

Comments and questions.

My relationship with the land and waters of the place that now is Straight Lake State Park and is further protected by the Ice Age National Trail which crosses it, predates the Park designation, the Bronkow acquisition, the development fiasco of the early 1980s. I saw the dam site after long very wet years and through very dry times.

At first the narrow flow-thru spot below the dam was still a road in bad shape, with rusted culverts.

It always has been a place with special charm for birds, amphibians, insects, beaver and otters and, for people.

To keep that charm intact is very important and, I realize, a challenge. It often costs more up front to do things "right", but not always. To not do it "right" always costs more over time.

Charm is derived from a wholeness of the ecology of the site.

In that wholeness belong

- 1) vegetation mats wherein many species support one another,
- 2) the sound of the water leaving the lake, flowing and seeping.
- 3) the up and down flow of the land, including the outflow of the lake.
- 4) the mix of trees and shrubs, all-age and various.
- 5) the old stones, snags and the water plants in the lake just off shore by the outlet.

Questions and suggestions ; I will refer to the wholeness components above;

1) Vegetation. Damage is often not due to the design of a project but to the equipment necessary to do the job. Especially the moving of materials and equipment does a lot of damage. I suggest that bigger is not necessarily better.

As a first step, might it not be possible to remove the vegetation mat, wherever it will be disturbed during the work process, as intact as possible? Store it aside to be replaced as the last step. This would assure the regeneration of material native to the site and might help keep out non native and invasive species.

2) Could you engineer the pure delight of the sound of the outlet.
How about getting close to it?

3) The final landscaping over the dam will, I hope, not be flat and level, but in concert with the flow of the land.

4) Save and replant whatever you can and protect the old ones.

5) Please use the glacial rocks of the area, even where buried. (I've got a dump truck load or two around the farm field, same as everyone else.)

My husband and I have adopted the Straight Lake Section of the Ice Age Trail for maintenance, so I share many questions about trail use and signage during and after the project with the IATA .

Marie-Anne Westigard
2860 State Rd 35
Frederic WI. 54837
Tel. 715-472-8302

Appendix C
Scoping Letter and EA Distribution List

Environmental Assessment (EA) Document Distribution List

Dam Reconstruction

Straight Lake State Park

DSF Project #10A4H

M - mailed a hard copy; M* - Mailed a notice of availability; E - emailed an electronic copy or website notice; ND - not distributed

Contact Name	Organization	Address Line 1	Address Line 2	City	State	Zip	Email Address	Document Distribution		
								Scoping	Draft EA	Final EA
State Government Agency Contacts										
Erik Sande	Dept. of Administration, Division of State Facilities	101 E. Wilson Street	PO Box 7866	Madison	WI	53702	erik.sande@wisconsin.gov	M/E	M/E	
Rick Hartig	Dept. of Administration, Division of State Facilities	101 E. Wilson Street	PO Box 7866	Madison	WI	53702	rick.hartig@wisconsin.gov	E	E	
Ken Keeley	Wisconsin Dept. of Natural Resources	101 S. Webster St.	PO Box 7921	Madison	WI	53707	kenneth.keeley@wisconsin.gov	E	M/E	
Bill Clark	Wisconsin Dept. of Natural Resources	810 W. Maple Street		Spooner	WI	54801	williamH.clark@wisconsin.gov	E	E	
Federal Government Agencies										
Pete Fasbender	U.S. Fish and Wildlife	2661 Scott Tower Drive		New Franken	WI	54229	Peter_Fasbender@fws.gov	E	E	
Polk County										
Robert Blake	Polk Co. - County Board Chair	468 345th Avenue		Frederic	WI	54837		M	M*	
Stan Heiderscheidt	Polk Co. - Chairman, Land & Water Resource Department	100 Polk County Plaza, Suite 120		Balsam Lake	WI	54810	LWRD@co.polk.wi.us	E	E	
Paul Pederson	Polk Co. - Forestry Department	100 Polk County Plaza, Suite 160		Balsam Lake	WI	54810	PaulP@co.polk.wi.us	E	E	
Deb Peterson	Polk Co. - Parks and Buildings	100 Polk County Plaza		Balsam Lake	WI	54810		M	M*	
Bill Lind	Polk Co. - Chair, Conservation Congress	718 110th Ave.		Amery	WI	54001		M	M*	
Sue Mathews	Polk Co. Information Center	710 Hwy. 35 S.		St. Croix Falls	WI	54024		M	M*	
Town of Luck										
Kathy Hanson	Town of Luck, Clerk-Treasurer	PO Box 315		Luck	WI	54853		M	M*	
Dean Johansen	Town of Luck, Chairman	1748 County Road N		Luck	WI	54853		M	M*	
Greg Marsten	Town of Luck, Supervisor	2491 170th St.		Luck	WI	54853	marscafe@lakeland.ws	ND	E	
State Elected Officials										
Office of the Governor	State of Wisconsin	115 East State Street		Madison	WI	53702	govgeneral@wisconsin.gov	M/E	M/E	
Erik Severson	28th Assembly District	State Capitol - Room 312 North	P.O. Box 8952	Madison	WI	53708	Rep.Severson@legis.wi.gov	E	E	
Sheila Harsdorf	10th Senate District	State Capitol - Room 18 South	P.O. Box 7882	Madison	WI	53707	Sen.Harsdorf@legis.wisconsin.gov	E	E	
Design Architect(s)/Engineer(s)										
Pete Haug	Ayres Associates	3433 Oakwood Hills Parkway		Eau Claire	WI	54701	haugp@ayresassociates.com	E	E	
Local Libraries										
Luck Public Library		301 South Main Street		Luck	WI	54853		ND	M	
Other Organizations and Private Citizens										
Michelle M. Dingwall	West Wisconsin Land Trust	500 East Main Street, Suite 307		Menomonie	WI	54751	mdingwall@wwlt.org	E	E	
Thomas Gordon	Clerk - Tribal Study Committee	PO BOX 878		Washburn	WI	54891		M	M*	
Andrew Hansen	Ice Age Park & Trail Foundation	207 East Buffalo Street, Suite 515		Milwaukee	WI	53202	info@iceagetrail.org	E	E	
Steve Hiniker	Exec. Director - 1000 Friends of Wisconsin	16 North Carroll St., Suite 810		Madison	WI	53703	friends@1kfriends.org	E	E	
Myron Schuster	Executive Director - NWRPC	1400 South River Street		Spooner	WI	54801	mschuster@nwrpc.com	E	E	
John Helling	President - Ice Age Trail Alliance	932 State Road 48		Luck	WI	54853	rojohell@hotmail.com	ND	E	
Marie-Anne Westigard	Ice Age Trail Alliance	2860 State Rd. 35		Frederic	WI	54837	marieannewestigard@yahoo.com	ND	E	

Appendix D
Site Photographs



Photo 1: Facing North – Existing Hiking Trail from the 120th Street Access Point.



Photo 2: Facing Northwest – Existing Ice Age Trail Leading Up To the Existing Dam Location.



Photo 3: Facing Northeast - View of Ice Age Trail Crossing the Existing Dam.



Photo 4: Facing Southeast – Standing on Existing Dam Looking at the Proposed Construction Equipment Access Route from Hiking Trail.



Photo 5: Facing Southwest - View of Existing Dam with Straight Lake in the Background. Spillway is Visible.



Photo 6: Facing West - View of Existing Dam with Straight Lake in the Background. Spillway is Visible.



Photo 7: Facing Northwest - View of Existing Dam with Straight Lake in the Background. Spillway is Visible.

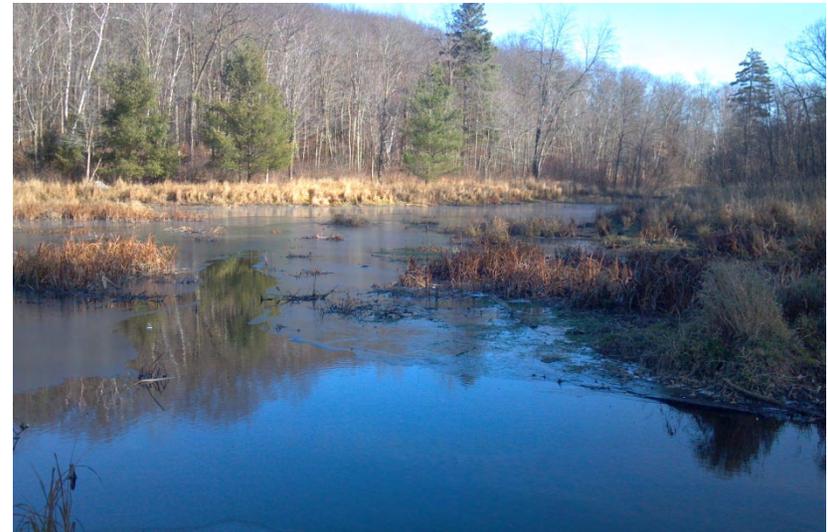


Photo 8: Facing East – View of Area Downstream of Existing Dam.



Photo 9: Facing South - View of Ice Age Trail Crossing the Existing Dam. Footbridge is Visible.

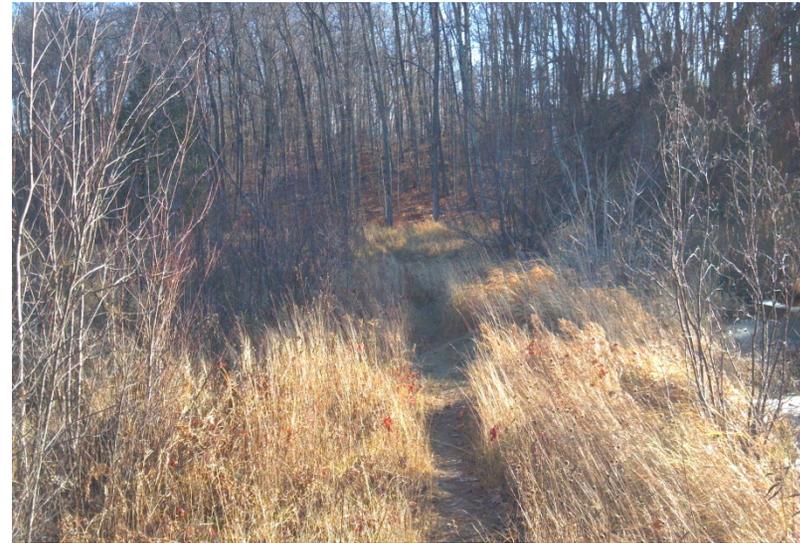


Photo 10: Facing North - View of Ice Age Trail Immediately After Crossing the Existing Dam.



Photo 11: Facing South - View of Ice Age Trail "Looking Back", Immediately After Crossing the Existing Dam.



Photo 12: Facing West - View of Straight Lake from the Eastern Shoreline.

Appendix E
WDNR Endangered Resources Review (ERR)
Request and Response

Notice: An Endangered Resources (ER) Review of a proposed land development, management, planning, or similar type of project provides the requester with information from Wisconsin's Natural Heritage Inventory (NHI) database and other sources on rare plants and animals, high quality natural communities, and other endangered resources that may be impacted by the proposed project. The ER Review will also include specific recommendations to help projects comply with Wisconsin's Endangered Species Law (s. 29.604, Wis. Stats.) and other laws and regulations protecting endangered resources. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.).

Instructions: The following materials are required to process this request. Submit all materials by mail to the address above or by fax (608-266-2925) or email (DNRRERReview@wisconsin.gov). Do not include payment with this form.

-  Completed, signed form
 -  Map(s) delineating the project area, preferably a topographic map and digital orthophoto (aerial photo)
- Submission of the following materials are strongly encouraged and will facilitate review of your project:
-  Photographs that clearly show the project area, including natural features and vegetation present on site
 -  Additional relevant information and reports (e.g., detailed project and habitat descriptions, wetland delineation, and site plans)

Section 1: Requester Information (ER Review, correspondence and invoice will be sent to this person)

Name Neil Carney		Organization Ayres Associates	
Mailing Address 1802 Pankratz St.		City Madison	State WI
Telephone Number (608) 443-1298		FAX Number (608) 442-1250	ZIP Code 53704-
Telephone Number (608) 443-1298		Email Address carneyn@ayresassociates.com	

Section 2: Landowner Information (if different than Section 1)

Name Erik Sande		Organization WDOA - Division of State Facilities	
Mailing Address P.O. Box 7866		City Madison	State WI
Telephone Number (608) 266-2886		FAX Number (608) 267-2710	ZIP Code 53707-
Telephone Number (608) 266-2886		Email Address erik.sande@wisconsin.gov	

Section 3: Project Information

Project Name Straight Lake State Park - Dam Reconstruction	Project Address (if applicable) NE of Luck, Wisconsin
---	--

Project Types: Residential Commercial Industrial Utility Transportation (roads, railroads, trails)
 Other: WDNR Sponsored Dam Reconstruction Project

Start Date (on-site disturbance) March 2012	End Date (on-site disturbance) December 2012	Total Acreage 1 acre
--	---	-------------------------

County: Polk City Town Village of: Luck

Township	Range	Direction	Section	Quarter Section	Quarter-Quarter Section	Additional Comments on TRS Location (attach additional information if necessary)
36 N	17	<input type="checkbox"/> E <input checked="" type="checkbox"/> W	13	<input type="checkbox"/> NW <input type="checkbox"/> NE <input type="checkbox"/> SW <input checked="" type="checkbox"/> SE	<input type="checkbox"/> NW <input checked="" type="checkbox"/> NE <input type="checkbox"/> SW <input type="checkbox"/> SE	
N		<input type="checkbox"/> E <input type="checkbox"/> W		<input type="checkbox"/> NW <input type="checkbox"/> NE <input type="checkbox"/> SW <input type="checkbox"/> SE	<input type="checkbox"/> NW <input type="checkbox"/> NE <input type="checkbox"/> SW <input type="checkbox"/> SE	

Provide a detailed description of the proposed project and associated disturbance, including acres to be disturbed. Attach additional pages as needed.

Existing lake levels in Straight Lake are dependent on a small, earthen dam that is approximately 360 feet long by 6 feet high. Constructed in 1880's, during the Wisconsin logging era, the dam does not meet current standards and is deemed out of compliance. Removing this dam is not an option as that would adversely affect water levels on the lake. The Park Management Team (PMT) elected to repair the dam with a sheet-pile core to avoid excess tree removal. The sheet-pile dam can be constructed to preserve the dam's structural integrity, yet maintain the rustic and wilderness appearance of sporadic tree groupings curved contours and seemingly random placement of rocks and earth. The path of the ice age trail will travel over the finished dam embankment. See Figures 1 to 4.

Section 3: Project Information, continued

Provide a detailed description of the habitat types and current land use within the project area (e.g., 50% in active agriculture-currently corn, 20% floodplain forest, 15% industrial area, 10% hardwood swamp dominated by black ash, 5% fallow field - in active agriculture until one year ago). Attach additional pages as needed.

Acquired in 2005, Straight Lake is one of the Wisconsin Department of Natural Resources (WDNR) newest properties. The total acreage is 2,850 acres and is split between state park and wildlife area (100% undeveloped). Use of the state park is restricted to non-motorized recreation and consists of hiking, fishing, rifle and muzzle loader deer season, snowshoeing, camping, picnicking, and group camping. The project will cover the proposed reconstruction of an existing earthen dam on the eastern shoreline of Straight Lake.

List all wetlands and waterbodies (e.g., rivers, intermittent streams, lakes, marshes) within one mile of the project area. List any known or suspected impacts of the proposed project to these wetlands and waterbodies. Indicate the location(s) of any point source discharge(s) into wetlands or waterbodies.

There are mapped wetlands within the proposed dam reconstruction area, and adjacent to the access route for construction equipment. See attached WDNR Wetland Indicator Map. There will be no point source discharges to wetlands or waterbodies. Construction activities will occur within mapped wetland areas, and have the potential to temporarily impact existing wetlands. Protective measures will be implemented, when possible, during construction to minimize the impact to wetlands.

List any reports that have been prepared to describe habitat that may be impacted by the proposed project (e.g., wetland delineation, habitat assessments, and rare species surveys). Attach copies if available.

See attached WDNR Wetland Indicator Map. A wetland delineation study was completed in mid-November 2011. Results of the study have not been completed, and/or are not yet available.

List any other project reports or correspondence concerning endangered resources. Include endangered resources reviews conducted by this or another agency (list log # and/or date issued) for this or a different phase of or alternative to the proposed project. Attach copies if available.

A Rapid Ecological Assessment (REA) was prepared by the WDNR as part of the Master Planning effort conducted for Straight Lake State Park. The Draft Assessment was last revised in October 2006. The Master Plan and scope of the REA were not inclusive of dam reconstruction activities, and did not specifically address aquatic organisms and fish near the construction site. The report is submitted with the ERR Request.

Section 4: Related Permits, Licenses or Regulatory Approvals

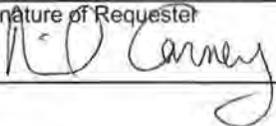
Permit, License or Approval	Issuing Agency, Program or Municipality	Contact Person	Status
WDNR Approval	WDNR Point of Contact	Ken Keely, (608) 267-7466	<input type="checkbox"/> will be applying for <input type="checkbox"/> have applied for <input type="checkbox"/> have received
		kenneth.keeley@wisconsin.gov	<input type="checkbox"/> will be applying for <input type="checkbox"/> have applied for <input type="checkbox"/> have received
			<input type="checkbox"/> will be applying for <input type="checkbox"/> have applied for <input type="checkbox"/> have received

Section 5: Certification by Requester

I am the owner, authorized representative of the owner, or utility representative of the property for which I am requesting an Endangered Resources (ER) Review. To the best of my knowledge, the information I have provided is complete and accurate.

I understand that the requested ER Review may contain NHI data and information (including specific locations of endangered resources) which are considered sensitive and are not subject to Wisconsin's Open Records Law (per s. 23.27, Wis. Stats.). I agree to use the information contained in the ER Review solely for planning and implementation of the proposed project. As such, I agree to share information contained in the ER Review only with individuals who need this information to carry out specific roles in planning and implementation of the proposed project. I agree to not reproduce or disseminate the ER Review or the specific locations of endangered resources contained in the ER Review to any other parties or individuals without prior written permission from the Bureau of Endangered Resources. (Please contact the Endangered Resources Review Program at 608-264-6057 if you have any questions about sharing information contained in the ER Review.)

I agree to pay, within 30 days of receipt of an invoice, the fee charged by the Department for this ER Review (see Page 1 for details).

Signature of Requester 	Date Signed 25-Nov-2011	Name of Requester (Please Print) Neil E. Carney
---	----------------------------	--

Carney, Neil

From: Rossler, Anna C - DNR <Anna.Rossler@wisconsin.gov>
Sent: Tuesday, January 03, 2012 4:11 PM
To: Carney, Neil
Cc: Keeley, Kenneth M - DNR
Subject: Endangered Resources Review #11-501
Attachments: wpdm_11-501.pdf; rwservlet.pdf

Dear Mr. Carney:

I am attaching an Endangered Resources Review and invoice for the proposed Straight Lake State Park Dam Reconstruction project in Polk County, WI.

The attached ER Review may contain NHI data and information (including specific locations of endangered resources) which are considered sensitive and are not subject to Wisconsin's Open Records Law (per s. 23.27, Wis. Stats.). As a result, please remember that you are authorized to share information contained in the ER Review only with individuals who need this information to carry out specific roles in planning and implementation of the proposed project.

Please also be aware that to ensure coordination on endangered resources issues for the proposed project, we are copying the results of the ER Review to individuals listed on the ER Review Request Form or other application submittals, as well as other Department staff and individuals involved in permitting, licensing, or approval of the proposed project. Individuals copied on this email are authorized to use the information provided in the ER Review only in reference to permitting, licensing, or approval of this specific proposed project. Individuals copied on this email are not authorized to share the ER Review or information contained in it with anyone else not directly involved in these activities.

If you need paper copies of any of the attached documents, please let me know.

Sincerely,
Anna

* Anna Cellar-Rossler
Wisconsin Department of Natural Resources Bureau of Endangered Resources
101 S. Webster St.
PO Box 7921
Madison, WI 53707-7921
Website: www.dnr.wi.gov/org/land/er/review
(*) phone: (608) 267-0797
(*) fax: (608) 266-2925
(*) e-mail: Anna.Rossler@Wisconsin.gov
Find us on Facebook: www.facebook.com/WIDNR<<http://www.facebook.com/WIDNR>>



December 23, 2011

Neil Carney
Ayres Associates
1802 Pankratz St.
Madison, WI 53704

SUBJECT: Endangered Resources Review (ERR Log # 11-501)
Proposed Dam Reconstruction Project, Straight Lake State Park, Polk County

Dear Neil,

The Bureau of Endangered Resources has reviewed the proposed project described in your Endangered Resources (ER) Review Request received November 23, 2011. The ER Review for the project is attached. Please keep in mind that the ER Review for the project does not exempt you from the requirements of state and federal endangered species laws. Rather, it is a tool to help you comply with state and federal endangered species laws. Additional consultation with the Department of Natural Resources (DNR) and/or US Fish and Wildlife Service may be necessary if follow-up actions are indicated.

The following page contains important information to help you better understand this ER Review. The ER Review itself is divided into four sections: A) Brief description of the proposed project, B) Endangered resources known or likely to occur in the proposed project area, C) Follow-up actions, including those that need to be taken to comply with state and federal endangered species laws, and D) Next steps.

This ER Review may contain [Natural Heritage Inventory data](#) (including specific locations of endangered resources) which are considered sensitive and are not subject to Wisconsin's Open Records Law. As a result, please remember that you may share information contained in the ER Review only with individuals who need this information to carry out specific roles in planning and implementation of the proposed project. Specific locations of endangered resources should not be released or reproduced in any publicly disseminated documents. To improve coordination regarding endangered resources issues for the proposed project, we are copying the ER Review to individuals and DNR staff who may be involved in permitting, licensing, or approval of the proposed project.

The attached ER Review is for informational purposes and only addresses endangered resources issues. This ER Review does not constitute DNR authorization of the proposed project and does not exempt the project from securing necessary permits and approvals from the DNR.

Please contact me at 608.267.0862 or via email at emma.pelton@wisconsin.gov if you have any questions about this ER Review.

Sincerely,

Emma Pelton
Endangered Resources Program

Cc: Dan Harrington, Water Management Specialist (Polk County)

wpdm 11-501

Standard Information to help you better understand this ER Review

Endangered Resources (ER) Reviews are conducted using a standard six-step process in which we gather initial information about the project and site, determine if endangered resources are present or likely to be present on the site, determine if the proposed project *is likely to affect* endangered resources present on site, determine if potential impacts to endangered resources present on the site *can be avoided*, identify options for proceeding if impacts to endangered resources cannot be avoided, and confirm and document findings.

To determine what endangered resources are present or likely to be present on the site, we first query the Wisconsin Natural Heritage Inventory (NHI) database for endangered resources records for the proposed project area. The project area evaluated consists of both the specific project site and a buffer area surrounding the site. The size of the buffer considered varies depending on the size and nature of the project and the ecological and land use characteristics of the site and surrounding area. In all cases, at least a 1-mile buffer is considered. At least a 2 mile buffer is considered for large linear projects, projects in areas that are unlikely to have been surveyed (e.g., within large blocks of private land), and projects near wetlands and water bodies. Other circumstances may warrant use of a larger buffer. For example, for projects in a large patch of contiguous habitat, we look throughout the patch. Endangered resources records from the buffer area are considered because most lands and waters in the state, especially private lands, have not been surveyed. In addition, if the area has moderate to high-quality or extensive habitat or if we are aware that recent surveys have been conducted on or near the site, we consult additional online databases, species experts, or other sources of endangered resources information to complement information contained in the NHI database. Considering records from the entire project area (also sometimes referred to as the search area) as well as other endangered resources information and data whenever warranted provides the best picture of species and communities that may be present on your specific site if suitable habitat for those species or communities is present.

This ER Review is being provided to you as a tool to help you comply with state and federal endangered species laws. By following the process described above, we have provided you with the best information currently available about endangered resources that may be present in the proposed project area. However, endangered resources information is never perfect. The NHI database is not all inclusive; systematic surveys of most public lands have not been conducted, and the majority of private lands have not been surveyed. Occurrences of endangered resources are only in the NHI database if the site has been previously surveyed for that species or group during the appropriate season, and an observation was reported to and entered into the NHI database. As such, absence of a record in the NHI database for a specific area should not be used to infer that no endangered resources are present in that area. Similarly, the presence of one species does not imply that surveys have been conducted for other species. Evaluations of the possible presence of rare species on the project site should always be based on whether suitable habitat exists on site for that species.

Endangered resources considered in ER Reviews and protections for each:

Species listed as Threatened or Endangered under Wisconsin's Endangered Species Law ([s. 29.604, Wis. Stats.](#)):

- State-listed animals (vertebrate and invertebrate) are protected on all lands and waters of the state
- State-listed plants are protected on public lands and on lands that the person does not own or lease, except in the course of forestry, agriculture or utility actions ([s. 29.604, Wis. Stats.](#)).

Species protected by the [Federal Endangered Species Act of 1973 as amended](#), including those federally-listed as Endangered or Threatened, those Proposed or Candidates for federal listing, and their Proposed or Designated Critical habitats:

- Federally-protected animals are protected on all lands.
- Federally-protected plants are protected on federal lands and in the course of projects that include federal funding. They are also protected on other lands if they are removed, cut, dug up or damaged in knowing violation of any law or regulation of any state or in violation of a criminal trespass law.

Special Concern species, high-quality examples of natural communities (sometimes called High Conservation Value areas), and unique natural features (e.g., caves and animal aggregation sites) are not legally protected by state or federal endangered species laws. However, other laws, policies (e.g., related to Forest Certification or master planning), or granting/permitting processes may require or strongly encourage protection of these resources. The main purpose of the Special Concern classification is to focus attention on species about which some problem of abundance or distribution is suspected before they become endangered or threatened.

State Natural Areas (SNAs) protect outstanding examples of Wisconsin's native landscape of natural communities, and significant geological formations. Endangered species are often found within SNAs. SNAs are protected by law from any use that is inconsistent with or injurious to their natural values ([s. 23.28, Wis. Stats.](#)).

Please click on [hyperlinks](#) for more information

Endangered Resource Review for the Proposed Straight Lake Dam Reconstruction Project in Polk County ERR Log # 11-501

Section A. Brief description of the proposed project

Based on information provided by you on the Endangered Resources (ER) Review Request form and attached materials, I understand the proposed project to be as follows:

This project is proposing reconstruction of an existing 360' long by 6' high earthen dam with a ~400' long sheet-pile core. The current dam does not meet standards and is deemed out of compliance. Removing the dam is not an option as it would adversely affect water levels on the lake. The Park Management Team elected to repair the dam with a sheet-pile core to avoid excess tree removal. The sheet-pile dam can be constructed to preserve the dam's structural integrity and maintain the wilderness appearance as the Ice Age Trail will travel over the finished dam embankment. The dam separates Straight Lake from adjacent wetlands and streams. The ~ 1 acre site is located in the center of Straight Lake State Park, T36N R17W Section 13 Quarter Section SE of Polk County.

It is best to request ER Reviews early in the project planning process. However, some important project details may not be known at that time. Details related to project location, design, and timing of disturbance are important for determining both the endangered resources that may be impacted by the project and any necessary follow-up actions. Please contact me whenever project plans change or new details become available to confirm if results of this ER Review are still valid.

Section B. Endangered resources known/likely to occur in the proposed project area

BIRDS

[Red-shouldered Hawk](#) (*Buteo lineatus*), a bird listed as Threatened in Wisconsin. This species prefers larger stands of medium-aged to mature lowland deciduous forests, dry-mesic and mesic forest with small wetland pockets. Breeding occurs from mid-March through early August.

[Cerulean Warbler](#) (*Dendroica cerulea*), a bird listed as Threatened in Wisconsin, prefers lowland deciduous forests dominated by mature stands of American elm, cottonwood, and green ash and large upland blocks of mature dry-mesic to mesic forests. The breeding season extends from late April through mid-July.

[Trumpeter Swan](#) (*Cygnus buccinator*), is a Special Concern bird in Wisconsin. Adults have all white plumage, a black bill with a narrow, salmon-red stripe along the base of lower bill, and a wingspan of nearly 8 feet. Most Trumpeters weigh 21-30 pounds, although large males may exceed 35 pounds. Individuals can live to 20-30 years of age. Juvenile Trumpeters are sooty gray with black-tipped, pink bills. They do not become all white with a black bill until about a year old. Trumpeters are often confused with other white waterfowl, especially Tundra Swans (*Cygnus columbianus*). Trumpeter Swans are migratory birds that arrive in their breeding grounds soon after ice melt in early spring and leave for their northern wintering grounds shortly before freeze. Trumpeter pair bonds mate for life and normally choose their 6-150 acre nesting territory near where the female (pen) was hatched. If a pair uses the same nesting location two summers in a row, they form an almost unbreakable attachment to the site. The pairs begin building their 6-ft diameter nests in mid-April on top of muskrat or beaver lodges or on mounds of emergent vegetation. The pen lays her clutch of 5-9 off-white eggs between late April and early May. She incubates the 4 ½ inch by 3 inch eggs for about 33-34 days while the male (cob) defends the nest. The cygnets hatch in June and fledge at about 14 weeks of age. They spend the rest of the summer preparing for migration with their parents to ice-free streams and ponds. Ideal habitat for Trumpeters include shallow wetlands 1-3 feet deep in isolated areas away from human disturbance with a diverse mix of emergent vegetation and open water that support a rich variety of submergent plants.

[American Bittern](#) (*Botaurus lentiginosus*), is a Special Concern bird in Wisconsin also protected under the federal Migratory Bird Act.

[Bald Eagle](#) (*Haliaeetus leucocephalus*), a bird listed as Special Concern in Wisconsin and Federally protected by the Bald & Golden Eagle Protection Act, prefers large trees in isolated areas in proximity to large areas of surface water, large complexes of deciduous forest, coniferous forest, wetland, and shrub communities. Large

lakes and rivers with nearby tall pine trees are preferred for nesting. The breeding season extends from February through August. Favored wintering and roosting habitat includes wooded valleys near open water and major rivers from December through March.

PLANTS

[Large-flowered Ground-cherry](#) (*Leucophysalis grandiflora*), a Special Concern plant in Wisconsin, is found mostly in recently burned moist to dry forests, as well as gravel bars of large rivers. Blooming occurs throughout July; fruiting occurs throughout August. The optimal identification period for this species is throughout July.

NATURAL COMMUNITES

[Southern dry-mesic forests](#) occur on loamy soils of glacial till plains and moraines, and on erosional topography with a loess cap, south of the tension zone. This community type was common historically, although white oak was considerably more dominant than red oak, and the type is still common today. However, to the detriment of the oaks, mesophytic tree species are becoming increasingly important under current management practices and fire suppression policies. Oak forests are succeeding to more mesic species (e.g., central and northern hardwood forest types), or to brush.

Red oak is a common dominant tree of this upland forest community type. White oak, basswood, sugar and red maples, white ash, shagbark hickory, and black cherry are also important. The herbaceous understory flora is diverse and includes many species listed under southern dry forest plus jack-in-the-pulpit, enchanter's-nightshade, large-flowered bellwort, interrupted fern, lady fern, tick-trefoils, and hog peanut.

[Lake—deep, hard, drainage](#)

[Tamarack \(poor\) swamp](#) are weakly to moderately minerotrophic conifer swamps dominated by a broken to closed canopy of tamarack (*Larix laricina*) and a frequently dense understory of speckled alder (*Alnus incana*). The understory is more diverse than in Black Spruce Swamps and may include more nutrient-demanding species such as winterberry holly (*Ilex verticillata*) and black ash (*Fraxinus nigra*). The bryophytes include many genera other than Sphagnum. Stands with spring seepage sometimes have marsh-marigold (*Caltha palustris*) and skunk-cabbage (*Symplocarpus foetidus*) as common understory inhabitants. These seepage stands have been separated out as a distinct type or subtype in some nearby states and provinces.

[Northern sedge meadow](#) is an open wetland community dominated by sedges and grasses and occurs primarily in northern Wisconsin. There are several common, fairly distinctive, subtypes: Tussock meadow, dominated by tussock sedge and Canada bluejoint grass; Broad-leaved sedge meadow, dominated by the robust sedges (*Carex lacustris* and/or *C. utriculata*); and Wire-leaved sedge meadow, dominated by woolly sedge and/or few-seeded sedge. Frequent associates include blue flag, marsh fern, marsh bellwort, manna grasses, panicked aster, Joe-Pye weed, and the bulrushes (*Schoenoplectus tabernaemontani* and *Scirpus cyperinus*). Sphagnum mosses are either absent or they occur in scattered, discontinuous patches. Sedge meadows occur on a variety of landforms and in several ecological settings that include depressions in outwash or ground moraine landforms in which there is groundwater movement and internal drainage, on the shores of some drainage lakes, and on the margins of streams and large rivers.

[Alder thicket](#) is a minerotrophic wetland community dominated by tall shrubs, especially speckled alder. Shrub associates may include red-osier dogwood, nannyberry, cranberry viburnum, wild currants, and willows. Among the characteristic herbaceous species are Canada bluejoint grass, orange jewelweed, asters, boneset, rough bedstraw, marsh fern, arrow-leaved tearthumb, and sensitive fern. This community type is sometimes a seral stage between northern sedge meadow and northern conifer swamp or northern hardwood swamp, but occurrences can be stable and persist at given locations for long periods of time. This type is common and widespread in northern and central Wisconsin, but also occurs at isolated locales in the southern part of the state. Alder thicket often occurs as a relatively stable community along streams and around lakes, but can occupy large areas formerly covered by conifer swamps that were logged during the Cutover and/or where water tables were raised. Stands of alder that originated following logging and/or wildfire will usually revert to forest, although on heavy, poorly drained soils, forest re-growth can be problematic owing to "swamping" effects.

Groundwater seepage is an important attribute of alder thickets. Seepage areas are often indicated by the presence of skunk-cabbage, marsh-marigold, swamp saxifrage, American golden saxifrage, and marsh pennywort.

[Ephemeral ponds](#) are depressions with impeded drainage (usually in forest landscapes), that hold water for a period of time following snowmelt and spring rains but typically dry out by mid-summer. Common wetland plants found in this community (as well as other types) include yellow water crowfoot, mermaid weed, Canada bluejoint grass, floating manna grass, spotted cowbane, smartweeds, orange jewelweed, and sedges. They flourish with productivity during their brief existence and provide critical breeding habitat for certain invertebrates, as well as for many amphibians such as wood frogs and salamanders. They also provide feeding, resting and breeding habitat for songbirds and a source of food for many mammals. Ephemeral ponds contribute in many ways to the biodiversity of a woodlot, forest stand and the larger landscape. There have been many definitions and synonyms for the term ephemeral pond (e.g., “vernal pool”). However, they all broadly fit into a community context by the following attributes: their placement in woodlands, isolation, small size, hydrology, length of time they hold water, and composition of the biological community (lacking fish as permanent predators).

Trees adjacent to ephemeral ponds provide a variety of benefits such as maintaining cool water temperatures, preventing premature drying, and adding to the food web. The annual input of leaves from trees around the pool support a detritus-based food web and a variety of invertebrates that are part of that food web.

[Hardwood swamp](#) is a deciduous forested wetland that occurs along lakes or streams, or in insular basins in poorly drained morainal landscapes. This community occurs across the state, but is most common in the northern Ecological Landscapes. The dominant tree species is black ash, but in some stands red maple, yellow birch, and (formerly) American elm are also important. The tall shrub speckled alder may be locally common. The herbaceous flora is often diverse and may include many of the same species found in alder thickets. Typical species are marsh-marigold, swamp raspberry, skullcap, orange jewelweed, and many sedges. Soils may be mucks or mucky sands.

For additional information on the rare species, high-quality natural communities, and other endangered resources listed above, please see <http://dnr.wi.gov/org/land/er/biodiversity/>.

Section C. Follow-up actions

Actions that will need to be taken to comply with state and/or federal endangered species laws:

All five of the **bird species** listed above have been recently confirmed nesting in or near the project area. Due to the high-level of disturbance expected in the path of machinery and surrounding areas of the dam itself, timeline restrictions must be observed to avoid impacts or possible take. To avoid the nesting season of all the species, **all construction activity must occur between August 15th and March 15th, and ideally between October 1st and March 15th**. Please contact me at Emma.Pelton@Wisconsin.gov if you have questions regarding the time-of-year restrictions or if your project timeline changes.

Note that protection for plants varies with land ownership, project activity, and project funding. In general, plants are protected by endangered species laws only on public lands or if public funding is involved. See page 2 for details. If your project changes (e.g., a change in location, size, design, disturbance footprint and timing, or construction sequence), please call me to confirm if these results are still valid:

Actions we recommend to help conserve Wisconsin’s rare species and high-quality natural communities:

The **Large-flowered Ground-cherry** was recorded within the project area, but it is an older record and suitable habitat no longer appears present; no impacts are anticipated.

Some or all of the above listed **Natural Communities** will likely be impacted by this project, but the dam reconstruction is for the conservation purpose of maintaining current lake levels which is important for many plant and animal species. The Bureau recommends that the construction footprint be minimized to the greatest extent possible to avoid undue impacts to these unique communities.

Strict erosion and siltation controls should be practiced during the entire construction period to avoid impacts to Straight Lake, the wetlands and streams. Please note that erosion control netting (also known as erosion control blankets, erosion mats or erosion mesh netting) used to prevent erosion during the establishment of vegetation can have detrimental effects on local snake and other wildlife populations. Plastic netting without independent movement of strands can easily entrap snakes moving through the area, leading to dehydration, desiccation, and eventually mortality. Netting that contains biodegradable thread with the “leno” or “gauze” weave (contains strands that are able to move independently) appears to have the least impact on snakes. **A DNR Water Management Specialist for Polk County is copied on this review if you have questions regarding impacts to water bodies.**

Section D. Next Steps

1) Evaluate whether the ‘**Brief description of the proposed project**’ is still accurate. All recommendations in this ER Review are based on the information supplied in the ER Review Request. If the proposed project has changed, please call me to determine if the information in this ER Review is still valid.

2) Determine whether you are able to implement the ‘**Follow-up actions**’ identified above:

‘Actions that will need to be taken to comply with state and/or federal endangered species laws’ represent the Department’s best available guidance for complying with state and federal endangered species laws based on the project information that you provided and the endangered resources information and data available to us. If the proposed project has not changed from the description that you provided us and you are able to implement all of the ‘Actions that will need to be taken to comply with state and/or federal endangered species laws’, your project should comply with state and federal endangered species laws. Please remember that if a violation occurs, the person responsible for the taking is the liable party. Generally this is the landowner or project proponent. If you have questions or concerns about your responsibilities related to Wisconsin’s Endangered Species Law, please contact me.

If you are not able to implement one or more of the ‘Actions that will need to be taken to comply with state and/or federal endangered species laws’ identified above, your project may potentially violate state and/or federal endangered species laws. There may still options available to you. Please call me and I will work with you to identify options that may allow the project to proceed in compliance with state and federal endangered species laws.

‘Actions we recommend to help conserve Wisconsin’s rare species and high-quality natural communities’ may be required by another law, a policy of this or another Department, agency or program; or as part of another permitting, approval or granting process. Please make sure to carefully read all permits and approvals for the project to determine whether these or other measures may be required. Even if these actions are not required by another program or entity for the proposed project to proceed, we strongly encourage you to implement these conservation measures on a voluntary basis to help prevent future listings and protect Wisconsin’s biodiversity for future generations.

Thank you for helping to protect Wisconsin’s endangered resources! Please call me if you have any questions about this ER Review.

Appendix F
Archaeological Survey Report and Website
Search Information

11-1220/PK

REQUEST FOR SHPO REVIEW AND COMMENT ON A STATE UNDERTAKING (Wis. State Process 4440 Form)

RECEIVED NOV 28 2011 DIV HIST PRES

Submit one copy with each undertaking for which our comment is requested. Please print or type. Return to:

Wisconsin Historical Society, Division of Historic Preservation and Public History, 816 State Street, Madison, WI 53706

Please Check All Boxes and Include All of the Following Information, as Applicable:

I. GENERAL INFORMATION

- Checkboxes for: This is a new submittal, This is supplemental information relating to Case #, This project is being undertaken pursuant to the terms and conditions of a programmatic or other interagency agreement. The title of the agreement is

- a. State Agency Jurisdiction (Agency providing funds, assistance, license, permit): DOA - Division of State Facilities
b. State Agency Contact Person: Erik Sande
c. Phone: (608) 266-2886 FAX: (608) 267-2710
d. Return Address: P.O. Box 7866 Zip Code: 53707
e. Email Address: erik.sande@wisconsin.gov

- f. Project Name: DSF Project #10A4H - Straight Lake State Park Dam Reconstruction - Environmental Assessment
g. Project Street Address: Not Applicable
h. County: Polk City: Luck Zip Code: 54853

- i. Project Location: Township 36, Range 17W, E/W (circle one), Section 13, Quarter Sections: NE 1/4 SE 1/4

- j. Project Narrative Description—Attach Information as Necessary. SEE ATTACHED
k. Area of Potential Effect (APE). Attach Copy of U.S.G.S. 7.5 Minute Topographic Quadrangle Showing APE. SEE ATTACHED USGS AND AERIAL

II. IDENTIFICATION OF HISTORIC PROPERTIES

- Checkboxes for: Historic Properties are not located within the project APE. Attach supporting materials. Historic Properties are located within the project APE. Attach supporting materials.

III. FINDINGS

- Checkboxes for: No historic properties will be affected (i.e., none is present or there are historic properties present but the project will have no effect upon them). Attach necessary documentation. The proposed undertaking will have an effect on one or more historic properties located within the project APE. Attach necessary documentation, as described.

Authorized Signature: [Signature] Date: 11/22/11

Type or print name: ERIK SANDE - DIV OF STATE FACIL

IV. STATE HISTORIC PRESERVATION OFFICE COMMENTS

- Checkboxes for: Agree with the finding in Section III above. The proposed undertaking will result in an adverse effect to one or more historic properties. WHS requires negotiation with the state agency to resolve the adverse effect. Object to the finding for reasons indicated in attached letter. Cannot review until information is sent as follows.

Authorized Signature: [Signature] Date: 11/29/11

Project Title

Straight Lake State Park - Dam Reconstruction
Luck, Wisconsin
DSF Project Number 10A4H
Environmental Assessment

Proposed Project Action

Acquired in 2005, Straight Lake is one of the Wisconsin Department of Natural Resources (WDNR) newest properties. The total acreage is 2,850 acres and is split between state park and wildlife area. Use of the state park is restricted to non-motorized recreation and consists of hiking, fishing, rifle and muzzle loader deer season, snowshoeing, camping, picnicking, and group camping. The Environmental Assessment (EA) will cover the proposed reconstruction of an existing earthen dam on the eastern shoreline of Straight Lake. A description of the project is below.

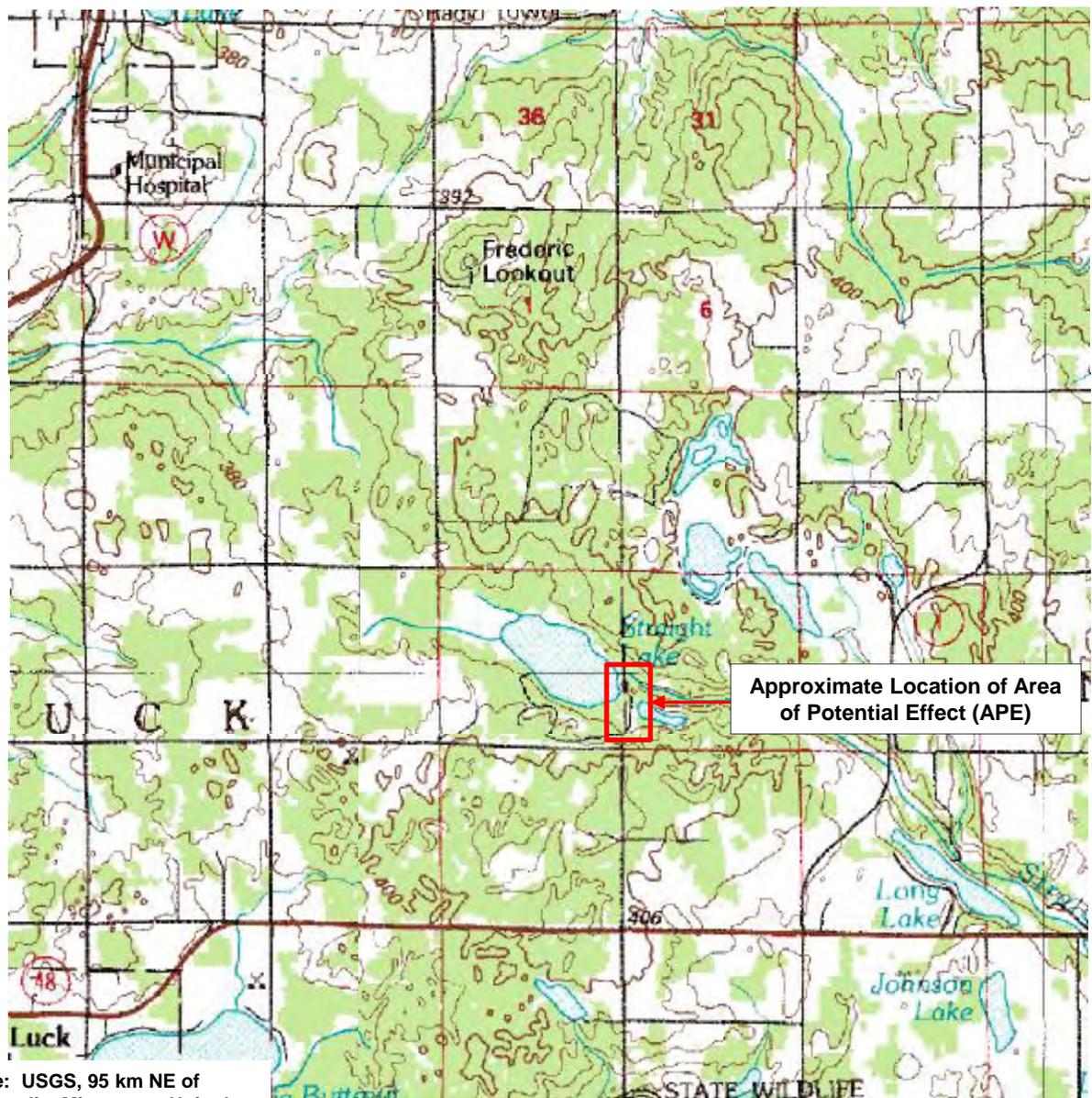
Existing lake levels in Straight Lake are dependent on a small, earthen dam that is approximately 360 feet long by 6 feet high. Constructed in 1880's, during the Wisconsin logging era, the dam does not meet current standards and is deemed out of compliance. Removing this dam is not an option as that would adversely affect water levels on the lake. In 2010, an Architectural & Engineering Firm (A/E) was hired by DOA to develop a solution for rebuilding the dam. The Park Management Team (PMT) elected to repair the dam with a sheet-pile core to avoid excess tree removal. The sheet-pile dam can be constructed to preserve the dam's structural integrity, yet maintain the rustic and wilderness appearance of sporadic tree groupings curved contours and seemingly random placement of rocks and earth. The path of the ice age trail will travel over the finished dam embankment. Replacement of this dam is essential to maintaining the central amenity and focus of Straight Lake State Park.

The estimated total project cost is \$345,000 that will be funded using stewardship borrowing. The anticipated project schedule calls for the start of construction in March 2012, with final completion targeted for December 2012.

Refer to Figures 1 through 4 for the area of potential effect (APE), aerial photograph of the site, approximate layout of sheet pile core wall, and cross section.

Refer to Attachment A for research conducted by the WDNR which indicates that there are no historical dams located in the project area.

Refer to Attachment B which indicates that there are no records found in the Wisconsin Architecture and History Inventory (AHI) for the proposed project location.



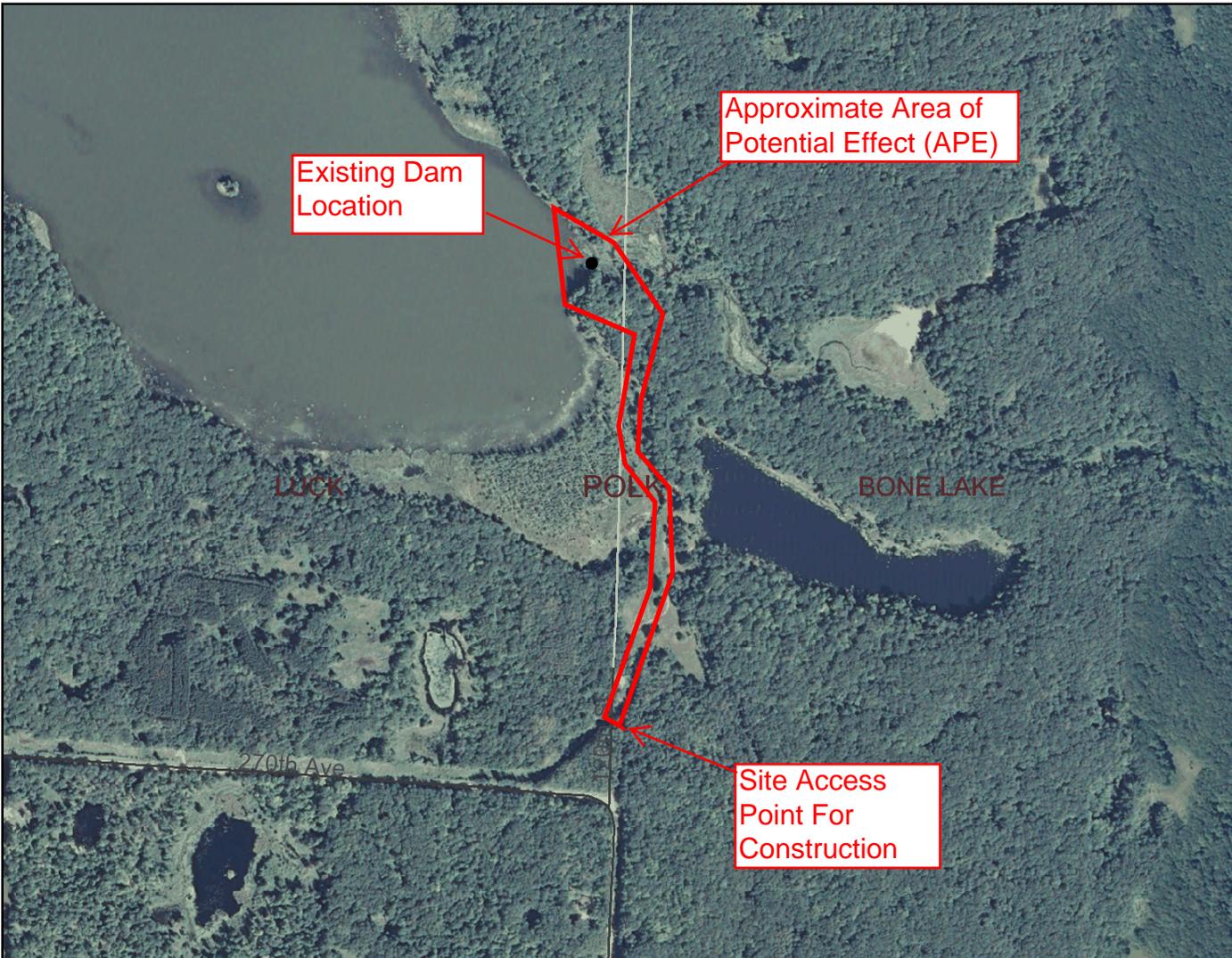
Source: USGS, 95 km NE of Minneapolis, Minnesota, United States, 1983

Figure 1 – USGS Quadrangle Map
 Straight Lake State Park Dam Reconstruction
 DSF Project No. 10A4H
 Luck, Wisconsin 54853



Figure 2

Straight Lake Dam Reconstruction - Aerial View



Legend

Major Highways

- Interstate
- State Highway
- U.S. Highways
- County Roads
- Local Roads

24K County Boundaries

Civil Towns

- Civil Town

Cities and Villages

- Village
- City

N

Scale: 1:8,971

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

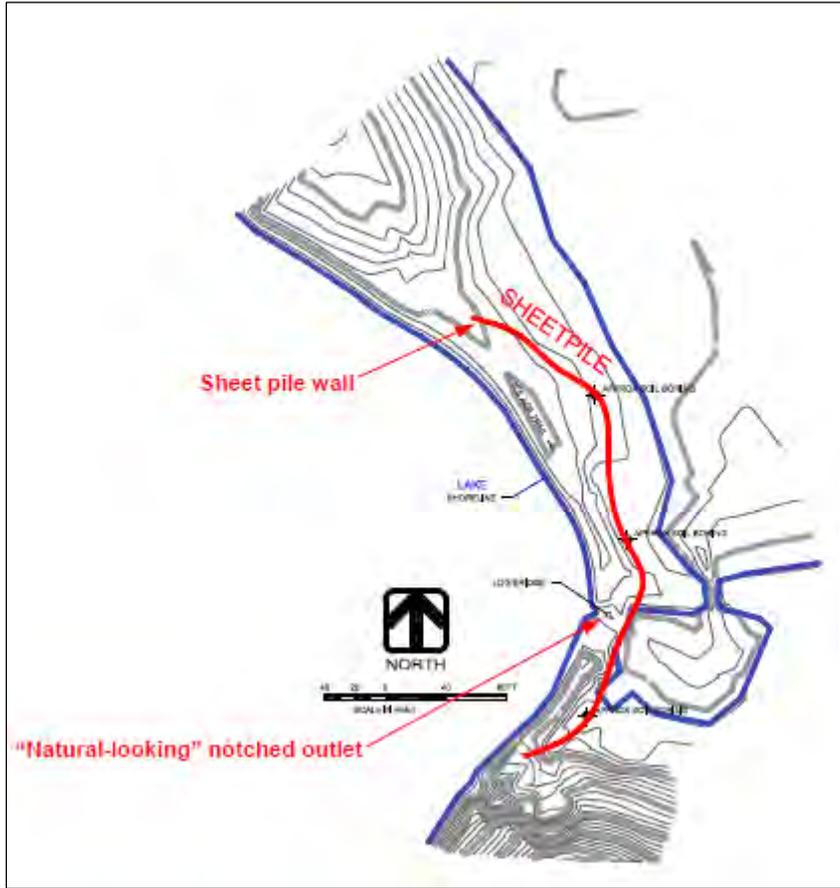


Figure 3 – Approximate Location of Sheet Pile Core Wall

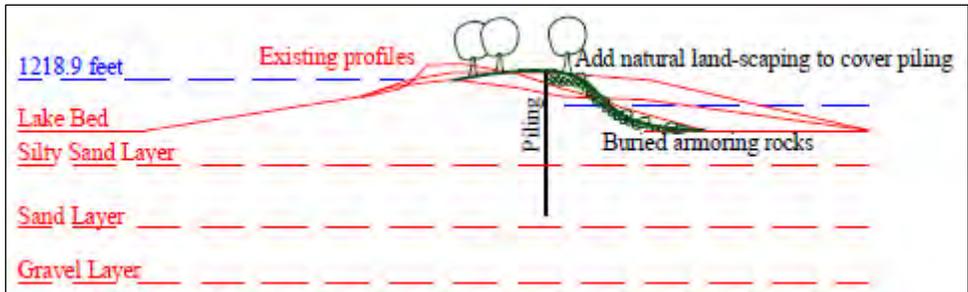


Figure 4 – Cross Section of Proposed Sheet Pile Core Wall

From: Dudzik, Mark J - DNR
Sent: Wednesday, October 26, 2011 10:31 AM
To: Keeley, Kenneth M - DNR

Attachments: Picture (Metafile)

No recorded historic dams within area on map.

Mark J. Dudzik
Departmental Archaeologist

Wisconsin Department of Natural Resources
Bureau of Facilities & Lands
101 South Webster, LF/6
Madison, WI 53707-7921

phone: 608.266.3462; FAX: 608.267.2750
e-mail: mark.dudzik@wisconsin.gov

WHS: asi - Windows Internet Explorer provided by Wisconsin DNR

http://www.wisahrd.org/index.cfm?d=search&t=rec&pk=70424&is_burial=0&ta Live Search

File Edit View Favorites Tools Help

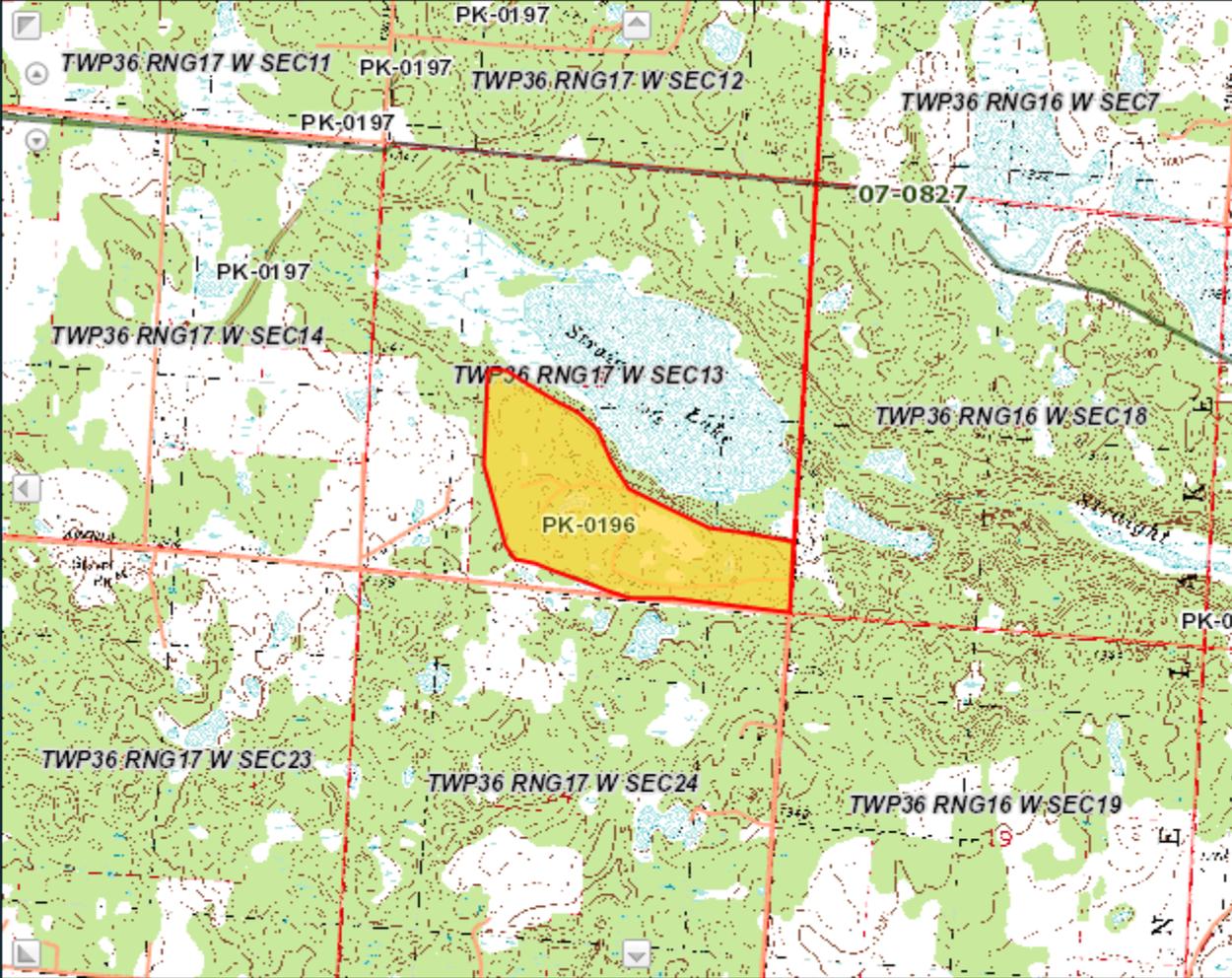
MyDNR WHS: asi

 **WISCONSIN HISTORICAL SOCIETY** [Search](#) [Logout](#)

Last 20 sites viewed... Map Image

[Primary Info](#) [Env Info](#) [Artifact/Investigator Info](#) [Burial Info](#) [Map](#) [Image](#)

[Instructions for using the map](#)



Map labels include: TWP36 RNG17 W SEC11, PK-0197, TWP36 RNG17 W SEC12, TWP36 RNG16 W SEC7, PK-0197, PK-0197, PK-0197, 07-0827, TWP36 RNG17 W SEC14, TWP36 RNG17 W SEC13, TWP36 RNG16 W SEC18, PK-0196, TWP36 RNG17 W SEC23, TWP36 RNG17 W SEC24, TWP36 RNG16 W SEC19.

[Primary Info](#) [Env Info](#) [Artifact/Investigator Info](#) [Burial Info](#) [Map](#) [Image](#)

Attachment B



Wisconsin Architecture & History Inventory

You searched for: POLK ->36 (Township) ->17 (Range) ->13 (Section) ->W (Direction)

[Refine Search](#)

Click on the AHI number to view the record detail

No Records Found

Have you read the search [tips](#) below?

The inventory is not comprehensive. There may be no record that matches your search.

End of Records

[Need help searching?](#)

[Start a New Search](#)

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Appendix G
Draft Design Drawings for Dam Reconstruction

STRAIGHT LAKE STATE PARK DAM RECONSTRUCTION

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

POLK COUNTY, WISCONSIN

DSF PROJECT NUMBER 10A4H
 JANUARY 15, 2012

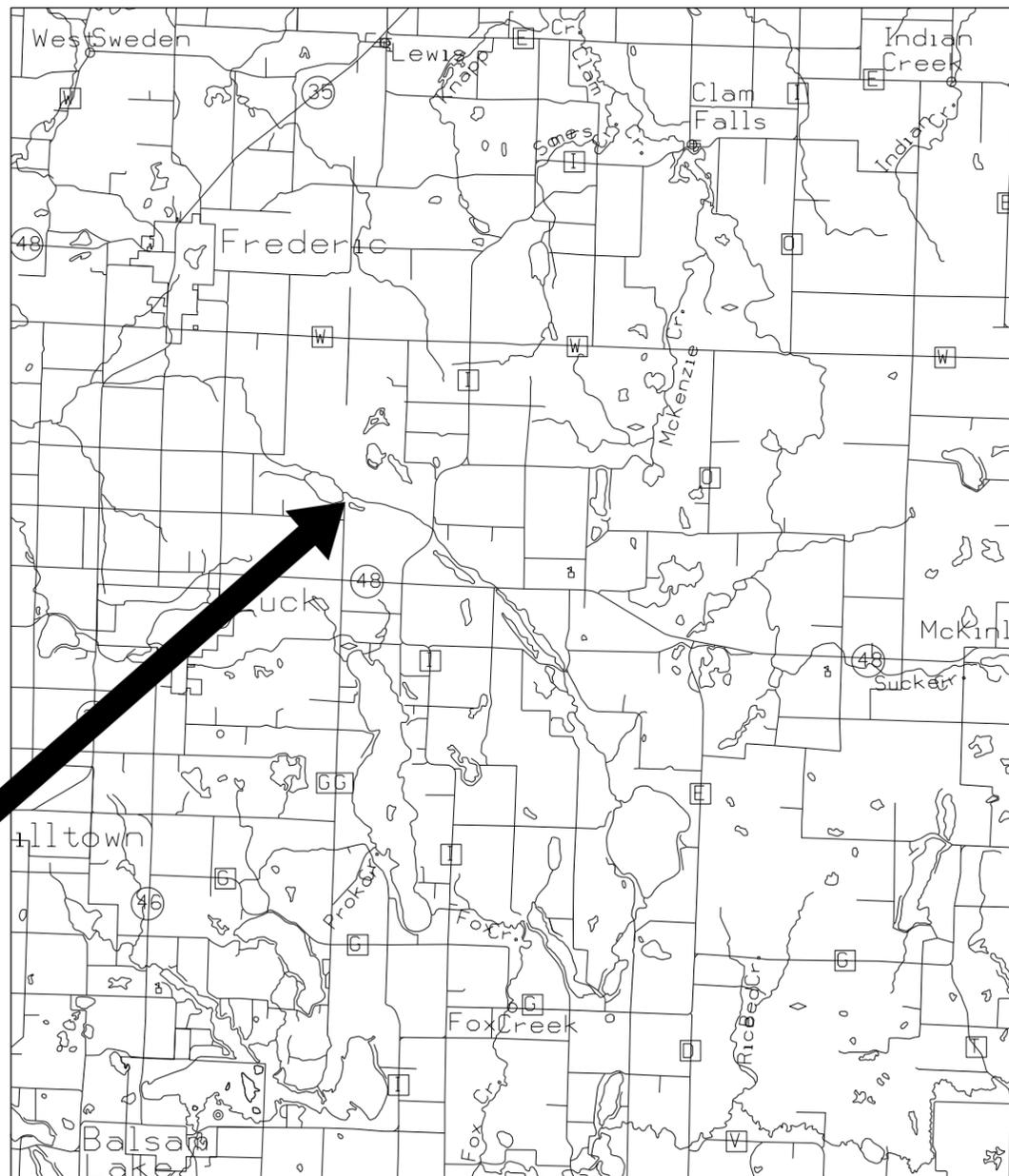


POLK COUNTY

COUNTY MAP
NTS



PROJECT LOCATION



LOCATION MAP
NTS

DRAWING INDEX	
T100	TITLE SHEET AND PROJECT LOCATION
C100	EXISTING CONDITIONS AND CONTROL
C101	OVERALL PROPOSED WORK AND DETOUR MAP
C200	PLANNED CONSTRUCTION WITH EROSION CONTROL
C201	PLANNED CONSTRUCTION WITH EROSION CONTROL
C202	PLANNED CONSTRUCTION WITH EROSION CONTROL
C300	WETLAND DISTURBANCE AREAS
C400	TREE PROTECTION PLAN
C500	CIVIL DETAILS
C501	CIVIL DETAILS
C600	PRELIMINARY LANDSCAPE SKETCHES
C601	PRELIMINARY LANDSCAPE SKETCHES

ABBREVIATIONS:

ACM - ASBESTOS CONTAINING MATERIAL	MJ - MECHANICAL JOINT
B/C - BACK CURB	NTS - NOT TO SCALE
C&G - CURB & GUTTER	RCP - REINFORCED CONCRETE PIPE
CL - CENTERLINE	REQ'D - REQUIRED
CONC - CONCRETE	RT - RIGHT
DIA - DIAMETER	RW - RIGHT OF WAY
DTL - DETAIL	SL - SLOPE
ELEV - ELEVATION	STM - STORM
ER - END RADIUS	TC - TOP OF CURB
EXG - EXISTING	THK - THICK
INV - INVERT	TYP - TYPICAL
LT - LEFT	W/ - WITH
MH - MANHOLE	WTR - WATER
MIN - MINIMUM	φ - DIAMETER



State of Wisconsin
 Department of Administration
 Division of State Facilities



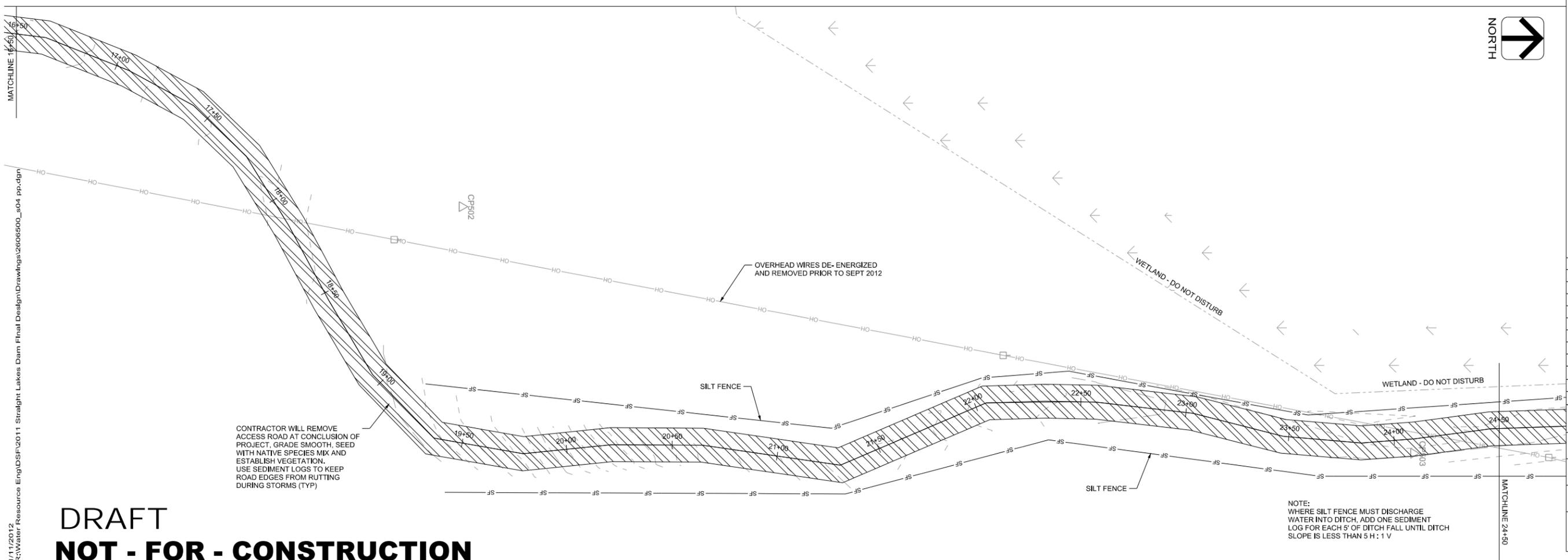
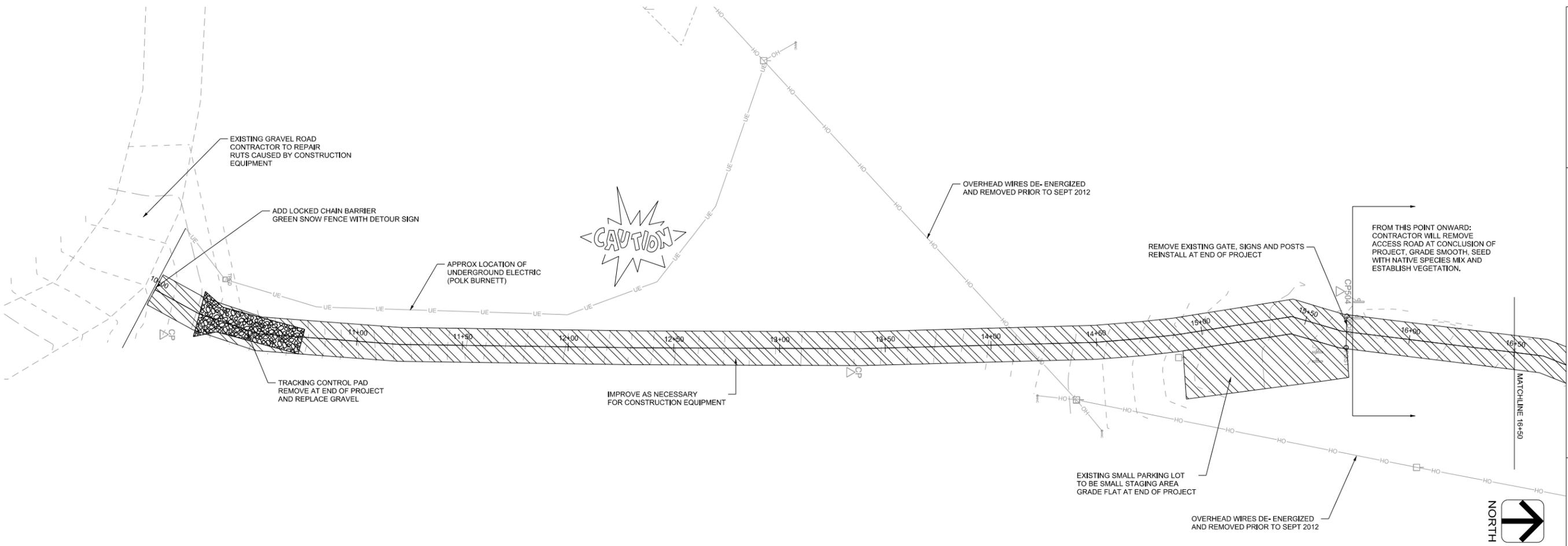
Section 13, T36N R17W
 Town of Luck, Polk County, Wisconsin

Straight Lake State Park Dam Reconstruction
 Wisconsin Department of Natural Resources
 Polk County, Wisconsin

Sheet Title:
 TITLE SHEET AND PROJECT LOCATION

Revisions:		
No.	Date:	Description:

Graphic Scale	 NOT TO SCALE
DSF Number	10A4H
Set Type	PR
Date Issued	01/15/2012
Sheet Number	T100



1/11/2012 R:\Water Resource Eng\DRS\2011 Straight Lakes Dam Final Design\Drawings\2606500_s04 pp.dgn

DRAFT
NOT - FOR - CONSTRUCTION

NOTE:
WHERE SILT FENCE MUST DISCHARGE
WATER INTO DITCH, ADD ONE SEDIMENT
LOG FOR EACH 5' OF DITCH FALL UNTIL DITCH
SLOPE IS LESS THAN 5 H : 1 V



State of Wisconsin
Department of Administration
Division of State Facilities



Section 13, T36N R17W
Town of Luck, Polk County, Wisconsin

Straight Lake State Park Dam Reconstruction
Wisconsin Department of Natural Resources
Polk County, Wisconsin

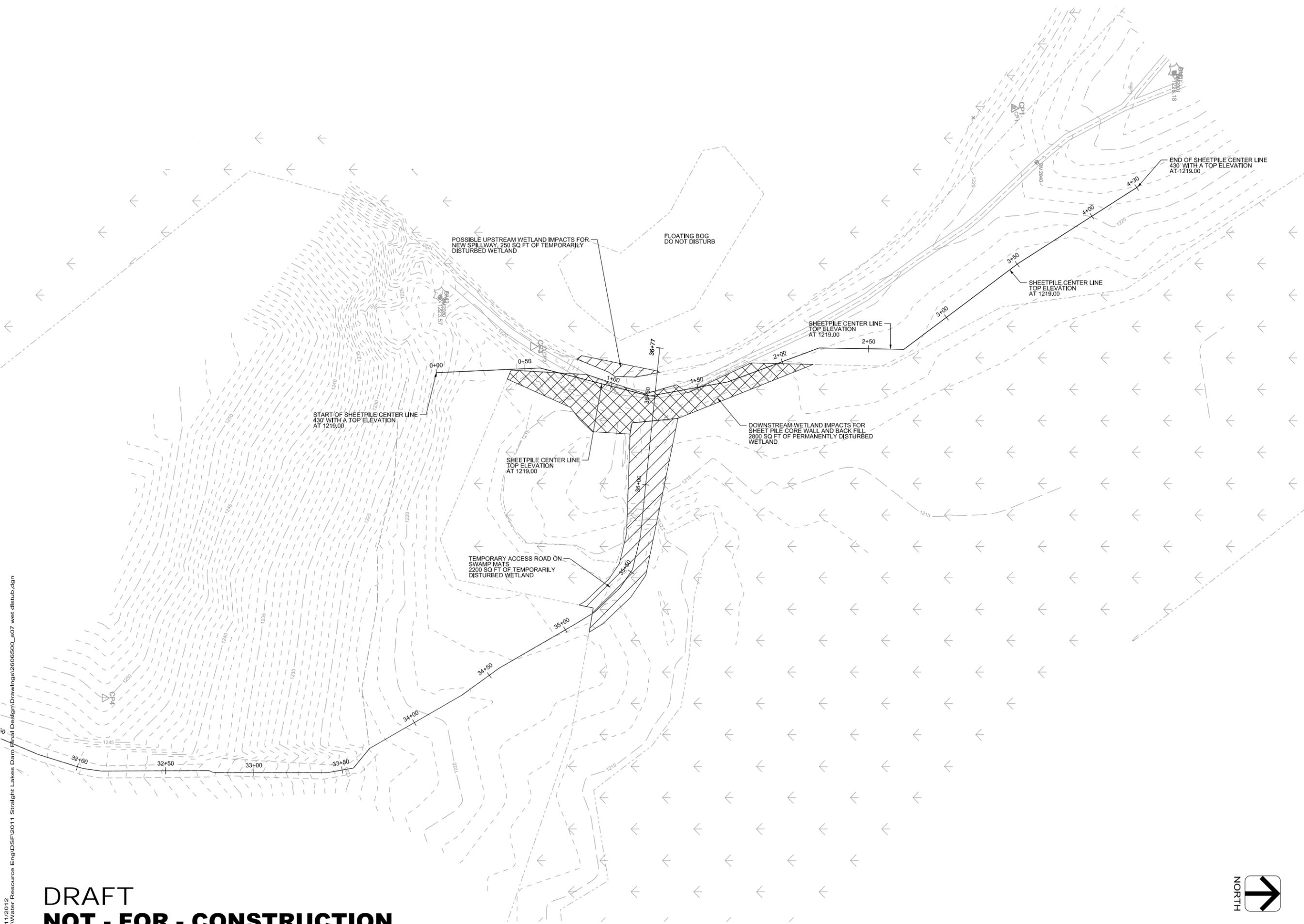
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PLANNED CONSTRUCTION WITH EROSION CONTROL

Revisions:

No.	Date:	Description:

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Set Type	PR
Date Issued	01/15/2012
Sheet Number	C200

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DRAFT
NOT - FOR - CONSTRUCTION



State of Wisconsin
Department of Administration
Division of State Facilities



Section 13, T36N R17W
Town of Luck, Polk County, Wisconsin

Straight Lake State Park Dam Reconstruction
Wisconsin Department of Natural Resources
Polk County, Wisconsin

Sheet Title:
WETLAND DISTURBANCE AREAS

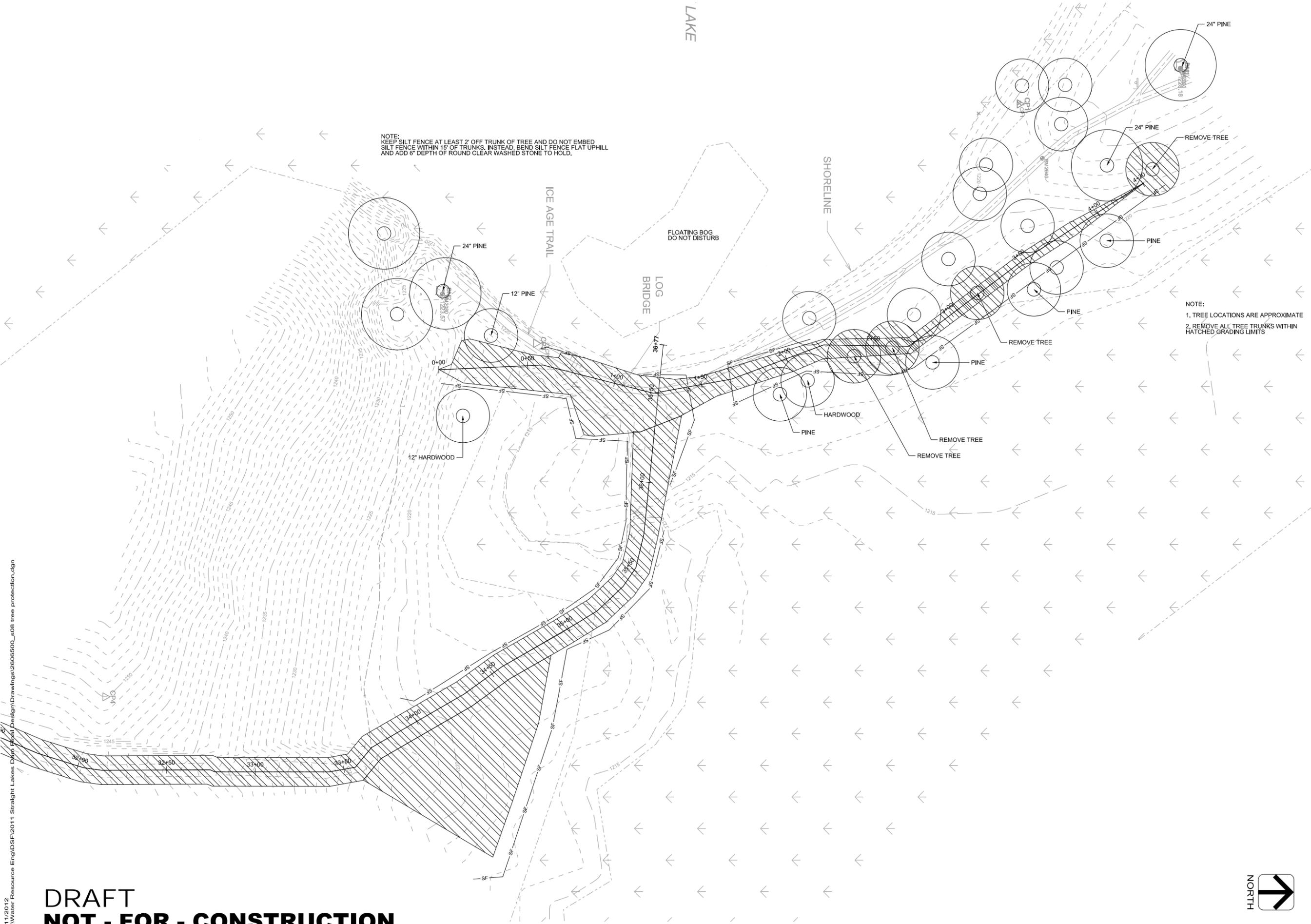
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DSF Number	10A4H
Set Type	PR
Date Issued	01/15/2012
Sheet Number	C300

1/11/2012 F:\Water Resource Eng\DSF\2011 Straight Lakes Dam Final Design\Drawings\2606500_s08 tree protection.dgn

DRAFT
NOT - FOR - CONSTRUCTION



NOTE:
KEEP SILT FENCE AT LEAST 2' OFF TRUNK OF TREE AND DO NOT EMBED SILT FENCE WITHIN 15' OF TRUNKS. INSTEAD, BEND SILT FENCE FLAT UPHILL AND ADD 6" DEPTH OF ROUND CLEAR WASHED STONE TO HOLD.

NOTE:
1. TREE LOCATIONS ARE APPROXIMATE
2. REMOVE ALL TREE TRUNKS WITHIN HATCHED GRADING LIMITS





EAU CLAIRE, WISCONSIN

State of Wisconsin
Department of Administration
Division of State Facilities

Section 13, T36N R17W
Town of Luck, Polk County, Wisconsin

Straight Lake State Park Dam Reconstruction
Wisconsin Department of Natural Resources
Polk County, Wisconsin

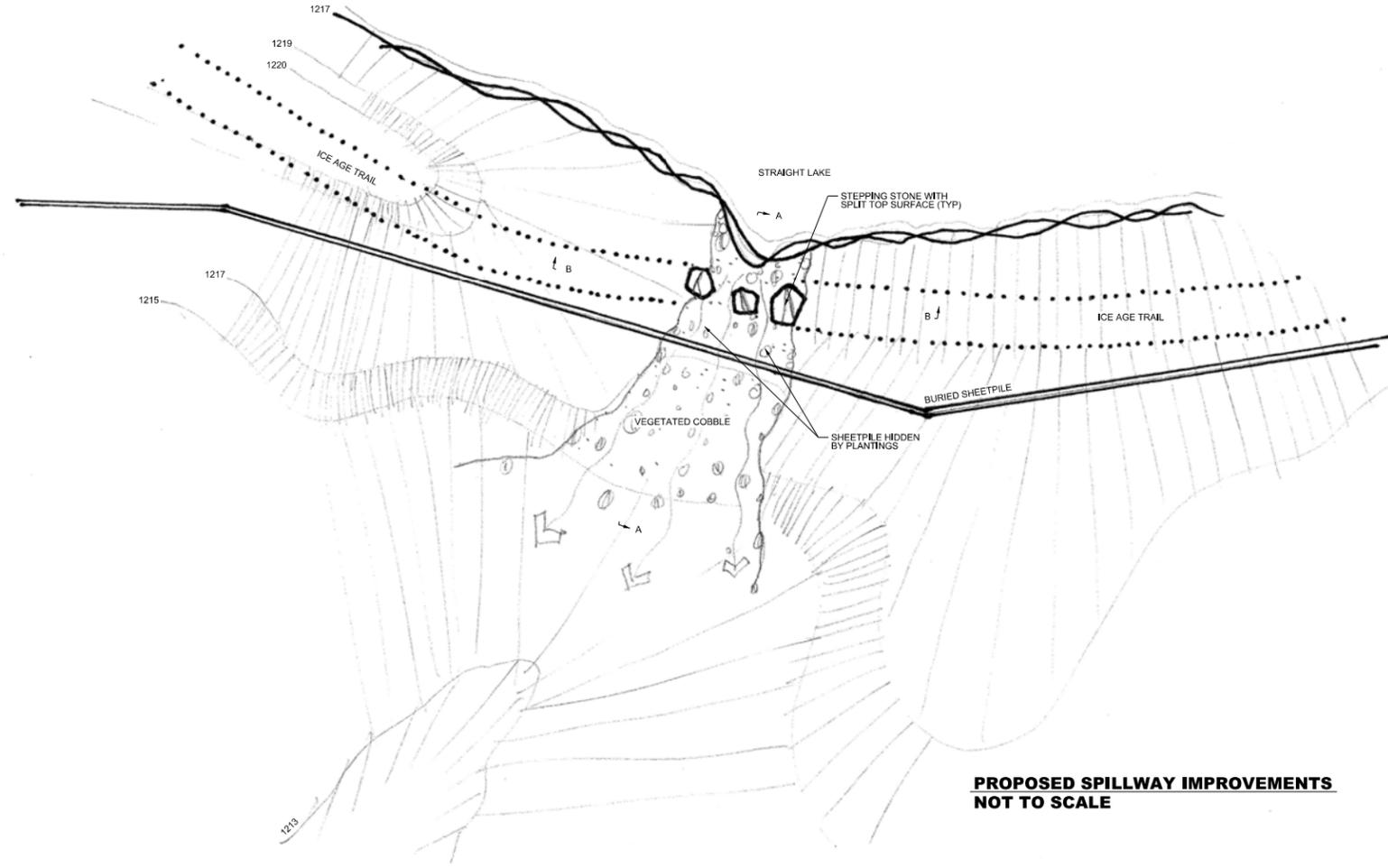
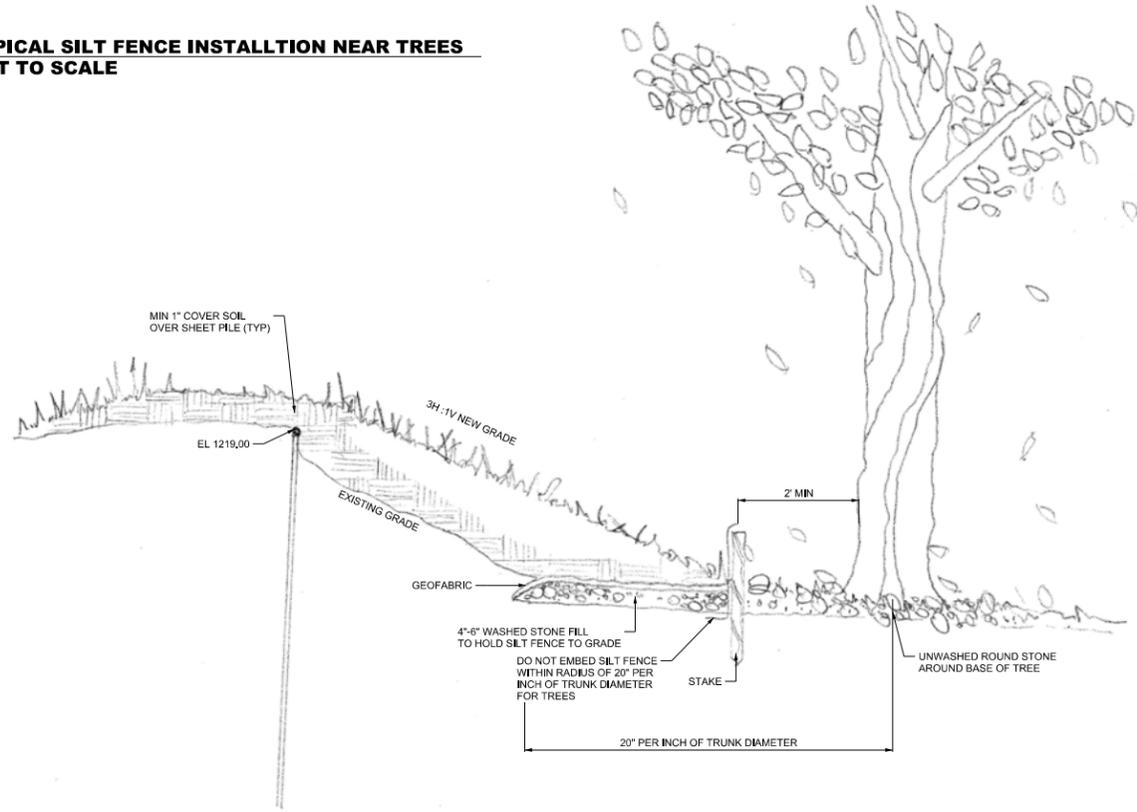
Sheet Title:
TREE PROTECTION PLAN

Revisions:		
No.	Date:	Description:

Graphic Scale	
DSF Number	10A4H
Set Type	PR
Date Issued	01/15/2012
Sheet Number	C400

1/11/2012 R:\Water Resource Eng\DSF\2011 Straight Lakes Dam Final Design\Drawings\260650C_s11 landscape sketch.dgn

TYPICAL SILT FENCE INSTALLTION NEAR TREES
NOT TO SCALE



PROPOSED SPILLWAY IMPROVEMENTS
NOT TO SCALE

DRAFT
NOT - FOR - CONSTRUCTION



State of Wisconsin
 Department of Administration
 Division of State Facilities



Section 13, T36N R17W
 Town of Luck, Polk County, Wisconsin

Straight Lake State Park Dam Reconstruction
 Wisconsin Department of Natural Resources
 Polk County, Wisconsin

Sheet Title:
PRELIMINARY LANDSCAPE SKETCHES

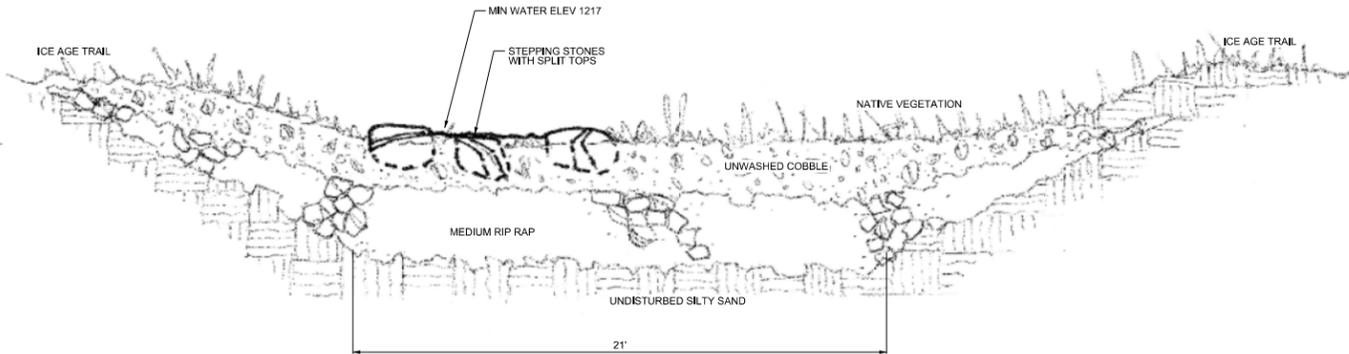
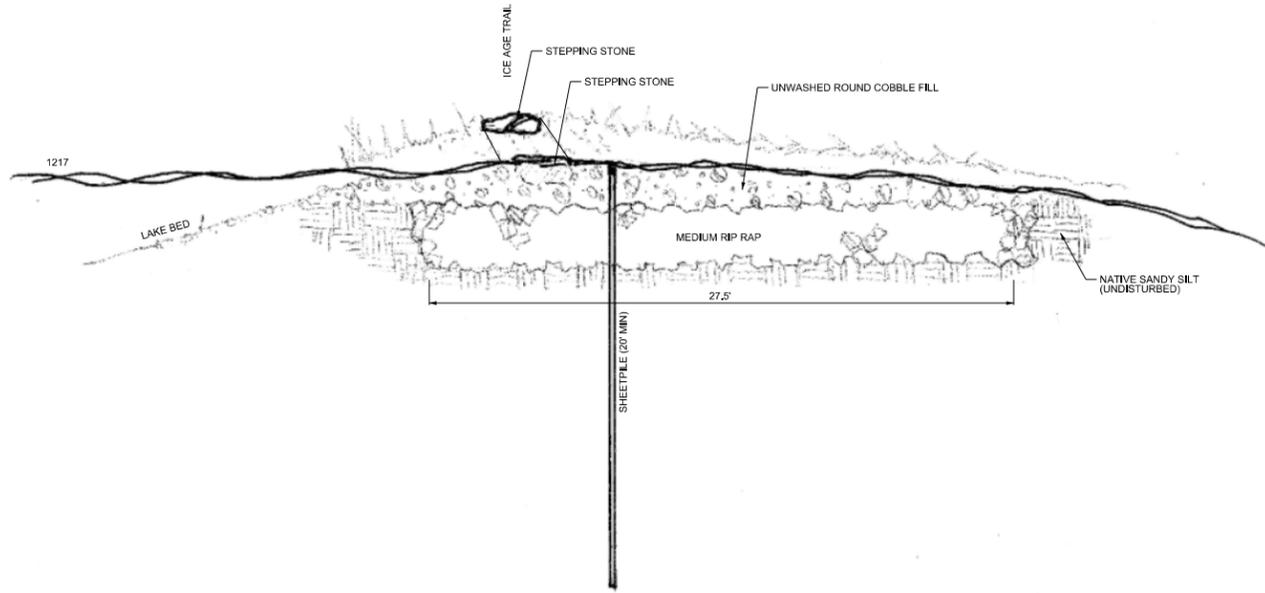
Revisions:

No.	Date:	Description:

Graphic Scale	0' NOT TO SCALE
DSF Number	10A4H
Set Type	PR
Date Issued	01/15/2012
Sheet Number	C600

1/11/2012 R:\Water Resource Eng\DSF\2011 Straight Lakes Dam Final Design\Drawings\260650C_s12 landscape sketch.dgn

**A-A ELEVATION VIEW THRU SPILLWAY CROSSING
NOT TO SCALE**



**B-B PROFILE THRU SPILLWAY CROSSING
NOT TO SCALE**

**DRAFT
NOT - FOR - CONSTRUCTION**



State of Wisconsin
Department of Administration
Division of State Facilities



Section 13, T36N R17W
Town of Luck, Polk County, Wisconsin

Straight Lake State Park Dam Reconstruction
Wisconsin Department of Natural Resources
Polk County, Wisconsin

Sheet Title:
PRELIMINARY LANDSCAPE SKETCHES

Revisions:

No.	Date:	Description:

Graphic Scale	0' NOT TO SCALE
DSF Number	10A4H
Set Type	PR
Date Issued	01/15/2012
Sheet Number	C601

RECEIVED

FEB 02 2012

AYRES ASSOCIATES

Dennis Johnson-PE
Area Associates
3433 Oakwood Hills Parkway
Eau Claire, WI 54701

January 31, 2012

Dear Mr. Johnson,

I just wanted to write a letter of thanks for having the foresight of creating such a beautiful state park. The new Straight Lake State Park Wildlife Area is truly a jewel for all to treasure.

The one thing Minnesota had that Wisconsin did not, was the B.W.C.A. But now it seems as if we have one just down the road from us. It's nice to set aside one little area for no motorized boats to use. I personally plan on using the park frequently myself.

A lot of thought and careful review was done for the preparation process for the dam replacement on Straight Lake. The only thing that I can see that maybe of any concern is the spread of oak wilt. I lived in the North Branch/Stacy area in Chisago County, MN and personally witnessed that whole area being devastated by the disease. It was thought to be spread by the heavy excavating equipment that disturbed and contaminated the root system in the many different housing developments around that area. If you are dealing with any oak trees, you may want to make sure the equipment being used for excavating is sprayed with a bleach substance to help prevent any such threat of the disease spreading. This maybe some what of an over kill precaution for this project, but at least review it and I will trust your judgment. It maybe of some if not any concern at all.

Again, I thank all of you, for the efforts you've put into this park. What a wonderful vision. The only thing missing now are the walleyes!

Sincerely,

Lawrence Lambert
Luck, Wisconsin

NOTICE OF AVAILABILITY
Draft Environmental Assessment
Straight Lake State Park Dam Reconstruction
Luck, Wisconsin
DSF Project Number: 10A4H

An Environmental Assessment (EA) was prepared in accordance with the Wisconsin Environmental Policy Act (WEPA), Wisconsin Statutes 1.11, and Chapter NR150, Wisconsin Administrative Code. The project co-managers are the State of Wisconsin Department of Administration's (DOA) Division of State Facilities (DSF) and the Wisconsin Department of Natural Resources (WDNR).

Existing lake levels in Straight Lake are dependent on a small, earthen dam that is approximately 360 feet long by 6 feet high. Constructed in the 1880s during the Wisconsin logging era, the dam is now out of compliance with Wisconsin Chapter NR 333, which governs dam design and construction.

From the alternatives that were developed, the option to repair the dam with a 400-foot long sheet-pile core approximately 20 feet away on the downstream side of the existing dam was selected.

The purpose of the EA is to describe the proposed project, to identify likely positive and negative impacts of the project on the physical, biological, social, historic and economic environments, and to describe alternatives to the proposed project and potential impacts of those alternatives. Impacts identified during the scoping process that occurred from November 30, 2011, to December 14, 2011, are addressed in the EA.

The proposed project is not anticipated to result in significant environmental effects and the WDNR has made a preliminary decision that an Environmental Impact Statement will not be required for this project.

The document is being made available to the public for a 15-day review period, beginning January 23, 2012, and is being circulated to appropriate federal, state and local agencies. A copy of the document is available at the Luck Public Library, 301 S. Main Street, Luck, WI 54853. It can also be downloaded from the project Web site at:

www.ayresprojectinfo.com/StraightLakeDamEA

Comments on the EA and proposed project may be submitted in writing by 6:30 p.m. (Central Time), February 6, 2012, to:

Dennis Johnson, PE
 Ayres Associates
 3433 Oakwood Hills Parkway
 Eau Claire, WI 54701
 JohnsonD@ayresassociates.com

563122 22Lp WNAXLP

PRINTER'S AFFIDAVIT

Polk County.

ss.

State of Wisconsin

Douglas Panek

being duly sworn, says that he is the manager of

INTER-COUNTY LEADER

which is a weekly newspaper printed and published at

FREDERIC

in said county and state, that a notice, of which the annexed is a printed copy taken from said newspaper, was printed and published in the full regular edition of said newspaper once each week for

one successive weeks commencing and the first publication on the 18th day of Jan., 20 12

being one such publications.

Douglas Panek

Manager.

Subscribed and sworn to before me this 18th day of Jan., 20 12

Kenneth M. Didlo

Notary Public, Polk County, Wis.

My Commission expires November 16, 2014

FEES: _____, one week at _____ per \$52.35
 _____ weeks at _____ per _____

Affidavit \$1.00

Proof _____

Total \$53.35

Received the above fee _____, 20 _____

(Certification No. 187)



February 1, 2012

Stuart Bearheart, Chairman
St. Croix Chippewa Indians of Wisconsin
24663 Angeline Avenue
Webster, WI 54893-9246

Subject: Notification of an Environmental Assessment for the Straight Lake Dam
Reconstruction Project - Straight Lake State Park and Wildlife Area

Stuart

Dear ~~Chairman~~ Bearheart:

As the first step in implementing the "Master Plan for Straight Lake State Park and Wildlife Area" (Master Plan), the Wisconsin Department of Natural Resources (WDNR) is planning to reconstruct the existing dike located at the southeast end of Straight Lake which flows into the Straight River. This original earthen dike was constructed in the 1880's during the Wisconsin logging era, so it does not comply with current dam design standards. Reconstruction was discussed in the Master Plan completed in 2009; however, the dam's reconstruction was not included in the Master Plan's Environmental Assessment because the engineering work for the dam was not finished. With this in mind, a separate Environmental Assessment (EA) has been drafted to provide a separate evaluation of the impacts related to the Straight Lake Dam's reconstruction.

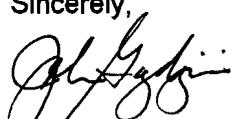
It is proposed that the existing earthen dam will be reconstructed approximately twenty feet offset (downstream) of the existing dam (overview map enclosed). In order to maintain the natural appearance of the lake's shoreline, approximately 375 feet of sheet piling will be installed below the finished grade so the majority of the piling will not be visible. A layer of soil will be placed on both sides of the sheet piling and native plantings will be restored. Once the vegetation is established the majority of the dam except for a stone spillway will blend with the adjacent shoreline. The dam will also be reconstructed so that hikers on the Ice Age National Scenic Trail will be able to cross over the Straight River and continue across the property on the north side of Straight Lake. A complete description of the dam's reconstruction is included in the attached Draft EA along with a number of maps and illustrations in the Appendices.

In recognition of the off-reservation hunting, fishing, and gathering rights which are part of the rights retained in the ceded territory by the Chippewa Tribes of Wisconsin, this letter respectfully extends the offer of government to government consultation between the WDNR and the St. Croix Chippewa Indians of Wisconsin's Tribal Council regarding the "Draft Environmental Assessment (EA) for the Straight Lake Dam Project" at Straight Lake State Park and Wildlife Area. More specifically, WDNR is extending; the offer to review the Draft Environmental Assessment and the opportunity to submit written comments regarding any issues or concerns related to the proposed dam reconstruction project's impacts to treaty resources, such as wild rice and exercising tribal member's Off Reservation Treaty Rights.

After receiving comments on the Draft EA, a final EA will be completed. The Department of Administration – Division of State Facilities will be able to prepare construction documents that will be released for bidding in April 2012. DNR staff have discussed the project with Katie Stariha, Director of Environmental Services / Natural Resources Department for the St. Croix Chippewa Indians of Wisconsin, as well as Jonathan Gilbert, Wildlife Section Leader of the Great Lakes Indian Fish and Wildlife Commission, and would appreciate written comments on the enclosed “Draft Environmental Assessment for the Reconstruction of the Straight Lake Dam”. If tribal representatives have any questions regarding the dam reconstruction project or the Draft EA, they may contact Ken Brokaw, Property Planner, in Rhinelander at (715) 365-8956. Written comments should be mailed to Ken’s attention at 107 Sutliff Avenue; Rhinelander, WI 54501.

Thank you for your prompt review and consideration of this request for your comments. If you feel that a formal discussion and a briefing with the St. Croix Chippewa Indians of Wisconsin Tribal Council are warranted, please contact me.

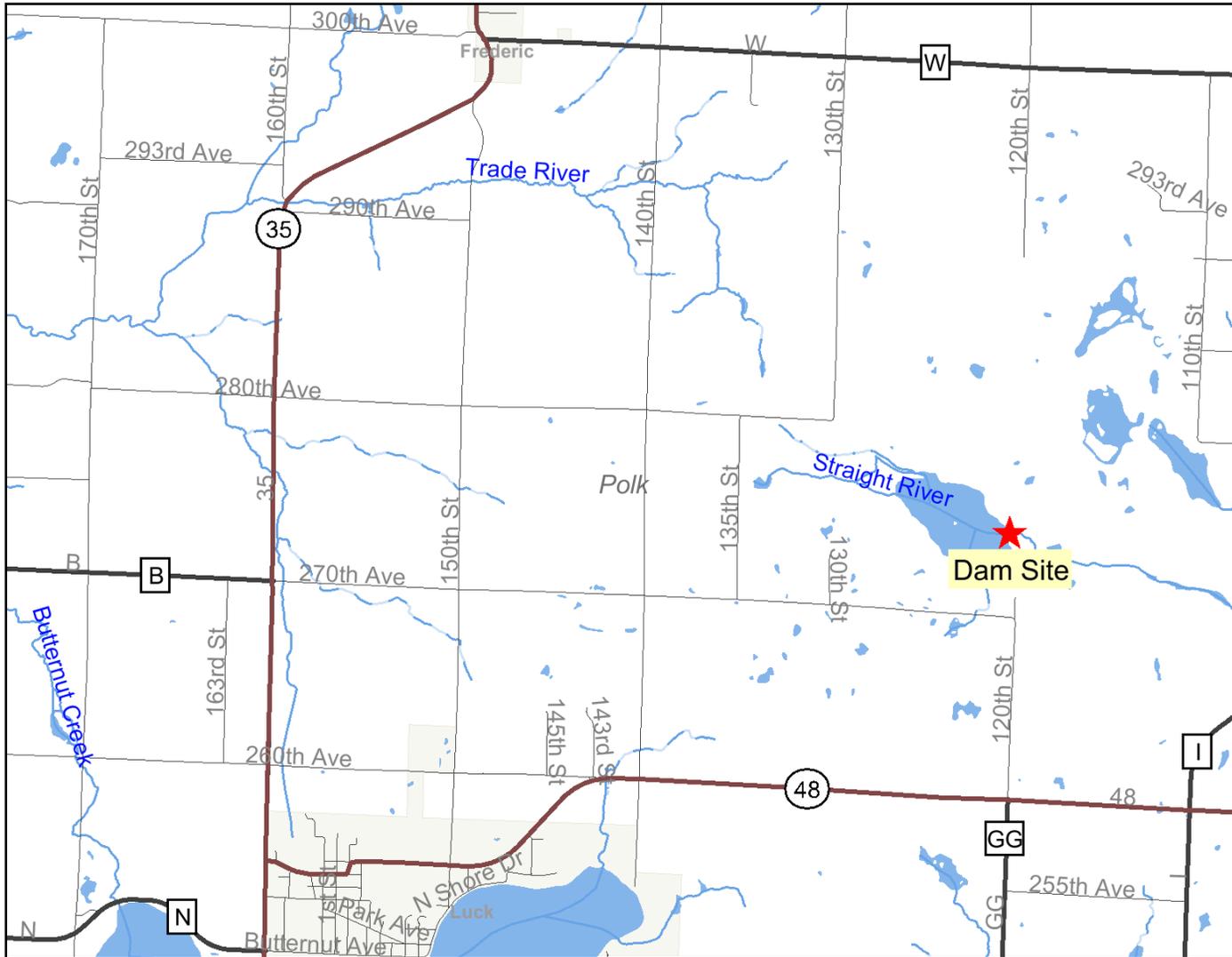
Sincerely,



John Gozdziński
Northern Region Director

cc: Katie Stariha, Director of Environmental Services / Natural Resources Department
Jonathan Gilbert, Wildlife Section Leader, GLIFWC
Aaron Loomis, Tribal Attorney and VTF Representative
George Reynolds, VTF Representative
Conrad St. John, VTF Representative
Susan Matrious, VTF Representative
Ken Brokaw, Property Planner, DNR – Rhinelander

Area Overview - Straight Lake Dam Site



Legend

- Major Highways**
 - Interstate
 - State Highway
 - U.S. Highways
 - County Roads
 - Local Roads
- Rivers and Streams**
 - Intermittent
 - Fluctuating
 - Perennial
 - 24K Open Water
- Municipalities**
 - County Boundary
 - Village
 - City



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Carney, Neil

Subject: FW: straight lake dam

-----Original Message-----

From: Carlisle, Michelle M - DNR [mailto:Michelle.Carlisle@Wisconsin.gov]

Sent: Wednesday, March 28, 2012 12:59 PM

To: Brokaw, Kenneth R - DNR; Anthony Havranek

Cc: Katie Stariha; Aaron Loomis; Peter David; Smith, William H - DNR (AD); Gozdziwski, John F - DNR; Fitzgerald, Kathryn I - DNR; Keeley, Kenneth M - DNR

Subject: RE: straight lake dam

Hello,

I was out of town for a few days, so could not respond sooner.

Seeding the flowages at Straight Lake Wildlife Area is an ongoing project. Tony and I have both agreed that the flowages are a great place for establishing rice. I would want to continue work on the flowages regardless of whether or not there was rice establishment/re-establishment on Straight Lake.

Cheers,
Michelle

From: Brokaw, Kenneth R - DNR

Sent: Thursday, March 22, 2012 02:27 PM

To: Anthony Havranek

Cc: Katie Stariha; Aaron Loomis; Carlisle, Michelle M - DNR; Peter David; Idavid@glifwc.org; Gilbert, Jonathan; Smith, William H - DNR (AD); Gozdziwski, John F - DNR; Fitzgerald, Kathryn I - DNR; Keeley, Kenneth M - DNR; Dreger, Kurt G - DNR; Biermeier, Peter C - DNR; Benson, Debora L - DNR

Subject: RE: straight lake dam

Hi Tony,

It's good to hear from you! We sincerely appreciated the St. Croix Tribe's participation in the development of the 2009 Master Plan for Straight Lake State Park and Wildlife Area. Michelle Carlisle had told me about the cooperative seeding in 2009 of wild rice along the NE shoreline of Straight Lake and in the Middle Impoundment in the Wildlife Area, as you mention in your email below. It too bad we didn't get better establishment. I know that our Property Managers appreciated the St. Croix Tribe's cooperation with WDNR in the seeding of wild rice and the enhancement of the wildlife habitat in these areas.

Just as a point of clarification, your email mentions that at one point in the Master Plan's development WI DNR was proposing to completely remove the Straight Lake Dam. This was discussed early in the master planning process as one of four theoretical Alternatives (see attached 5-08 Newsletter), but was later rejected to avoid the adverse impacts you mention. Subsequently, the Draft and Final Master Plans included the reconstruction of the existing earthen dike and maintaining the existing water level. Please see the attached "Excerpts" Word file for additional information.

I have not been able to reach Michelle Carlisle- our Wildlife Area Property Manager, but I expect that she would welcome the St. Croix Tribal Environmental Department's continued efforts to establish rice on the Wildlife Area flowages in cooperation with WDNR. I also expect that she would welcome any further input the St. Croix Tribal Environmental Department wishes to provide regarding the management of wild rice on the Straight Lake property. I will ask Michelle to follow up with you. Please direct any future comments regarding wild rice to Michelle. And if you have any further comments on the Draft Environmental Assessment of the Straight Lake Dam Reconstruction, please direct those to me care of Katie Stariha. I will be contacting her shortly to ask if she or her staff will be submitting any additional comments on the Draft EA.

WDNR sincerely appreciates your and the St. Croix Tribe's comments regarding the management and development of Straight Lake State Park and Wildlife Area.

Sincerely,

Ken Brokaw
NOR Property Planner
Land Management Section
Bureau of Facilities & Lands
Wisconsin Department of Natural Resources
(()) phone: (715) 365-8956
(()) fax: (715) 365-8932
(+) email: Kenneth.Brokaw@wisconsin.gov<mailto:Kenneth.Brokaw@wisconsin.gov>

P.S. - I will send some additional hard copies of the Final 2009 Master Plan for Straight Lake State Park and Wildlife Area as soon as we get some more printed. In the meantime, I have attached a link to the DNR web page where the Straight Lake Master Plan and the various associated Maps are listed.

www.dnr.state.wi.us/master_planning/completed_archive/parks_trails/

From: Anthony Havranek
[mailto:anthonyh@stcroixtribalcenter.com]<mailto:[mailto:anthonyh@stcroixtribalcenter.com]>
Sent: Tuesday, March 20, 2012 12:16 PM

To: Brokaw, Kenneth R - DNR
Cc: Katie Stariha; Aaron Loomis; Carlisle, Michelle M - DNR; Peter David
Subject: straight lake dam

Ken,

Katie forwarded me your e-mail with the letter to Chairman Bearheart attached.

I remember speaking with you when the master plan was been drafted for Straight Lake. I think at that time WI DNR was proposing to completely remove the dam in question. The main concern with this proposal was that water levels on Straight Lake would drop, resulting in a loss of wild rice habitat due to the fact that wild rice was currently confined to very near shore areas because of steep shorelines.

To mitigate this, we proposed working with the local DNR biologist, Michelle Carlisle, to introduce wild rice on the constructed wetlands to the north of the lake proper. In 2009 we seeded 3 acres to rice. A field check in 2010 showed that the rice grew, but was sparse probably due to high water levels and overgrazing by waterfowl. I think if we increased seeding area and density and combined that with proper water level management, the rice would do really well there.

We would like to continue plans to establish rice on the aforementioned flowages even though the dam will still be constructed on Straight Lake.

Let me know if I can provide any further input.

Sincerely,

Anthony Havranek

Land & Water Resources Manager

St. Croix Tribal Environmental Department

24663 Angeline Avenue

Webster, WI 54893

anthonyh@stcroixtribalcenter.com<mailto:anthonyh@stcroixtribalcenter.com>

P: (715)349-2195 ext. 5183

F: (715)349-8302

Carney, Neil

Subject: FW: Straight Lake Dam- Draft EA

-----Original Message-----

From: Katie Stariha [<mailto:katies@stcroixtribalcenter.com>]

Sent: Wednesday, April 11, 2012 8:21 AM

To: Brokaw, Kenneth R - DNR

Subject: RE: Straight Lake Dam- Draft EA

Hey Ken-

Just wanted to follow up my phone call last night with an official email stating that all comments from the St. Croix Tribe have been submitted through Tony Havranek's letter and any communication with Lisa and Peter David. Thank you for giving the Tribe the opportunity to work with you and sorry it took so long to send the official final affirmation that all comments have been submitted.

Katie

Katie Stariha

Environmental and Natural Resources Director St. Croix Environmental Services

24663 Angeline Ave

Webster, WI 54893

(715) 349-2195 x 5241

-----Original Message-----

From: Brokaw, Kenneth R - DNR [<mailto:Kenneth.Brokaw@wisconsin.gov>]

Sent: Thursday, March 22, 2012 3:15 PM

To: Katie Stariha

Cc: Gozdziwski, John F - DNR; Smith, William H - DNR (AD); Biermeier, Peter C - DNR; Carlisle, Michelle M - DNR; Dreger, Kurt G - DNR; Keeley, Kenneth M - DNR; Benson, Debora L - DNR

Subject: FW: Straight Lake Dam- Draft EA

Hi Katie,

I wanted to follow up with you regarding any forthcoming comments from the St. Croix Tribal Environmental Services/Natural Resources Departments regarding the Draft Environmental Assessment for the Reconstruction of the Straight Lake Dam. I received an email from Anthony (Tony) Havranek, your Land & Water Resources Manager, which I replied to with a copy to you.

Jonathan Gilbert's email below mentions that Lisa and Peter David had "spoken with representatives from St. Croix". He concludes that "There does not appear to be any major concerns about this dam reconstruction thus we will not be submitting any comments".

I wasn't sure how to interpret this in terms of the St. Croix Tribe's comments, so I am contacting you. Will your staff or other representatives for the St. Croix Tribe be submitting any further comments on the Draft EA, or do you share GLIFWC's opinion? In order to "dot the i s and cross the t s", I would appreciate it if you could please provide a written reply (an e-mail is fine).

WDNR sincerely appreciates your and the St. Croix Tribe's comments regarding the management and development of Straight Lake State Park and Wildlife Area.

Sincerely,

Ken Brokaw
Northern Region Property Planner
Land Management Section
Bureau of Facilities & Lands
Wisconsin Department of Natural Resources
(*) phone: (715) 365-8956
(*) fax: (715) 365-8932
(*) email: Kenneth.Brokaw@wisconsin.gov

-----Original Message-----

From: Jonathan Gilbert [\[mailto:jgilbert@glifwc.org\]](mailto:jgilbert@glifwc.org)
Sent: Monday, March 19, 2012 3:29 PM
To: Brokaw, Kenneth R - DNR
Cc: 'Lisa David'; pdavid@glifwc.org
Subject: RE: Straight Lake Dam- Draft EA

Ken
I just spoke with Peter and Lisa (the people working on wild rice issues including comments on DNR permits which may affect rice). They in turn have spoken with representatives from St. Croix. There does not appear to be any major concerns about this dam reconstruction thus we will not be submitting any comments.

Jon

Jonathan Gilbert Ph.D.
Wildlife Section Leader
Great Lakes Indian Fish and Wildlife Commission P. O. Box 9 Odanah, WI 54806

Office (715) 682-6619 ext 2121
Cell (715) 209- 3975

jgilbert@glifwc.org



February 1, 2012

Mr. James E. Zorn, Executive Director
Great Lakes Indian Fish and Wildlife Commission
P.O. Box 9
Odanah WI 54861

Subject: Notification of an Environmental Assessment for the Straight Lake Dam
Reconstruction Project – Straight Lake State Park and Wildlife Area

Dear ^{Jim}Mr. Zorn:

Department of Natural Resources (DNR) staff are currently planning to reconstruct the existing dike located at the southeast end of Straight Lake which flows into the Straight River. The original earthen dike was constructed in the 1880's during the Wisconsin logging era, so it does not comply with current dam design standards. Dam reconstruction was discussed in the "Master Plan for Straight Lake State Park and Wildlife Area" (Master Plan) completed in 2009; however, the reconstruction was not included in the Master Plan's Environmental Assessment because the engineering work for the dam was not finished. With this in mind, a separate Environmental Assessment (EA) has been drafted to provide a separate evaluation of the impacts related to Straight Lake Dam's reconstruction.

DNR staff are in the process of seeking comments on the Draft Environmental Assessment (EA) for the Reconstruction of Straight Lake Dam that is enclosed. DNR staff have discussed the project with Jonathan Gilbert, Wildlife Section Leader of the Great Lakes Fish and Wildlife Commission (GLIFWC), as well as Katie Stariha, Director of Environmental Services / Natural Resources Department for the St. Croix Chippewa Indians of Wisconsin, and would appreciate written comments on the enclosed Draft EA. Written comments should be mailed to Ken Brokaw, Property Planner, at 107 Sutliff Avenue; Rhinelander, WI 54501. After receiving comments on the Draft EA, a final EA will be completed. After that, the Department of Administration – Division of State Facilities will be able to prepare construction documents that will be released for bidding in April 2012.

There is no known rice growing or has been seeded in the vicinity of the area which would be disturbed by the reconstruction of the Straight Lake Dam. By this letter the DNR is formally notifying the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and the Voigt Intertribal Task Force (VTF) of the planned dam reconstruction and the potential impact on wild rice. I would like to ask you to determine if a formal presentation to the VTF is necessary.

Background Information

Existing lake levels in Straight Lake are dependent on a small, earthen dam approximately 360 feet long by 5.7 feet high on the eastern shoreline of Straight Lake. The original earthen dike is now out of compliance with Wisconsin Chapter NR 333, which governs dam design and construction for dams having a structural height of more than six feet and a maximum storage capacity of 50 acre-feet. The Draft EA prepared to evaluate the impacts of the dam's reconstruction concludes that, "removing this dam is not a desirable option, as water levels on the lake would be adversely affected having an impact on aquatic and shoreline habitat on Straight Lake".

DNR staff are proposing that an earthen dam be reconstructed approximately twenty feet offset (downstream) of the existing dam (overview map enclosed). In order to maintain the natural appearance of the lake's shoreline, approximately 375 feet of sheet piling will be installed below the finished grade so the majority of the piling will not be visible. A layer of soil will be placed on both sides of the sheet piling and native plantings will be restored. Once the vegetation is established, the majority of the dam except for a stone spillway will blend with the adjacent shoreline. The dam will also be reconstructed so that hikers on the Ice Age National Scenic Trail will be able to cross over the Straight River and continue across the property on the north side of Straight Lake. A complete description of the dam's reconstruction is included in the attached Draft EA along with a number of maps and illustrations in the Appendices.

Impact on Wild Rice

Information from a wild rice survey report titled "Circle of Flight" created by the St. Croix Chippewa Indians of Wisconsin Natural Resources Department indicates that wild rice was found in Straight Lake in isolated remnant patches that consist of one to five plants along the majority of the shoreline with the exception of the northeast portion. One wild rice bed (<1 acre) was observed along the southeast shoreline near a patch of tamarack trees. According to information from the 2010 compilation of Wild Rice waters provided by Peter David, Straight Lake is listed with the following narrative:

"A small patch of rice was documented on this lake by the St. Croix Tribe, and the bed has been discussed in documents related to the development of Straight Lake State Park. Although it appears this bed is likely too small to provide public harvest, it may provide some unique opportunities for public education. Watch status is medium because of limited annual abundance information.

There is no known rice growing or has been seeded in the vicinity of the area which would be disturbed by the dam reconstruction. If wild rice is growing within the area that will be disturbed by construction work, effective erosion control practices will be implemented. It is anticipated that the majority of the work will be performed during the winter months when the ground is frozen. The plans for the restoration of the dam site following construction will include seeding of wild rice along the shoreline. An opportunity to do the seeding in cooperation with GLIFWC staff and St. Croix Chippewa Indians of Wisconsin staff will be extended. If GLIFWC staff or tribal representatives have any questions regarding the dam reconstruction project or the Draft EA, they may contact Ken Brokaw, Property Planner, in Rhinelander at (715) 365-8956.

I invite the input of the Voigt Intertribal Task Force on the dam reconstruction project and the Draft Environmental Assessment. If you feel that a formal discussion and briefing with the VTF are warranted, please contact me.

Sincerely,



John Gozdziński
Northern Region Director

Enclosure

cc: Lisa David, Manoomin Biologist, GLIFWC
Jonathan Gilbert, Wildlife Section Leader, GLIFWC
Tom Maulson, Chairman, Voigt Intertribal Task Force
Aaron Loomis, Tribal Attorney and VTF Representative
George Reynolds, VTF Representative
Conrad St. John, VTF Representative
Susan Matrious, VTF Representative
Katie Starhia, Director of Environmental Services, St. Croix Chippewa Indians of Wisconsin
Ken Brokaw, Property Planner, DNR – Rhinelander

Carney, Neil

Subject: RE: Straight Lake Dam- Draft EA

-----Original Message-----

From: Jonathan Gilbert [<mailto:jgilbert@glifwc.org>]

Sent: Monday, March 19, 2012 3:29 PM

To: Brokaw, Kenneth R - DNR

Cc: 'Lisa David'; pdavid@glifwc.org

Subject: RE: Straight Lake Dam- Draft EA

Ken

I just spoke with Peter and Lisa (the people working on wild rice issues including comments on DNR permits which may affect rice). They in turn have spoken with representatives from St. Croix. There does not appear to be any major concerns about this dam reconstruction thus we will not be submitting any comments.

Jon

Jonathan Gilbert Ph.D.

Wildlife Section Leader

Great Lakes Indian Fish and Wildlife Commission P. O. Box 9 Odanah, WI 54806

Office (715) 682-6619 ext 2121

Cell (715) 209- 3975

jgilbert@glifwc.org