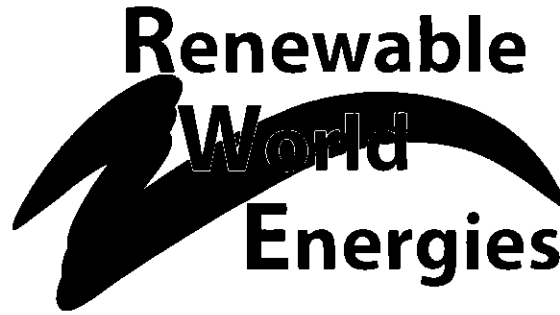


ORIGINAL



February 18, 2013

Ms. Kimberly D. Bose, Secretary
 Federal Energy Regulatory Commission
 888 First Street NE
 Washington, DC 20426

FEDERAL ENERGY REGULATORY COMMISSION
 FEB 26 2013 9:10 AM
 SECRETARY'S OFFICE

**Re: Winter Hydroelectric Project
 FERC Project Number P-2064
 Flambeau Hydro LLC
 Final 2012 Land & Wildlife Management Report**

Dear Ms. Bose:

Purpose

On behalf of Flambeau Hydro LLC "Flambeau" (Licensee), Renewable World Energies is submitting (1) original and (8) copies of the Final 2012 Land & Wildlife Management Report for the Winter Hydroelectric Project. The Final report is the same as the draft report as none of the agencies had us incorporate anything new into the plan.

Background

The Federal Energy Regulatory Commission "FERC" issued a License to Flambeau on August 12, 2005. Portions of the original Certification were contested by the Licensee. The Wisconsin Department of Natural Resources (WDNR) submitted a revised Water Quality Certification, Dated at Park Falls, WI: August 19, 2008 that replaced the original certification of June 21, 2005. Only conditions E, F, and J were modified and a footnote was added to condition D according to the Final Settlement Agreement.

The submitted report is a requirement of the License pursuant to Article 404, Forest Service (FS) Condition 10, and WDNR Water Quality Certification Item Letter P, Q, and R. The Land & Wildlife

Corporate Office
 P.O. Box 264
 100 S. State Street
 Neshkoro, WI 54960
 Fax: 920-293-4100

Phone: 855-99HYDRO
 (855-994-9376)
www.renewableworldenergies.com

Administrative Office
 1001 Stephenson Street
 Norway, MI 49870
 Fax: 906-563-9344

Management Plan was filed with FERC on December 19, 2008. FERC issued an Order Modifying and Approving the plan on June 3, 2011. At the time of approval the Licensee was directed to consult with the Wisconsin Department of Natural Resources (WDNR), Forest Service (FS), and U.S. Fish and Wildlife Service (FWS).

(B) Any further change in the Federal status of the gray wolf is to be acknowledged in the report. (The gray wolf is currently delisted in Wisconsin by the U.S. Fish and Wildlife Service). The filing shall also include documentation of consultation with the Wisconsin Department of Natural Resources, the U.S. Forest Service (FS), and FWS. The licensee also shall file documentation of non-native invasive species survey results, and the monitoring, control, and mitigation measures agreed to with the FS, upon completion of remaining surveys. Survey results and mitigation measures shall file as part of the annual reporting process described as part of the plan. Documentation of consultation with the FS is to be included in the filing. The Commission reserves the right to make changes to this plan based upon the licensee's filings and agency comments received on the reports

(C) The licensee shall employ a biologist trained in the identification of the appropriate non-native invasive species and Regional Forester Sensitive Species and Management Indicator Species, as specified by the plan, to identify the appropriate species, or to educate other licensee staff.

Invasive Species Consultation

During the 2012 season Flambeau Hydro, LLC was in contact with Steven Spickerman Plant Ecologist for the Chequamegon-Nicolet National Forest. They had a crew that was going to help eradicate the invasive honeysuckle growing on the Winter Project property. Unfortunately, they ran out of time to treat the honeysuckle at Winter Dam this year when they got tied up with another large honeysuckle eradication project in the area. We will be in contact with Steven next season as well to try and combine forces in eradicating the honeysuckle on the property.

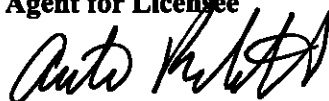
Conclusion

Draft copies of the Winter Land and Wildlife Report were sent to the Forest Service, WI DNR, and US Fish and Wildlife Service on 11-30-2012 to invite comments. On December 12, 2012 the FS sent back a comment to keep working with Steven Spickerman on the Non Native Invasive Species issues. The FWS sent an email on January 18, 2013 that they had no comments on the Winter project. A reminder was sent to Ms. Cheryl Laatsch (WI DNR) on February 7, 2013 and she said she would check for comments- none have been received as of February 18, 2013. All agency comments received are attached in Appendix 1.

The Licensee's staff Environmental Manager has a B.S. in Forest Administration with a minor in Natural Resources Management from the University of Wisconsin Stevens Point. He and another staff member are certified as completing the Wisconsin DNR Karner Blue Butterfly HCP Monitoring Training. He attended and has certificates of completion of a WI-DNR Aquatic Plant Identification Workshop on June 28, 29, 30, 2011. He also has attended a "Getting to Know Your Local Trees & Invasive Plants" class sponsored by the University of Wisconsin Extension. The licensee's staff consults agencies on a regular basis concerning identification and environmental issues.

If you have any questions concerning this report, please contact Mr. Gary Rast at the Renewable World Energies LLC offices @ 855-994-9376 ext. 105, or by email at; grast@rwehydro.com. An alternate contact is Aneta Rietveld at the Renewable World Energies LLC offices @ 855-994-9376 ext. 108, or by email at; arietveld@rwehydro.com.

Sincerely,
Renewable World Energies, LLC
Agent for Licensee



For: Mr. Jason Kreuzscher
Vice President Operations

Attachment: Final 2012 Land & Wildlife Management Report – February 18, 2013

Cc: RWE Corporate
Mr. Craig Roesler
Mr. Peter Fasbender
Ms. Cheryl Laatsch
Mr. Paul Strong

FINAL

**2012 LAND & WILDLIFE
MANAGEMENT REPORT
(Per FERC License Article 404)**

**Per USDA Forest Service 4(e) Condition 10
Per WDNR Revised 401 Water Quality Certification Item Letter P, Q, R**

**Winter Hydroelectric Project
FERC Project #2064
Flambeau Hydro, LLC**

East Fork of the Chippewa River, Sawyer County, Wisconsin

Respectfully Submitted by:

**Renewable World Energies
100 South State Street
Neshkoro, Wisconsin 54960**

Final- February 18, 2013

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I
Plan Requirements & Approval

1. The Federal Energy Regulatory Commission (FERC) issued a new license on August 12, 2005 to Flambeau Hydro LLC. The license is for the continued operation and maintenance of the 600 KW Winter Project (No. 2064), located in Sawyer County on the East Fork of the Chippewa River. As such, the Federal Energy Regulatory Commission incorporated the following requirement into the new license:

FERC License Article 404 - Land and Wildlife Management Plan

Within six months of license issuance, the licensee shall file for Commission approval a plan to manage land and wildlife at the project. The plan shall be prepared after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Forest Service, and the U.S. Fish and Wildlife Service (FWS). Measures to protect threatened and endangered species (i.e., bald eagle, gray wolf) at the project, as well as other wildlife habitat of concern, shall be included in the land and wildlife management plan. In addition, the plan shall include guidelines for the managing vegetation, habitat, and ground-disturbing activities in accordance with condition 10 in appendix B of this license, and shall be consistent with the bald eagle and gray wolf management guidelines of the FWS, Forest Service, and Wisconsin DNR. The plan shall include, at a minimum, the following:

- 1. Procedures for obtaining and documenting bald eagle nesting activity and the presence of gray wolves on an annual basis, and for maintaining the information on project maps for use when planning land disturbing activities such as vegetation control or recreation facility development;*
- 2. Consultation with the Wisconsin DNR, Forest Service, and FWS prior to conducting land disturbing activities that could affect any of the threatened and endangered species using project land;*
- 3. Measures to protect Regional Forester Sensitive Species and Management Indicator Species; and*
- 4. Measures to control erosion from trails, parking lots and shoreline areas; and; annual consultation with the resource agencies to allow for periodic management plan updates and to obtain agency input regarding proposed management decisions.*

The licensee shall include with the land and wildlife management plan documentation of agency consultation, including copies of agency comments and recommendations on the draft plan, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations, before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The land and Wildlife management plan shall not be implemented until the licensee is notified that the plan is approved. Upon approval, the licensee shall implement the plan according to the approved schedule, including any changes required by the Commission.

2. Attached to the FERC License, and as Appendix B, are the USDA Forest Service Conditions. As such the USDA Forest Service incorporated the following condition into the FERC License:

USDA Forest Service Condition No. 10 – Vegetation, Habitat and Ground-disturbing Activities on National Forest System Lands

Within one year of license issuance or at least 90 days prior to vegetation, habitat, and/or ground-disturbing activity, whichever comes first the Licensee shall file with the Commission a Vegetation, Habitat, and Ground-Disturbing Management Plan (Plan) that is approved by the Forest Service. The Plan shall be site specific and be prepared in consultation with the appropriate Federal and State resource agencies for all tree or vegetation removal, habitat, and/or ground-disturbing activities on, or effecting, National Forest System lands.

The Plan shall implement measures to prevent the Spread of non-native invasive species; minimize erosion as well as sedimentation; protect, mitigate, or enhance terrestrial and fisheries habitat; and provide for adaptive management measures based on prescribed monitoring objectives over the life of the license. The Licensee shall not file any such plans with the Commission or commence any such activities without written approval from the USDA Forest Service.

At a minimum, and where relevant, the Plan shall include the following provisions:

Notification to the Chequamegon-Nicolet National Forest before the Licensee begins any vegetation or ground disturbing work;

The Licensee's plan shall comply with USDA Forest Service and Chequamegon-Nicolet National Forest sensitive species and non-native invasive species management guidelines and protocols, including prevention, control, and monitoring protocols;

Identification of methods for prevention and control of non-native invasive species. Treatment of existing infestations of highest priority non-native invasive species shall be initiated immediately upon completion of appropriate National Environmental Policy Act (NEPA) documentation and approval of the Plan by the Commission;

Notification to the Chequamegon-Nicolet National Forest upon the Licensee finding new locations for any listed non-native invasive species and/or prior to any independent actions at non-native invasive species control efforts;

Timing to establish vegetation of disturbed soils as soon as possible;

Identification and prioritization of any erosion areas to be re-vegetated or rehabilitated; Procedures for identification of additional measures that the Licensee shall implement if monitoring reveals that re-vegetation and vegetation control is not successful or does not meet intended objectives;

Disclosure of any temporary habitat and/or ground-disturbing measures the Licensee will use;

A list of species to be used, planting location, and site preparation methods.

Emphasis shall be to use native species and to follow the Forest's Land and Recourse Management Plan as well as the Wisconsin's Forestry Best Management practices for Water Quality,

Identification of measures the Licensee will use to mitigate project effects on terrestrial and aquatic habitat including any identified habitat threats, as well as measures designed to enhance habitat, including restoration of wetland, riparian, and aquatic systems;

Be updated to meet standards and guidelines that are applicable to the Chequamegon-Nicolet National Forest;

Be updated as new information is obtained in consultation with the agencies and submit the updated plan to the Forest Service and Commission for approval;

A monitoring program to evaluate the effectiveness of re-vegetation, vegetation control and/or non-native invasive species control measures; and

Identify a timeline for accomplishing plan objectives.

- 3.** Attached to the FERC License, and as Appendix A, are the Wisconsin Department of Natural Resources (WDNR) 401 Revised Water Quality Certification Dated at Park Falls WI: August 19, 2008 Item Letter P, Q, and R. As such the WDNR incorporated the following conditions into the FERC License:

Wisconsin Department of Natural Resources 401 Water Quality Certification Item Letter P, Q, and R

*P. The licensee shall annually inspect the entire shoreline of the project waters for purple loosestrife (*Lythrum salicaria*) and map its distribution and relative abundance. Inspections should be scheduled in August while plants are flowering so purple loosestrife can be readily identified. The licensee should submit a report of the monitoring results to the Department by December 31 each year. If the Department deems it necessary to initiate or expand efforts to control purple loosestrife in the East Fork Chippewa River, the licensee shall provide reasonable cooperation in those efforts.*

Q. The licensee shall monitor the shoreline of the project reservoir, power canal, tailrace, and bypassed channel for erosion, and if necessary, prepare an erosion control plan in consultation with the Department. Inspections should be conducted at three-year intervals in spring before vegetation develops, so eroded areas can be readily identified. The licensee shall submit to the Department a report of monitoring results by December 31 in the year of each inspection.

R. Before engaging in any activity that may introduce zebra mussels into project waters, the licensee shall provide or demand (through contract clause or other binding agreement) evidence of effective decontamination of barges, tools, boats, construction equipment, or other items capable of transferring water containing larval or adult zebra mussels. Effective decontamination may include steam-cleaning, chemical treatment, physical treatment, or other suitable procedures.

4. FERC PLAN APPROVAL

The Land and Wildlife Management was submitted to the Federal Energy Regulatory Commission December 19, 2008. It was approved by an *Order Modifying And Approving Land And Wildlife Management Plan Issued June 3, 2011*.

II
Description of Winter Hydroelectric Project

Project Description

The project is located on the East Fork of the Chippewa River, near the town of Winter, in Sawyer County, Wisconsin. The Project reservoir has been determined to be approximately 30 acres at the project's normal pool elevation. The USDA Forest Service portion of the reservoir, as defined to the natural thread of the river, would amount to a very tiny area of approximately 15 acres. Additionally, there are approximately 11 tiny acres of USDA Forest Service lands below the dam, making the total acreage of Federal lands at the project to be approximately only 26 acres.

The overall configuration of the project is as follows:

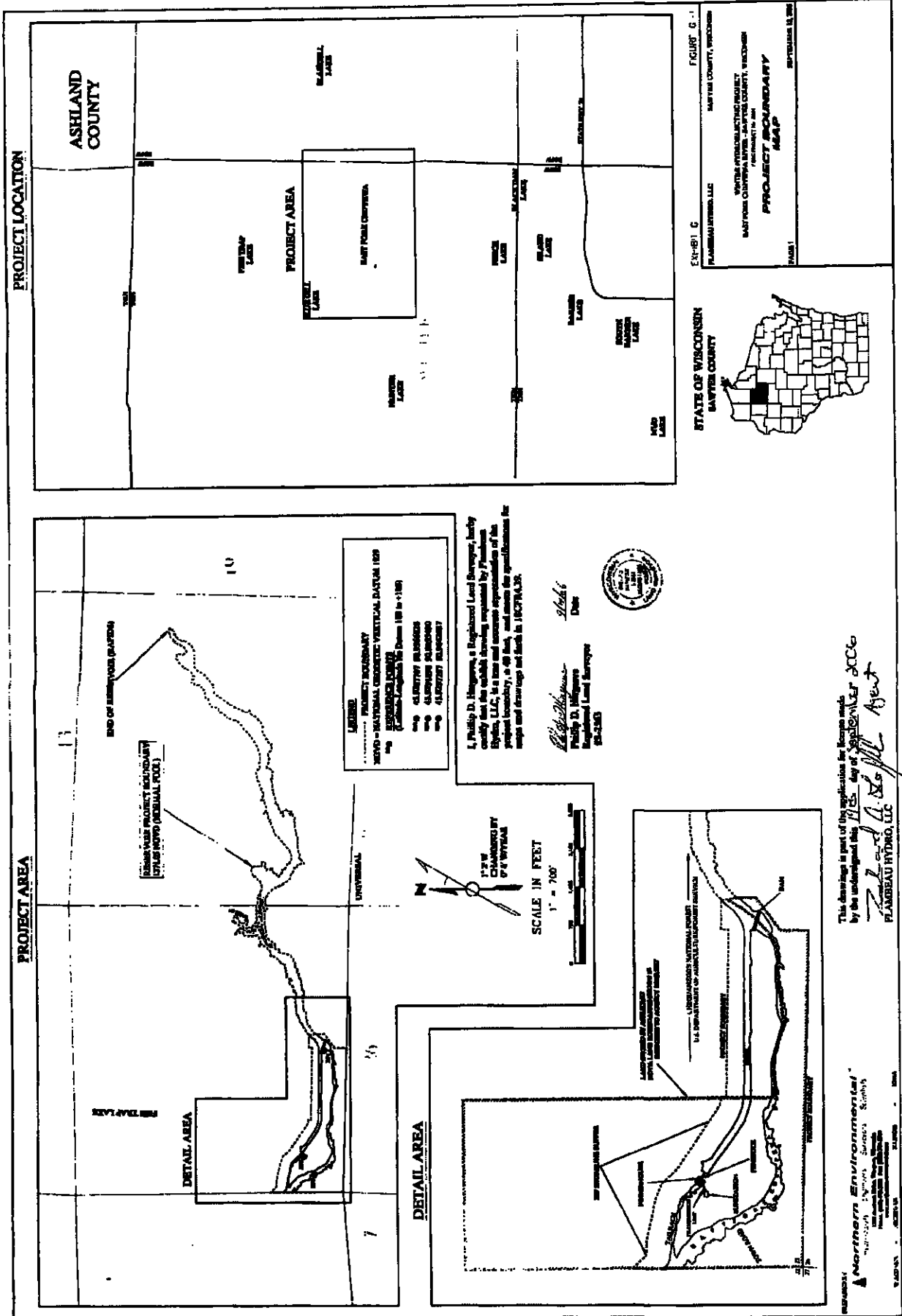
- **Diversion Dam:** A 14-foot-high, 140 foot-long concrete dam section (8 bays total) with steel gates on top of wooden stop logs in 7 bays and one bay with a 6'x16' steel lift gate operated with an electric motor and mechanical ball-screw. The diversion dam allows the water to be apportioned either to the bypassed reach or down the power canal and into the hydroelectric units.
- **Power Canal:** The power canal consists of earth embankments and is approximately 2,100 feet in length. The canal is approximately 20 feet wide at the bottom and has flanked earth embankments to retain the water.
- **Intake Structure:** The intake structures consist of reinforced concrete structure housing a common intake rack that conveys water to (2) two 5 foot – 6 inch penstock tubes.
- **Powerhouse and the Tailrace:** The powerhouse is a concrete structure (with a total of 24.5 feet of head) that houses two generators coupled to vertical Francis turbines. Unit 1 has a load capacity of 200 KW, and with a 174 CFS flow capacity. Unit 2 has a load capacity of 400 KW, with a 224 CFS flow capacity. The tailrace of the powerhouse is approximately 700 feet in length.
- **USDA Forest Service Lands:** The Forest Service lands are approximately 300 feet wide by 1600 feet long, or approximately 11 acres. However, this 300 foot strip includes; ½ of the river, the Diversion Dam, the Project's power canal, the diversion dam's access road and the left and right embankments for the power canal. (please refer to the Plan's map; Forest Service Lands at the Winter Project)

III Project Drawings

**Winter Hydroelectric Project Boundary
Exhibit G - Figure G-1**

Forest Service Lands at the Winter Project

**Winter Hydroelectric Project Boundary
Exhibit G - Figure G-1**



PROJECT LOCATION

ASHLAND COUNTY

PROJECT AREA

STATE OF WISCONSIN
SAWYER COUNTY

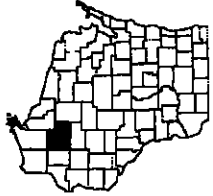


FIGURE G-1

EX-101 G
FLAMBEAU HYDRO, LLC

NORTHERN ENVIRONMENTAL PROJECT
SAWYER COUNTY, WISCONSIN
PROJECT BOUNDARY
MAP

PROJECT AREA

7

DETAIL AREA

10

DETAIL AREA

LEGEND
 - - - - - PROJECT BOUNDARY
 - - - - - NATIONAL GRID VERTICAL DATUM (NGVD) 1989
 --- REFERENCE POINT
 --- CLUSTERED BOUNDARY
 --- CLUSTERED BOUNDARY

I, Phillip D. Higgins, a Registered Land Surveyor, hereby certify that the exhibit showing represented by Phillip D. Higgins, LLC, is true and correct representation of the project boundary, as shown, and meets the specifications for maps and drawings set forth in 10 CFR 24.33.

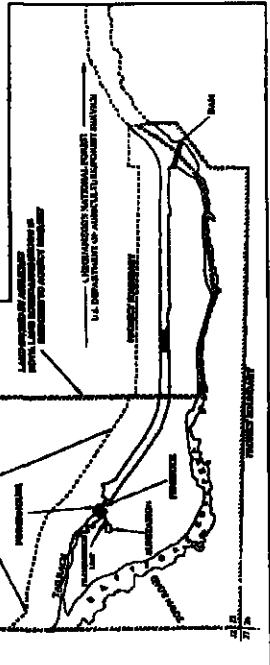
Phillip D. Higgins
Phillip D. Higgins
Registered Land Surveyor
25-3280

Stacy
Date



1/4" IN CHAINING BY P. A. WYMAN

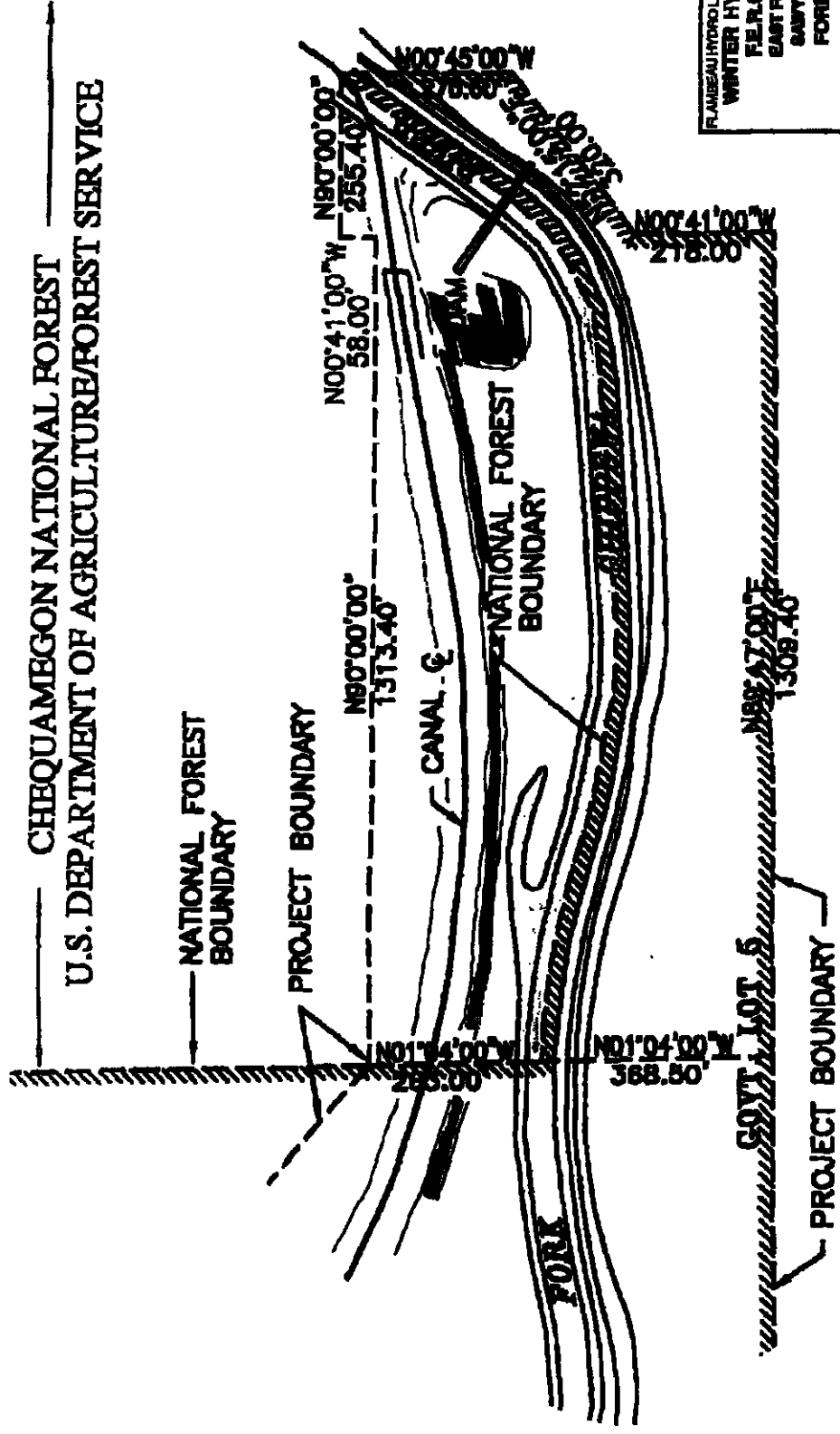
SCALE IN FEET
1" = 700'



This drawing is part of the application for license made by the undersigned on 1/15 day of September 2006.
Phillip D. Higgins
Stacy
 Registered Land Surveyor
 25-3280

Northern Environmental
 Northern Environmental
 1100 North Lincoln Street
 Ashland, WI 54806
 715-783-1111
 www.northernenv.com

Forest Service Lands at the Winter Project



	POWER CANAL EMBANKMENT AND TOE AREA
	POWER CANAL/ EAST FORK RIVER
	DIVERSION DAM ACCESS ROAD

FLAMBEAU HYDRO LLC SAWYER COUNTY, WISCONSIN
WINTER HYDROELECTRIC PROJECT
 F.E.R.C. PROJECT NO. 2004
 EAST FORK OF CHIPPEWA RIVER
 SAWYER COUNTY, WISCONSIN
 FOREST SERVICE LANDS
 AT
 THE WINTER PROJECT

IV
Land & Wildlife Survey Results

1. Bald Eagle

There are not results to report as no formal surveys were conducted for the Bald Eagle at the Winter Hydro Project in 2012 per approved plan. Agencies will be notified should any Eagle Nests be found located within the project boundary.

2. Gray Wolf

There are no results to report as no formal surveys were conducted for the Gray Wolf the Winter Hydro Project in 2012 per approved plan. The Gray Wolf was delisted at the time of submittal of the Land and Wildlife Management Plan. It was re-listed July 1, 2009 as Threatened and Endangered in Wisconsin by the U.S. Fish and Wildlife Service (FWS) then delisted again on January 27, 2012.

3. Wood Turtle

The annual Wood Turtle survey was conducted at the Winter Hydro Project on June 6, 2012 by Aneta Rietveld, Environmental Quality with Renewable World Energies. The survey started at 1:50 p.m. and ended at 6:30 p.m. for a total survey time of 4 hours and 40 minutes. The survey was divided into 3 sections consisting of the Tailrace (1:50 -2:25 p.m. on foot), Bypass Reach (2:30 – 4:00 p.m. on foot), and Impoundment (4:00 – 6:30 p.m. by kayak). Conditions for the survey were good. Temperatures were in the high 60's to low 70's, calm to slightly breezy, with a mix of sun and clouds throughout the entire survey. Project log sheet records indicated a HWL of 1370.20 MSL and TWL of 1345.05 MSL. No sightings of Wood Turtles were noted. However, other species were observed and included:

- Various Song Birds
- Blackbirds
- Merganser
- Beaver
- (3) Painted Turtles
- Baby Raccoons
- Bullfrog
- Snapping Turtle
- Sturgeon (jumped out of the water in front of a deer and startled it)
- Dragonflies
- Deer

Survey documents and photos may be found at the end of the report under the section titled Survey Documents page 27.

4. Non Native Invasive Species

This section of the report includes survey results for species such as:

- Asiatic Honeysuckles, *Lonicera tartarica*, *L. morrowii*, and *L. x bella*
- Buckthorns, *Rhamnus cathartica* and *R. frangula*
- Curly Pondweed, *Potamogeton crispus*
- Garlic Mustard, *Alliaria petiolata*
- Eurasian Water Milfoil, *Myriophyllum spicatum*
- Japanese Knotweed, *Polygonum cuspidatum*
- Purple Loosestrife, *Lythrum salicaria*

It was agreed upon during Agency consultation and during the development of the Final Land and Wildlife Management Plan that these surveys could all be conducted concurrently. However, the Final Plan devoted a separate section to Purple Loosestrife which will be addressed in the next section of the report.

The survey was conducted by Mr. Gary Rast and Aneta Rietveld of RWE on August 6, 2012. The Tailrace and Bypass Reach was surveyed (2:00 -3:25 p.m. on foot), and the Impoundment 3:46 -6:00 p.m. by boat).

The weather conditions during the survey were bright and sunny with a temperature of 81 degrees F.

Honeysuckle was observed on the Tailrace Canoe Portage Trail and Fishing Access Trail as well as on the Bypass Reach Roadway to dam. The coordinates with photos are attached in the survey documents. None of the other invasive species were noted during this survey.

Survey documents and photos may be found at the end of the report under the section titled Survey Documents page 27.

5. Purple Loosestrife

On August 6, 2012, Flambeau Hydro, LLC (FHLLC) performed an inventory of purple loosestrife plants at the Winter Project in Sawyer County, Wisconsin. The method of inventory was defined as follows:

While Purple Loosestrife is blooming in July and August, the inventory should be conducted using a boat to survey the impoundment above the dam within the Project Boundary and on foot below the dam within the Project Boundary. County wetland maps may be used to determine other areas where Purple Loosestrife could be found on lands owned by FHLLC within the Project Boundary. Lands owned by FHLLC within the Project Boundary will be surveyed on foot. A pair of binoculars should be used to search for the purple flowered spikes of the plant. When plants are located, the person(s) inventorying should get close enough to make a positive identification without disturbing the plants or the

immediate area around the plants as this could cause them to spread. A GPS receiver will be used to establish a GPS coordinate for the location of the plants. If it is not possible to get close enough to establish an accurate location, an approximate location will be established with reference to an established GPS coordinate. The plants should be inventoried by marking and numbering the location on a Project map along with notes approximating size of plants, stand area, stem density, plant density, and location with reference to established GPS coordinates. Photos and/or videotape may be taken of the largest occurrences.

Example:

GPS point CLRVPL001; Location Lat N45° 54.493' Lon W92° 31.128'; Plant height 2' – 6'; Density ~5' X 50' ~40 plants single & multi-stem; Comments: Insect damage observed. Seed heads removed. Photos. No Video.

The area to be inventoried shall be the shoreline of the impoundment and lands owned by FHLLC within the Project Boundary as indicated on the Project Boundary Map G-1, as filed with the Federal Energy Regulatory Commission.

General Observations:

The Winter Project Boundary was divided into three different areas; *the impoundment* (from the Winter powerhouse to the upstream project boundary, approximately 2.10 miles upstream), *FHLLC owned property within the project boundary* (FHLLC owned property adjacent to the dam and powerhouse), *the tailrace/bypass reach* (from the powerhouse to a point approximately 595 feet downstream, including the 3,028-foot long bypass reach area from the spillway to the downstream project boundary).

The tailrace/bypass reach was surveyed on foot (Tailrace and By-Pass Reach 2:00 p.m. - 3:25 p.m.) and no purple loosestrife plants were observed.

The FHLLC owned property within the project boundary was surveyed on foot (3:25 p.m. – 3:46 p.m.) and no purple loosestrife plants were observed.

The impoundment was surveyed by boat beginning at 3:46 and ending at 6:00 p.m. WNTRPL001 was seen again this year as 1 plant located in a marshy area with no boat access. The mud was too deep to attempt to wade out and remove this plant. WNTRPL002 / WNTRPL003 was located in a marshy low lying peninsula of grasses and cattails adjacent to the river (see included photo). These 9 clumps of PL were not in a navigable section of the river. WNTRPL004 was a stand of 2 Loosestrife located beyond a piece of solid ground in the marsh. The survey crew proceeded upstream outside of the project boundary as during previous surveys to explore if any plants existed that may be contributing to the infestation by spreading seeds downstream into the impoundment. The 2010 survey had revealed four areas of blooming purple loosestrife plants located ~240 yards upstream from the project boundary. This site, (WNTRPLNA01) was checked out on foot and no Purple Loosestrife was observed in 2012.

The prior purple loosestrife plants were inventoried and have been noted on the survey sheet(s) and map(s) at the end of this report with notations added for 2012. No other occurrences of purple loosestrife were observed.

During the inventory, a Digital Camera, Laser Rangefinder, GPS, and 2 pair of binoculars were used to document occurrences of purple loosestrife as noted in the survey comments at the end of this report.

A vegetation survey dated 1999 and included in Exhibit E of the Application for New License for the Winter Hydroelectric Plant and filed with the Federal Energy Regulatory Commission (FERC) was used as an aid in a 2008 baseline purple loosestrife survey.



2012 PHOTO OF WNTR PL002 / WNTR PL003

6. Land Disturbance & Erosion Control

Erosion

On May 8, 2012, Flambeau Hydro, LLC (FHLLC) performed an unofficial inventory and survey of erosion sites at the Winter Project in Sawyer County, Wisconsin. Monitoring of erosion is a requirement of Section Q of the Water Quality Certification for the Winter Project and reads as follows:

- Q. The licensee shall monitor the shoreline of the project reservoir, power canal, tailrace, and bypassed channel for erosion, and if

necessary, prepare an erosion control plan in consultation with the Department. Inspections should be conducted at three-year intervals in spring before vegetation develops, so eroded areas can be readily identified. The licensee shall submit to the Department a report of monitoring results by December 31 in the year of each inspection.

A basic rating system of Minor, Moderate, and Severe is used to give an indication of the condition of each site with the following description for each condition:

Minor – Some unusual erosion from within the recent past is noticeable. The site is either small or stable to the point that very little or no unusual sediment is entering the river. The toe of the bank is stationary and stable with material such as rocks, logs, vegetation, etc.

Moderate – Some unusual erosion from within the recent past is noticeable. The site has areas that appear to be actively eroding into the water in places. Vegetation may be slumping into the river at a slow rate. The majority of the toe of the bank is still stable with material such as rocks, logs, vegetation, etc.

Severe – Heavy unusual erosion from the recent past is evident. The site is actively eroding into the water. Little or no vegetation is present. The entire toe of the bank is unstable and eroding into the water.

FHLLC has been actively monitoring erosion within the Project Boundary since 2006 in order to gain an understanding of trends at potential erosion sites. The next erosion inspection will be performed in 2013. The next tri-annual report will be due in 2014.

General Observations:

The Winter Project Boundary was divided into three different areas; *the impoundment* (from the Winter powerhouse to the upstream project boundary, approximately 2.10 miles upstream), *FHLLC owned property within the project boundary* (FHLLC owned property adjacent to the dam and powerhouse), *the tailrace/bypass reach* (from the powerhouse to a point approximately 595 feet downstream, including the 3,028-foot long bypass reach area from the spillway to the downstream project boundary).

The tailrace/bypass reach was surveyed on foot and no unusual erosion sites were observed.

The FHLLC owned property within the project boundary was surveyed on foot and one minor erosion site (WNTR ER003) was observed.

WNTR ER003 is located on a point of land formed at the confluence of the powerhouse tailrace and the by-pass reach about 0.12 miles downstream from the powerhouse. This site is a popular fishing area located on FHLLC property and erosion here can be directly attributed to pedestrian traffic. This is considered a Minor site due to its small footprint and rocky characteristic that increases stability. No noticeable erosion has been evident during the monitoring period of 2008 through 2012. The site appears much the same as it did in past surveys. Human activity at this site appears to be what has caused this to be

classed as an erosion site. It is unlikely to contribute noticeable sediment discharge to the river in its current condition.

No other unusual erosion sites were observed on FHLLC owned property within the project boundary.

The impoundment was surveyed by boat and two Minor erosion sites (WNTR ER001 and WNTR ER002) were observed.

WNTR ER001 is located on the right side of the river at the confluence of Fishtrap Creek and the East Fork of the Chippewa River about 0.90 miles upstream from the powerhouse. This site is not located on FHLLC property. It is considered a Minor site due to the stability of the toe. The entire toe is firmly established with trees, shrubbery, and other vegetation. No noticeable erosion has been evident during the monitoring period of 2008 through 2012. In fact it appears to be healing. It is unlikely to contribute noticeable sediment to the river in its current condition.

WNTR ER002 is located on the right side of the river near the spillway about 0.43 miles upstream from the powerhouse. This site is not located on FHLLC property. It is considered a Minor site due to the small size and stability of the toe. The entire toe is established with rock and gravel. No noticeable erosion has been evident during the monitoring period of 2008 through 2012. It is unlikely to contribute noticeable sediment to the river in its current condition.

No other unusual erosion sites were observed in the impoundment.

These erosion sites were inventoried and have been noted on the survey sheet(s) and map(s) at the end of this report.

During the inventory, a digital camera and/or video camera was used to document the erosion sites as noted in the survey comments at the end of this report. Please note that the photos are of sites ER001 thru ER003 but the report describes them in this order ER003, ER001, and ER002.

5/8/2012 Winter Erosion Site Photos



Photo 1 – WNTR ER001



Photo 2- WNTR ER002



Photo 3- WNTR ER003



Photo 4- WNTR ER003



Photo 5 – WNTR ER003

Erosion Survey

12-11-09 GGR WNTR Erosion Monitoring inv

Project: Winter #2064Datum: WGS 84Date: 5/8/2012Crew: GGR

GPS Point	Latitude	Longitude	Length of Site	Height of Banks	Comments
WNTR ER001	N45 55.957'	W90 56.904'	25'	15'	First observed in 2006 as Minor site. Right side of river at confluence of Fishtrap Creek and East Fork of the Chippewa River. Toe is stable with trees, shrubs, and other vegetation. No noticeable erosion from 2008 through 2012 and appears to be healing. No remediation. Photos taken in 2008, 2010, and 2012.
WNTR ER002	N45 55.760'	W90 57.347'	15'	4'	First observed in 2006 as Minor site. Right side of river near spillway. Toe is stable with rocks and gravel. No noticeable erosion from 2008 through 2012. No remediation. Photos in 2008, 2011, and 2012.
WNTR ER003	N45 55.830'	W90 57.988'	25'	6'	First observed in 2006 as Minor site. Located on a point of land formed at the confluence of the powerhouse tailrace and the by-pass reach. Popular fishing site with moderate pedestrian traffic. Site is stable with rocks. No noticeable erosion from 2008 through 2012. No remediation. Photos in 2008, 2011, and 2012.

Winter Hydroelectric Project P-2064 Erosion Site Location Map 2012

DOWNSTREAM END OF PROJECT BOUNDARY

WNTR ER001

WNTR ER002

WNTR ER003

POWERHOUSE

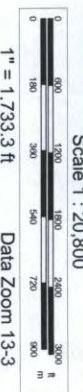
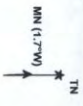
UPSTREAM END OF PROJECT BOUNDARY



Data use subject to license.

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www.delorme.com



7. Zebra Mussels

No Zebra Mussels were observed during the Wood Turtle/Invasive/Erosion surveys performed during 2012. At the end of the surveys boats and trailers were cleaned with a 10% bleach solution applied by sprayer.

8. Standards and Guidelines

Flambeau Hydro LLC realizes that during the term of the license, applicable standards and guidelines for the Chequamegon-Nicolet National Forest may change. So that the Plan can be updated and accommodate new information as it is obtained, Flambeau Hydro LLC will formally consult with the Forest Service every five (5) years to update the plan accordingly during the term of the License. The table below shows the schedule the consultation process will follow. The first formal consultation will take place in 2013.

Year	Formal Consultation
2013	Yes
2018	Yes
2023	Yes
2028	Yes
2033	Yes
2038	Yes

Survey Documents

Wood Turtle

Wood Turtle Survey Form

Winter Hydroelectric Project - FERC # 2064

Date: 6-6-12

Conducted By: Aneta Rietveld

Time Survey Started: 4:00

Time Survey Ended: 6:30

Weather Conditions: 74° Sunny calm - no breeze

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): _____

(Attach Photos & Map if Applicable)

Sex of Turtles Sighted: Male Female Unknown

Total # Turtles Sighted: _____

Other Species Observed: 2 deer, baby raccoons, merganser
bullfrog, beaver, snapping turtle, ruffed grouse
2 painted turtles sturgeon jumped

Other Pertinent Survey Information

Aneta Rietveld
6-6-12

Wood Turtle Survey Form Winter Hydroelectric Project - FERC # 2064

Date: 6-6-12 Conducted By: Aneta Rietveld

Time Survey Started: 1:50 Time Survey Ended: 2:25

Weather Conditions: 68° - mix sun and clouds
slight breeze

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): _____

(Attach Photos & Map if Applicable)

Sex of Turtles Sighted: Male Female Unknown

Total # Turtles Sighted: _____

Other Species Observed: 1 painted turtle blackbirds

Other Pertinent Survey Information

CFM- 186

Headwater - 1370.20

Tailwater - 1345.05

diversion dam - 1370.42

Aneta Rietveld
6-6-12

Wood Turtle Survey Form Winter Hydroelectric Project - FERC # 2064

Date: 6-6-12 Conducted By: Aneta Rietveld

Time Survey Started: 2:30 Time Survey Ended: 4:00

Weather Conditions: 68° cloudy slight breeze

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): _____

(Attach Photos & Map if Applicable)

Sex of Turtles Sighted: Male Female Unknown

Total # Turtles Sighted: _____

Other Species Observed: dragonflies black birds
various song birds

Other Pertinent Survey Information

turtle eggs dug up and eaten by road.

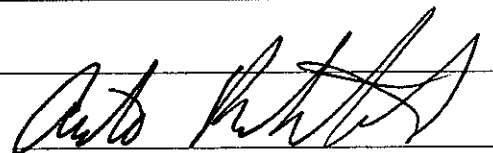

6-6-12



PHOTO 1- WOOD TURTLE SURVEY IMPOUNDMENT



PHOTO 2- WOOD TURTLE SURVEY IMPOUNDMENT



PHOTO 3 - WOOD TURTLE SURVEY IMPOUNDMENT



PHOTO 4- WOOD TURTLE SURVEY-BABY RACCOONS



PHOTO5- SNAPPING TURTLE

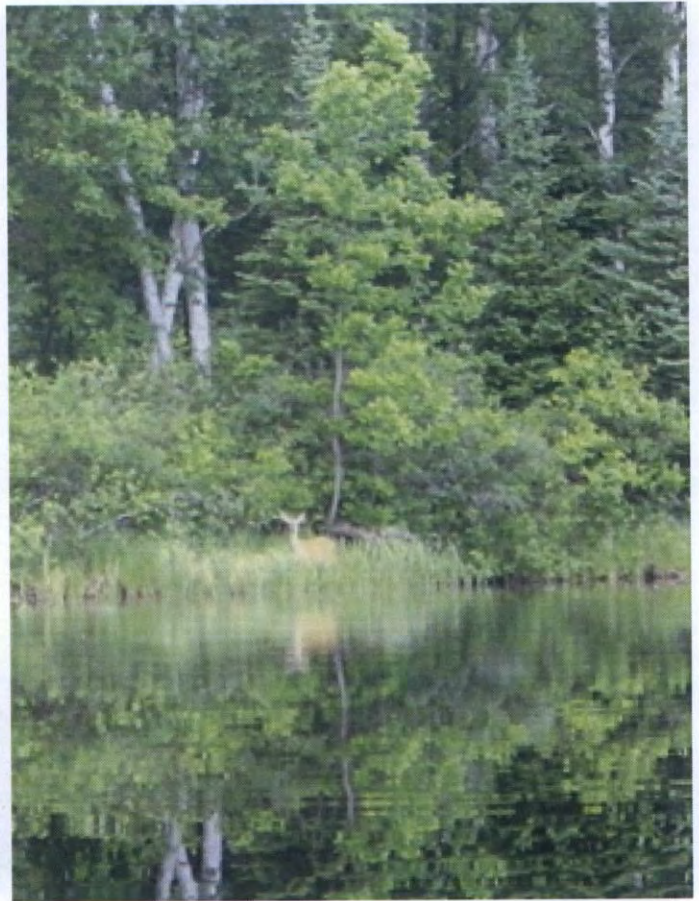


PHOTO 6- DEER



PHOTO 7 - WOOD TURTLE SURVEY- PAINTED TURTLE

Invasive Species/Erosion

Year 2012 **Invasive Species/Erosion Survey**

Winter Hydroelectric Project – FERC # 2064

Date: 8-6-12 Conducted By: AKR

HWL: _____ TWL: _____

Time Survey Started: 2:00 pm Time Survey Ended: 3:25

Weather Conditions: sunny 81°

Location of Survey Area: Tailrace Bypass Reach Impoundment _____

Time of Sighting(s): all throughout

Location of Sighting(s) (GPS Coordinates): N 45° 55.802' W 90° 57.898'

N 45° 55.796 W 90° 57.883

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ **Garlic Mustard** _____ **Eurasian Water Milfoil** _____

Japanese Knotweed: _____ **Purple Loosestrife** _____

Erosion: _____ (Photos Taken) Yes No _____

Other Species Observed: _____

Other Pertinent Survey Information

multiple bushes observed at the canoe portage trail, along the fishing trail to tailrace, and along road (near shed and guard rail)

Winter - Invasives -

AKR

2:00 -
2:35

Sunny

Honeysuckles - ^(200 bushes) multiple at canoe portage trail
 N45°55 802' (pic 1)
 W90°57.898'

Tail Race

fishing trail - 2 bushes - N45°55.802
 (pic 2) W90.57.898'

13 bushes at beginning of
 trail by N45.55796
 W90 57.883
 (pic 3)

16 bushes by road near
 tailrace (pic 4)

Bypassed Reach -

2:35 -
3:25

Honeysuckle - 4 bushes by guardrail
 (pic 5)

5 bushes by shed (pic 6)

1 Bush - N45 55.728
 W 090.57.635'

1 Bush N45 55 685'
 W90 57.480

1 Bush next to dam. (pic 7)



PHOTO 1- HONEYSUCKLE ON PORTAGE TRAIL-CLOSEUP



PHOTO 2 - HONEYSUCKLE ON PORTAGE TRAIL



PHOTO 3- HONEYSUCKLE ALONG ROAD



PHOTO 4- HONEYSUCKLE ALONG ROAD BY BRIDGE



PHOTO 5- HONEYSUCKLE ALONG FISHING TRAIL

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 8-6-12 Conducted By: AKR GGR

HWL: _____ TWL: _____

Time Survey Started: 3:46 Time Survey Ended: 6:00 pm

Weather Conditions: sunny 81°

Location of Survey Area: Tailrace _____ Bypass Reach _____ Impoundment

Time of Sighting(s): 4:30, 4:50,

Location of Sighting(s) (GPS Coordinates): see survey sheet

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife

Erosion: _____ (Photos Taken) Yes No _____

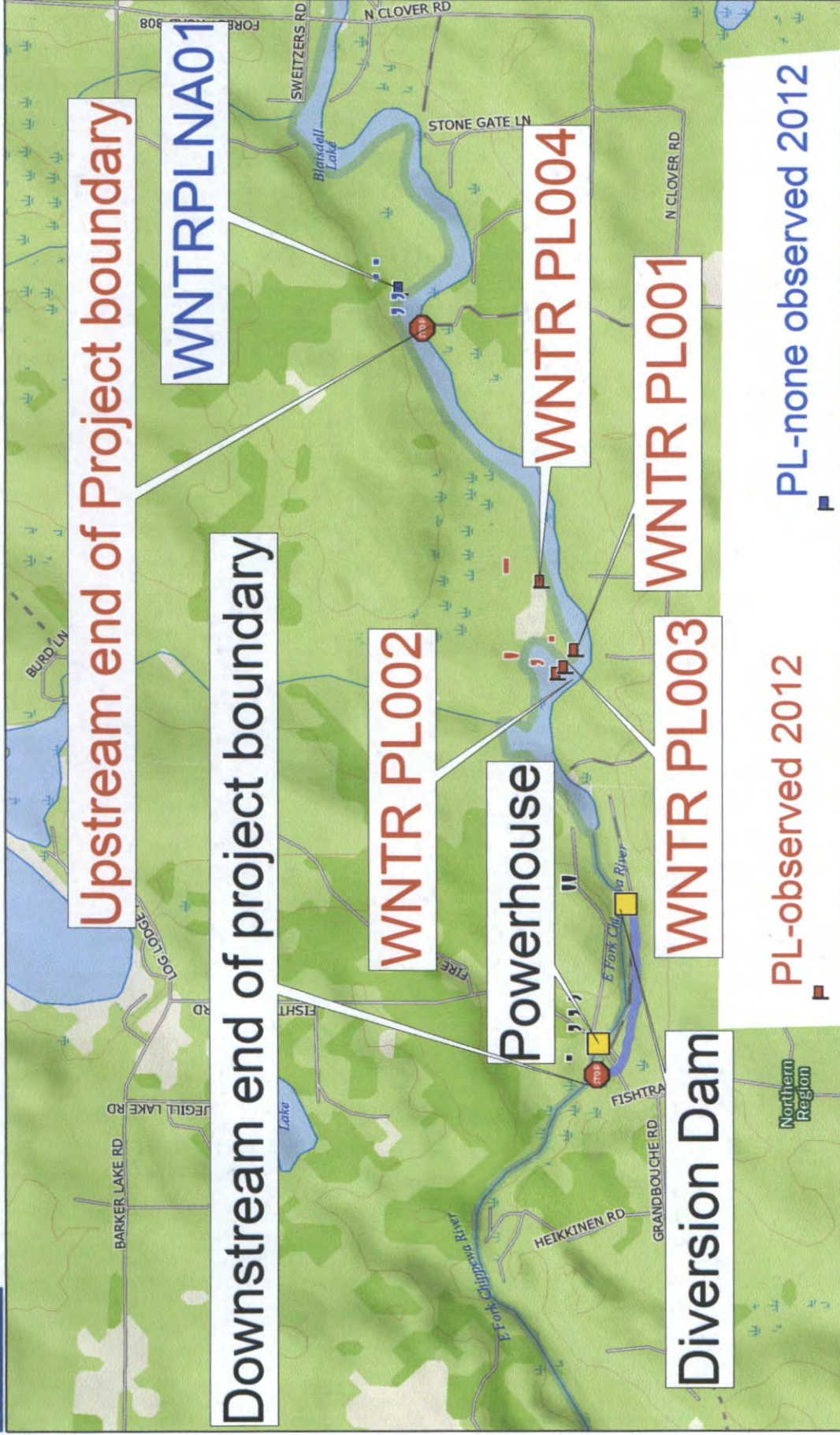
Other Species Observed: blue heron bear swimming river

Other Pertinent Survey Information

no Beetle damage noticed on PL

Purple Loosestrife Survey Project: Winter #2064 Date : 8-6-2012 Crew: GGR ,AKR Datum: WGS 84

Sighting #	GPS Point	Latitude	Longitude	Plant Height	Stand Area	Comments
1	WNTR PL001	N45 55.827'	W90 56.572	4'	1 PLANT	First observed in 2007. Located on the right side of the river ~4050 ft. upstream from the diversion dam. Seed heads cut in 2007. No treatment in 2008.No plants observed in 2009,2010,and 2011. Boat was not able to get close enough for treatment in 2012.
2&3	WNTR PL002 WNTR PL003	N45 55.868 N45 55.851	W90 56.650 W90 56.628	4' - 6'	~120' X 200' 9 Groups of plants	First observed in 2007. Located on the right side of the river ~3700 ft. upstream from the diversion dam. Beginning in 2009, sites PL002 and PL003 were grouped as one continuous site due to the close proximity of the sites. In 2010 some old cane was visible with no new growth within it. None were seen in 2011. No treatment 2008-2012. Photo taken in 2012 -full bloom. No beetle damage observed.
4	WNTR PL004	N45 55.904	W90 56.347	1-3' plant 4' plant	1- 5'x 5' 2 plants	First observed in 2010. Located on the right side of the river and ~5130 ft. upstream of the diversion dam. No old cane and no treatment in 2010 and nothing observed or treated in 2011. No beetle damage observed in 2012 and no treatment.
5	WNTRPLNA01	N45 56.225 estimated location	W90 55.392 estimated location	N/A	N/A	First observed in 2007-photos taken . Right side of river. This site was ~240 yds. upstream of the project boundary limits and could not be reached by boat due to rapids. In 2010 only 4 areas of blooming plants were observed at this site.No treatment in 2008 to 2011. In 2012 no blooming plants were observed.



Winter Project, Purple Loosestrife Location Map 2012

Winter WI FERC #2064

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 5/8/12 Conducted By: GWY PPT

HWL: 1370.58 TWL: 1346.65

Time Survey Started: 2:30 Time Survey Ended: 4:30

Weather Conditions: Cool - High 50's - Low 60's - Cloudy

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): SAME AS PER 1001 - 1002
1001 & 1002

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica L. morrowii L. x bella

Buckthorns: Rhamnus carthartica R. frangula

Curly Pondweed: Garlic Mustard Eurasian Water Milfoil

Japanese Knotweed: Purple Loosestrife

Erosion: 1001 PHOTOS 1-5
1002 PHOTOS 6-70 (Photos Taken) Yes No

Other Species Observed: _____

Other Pertinent Survey Information

[Handwritten Signature]

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 5/8/12 Conducted By: GARY RAST

HWL: 1370.58 TWL: 1346.65

Time Survey Started: 1:00 Time Survey Ended: 1:30

Weather Conditions: COOL - HIGH 50'S - LOW 60'S

CLOUDY - SOME MIST

Location of Survey Area: Tailrace Bypass Reach _____ Impoundment _____

Time of Sighting(s): THROUGHOUT SURVEY

Location of Sighting(s) (GPS Coordinates): SAME AS PREVIOUS
ER003

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife _____

Erosion: ER003 (Photos Taken) Yes No _____

Other Species Observed: N/A

Other Pertinent Survey Information

[Handwritten Signature]

Year _____ Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 5/8/12 Conducted By: GARY RAST

HWL: 1370.58 TWL: 1346.65

Time Survey Started: 2:00 Time Survey Ended: 2:30

Weather Conditions: COOL HIGH 50'S - LOW 60'S CLOUDY - SOME MIST

Location of Survey Area: Tailrace _____ Bypass Reach X Impoundment _____

Time of Sighting(s): N/A

Location of Sighting(s) (GPS Coordinates): N/A

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife _____

Erosion: NONE (Photos Taken) Yes _____ No _____

Other Species Observed: N/A

Other Pertinent Survey Information

Gary Rast

5/8/2012 Winter Erosion Site Photos



Photo 1 – WNTR ER001



Photo 2 – WNTR ER002



Photo 3 – WNTR ER003



Photo 4 – ER003



Photo 5 – WNTR ER003

Appendix 1
Agency Correspondence

Aneta Rietveld

From: Laatsch, Cheryl - DNR <Cheryl.Laatsch@Wisconsin.gov>
Sent: Thursday, February 07, 2013 3:49 PM
To: Aneta Rietveld
Subject: RE: Winter Hydroelectric project

I will double check. Thanks for the reminder.

Cheryl Laatsch, Water Mgt Specialist

*Horicon DNR
N7725 HIGHWAY 28
HORICON WI 53032
(920) 387-7869*

e-mail: Cheryl.laatsch@wisconsin.gov
Website: dnr.wi.gov
www.facebook.com/WIDNR

From: Aneta Rietveld [<mailto:arietveld@rwehydro.com>]
Sent: Thursday, February 07, 2013 3:47 PM
To: Laatsch, Cheryl - DNR
Cc: Gary Rast
Subject: Winter Hydroelectric project

Hello Cheryl,

I am emailing your office to see if any of your biologists had comments to share with us on the Winter Hydro Project's Draft 2012 Land and Wildlife Management report. It was sent to the DNR, FS, and FWS on November 30th. We have had responses back from the FS on Dec. 12 and the FWS on Jan. 18, and would like to send the final copy to FERC by next Thursday. Please drop me an email by next week as I will be mailing the final copy out on the 14th of February. Thank you for your consideration,

Aneta Rietveld
RWE Hydro
Phone (906)828-0808 ext 108
Cell(920)293-1251
Home (906)563-9745

Aneta Rietveld

From: Utrup, Nick <nick_utrup@fws.gov>
Sent: Friday, January 18, 2013 11:07 AM
To: Aneta Rietveld
Cc: Peter Fasbender
Subject: Loosestrife reports - FWS response

Aneta,

Regarding the Purple Loosestrife reports for the following FERC projects:

Clam River FERC #9185

Danbury FERC # 9184

Flambeau area (Upper #2640, Lower #2421, Pixley #2395, and Crowley #2473)

And Winter #2064

The FWS has no comments and concurs with comments already provided by WDNR. I appreciate having the opportunity to respond, please let me know if you have any questions.

Sincerely,

Nicholas J. Utrup

U.S. Fish and Wildlife Service
Wisconsin Ecological Services Office
2661 Scott Tower Drive
New Franken, WI 54229

Office: (920) 866-1736
Cell: (920) 530-9937
FAX: (920) 866-1710
Email: Nick_Utrup@fws.gov

From: Reinecke, Sue -FS [<mailto:sreinecke@fs.fed.us>]
Sent: Wednesday, December 12, 2012 8:38 AM
To: Gary Rast
Cc: Higgins, Dale -FS; Reinecke, Sue -FS
Subject: draft land and wildlife report

Hi Gary, we reviewed the 2012 draft land and wildlife report. We have no comments other than keep working with Steven Spickerman on the NNIS issues.

Thanks
sue

Sue Reinecke, Forest Fisheries Biologist
Chequamegon-Nicolet NF
1170 4th Ave South
Park Falls, WI 54552
715-762-5185
sreinecke@fs.fed.us

Aneta Rietveld

From: Gary Rast
Sent: Wednesday, August 29, 2012 4:04 PM
To: Spickerman, Steven -FS
Cc: Aneta Rietveld
Subject: RE: WNTR Invasive Treatment

Steven,

Is it too late to treat the Honey suckle this year or should we let it go until next year? What were the treatment methods again and what chemical do you recommend if we do it now or in the future? I don't seem to find them but I know you sent it to me at some time. The reason I ask about the control is when I filed a report to FERC we had been directed to consult with WDNR/FS on methods and control options. If it is too late this year because the grow season is coming to an end at least I have this paper trail of consult.

Gary

Gary Rast
Regulatory/Compliance Manager



Renewable World Energies, LLC
100 S. State Street
P.O. Box 264
Neshkoro, WI 54960
Phone: 855-994-9376 Ext. 105
Fax: 920-293-4100
Cell: 920-570-0995
E-mail: grast@rwehydro.com

From: Spickerman, Steven -FS [<mailto:sspickerman@fs.fed.us>]
Sent: Wednesday, August 29, 2012 3:43 PM
To: Gary Rast
Cc: Aneta Rietveld
Subject: RE: WNTR Invasive Treatment

Gary, my crew was unable to treat honeysuckle at Winter Dam this year, they got tied up with a large honeysuckle eradication project near Drummund, WI and are now laid off for the season (too little time, too many invasives!). They did survey the up-river flowage area from the dam to upper Blaisdell for Loosestrife and eradicated what they found. I have to do the data entry and when I get that finished, I'll send you acres treated. On a side note, I have a contractor surveying the entire Chip system within the National Forest boundary in 2013 for aquatic invasives and I will share that data with you when its available next year.

Steven Spickerman
Plant Ecologist
Great Divide Ranger District

Chequamegon-Nicolet National Forest
715-264-2511

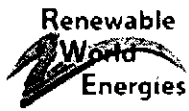
From: Gary Rast [<mailto:grast@rwehydro.com>]
Sent: Wednesday, August 29, 2012 3:13 PM
To: Spickerman, Steven -FS
Cc: Aneta Rietveld
Subject: FW: WNTR Invasive Treatment

Steven,

Here is a re-send of the original e-mail on treatment of the invasive species at the Winter Hydro Project. We conducted the survey in July. I believe Aneta has the 2012 results which I think are very similar to 2011 with some additions. You had indicated to me in the past that you would consider taking care of the treatment when you treat FS lands near that project. Is that still your intent? Either way I'd appreciate an answer as we could still accomplish treatment if it is not getting too late in the year.

Gary

Gary Rast
Regulatory/Compliance Manager



Renewable World Energies, LLC
100 S. State Street
P.O. Box 264
Neshkoro, WI 54960
Phone: 855-994-9376 Ext. 105
Fax: 920-293-4100
Cell: 920-570-0995
E-mail: grast@rwehydro.com

From: Gary Rast
Sent: Tuesday, July 17, 2012 11:52 AM
To: 'sspickerman@fs.fed.us'
Subject: WNTR Invasive Treatment

Steven,

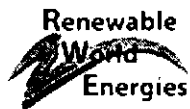
Sometime in the next few weeks I need to perform an Invasive (Aquatic & Terrestrial) survey at the Winter Hydro Project. When I've filed reports to WDNR/FS etc. in the past I was asked to consult with the agencies which is what I had in mind in speaking to you in the past about controls for things such as Honeysuckle etc. You had indicated to me that you would consider taking care of the treatment when you treat FS lands near that project. Is that still your intent? The places I noted in last year's report will more than likely be the same this year with some possible exceptions. Locations can be found in last year's report. However it is primarily near the power canal and along the trails leading downstream on either side of the powerhouse. Please let me know as I will need to indicate some type of treatment in this year's

report whether our company does it or you are gracious enough to perform the treatment. I've not purchased any chemicals yet because of our past e-mail/phone conversations.

Thanks

Gary

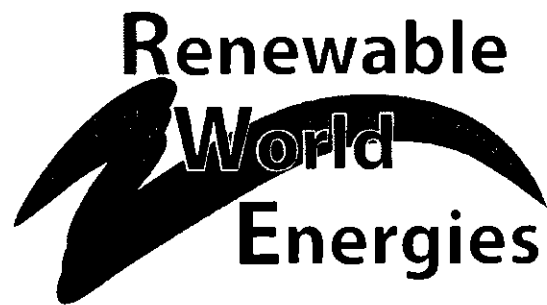
Gary Rast
Regulatory/Compliance Manager



Renewable World Energies, LLC
100 State Street
P.O. Box 264
Neshkoro, WI 54960
Phone: 855-994-9376 Ext. 105
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E-mail: grast@rwehydro.com

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Appendix 2
Documentation of Submittal
To Agencies



November 29, 2012

Mr. Craig Roesler
Water Quality Biologist, Upper Chippewa Basin
Wisconsin Dept. of Natural Resources
10220 State Hwy. 27
Hayward, WI 54843

Mr. Peter Fasbender
Field Supervisor
U.S. Fish and Wildlife Service
2661 Scott Tower Drive
New Franken, WI 54229

Ms. Cheryl Laatsch
Water Regulations & Zoning Specialist
Wisconsin Dept. of Natural Resources
P O Box 7921
Madison, WI 53707-7921

Mr. Paul Strong, Forest Supervisor
USDA Forest Service Chequamegon, Nicolet NF
Forest Headquarters Offices
500 Hanson Lake Road
Rhineland, WI 54501

**Re: Winter Hydroelectric Project
FERC Project Number P-2064
Flambeau Hydro LLC
Draft Report 2012 Land & Wildlife Management Report**

Dear Agencies:

Purpose

On behalf of Flambeau Hydro LLC "Flambeau" (Licensee), Renewable World Energies is submitting (2) copies of the Draft Report 2012 Land & Wildlife Management Report for the Winter Hydroelectric Project for review and comment.

Background

The Federal Energy Regulatory Commission "FERC" issued a License to Flambeau on August 12, 2005. Portions of the original Certification were contested by the Licensee. The Wisconsin Department of Natural Resources (WDNR) submitted a revised Water Quality Certification, Dated at Park Falls, WI:

Corporate Office
P.O. Box 264
100 S. State Street
Neshkoro, WI 54960
Fax: 920-293-4100

Phone: 855-99HYDRO
(855-994-9376)
www.renewableworldenergies.com

Administrative Office
1001 Stephenson Street
Norway, MI 49870
Fax: 906-563-9344

August 19, 2008 that replaced the original certification of June 21, 2005. Only conditions E, F, and J were modified and a footnote was added to condition D according to the Final Settlement Agreement.

The submitted report is a requirement of the License pursuant to Article 404, Forest Service (FS) Condition 10, and WDNR Water Quality Certification Item Letter P, Q, and R. The Land & Wildlife Management Plan was filed with FERC on December 19, 2008. FERC issued an Order Modifying and Approving the plan on June 3, 2011.

Invasive Species Consultation

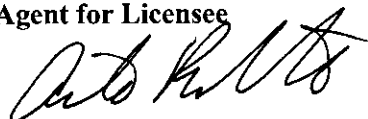
During the 2012 season Flambeau Hydro, LLC was in contact with Steven Spickerman Plant Ecologist for the Chequamegon-Nicolet National Forest. They had a crew that was going to help eradicate the invasive honeysuckle growing on the Winter Project property. Unfortunately, they ran out of time to treat the honeysuckle at Winter Dam this year when they got tied up with another large honeysuckle eradication project in the area. We will be in contact with Steven next season as well to try and combine forces in eradicating the honeysuckle on the property. Email correspondence is attached under appendix 1.

Conclusion

The Federal Energy Regulatory Commission's regulations allow for a 30 day formal review and comment period. Thank you in advance for providing your responses in a timely manner so we can include your comments and recommendations, as appropriate, into our report which the Licensee must file by March 1, 2013 with the FERC.

If you have any questions concerning this report, please contact Mr. Gary Rast at the Renewable World Energies LLC offices @ 855-994-9376 ext. 105, or by email at; grast@rwehydro.com. An alternate contact is Aneta Rietveld at the Renewable World Energies LLC offices @ 855-994-9376 ext. 108, or by email at; arietveld@rwehydro.com.

Sincerely,
Renewable World Energies, LLC
Agent for Licensee



for:

Mr. Jason Kreuzscher
Vice President Operations

Attachment: Draft Report 2012 Land & Wildlife Management Report – November 7, 2012

Cc: RWE Corporate

Draft

2012 LAND & WILDLIFE MANAGEMENT REPORT (Per FERC License Article 404)

**Per USDA Forest Service 4(e) Condition 10
Per WDNR Revised 401 Water Quality Certification Item Letter P, Q, R**

Winter Hydroelectric Project FERC Project #2064 Flambeau Hydro, LLC

East Fork of the Chippewa River, Sawyer County, Wisconsin

Respectfully Submitted by:

Renewable World Energies
100 South State Street
Neshkoro, Wisconsin 54960

Draft – November 29, 2012

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I
Plan Requirements & Approval

1. The Federal Energy Regulatory Commission (FERC) issued a new license on August 12, 2005 to Flambeau Hydro LLC. The license is for the continued operation and maintenance of the 600 KW Winter Project (No. 2064), located in Sawyer County on the East Fork of the Chippewa River. As such, the Federal Energy Regulatory Commission incorporated the following requirement into the new license:

FERC License Article 404 - Land and Wildlife Management Plan

Within six months of license issuance, the licensee shall file for Commission approval a plan to manage land and wildlife at the project. The plan shall be prepared after consultation with the Wisconsin Department of Natural Resources (Wisconsin DNR), the U.S. Forest Service, and the U.S. Fish and Wildlife Service (FWS). Measures to protect threatened and endangered species (i.e., bald eagle, gray wolf) at the project, as well as other wildlife habitat of concern, shall be included in the land and wildlife management plan. In addition, the plan shall include guidelines for the managing vegetation, habitat, and ground-disturbing activities in accordance with condition 10 in appendix B of this license, and shall be consistent with the bald eagle and gray wolf management guidelines of the FWS, Forest Service, and Wisconsin DNR. The plan shall include, at a minimum, the following:

- 1. Procedures for obtaining and documenting bald eagle nesting activity and the presence of gray wolves on an annual basis, and for maintaining the information on project maps for use when planning land disturbing activities such as vegetation control or recreation facility development;*
- 2. Consultation with the Wisconsin DNR, Forest Service, and FWS prior to conducting land disturbing activities that could affect any of the threatened and endangered species using project land;*
- 3. Measures to protect Regional Forester Sensitive Species and Management Indicator Species; and*
- 4. Measures to control erosion from trails, parking lots and shoreline areas; and; annual consultation with the resource agencies to allow for periodic management plan updates and to obtain agency input regarding proposed management decisions.*

The licensee shall include with the land and wildlife management plan documentation of agency consultation, including copies of agency comments and recommendations on the draft plan, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations, before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The land and Wildlife management plan shall not be implemented until the licensee is notified that the plan is approved. Upon approval, the licensee shall implement the plan according to the approved schedule, including any changes required by the Commission.

2. Attached to the FERC License, and as Appendix B, are the USDA Forest Service Conditions. As such the USDA Forest Service incorporated the following condition into the FERC License:

USDA Forest Service Condition No. 10 – Vegetation, Habitat and Ground-disturbing Activities on National Forest System Lands

Within one year of license issuance or at least 90 days prior to vegetation, habitat, and/or ground-disturbing activity, whichever comes first the Licensee shall file with the Commission a Vegetation, Habitat, and Ground-Disturbing Management Plan (Plan) that is approved by the Forest Service. The Plan shall be site specific and be prepared in consultation with the appropriate Federal and State resource agencies for all tree or vegetation removal, habitat, and/or ground-disturbing activities on, or effecting, National Forest System lands.

The Plan shall implement measures to prevent the Spread of non-native invasive species; minimize erosion as well as sedimentation; protect, mitigate, or enhance terrestrial and fisheries habitat; and provide for adaptive management measures based on prescribed monitoring objectives over the life of the license. The Licensee shall not file any such plans with the Commission or commence any such activities without written approval from the USDA Forest Service.

At a minimum, and where relevant, the Plan shall include the following provisions:

Notification to the Chequamegon-Nicolet National Forest before the Licensee begins any vegetation or ground disturbing work;

The Licensee's plan shall comply with USDA Forest Service and Chequamegon-Nicolet National Forest sensitive species and non-native invasive species management guidelines and protocols, including prevention, control, and monitoring protocols;

Identification of methods for prevention and control of non-native invasive species. Treatment of existing infestations of highest priority non-native invasive species shall be initiated immediately upon completion of appropriate National Environmental Policy Act (NEPA) documentation and approval of the Plan by the Commission;

Notification to the Chequamegon-Nicolet National Forest upon the Licensee finding new locations for any listed non-native invasive species and/or prior to any independent actions at non-native invasive species control efforts;

Timing to establish vegetation of disturbed soils as soon as possible;

Identification and prioritization of any erosion areas to be re-vegetated or rehabilitated; Procedures for identification of additional measures that the Licensee shall implement if monitoring reveals that re-vegetation and vegetation control is not successful or does not meet intended objectives;

Disclosure of any temporary habitat and/or ground-disturbing measures the Licensee will use;

A list of species to be used, planting location, and site preparation methods.

Emphasis shall be to use native species and to follow the Forest's Land and Recourse Management Plan as well as the Wisconsin's Forestry Best Management practices for Water Quality,

Identification of measures the Licensee will use to mitigate project effects on terrestrial and aquatic habitat including any identified habitat threats, as well as measures designed to enhance habitat, including restoration of wetland, riparian, and aquatic systems;

Be updated to meet standards and guidelines that are applicable to the Chequamegon-Nicolet National Forest;

Be updated as new information is obtained in consultation with the agencies and submit the updated plan to the Forest Service and Commission for approval;

A monitoring program to evaluate the effectiveness of re-vegetation, vegetation control and/or non-native invasive species control measures; and

Identify a timeline for accomplishing plan objectives.

- 3.** Attached to the FERC License, and as Appendix A, are the Wisconsin Department of Natural Resources (WDNR) 401 Revised Water Quality Certification Dated at Park Falls WI: August 19, 2008 Item Letter P, Q, and R. As such the WDNR incorporated the following conditions into the FERC License:

Wisconsin Department of Natural Resources 401 Water Quality Certification Item Letter P, Q, and R

*P. The licensee shall annually inspect the entire shoreline of the project waters for purple loosestrife (*Lythrum salicaria*) and map its distribution and relative abundance. Inspections should be scheduled in August while plants are flowering so purple loosestrife can be readily identified. The licensee should submit a report of the monitoring results to the Department by December 31 each year. If the Department deems it necessary to initiate or expand efforts to control purple loosestrife in the East Fork Chippewa River, the licensee shall provide reasonable cooperation in those efforts.*

Q. The licensee shall monitor the shoreline of the project reservoir, power canal, tailrace, and bypassed channel for erosion, and if necessary, prepare an erosion control plan in consultation with the Department. Inspections should be conducted at three-year intervals in spring before vegetation develops, so eroded areas can be readily identified. The licensee shall submit to the Department a report of monitoring results by December 31 in the year of each inspection.

R. Before engaging in any activity that may introduce zebra mussels into project waters, the licensee shall provide or demand (through contract clause or other binding agreement) evidence of effective decontamination of barges, tools, boats, construction equipment, or other items capable of transferring water containing larval or adult zebra mussels. Effective decontamination may include steam-cleaning, chemical treatment, physical treatment, or other suitable procedures.

4. FERC PLAN APPROVAL

The Land and Wildlife Management was submitted to the Federal Energy Regulatory Commission December 19, 2008. It was approved by an *Order Modifying And Approving Land And Wildlife Management Plan Issued June 3, 2011*.

II
Description of Winter Hydroelectric Project

Project Description

The project is located on the East Fork of the Chippewa River, near the town of Winter, in Sawyer County, Wisconsin. The Project reservoir has been determined to be approximately 30 acres at the project's normal pool elevation. The USDA Forest Service portion of the reservoir, as defined to the natural thread of the river, would amount to a very tiny area of approximately 15 acres. Additionally, there are approximately 11 tiny acres of USDA Forest Service lands below the dam, making the total acreage of Federal lands at the project to be approximately only 26 acres.

The overall configuration of the project is as follows:

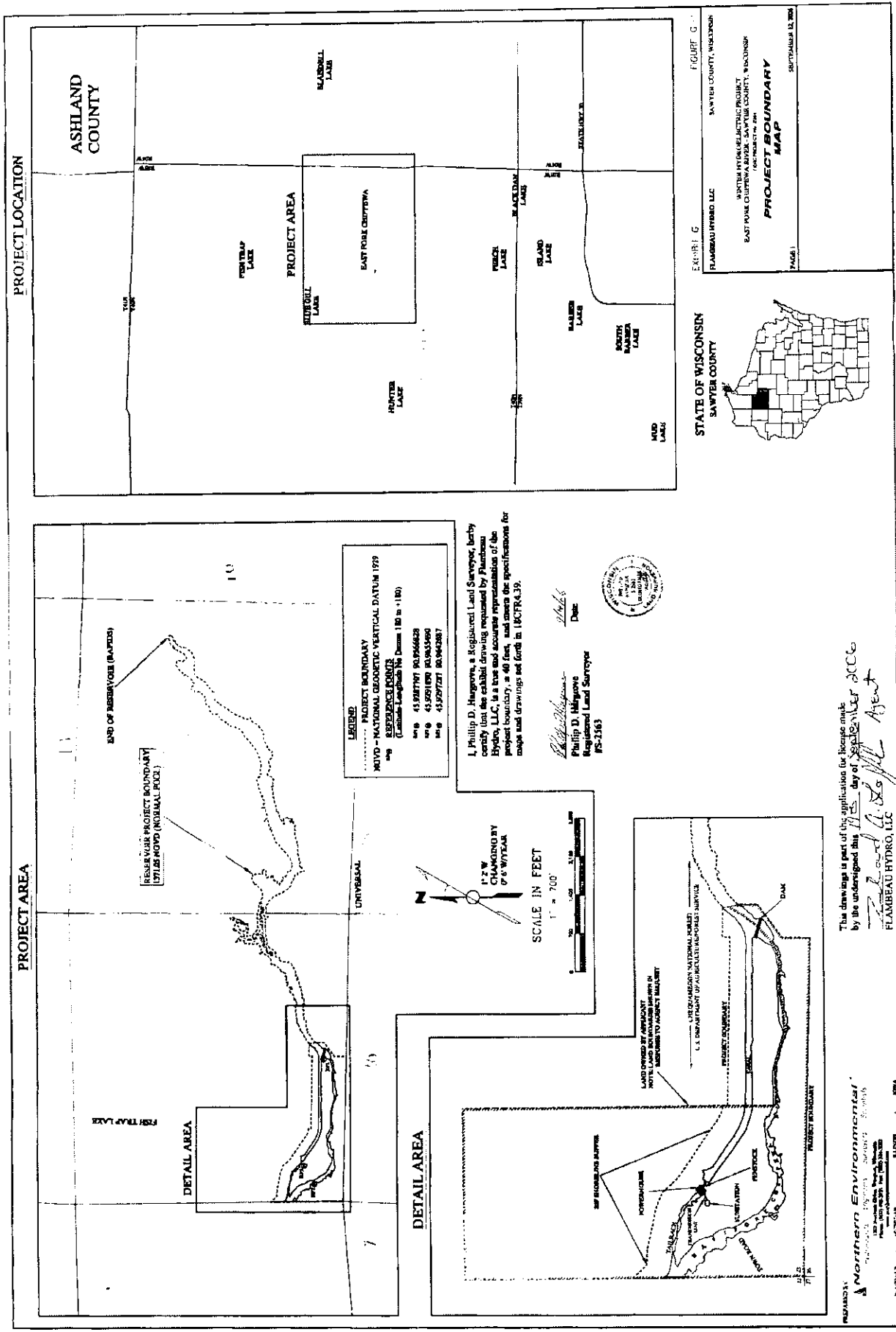
- Diversion Dam: A 14-foot-high, 140 foot-long concrete dam section (8 bays total) with steel gates on top of wooden stop logs in 7 bays and one bay with a 6'x16' steel lift gate operated with an electric motor and mechanical ball-screw. The diversion dam allows the water to be apportioned either to the by-passed reach or down the power canal and into the hydroelectric units.
- Power Canal: The power canal consists of earth embankments and is approximately 2,100 feet in length. The canal is approximately 20 feet wide at the bottom and has flanked earth embankments to retain the water.
- Intake Structure: The intake structures consist of reinforced concrete structure housing a common intake rack that conveys water to (2) two 5 foot – 6 inch penstock tubes.
- Powerhouse and the Tailrace: The powerhouse is a concrete structure (with a total of 24.5 feet of head) that houses two generators coupled to vertical Francis turbines. Unit 1 has a load capacity of 200 KW, and with a 174 CFS flow capacity. Unit 2 has a load capacity of 400 KW, with a 224 CFS flow capacity. The tailrace of the powerhouse is approximately 700 feet in length.
- USDA Forest Service Lands: The Forest Service lands are approximately 300 feet wide by 1600 feet long, or approximately 11 acres. However, this 300 foot strip includes; ½ of the river, the Diversion Dam, the Project's power canal, the diversion dam's access road and the left and right embankments for the power canal. (please refer to the Plan's map; Forest Service Lands at the Winter Project)

III Project Drawings

Winter Hydroelectric Project Boundary
Exhibit G - Figure G-1

Forest Service Lands at the Winter Project

Winter Hydroelectric Project Boundary
Exhibit G - Figure G-1



LEGEND
 PROJECT BOUNDARY
 - - - - - NATIONAL GEODETIC VERTICAL DATUM 1973
 MVD - NATIONAL GEODETIC VERTICAL DATUM 1973
 REFERENCE POINT
 (Contour Length in Feet, Datum 100 to 110)
 1010 43287741 92.946428
 1010 43291129 92.945490
 1010 43292727 92.942287

I, Phillip D. Hargrove, a Registered Land Surveyor, hereby certify that this exhibit drawing prepared by Flambau Hydro, LLC, is a true and accurate representation of the project boundary as shown on the drawings and the specifications for complete drawings set forth in 18CFR4.39.

Phillip D. Hargrove
 Phillip D. Hargrove
 Registered Land Surveyor
 PS-1563



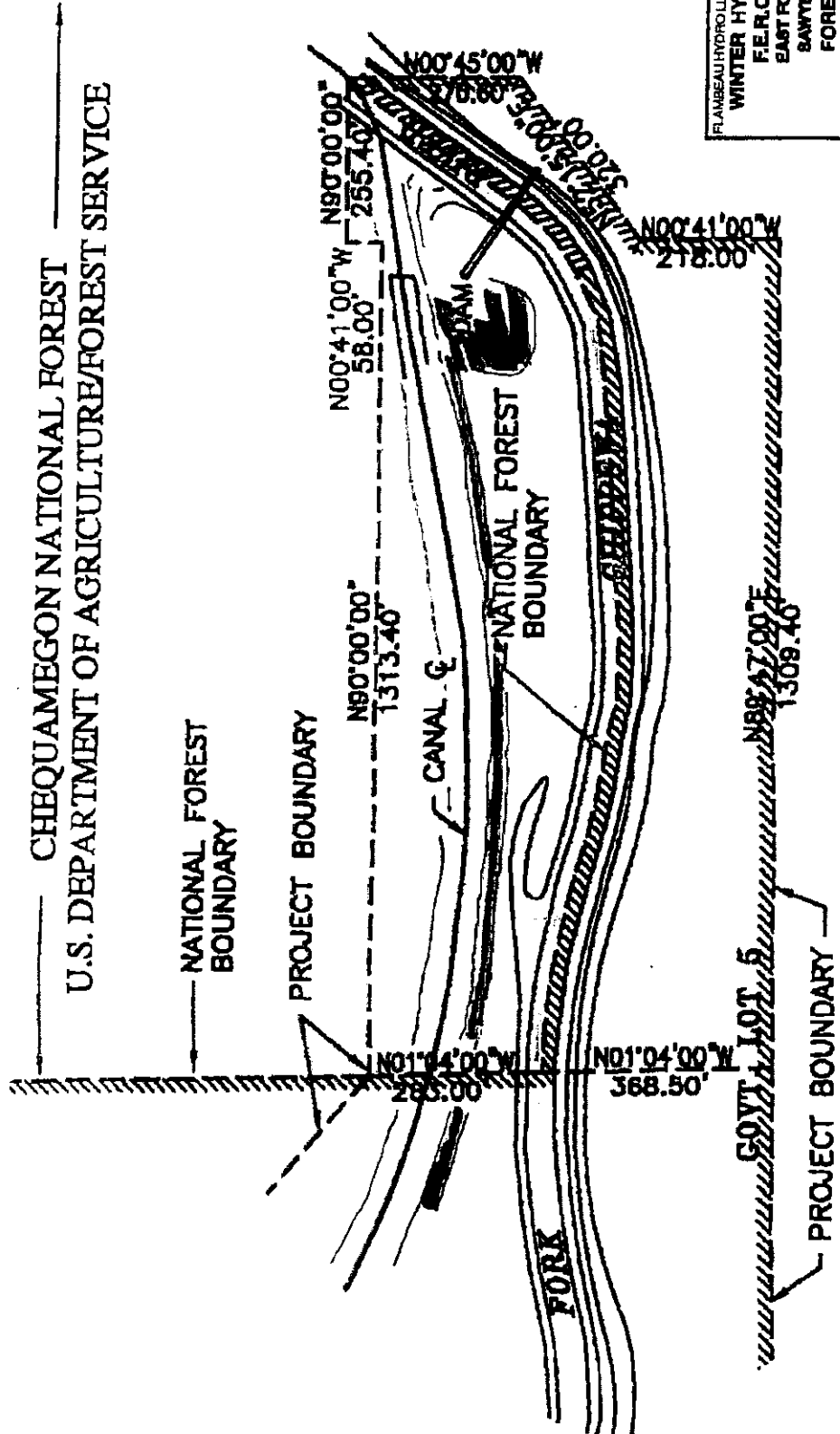
This drawing is part of the application for license made by the undersigned this 15 day of October 2006.




Elizabeth G. DeWitt
 Elizabeth G. DeWitt, Agent
 FLAMBEAU HYDRO, LLC

Flambau Hydro, LLC
 Northern Environmental
 100 North Main Street
 Flambeau, WI 54436
 715-237-1111

EXHIBIT G
 FLAMBEAU HYDRO LLC
 SAWYER COUNTY, WISCONSIN
 NORTHERN HYDROELECTRIC PROJECT
 EAST POLE COTTAGE AREA - SAWYER COUNTY, WISCONSIN
 PROJECT No. 204
PROJECT BOUNDARY MAP
 PAGE 1
 SEPTEMBER 12, 2006

Forest Service Lands at the Winter Project



-  POWER CANAL EMBANKMENT AND TOE AREA
-  POWER CANAL/EAST FORK RIVER
-  DIVERSION DAM ACCESS ROAD

FLAMBEAU HYDRO LLC
SAWYER COUNTY, WISCONSIN
WINTER HYDROELECTRIC PROJECT
F.E.R.C. PROJECT NO. 2064
EAST FORK OF CHIPPEWA RIVER
SAWYER COUNTY, WISCONSIN
FOREST SERVICE LANDS
AT
THE WINTER PROJECT

IV
Land & Wildlife Survey Results

1. Bald Eagle

There are not results to report as no formal surveys were conducted for the Bald Eagle at the Winter Hydro Project in 2012 per approved plan. Agencies will be notified should any Eagle Nests be found located within the project boundary.

2. Gray Wolf

There are no results to report as no formal surveys were conducted for the Gray Wolf the Winter Hydro Project in 2012 per approved plan. The Gray Wolf was delisted at the time of submittal of the Land and Wildlife Management Plan. It was re-listed July 1, 2009 as Threatened and Endangered in Wisconsin by the U.S. Fish and Wildlife Service (FWS), then delisted again on January 27, 2012.

3. Wood Turtle

The annual Wood Turtle survey was conducted at the Winter Hydro Project on June 6, 2012 by Aneta Rietveld, Environmental Quality with Renewable World Energies. The survey started at 1:50 p.m. and ended at 6:30 p.m. for a total survey time of 4 hours and 40 minutes. The survey was divided into 3 sections consisting of the Tailrace (1:50 -2:25 p.m. on foot), Bypass Reach (2:30 – 4:00 p.m. on foot), and Impoundment (4:00 – 6:30 p.m. by kayak). Conditions for the survey were good. Temperatures were in the high 60's to low 70's, calm to slightly breezy, with a mix of sun and clouds throughout the entire survey. Project log sheet records indicated a HWL of 1370.20 MSL and TWL of 1345.05 MSL. No sightings of Wood Turtles were noted. However, other species were observed and included:

- Various Song Birds
- Blackbirds
- Merganser
- Beaver
- (3) Painted Turtles
- Baby Raccoons
- Bullfrog
- Snapping Turtle
- Sturgeon (jumped out of the water in front of a deer and startled it)
- Dragonflies
- Deer

Survey documents and photos may be found at the end of the report under the section titled Survey Documents page 27.

4. Non Native Invasive Species

This section of the report includes survey results for species such as:

- Asiatic Honeysuckles, *Lonicera tartarica*, *L. morrowii*, and *L. x bella*
- Buckthorns, *Rhamnus cathartica* and *R. frangula*
- Curly Pondweed, *Potamogeton crispus*
- Garlic Mustard, *Alliaria petiolata*
- Eurasian Water Milfoil, *Myriophyllum spicatum*
- Japanese Knotweed, *Polygonum cuspidatum*
- Purple Loosestrife, *Lythrum salicaria*

It was agreed upon during Agency consultation and during the development of the Final Land and Wildlife Management Plan that these surveys could all be conducted concurrently. However, the Final Plan devoted a separate section to Purple Loosestrife which will be addressed in the next section of the report.

The survey was conducted by Mr. Gary Rast and Aneta Rietveld of RWE on August 6, 2012. The Tailrace and Bypass Reach was surveyed (2:00 -3:25 p.m. on foot), and the Impoundment 3:46 -6:00 p.m. by boat).

The weather conditions during the survey were bright and sunny with a temperature of 81 degrees F.

Honeysuckle was observed on the Tailrace Canoe Portage Trail and Fishing Access Trail as well as on the Bypass Reach Roadway to dam. The coordinates with photos are attached in the survey documents. None of the other invasive species were noted during this survey.

Survey documents and photos may be found at the end of the report under the section titled Survey Documents page 27.

5. Purple Loosestrife

On August 6, 2012, Flambeau Hydro, LLC (FHLLC) performed an inventory of purple loosestrife plants at the Winter Project in Sawyer County, Wisconsin. The method of inventory was defined as follows:

While Purple Loosestrife is blooming in July and August, the inventory should be conducted using a boat to survey the impoundment above the dam within the Project Boundary and on foot below the dam within the Project Boundary. County wetland maps may be used to determine other areas where Purple Loosestrife could be found on lands owned by FHLLC within the Project Boundary. Lands owned by FHLLC within the Project Boundary will be surveyed on foot. A pair of binoculars should be used to search for the purple flowered spikes of the plant. When plants are located, the person(s) inventorying should get close enough to make a positive identification without disturbing the plants or the

immediate area around the plants as this could cause them to spread. A GPS receiver will be used to establish a GPS coordinate for the location of the plants. If it is not possible to get close enough to establish an accurate location, an approximate location will be established with reference to an established GPS coordinate. The plants should be inventoried by marking and numbering the location on a Project map along with notes approximating size of plants, stand area, stem density, plant density, and location with reference to established GPS coordinates. Photos and/or videotape may be taken of the largest occurrences.

Example:

GPS point CLRVPL001; Location Lat N45° 54.493' Lon W92° 31.128'; Plant height 2' – 6'; Density ~5' X 50' ~40 plants single & multi-stem; Comments: Insect damage observed. Seed heads removed. Photos. No Video.

The area to be inventoried shall be the shoreline of the impoundment and lands owned by FHLLC within the Project Boundary as indicated on the Project Boundary Map G-1, as filed with the Federal Energy Regulatory Commission.

General Observations:

The Winter Project Boundary was divided into three different areas; *the impoundment* (from the Winter powerhouse to the upstream project boundary, approximately 2.10 miles upstream), *FHLLC owned property within the project boundary* (FHLLC owned property adjacent to the dam and powerhouse), *the tailrace/bypass reach* (from the powerhouse to a point approximately 595 feet downstream, including the 3,028-foot long bypass reach area from the spillway to the downstream project boundary).

The tailrace/bypass reach was surveyed on foot (Tailrace and By-Pass Reach 2:00 p.m. - 3:25 p.m.) and no purple loosestrife plants were observed.

The FHLLC owned property within the project boundary was surveyed on foot (3:25 p.m. – 3:46 p.m.) and no purple loosestrife plants were observed.

The impoundment was surveyed by boat beginning at 3:46 and ending at 6:00 p.m. WNTRPL001 was seen again this year as 1 plant located in a marshy area with no boat access. The mud was too deep to attempt to wade out and remove this plant. WNTRPL002 / WNTRPL003 was located in a marshy low lying peninsula of grasses and cattails adjacent to the river (see included photo). These 9 clumps of PL were not in a navigable section of the river. WNTRPL004 was a stand of 2 Loosestrife located beyond a piece of solid ground in the marsh. The survey crew proceeded upstream outside of the project boundary as during previous surveys to explore if any plants existed that may be contributing to the infestation by spreading seeds downstream into the impoundment. The 2010 survey had revealed four areas of blooming purple loosestrife plants located ~240 yards upstream from the project boundary. This site, (WNTRPLNA01) was checked out on foot and no Purple Loosestrife was observed in 2012.

The prior purple loosestrife plants were inventoried and have been noted on the survey sheet(s) and map(s) at the end of this report with notations added for 2012. No other occurrences of purple loosestrife were observed.

During the inventory, a Digital Camera, Laser Rangefinder, GPS, and 2 pair of binoculars were used to document occurrences of purple loosestrife as noted in the survey comments at the end of this report.

A vegetation survey dated 1999 and included in Exhibit E of the Application for New License for the Winter Hydroelectric Plant and filed with the Federal Energy Regulatory Commission (FERC) was used as an aid in a 2008 baseline purple loosestrife survey.



2012 PHOTO OF WNTR PL002 / WNTR PL003

6. Land Disturbance & Erosion Control

Erosion

On May 8, 2012, Flambeau Hydro, LLC (FHLLC) performed an unofficial inventory and survey of erosion sites at the Winter Project in Sawyer County, Wisconsin. Monitoring of erosion is a requirement of Section Q of the Water Quality Certification for the Winter Project and reads as follows:

- Q. The licensee shall monitor the shoreline of the project reservoir, power canal, tailrace, and bypassed channel for erosion, and if

necessary, prepare an erosion control plan in consultation with the Department. Inspections should be conducted at three-year intervals in spring before vegetation develops, so eroded areas can be readily identified. The licensee shall submit to the Department a report of monitoring results by December 31 in the year of each inspection.

A basic rating system of Minor, Moderate, and Severe is used to give an indication of the condition of each site with the following description for each condition:

Minor – Some unusual erosion from within the recent past is noticeable. The site is either small or stable to the point that very little or no unusual sediment is entering the river. The toe of the bank is stationary and stable with material such as rocks, logs, vegetation, etc.

Moderate – Some unusual erosion from within the recent past is noticeable. The site has areas that appear to be actively eroding into the water in places. Vegetation may be slumping into the river at a slow rate. The majority of the toe of the bank is still stable with material such as rocks, logs, vegetation, etc.

Severe – Heavy unusual erosion from the recent past is evident. The site is actively eroding into the water. Little or no vegetation is present. The entire toe of the bank is unstable and eroding into the water.

FHLLC has been actively monitoring erosion within the Project Boundary since 2006 in order to gain an understanding of trends at potential erosion sites. The next erosion inspection will be performed in 2013. The next tri-annual report will be due in 2014.

General Observations:

The Winter Project Boundary was divided into three different areas; *the impoundment* (from the Winter powerhouse to the upstream project boundary, approximately 2.10 miles upstream), *FHLLC owned property within the project boundary* (FHLLC owned property adjacent to the dam and powerhouse), *the tailrace/bypass reach* (from the powerhouse to a point approximately 595 feet downstream, including the 3,028-foot long bypass reach area from the spillway to the downstream project boundary).

The tailrace/bypass reach was surveyed on foot and no unusual erosion sites were observed.

The FHLLC owned property within the project boundary was surveyed on foot and one minor erosion site (WNTR ER003) was observed.

WNTR ER003 is located on a point of land formed at the confluence of the powerhouse tailrace and the by-pass reach about 0.12 miles downstream from the powerhouse. This site is a popular fishing area located on FHLLC property and erosion here can be directly attributed to pedestrian traffic. This is considered a Minor site due to its small footprint and rocky characteristic that increases stability. No noticeable erosion has been evident during the monitoring period of 2008 through 2012. The site appears much the same as it did in past surveys. Human activity at this site appears to be what has caused this to be

classed as an erosion site. It is unlikely to contribute noticeable sediment discharge to the river in its current condition.

No other unusual erosion sites were observed on FHLLC owned property within the project boundary.

The impoundment was surveyed by boat and two Minor erosion sites (WNTR ER001 and WNTR ER002) were observed.

WNTR ER001 is located on the right side of the river at the confluence of Fishtrap Creek and the East Fork of the Chippewa River about 0.90 miles upstream from the powerhouse. This site is not located on FHLLC property. It is considered a Minor site due to the stability of the toe. The entire toe is firmly established with trees, shrubbery, and other vegetation. No noticeable erosion has been evident during the monitoring period of 2008 through 2012. In fact it appears to be healing. It is unlikely to contribute noticeable sediment to the river in its current condition.

WNTR ER002 is located on the right side of the river near the spillway about 0.43 miles upstream from the powerhouse. This site is not located on FHLLC property. It is considered a Minor site due to the small size and stability of the toe. The entire toe is established with rock and gravel. No noticeable erosion has been evident during the monitoring period of 2008 through 2012. It is unlikely to contribute noticeable sediment to the river in its current condition.

No other unusual erosion sites were observed in the impoundment.

These erosion sites were inventoried and have been noted on the survey sheet(s) and map(s) at the end of this report.

During the inventory, a digital camera and/or video camera was used to document the erosion sites as noted in the survey comments at the end of this report. Please note that the photos are of sites ER001 thru ER003 but the report describes them in this order ER003, ER001, and ER002.

5/8/2012 Winter Erosion Site Photos



Photo 1 – WNTR ER001



Photo 2- WNTR ER002



Photo 3- WNTR ER003



Photo 4- WNTR ER003



Photo 5 – WNTR ER003

Erosion Survey

12-11-09 GGR WNTR Erosion Monitoring inv

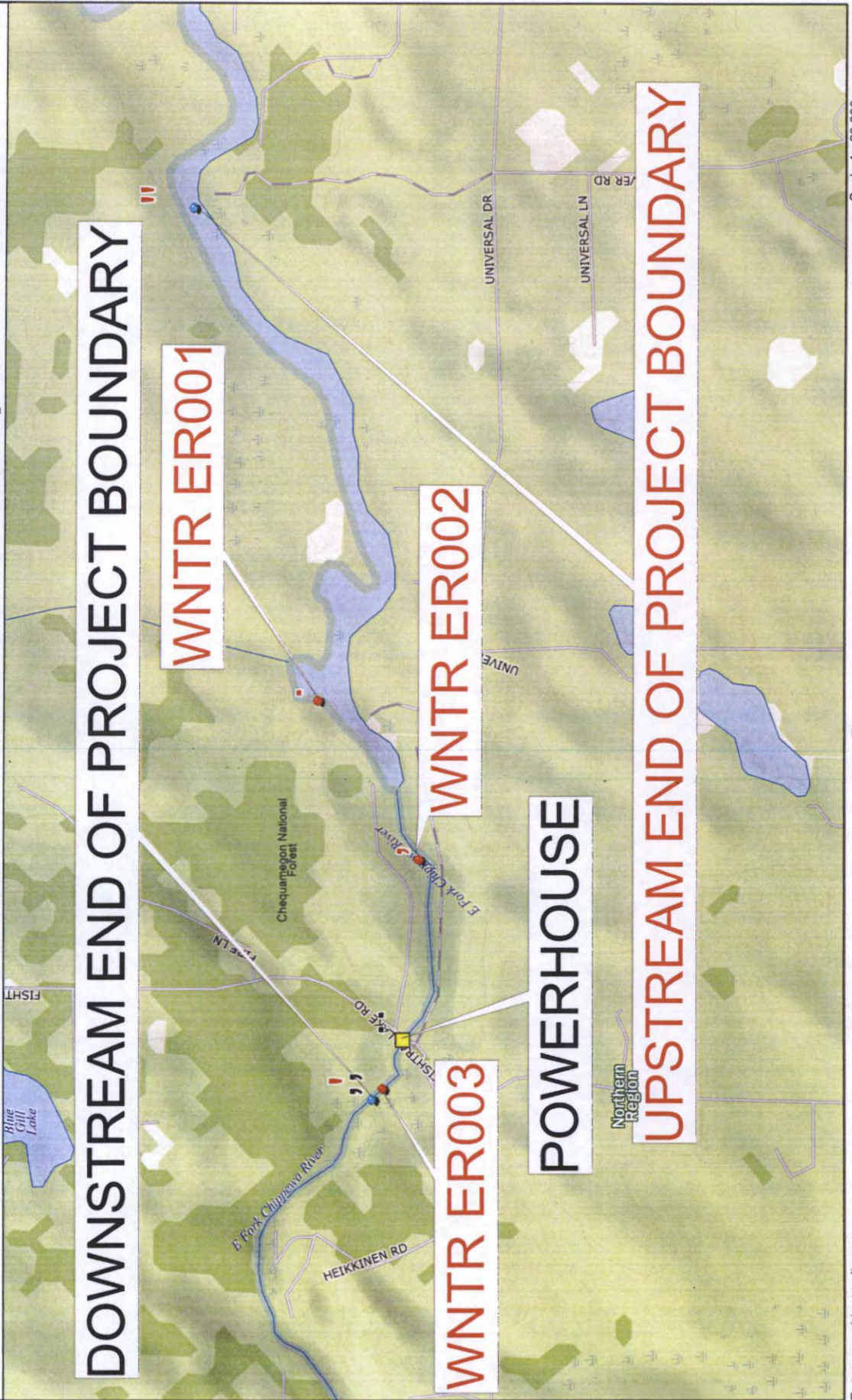
Project: Winter #2064Datum: WGS 84Date: 5/8/2012Crew: GGR

GPS Point	Latitude	Longitude	Length of Site	Height of Banks	Comments
WNTR ER001	N45 55.957'	W90 56.904'	25'	15'	First observed in 2006 as Minor site. Right side of river at confluence of Fishtrap Creek and East Fork of the Chippewa River. Toe is stable with trees, shrubs, and other vegetation. No noticeable erosion from 2008 through 2012 and appears to be healing. No remediation. Photos taken in 2008, 2010, and 2012.
WNTR ER002	N45 55.760'	W90 57.347'	15'	4'	First observed in 2006 as Minor site. Right side of river near spillway. Toe is stable with rocks and gravel. No noticeable erosion from 2008 through 2012. No remediation. Photos in 2008, 2011, and 2012.
WNTR ER003	N45 55.830'	W90 57.988'	25'	6'	First observed in 2006 as Minor site. Located on a point of land formed at the confluence of the powerhouse tailrace and the by-pass reach. Popular fishing site with moderate pedestrian traffic. Site is stable with rocks. No noticeable erosion from 2008 through 2012. No remediation. Photos in 2008, 2011, and 2012.



Topo USA® 6.0

Winter Hydroelectric Project P-2064 Erosion Site Location Map 2012



Data use subject to license.

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www.delorme.com



Scale 1 : 20,800



1" = 1,733.3 ft

Data Zoom 13-3

7. Zebra Mussels

No Zebra Mussels were observed during the Wood Turtle/Invasive/Erosion surveys performed during 2012. At the end of the surveys boats and trailers were cleaned with a 10% bleach solution applied by sprayer.

8. Standards and Guidelines

Flambeau Hydro LLC realizes that during the term of the license, applicable standards and guidelines for the Chequamegon-Nicolet National Forest may change. So that the Plan can be updated and accommodate new information as it is obtained, Flambeau Hydro LLC will formally consult with the Forest Service every five (5) years to update the plan accordingly during the term of the License. The table below shows the schedule the consultation process will follow. The first formal consultation will take place in 2013.

Year	Formal Consultation
2013	Yes
2018	Yes
2023	Yes
2028	Yes
2033	Yes
2038	Yes

Survey Documents

Wood Turtle

Wood Turtle Survey Form Winter Hydroelectric Project - FERC # 2064

Date: 6-6-12 Conducted By: Aneta Rietveld

Time Survey Started: 4:00 Time Survey Ended: 6:30

Weather Conditions: 74° sunny calm - no breeze

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): _____

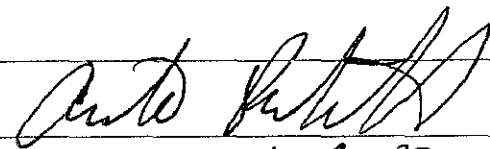
(Attach Photos & Map if Applicable)

Sex of Turtles Sighted: Male Female Unknown

Total # Turtles Sighted: _____

Other Species Observed: 2 deer, baby raccoons, merganser
bullfrog, beaver, snapping turtle, ruffed grouse
2 painted turtles sturgeon jumper

Other Pertinent Survey Information


6-6-12

Wood Turtle Survey Form Winter Hydroelectric Project - FERC # 2064

Date: 6-6-12 Conducted By: Aneta Rietveld

Time Survey Started: 1:50 Time Survey Ended: 2:25

Weather Conditions: 68° - mix sun and clouds
slight breeze

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): _____

(Attach Photos & Map if Applicable)

Sex of Turtles Sighted: Male Female Unknown

Total # Turtles Sighted: _____

Other Species Observed: 1 painted turtle blackbirds

Other Pertinent Survey Information

CFM- 186

Headwater - 1370.20

Tailwater - 1345.05

diversion dam - 1370.42

Aneta Rietveld
6-6-12

Wood Turtle Survey Form Winter Hydroelectric Project - FERC # 2064

Date: 6-6-12 Conducted By: Aneta Rietveld

Time Survey Started: 2:30 Time Survey Ended: 4:00

Weather Conditions: 68° cloudy slight breeze

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): _____

(Attach Photos & Map if Applicable)

Sex of Turtles Sighted: Male Female Unknown

Total # Turtles Sighted: _____

Other Species Observed: dragonflies black birds
various songbirds

Other Pertinent Survey Information

turtle eggs dug up and eaten by road.

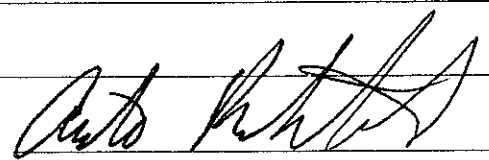

6-6-12



PHOTO 1- WOOD TURTLE SURVEY IMPOUNDMENT



PHOTO 2- WOOD TURTLE SURVEY IMPOUNDMENT

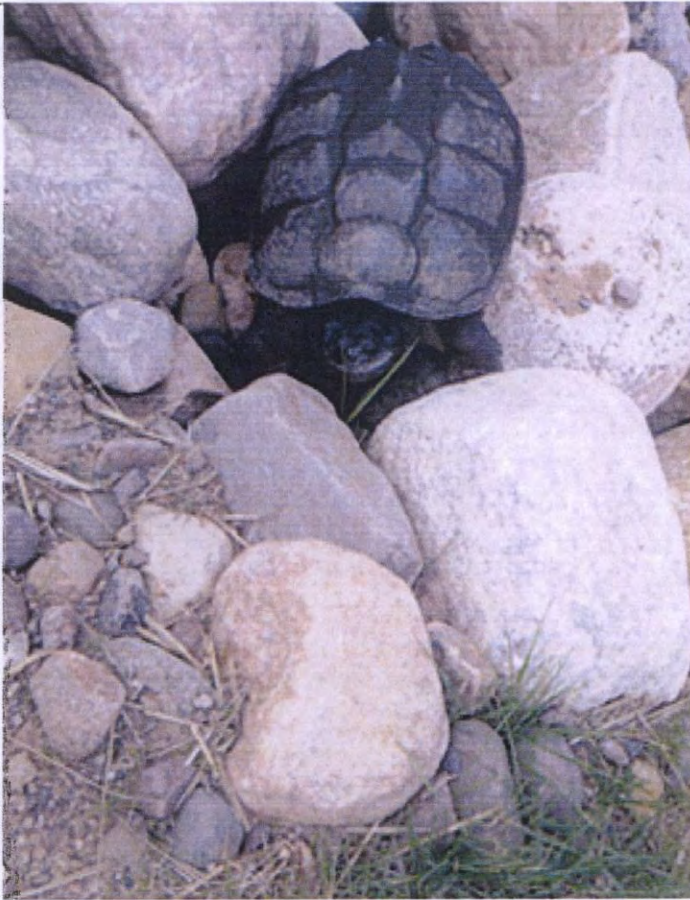


PHOTO5- SNAPPING TURTLE

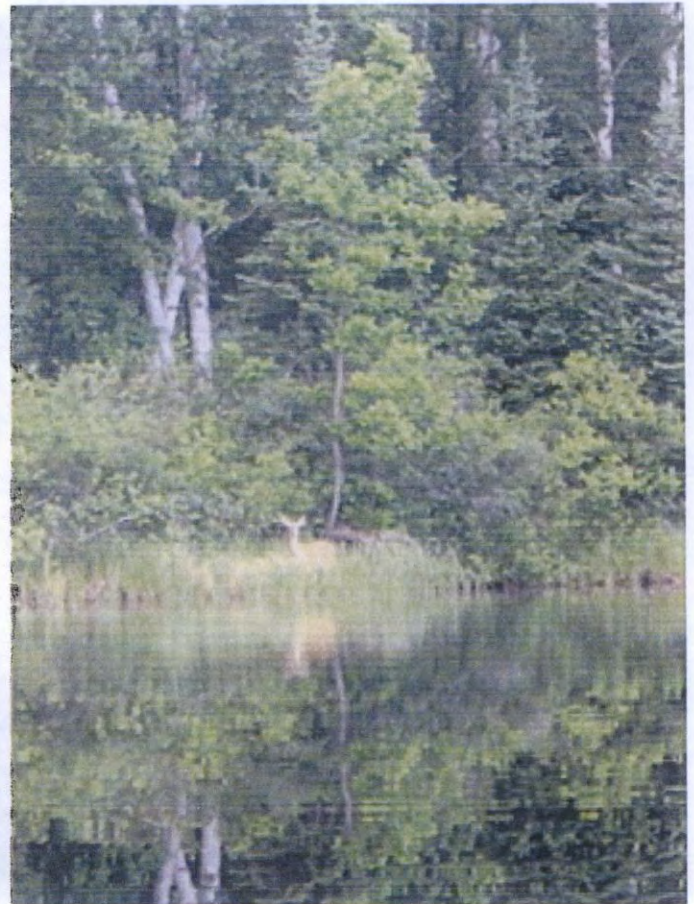


PHOTO 6- DEER



PHOTO 7 - WOOD TURTLE SURVEY- PAINTED TURTLE

Invasive Species/Erosion

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 8-6-12 Conducted By: AKR

HWL: _____ TWL: _____

Time Survey Started: 2:00 pm Time Survey Ended: 3:25

Weather Conditions: Sunny 81°

Location of Survey Area: Tailrace Bypass Reach Impoundment _____

Time of Sighting(s): all throughout

Location of Sighting(s) (GPS Coordinates): N 45° 55.802' W 90° 57.898'
N 45° 55.796 W 90° 57.883

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife _____

Erosion: _____ (Photos Taken) Yes No _____

Other Species Observed: _____

Other Pertinent Survey Information

multiple bushes observed at the canoe portage trail, along the fishing trail to tailrace, and along road (near shed and guard rail)

winter - INVASIVES-

AKR

2:00-

Sunny

2:35

Honeysuckles -

(200 bushes)

multiple at canoe portage trail

N45°55' 808' (pic 1)

W90° 57.898'

Tail Race

fishing trail - 2 bushes - N45°55' 802'

(pic 2) W90.57.898'

13 bushes at beginning of
trail by N45.55796'

W90 57.883'

(pic 3)

16 bushes by road near
tailrace (pic 4)

Bypassed Reach -

2:35-

Honeysuckle - 4 bushes by guardrail
(pic 5)

3:25

5 bushes by shed (pic 6)

1 Bush - N45 55.728'

W 090.57.635'

1 Bush N45 55 685'

W90 57.480'

1 Bush next to dam. (pic 7)



PHOTO 1- HONEYSUCKLE ON PORTAGE TRAIL-CLOSEUP



PHOTO 2 - HONEYSUCKLE ON PORTAGE TRAIL



PHOTO 3- HONEYSUCKLE ALONG ROAD



PHOTO 4- HONEYSUCKLE ALONG ROAD BY BRIDGE



PHOTO 5- HONEYSUCKLE ALONG FISHING TRAIL

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project – FERC # 2064

Date: 8-6-12 Conducted By: AKR GGR

HWL: _____ TWL: _____

Time Survey Started: 3:46 Time Survey Ended: 6:00 pm

Weather Conditions: sunny 81°

Location of Survey Area: Tailrace _____ Bypass Reach _____ Impoundment

Time of Sighting(s): 4:30, 4:50,

Location of Sighting(s) (GPS Coordinates): see survey sheet

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife

Erosion: _____ (Photos Taken) Yes No _____

Other Species Observed: blue heron bear swimming river

Other Pertinent Survey Information

no Beetle damage noticed on PL

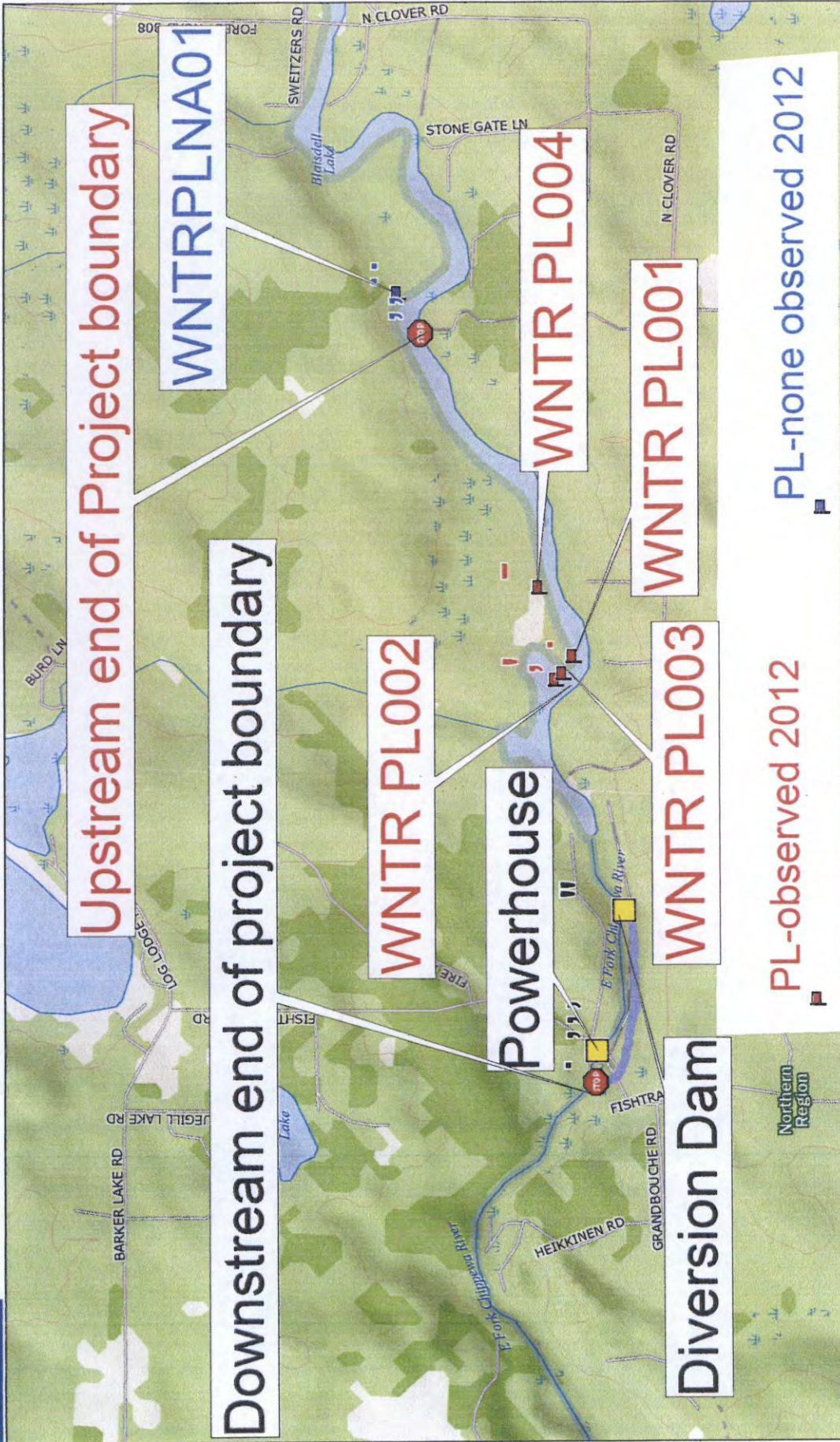
Crew: GGR ,AKR Datum: WGS 84

Date : 8-6-2012

Project: Winter #2064

Purple Loosestrife Survey

Sighting #	GPS Point	Latitude	Longitude	Plant Height	Stand Area	Comments
1	WNTR PL001	N45 55.827'	W90 56.572	4'	1 PLANT	First observed in 2007. Located on the right side of the river ~4050 ft. upstream from the diversion dam. Seed heads cut in 2007. No treatment in 2008.No plants observed in 2009,2010,and 2011. Boat was not able to get close enough for treatment in 2012.
2&3	WNTR PL002 WNTR PL003	N45 55.868 N45 55.851	W90 56.650 W90 56.628	4' - 6'	~120' X 200' 9 Groups of plants	First observed in 2007. Located on the right side of the river ~3700 ft. upstream from the diversion dam. Beginning in 2009, sites PL002 and PL003 were grouped as one continuous site due to the close proximity of the sites. In 2010 some old cane was visible with no new growth within it. None were seen in 2011. No treatment 2008-2012. Photo taken in 2012 -full bloom. No beetle damage observed.
4	WNTR PL004	N45 55.904	W90 56.347	1-3' plant 4' plant	1- 5'x 5' 2 plants	First observed in 2010. Located on the right side of the river and ~5130 ft. upstream of the diversion dam. No old cane and no treatment in 2010 and nothing observed or treated in 2011. No beetle damage observed in 2012 and no treatment.
5	WNTRPLNA01	N45 56.225 estimated location	W90 55.392 estimated location	N/A	N/A	First observed in 2007-photos taken . Right side of river. This site was ~240 yds. upstream of the project boundary limits and could not be reached by boat due to rapids. In 2010 only 4 areas of blooming plants were observed at this site.No treatment in 2008 to 2011. In 2012 no blooming plants were observed.



Winter Project, Purple Loosetrife Location Map 2012

Winter WI FERC #2064

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 5/8/12 Conducted By: GARY RAST

HWL: 1370.58 TWL: 1346.65

Time Survey Started: 2:30 Time Survey Ended: 4:30

Weather Conditions: COOL - HIGH 50'S - LOW 60'S - CLOUDY

Location of Survey Area: Tailrace Bypass Reach Impoundment

Time of Sighting(s): _____

Location of Sighting(s) (GPS Coordinates): SAME AS PREVIOUS YEARS

ER001 + ER002

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica L. morrowii L. x bella

Buckthorns: Rhamnus carthartica R. frangula

Curly Pondweed: Garlic Mustard Eurasian Water Milfoil

Japanese Knotweed: Purple Loosestrife

Erosion: ER001 PHOTOS 1-5
ER002 PHOTOS 6-70 (Photos Taken) Yes No

Other Species Observed: _____

Other Pertinent Survey Information

Gary Rast

Year 2012 Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 5/8/12 Conducted By: GARY RAST

HWL: 1370.58 TWL: 1346.65

Time Survey Started: 1:00 Time Survey Ended: 1:30

Weather Conditions: COOL - HIGH 50'S - LOW 60'S
CLOUDY - SOME MIST

Location of Survey Area: Tailrace Bypass Reach _____ Impoundment _____

Time of Sighting(s): THROUGHOUT SURVEY

Location of Sighting(s) (GPS Coordinates): SAME AS PREVIOUS
ER003

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife _____

Erosion: ER003 (Photos Taken) Yes No _____ PHOTOS 11-15

Other Species Observed: N/A

Other Pertinent Survey Information

Gary Rast

Year _____ Invasive Species/Erosion Survey

Winter Hydroelectric Project - FERC # 2064

Date: 5/8/12 Conducted By: CARY RAST

HWL: 1370.58 TWL: 1346.65

Time Survey Started: 2:00 Time Survey Ended: 2:30

Weather Conditions: COOL HIGH 50'S - LOW 60'S CLOUDY - SOME MIST

Location of Survey Area: Tailrace _____ Bypass Reach X Impoundment _____

Time of Sighting(s): N/A

Location of Sighting(s) (GPS Coordinates): N/A

(Attach Photos & Map if Applicable)

Asiatic Honeysuckles: Lonicera tartarica _____ L. morrowii _____ L. x bella _____

Buckthorns: Rhamnus carthartica _____ R. frangula _____

Curly Pondweed: _____ Garlic Mustard _____ Eurasian Water Milfoil _____

Japanese Knotweed: _____ Purple Loosestrife _____

Erosion: NONE (Photos Taken) Yes _____ No _____

Other Species Observed: N/A

Other Pertinent Survey Information

Cary Rast

5/8/2012 Winter Erosion Site Photos



Photo 1 – WNTR ER001



Photo 2 – WNTR ER002



Photo 3 – WNTR ER003



Photo 4 – ER003



Photo 5 – WNTR ER003

Appendix 1
Agency Correspondence

Aneta Rietveld

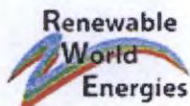
From: Gary Rast
Sent: Wednesday, August 29, 2012 4:04 PM
To: Spickerman, Steven -FS
Cc: Aneta Rietveld
Subject: RE: WNTR Invasive Treatment

Steven,

Is it too late to treat the Honey suckle this year or should we let it go until next year? What were the treatment methods again and what chemical do you recommend if we do it now or in the future? I don't seem to find them but I know you sent it to me at some time. The reason I ask about the control is when I filed a report to FERC we had been directed to consult with WDNR/FS on methods and control options. If it is too late this year because the grow season is coming to an end at least I have this paper trail of consult.

Gary

Gary Rast
Regulatory/Compliance Manager



Renewable World Energies, LLC
100 S. State Street
P.O. Box 264
Neshkoro, WI 54960
Phone: 855-994-9376 Ext. 105
Fax: 920-293-4100
Cell: 920-570-0995
E-mail: grast@rwehydro.com

From: Spickerman, Steven -FS [<mailto:sspickerman@fs.fed.us>]
Sent: Wednesday, August 29, 2012 3:43 PM
To: Gary Rast
Cc: Aneta Rietveld
Subject: RE: WNTR Invasive Treatment

Gary, my crew was unable to treat honeysuckle at Winter Dam this year, they got tied up with a large honeysuckle eradication project near Drummund, WI and are now laid off for the season (too little time, too many invasives!). They did survey the up-river flowage area from the dam to upper Blaisdell for Loosestrife and eradicated what they found. I have to do the data entry and when I get that finished, I'll send you acres treated. On a side note, I have a contractor surveying the entire Chip system within the National Forest boundary in 2013 for aquatic invasives and I will share that data with you when its available next year.

Steven Spickerman
Plant Ecologist
Great Divide Ranger District

Chequamegon-Nicolet National Forest
715-264-2511

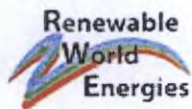
From: Gary Rast [<mailto:grast@rwehydro.com>]
Sent: Wednesday, August 29, 2012 3:13 PM
To: Spickerman, Steven -FS
Cc: Aneta Rietveld
Subject: FW: WNTR Invasive Treatment

Steven,

Here is a re-send of the original e-mail on treatment of the invasive species at the Winter Hydro Project. We conducted the survey in July. I believe Aneta has the 2012 results which I think are very similar to 2011 with some additions. You had indicated to me in the past that you would consider taking care of the treatment when you treat FS lands near that project. Is that still your intent? Either way I'd appreciate an answer as we could still accomplish treatment if it is not getting too late in the year.

Gary

Gary Rast
Regulatory/Compliance Manager



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Neshkoro, WI 54960
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Fax: 920-293-4100
Cell: 920-570-0995
E-mail: grast@rwehydro.com

From: Gary Rast
Sent: Tuesday, July 17, 2012 11:52 AM
To: 'sspickerman@fs.fed.us'
Subject: WNTR Invasive Treatment

Steven,

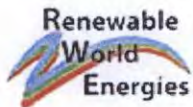
Sometime in the next few weeks I need to perform an Invasive (Aquatic & Terrestrial) survey at the Winter Hydro Project. When I've filed reports to WDNR/FS etc. in the past I was asked to consult with the agencies which is what I had in mind in speaking to you in the past about controls for things such as Honeysuckle etc. You had indicated to me that you would consider taking care of the treatment when you treat FS lands near that project. Is that still your intent? The places I noted in last year's report will more than likely be the same this year with some possible exceptions. Locations can be found in last year's report. However it is primarily near the power canal and along the trails leading downstream on either side of the powerhouse. Please let me know as I will need to indicate some type of treatment in this year's

report whether our company does it or you are gracious enough to perform the treatment. I've not purchased any chemicals yet because of our past e-mail/phone conversations.

Thanks

Gary

Gary Rast
Regulatory/Compliance Manager



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E-mail: grast@rwehydro.com

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