

January 25, 2016

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

RE: Winter Hydroelectric Project, FERC Project #2064

Flambeau Hydro LLC

Final Report 2015 Land & Wildlife Management Report

FERC License Article 404 USDA Forest Service 4(e), Condition 10 Wisconsin DNR 401 Water Quality Certification, Item Letter P, Q, R

Dear Ms. Bose:

On behalf of Flambeau Hydro LLC, Licensee, Renewable World Energies LLC hereby submits the Licensee's 2015 Final Land and Wildlife Management Report for the Winter Hydroelectric Project FERC #2064. The Draft Report was sent to the agencies by letter dated December 18, 2015, and attached to an e-mail dated December 17, 2015 asking for comment. As of the date of this letter no comments have been received.

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 Management Plan was filed with FERC on December 19, 2008. FERC issued an Order Modifying and Approving the plan on June 3, 2011.

Corporate Office

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2015 Results

Wood Turtle Survey

The wood turtle survey was conducted on June 10, 2015. No wood turtles were sighted by the licensee although multiple other animal species were seen including assorted songbirds, deer, and (3) geese. A Bald Eagle Nest was discovered during this survey. It is discussed further in the Bald Eagle section of this letter. The next survey will be completed in the early summer of 2016.

Non - Native Invasive Species Survey

The survey was conducted by Mr. Gary Rast and Jim Tesch of RWE on August 13, 2015. The Tailrace, Bypass Reach, and FHLLC Property were surveyed on foot from 1:30 pm - 2:30 pm and the Impoundment from 9:45 a.m. - 1:30 pm by boat. The HWL was 1370.45, TWL 1344.60, and Project Flow was 65 CFS. No Aquatic Invasive species or Living Asiatic Honeysuckles were observed. The Honeysuckles had been treated by the USFS in late June or early July. All survey information about the invasive species found on the Winter Project (Asiatic Honeysuckle and Purple Loosestrife) has been added to the SWIMS database for the 2015 year. The next formal survey to be conducted will be in 2016.

Purple Loosestrife Survey

The survey was conducted by Mr. Gary Rast and Jim Tesch of RWE on August 13, 2015 in conjunction with the Non – Native Invasive Species Survey spoken of above. The Tailrace, Bypass Reach, and FHLLC Property were surveyed on foot from 1:30 pm – 2:30 pm and no purple loosestrife plants were observed. The impoundment was surveyed by boat beginning at 9:45 p.m. and ending at 1:30 p.m. The HWL was 1370.45, TWL 1344.60, and Project Flow was 65 CFS. Purple loosestrife was observed at WNTRPL002/WNTRPL003 and is located in a marshy low lying peninsula of grasses and cattails adjacent to the river and was the only sites to contain Purple Loosestrife. The site has 15-25 plants blooming in the middle of a grassy inaccessible swamp. The area is estimated at approximately 1 acre in size and appears to be increasing from previous year's survey results. These plants are not in a navigable section of the river, so they were not pulled. No other Purple Loosestrife was observed on the project Impoundment. The only animal life seen this day were various songbirds and a family of (6) Ducks. All survey information about the invasive species found on the Winter Project (Asiatic Honeysuckle and Purple Loosestrife) has been added to the SWIMS database for the 2015 year. The next formal survey to be conducted will be in 2016.

Erosion Survey

The next formal spring inspection will be performed in 2017 and will be added to the 2017 Land and Wildlife Management Report as a Tri-Annual Reporting (2015-2017).



Wolf Survey

The Gray Wolf was relisted in December of 2015. The Licensee immediately began consultation with the agencies on how to conduct the survey. Formal surveys were conducted for the Gray Wolf at the Winter Hydro Project in 2015 per approved survey protocol and began on January 14, 2015. They ended with the last snowfall on April 10, 2015. No Wolves or Dens were noted. However, tracks were observed several times in February and March of 2015. The next Wolf survey (2015 – 2016) will begin with the first snow fall in the fall of 2015 and end on March 31, 2016. This will be reported in the 2016 report.

Bald Eagle Survey

No formal surveys were conducted for the Bald Eagle at the Winter Hydro Project in 2015 per approved plan which said agencies would be notified should any Eagle Nests be found located within the project boundary. One nest was located during the Wood Turtle Survey conducted on June 10, 2015. It did not appear active and even appeared abandoned. The agencies were notified via e-mail dated June 26, 2015. No responses were received from any of the agencies. A small Project Boundary Map with the approximate nest location shown was inadvertently omitted in the Draft Report Wood Turtle Survey Documents. It has been added to the Final Report. RWE will continue to monitor the nest during the other surveys conducted throughout the monitoring season. It will be re-visited again during the 2016 season but *no formal survey will be conducted*.

If you have any questions concerning this submittal, please contact Mr. Jason Kreuscher at the Renewable World Energies, LLC offices @ 855-994-9376 Ext 102. He can also be reached by e-mail at jason@rwehydro.com.

Sincerely,

Renewable World Energies, LLC

Agent for Licensee

Mr. Jason Kreuscher

Vice President

Attachment:

Final Report 2015 Land & Wildlife Management Report – January 25, 2016

Cc:

RWE Corporate

Mr. Nick Utrup, USFWS Ms. Cheryl Laatsch, WDNR

Mr. Paul Strong, Forest Supervisor, FS

Ms. Sue Reinecke, FS Mr. Dale Higgins, FS

FINAL

2015 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 – January 25, 2016

Table of Contents

Section	on Description	Page No.
I	Plan Requirements & Approval	. 3
	 Federal Energy Regulatory Commission License Article 40 USDA Forest Service 4 (e) Condition 10	5 6
II	Description of Winter Project	8
	Project Description.	9
III	Project Drawings	10
IV	Winter Hydroelectric Project Boundary— Exhibit G Figure G-1 Forest Service Lands at the Winter Project Land & Wildlife Survey Decults	12
1 V	Land & Wildlife Survey Results	13
	 Bald Eagle Gray Wolf Wood Turtle Non Native Invasive Species Purple Loosestrife Land Disturbance & Erosion Control Zebra Mussels Standards and Guidelines Survey Documents Wood Turtle Invasive Species 	. 14 14 . 15 15 . 17 . 18
	Purple Loosestrife Erosion	
	Appendices	
Appen	ndix 1 Agency Correspondence	20

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:

<u>USDA Forest Service Condition No. 10 - Vegetation, Habitat and Ground-disturbing Activities on National Forest System Lands</u>

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:

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

- 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:

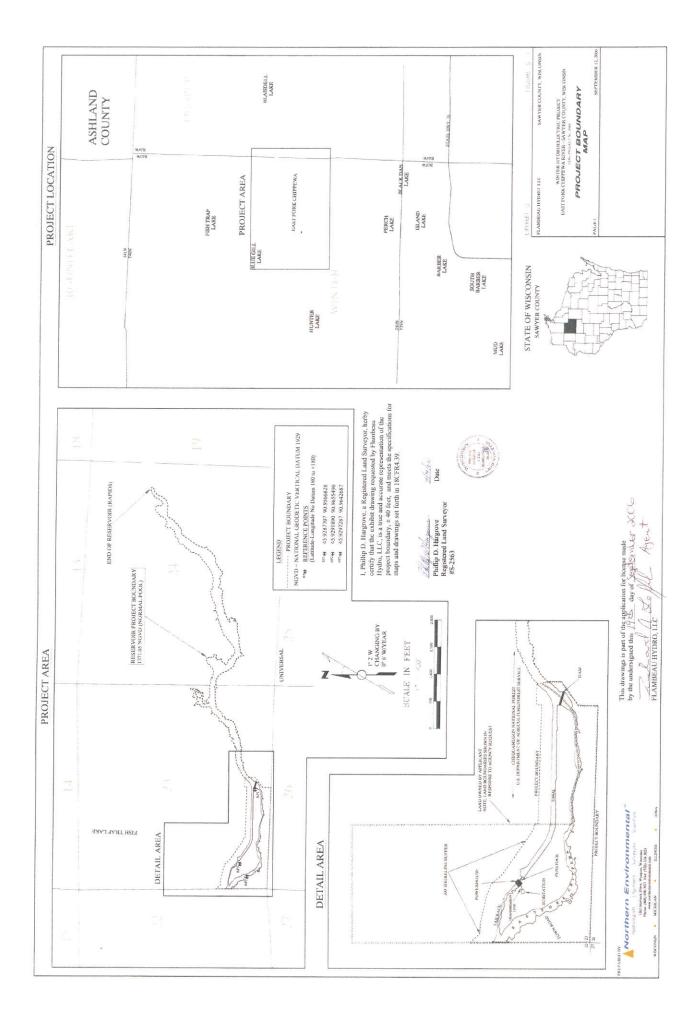
- <u>Diversion Dam:</u> A 14-foot-high, 140 foot-long concrete dam section (8 bays total) with steel gates on top of wooden stop logs in 7 bays and one bay with a 6'x16' steel lift gate operated with an electric motor and mechanical ball-screw. The diversion dam allows the water to be apportioned either to the bypassed reach or down the power canal and into the hydroelectric units.
- <u>Power Canal:</u> 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.
- <u>Intake Structure</u>: 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.
- <u>Powerhouse and the Tailrace:</u> 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.
- <u>USDA Forest Service Lands</u>: 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

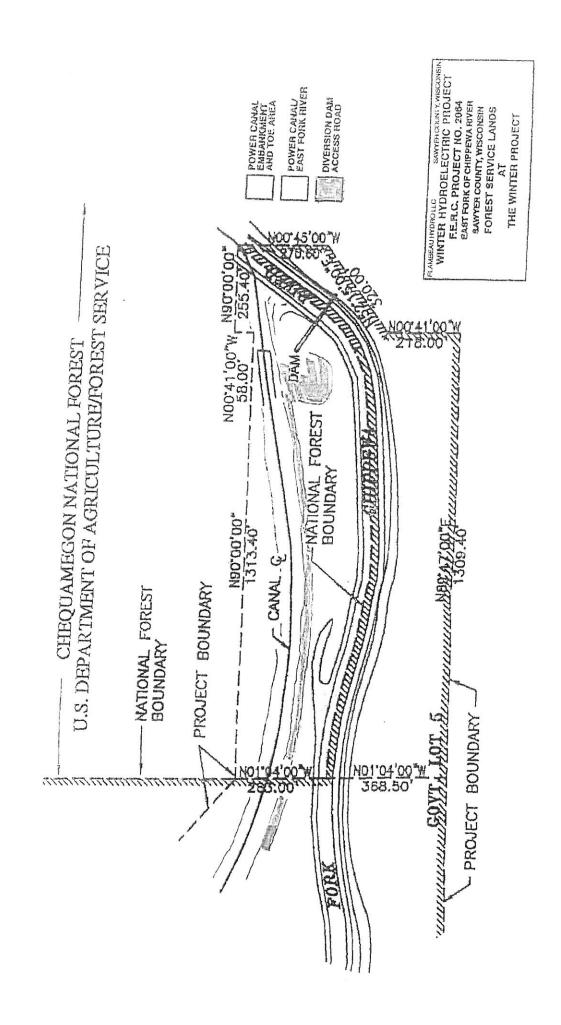
Winter Hydroelectric Project Boundary Exhibit G - Figure G-1

Forest Service Lands at the Winter Project

Winter Hydroelectric Project Boundary Exhibit G - Figure G-1



Forest Service Lands at the Winter Project



IV Land & Wildlife Survey Results

1. Bald Eagle

No formal surveys were conducted for the Bald Eagle at the Winter Hydro Project in 2015 per approved plan which said agencies would be notified should any Eagle Nests be found located within the project boundary. One nest was located during the Wood Turtle Survey conducted on June 10, 2015. It did not appear active and even appeared abandoned. The nest is located about ½ way between the diversion dam and the upper project boundary on the left (N – NW) hand side of the river as traveling upstream. It is located in a large Pine. Agencies were notified via e-mail dated June 26, 2015. No responses were received from any of the agencies. RWE will continue to monitor the nest during the other surveys conducted throughout the monitoring season. It will be revisited again during the 2016 season.

2. Gray Wolf

The Gray Wolf was relisted in December of 2015. The Licensee immediately began consultation with the agencies on how to conduct the survey, see correspondence. It was decided that the <u>survey would be conducted in the winter when the operator does daily checks at the project after fresh snowfall as a foot/vehicle survey of the accessible project property. After winter 2015 the surveys would be conducted beginning with the first snowfall of the Fall season and continuing through March 31st. Formal surveys were conducted for the Gray Wolf at the Winter Hydro Project in 2015 per approved survey protocol and began on January 14, 2015. They ended with the last snowfall on April 10, 2015. No Wolves or Dens were noted. However, tracks were observed several times in February and March of 2015. The survey notes and photos are included under the section titled Survey Documents page 19. The 2015 – 2016 Wolf survey will begin with the first snow fall in the fall of 2015 and end on March 31, 2016. This will be reported in the 2016 report.</u>

3. Wood Turtle

The wood turtle survey was conducted on June 10, 2015. The Impoundment (12:20 – 4:00 p.m.), By-Pass (4:00 – 4:30 p.m.), and Tailrace (4:30 – 5:00 p.m.) were surveyed in succession. Conditions for the survey varied between sunny to partly cloudy. Temps were in the mid 70's and winds were 7-8 mph W to SW. The project HWL was 1370.26, TWL 1346.45, Project Flow was at 616 CFS. No wood turtles were sighted by the licensee although other animal species were seen including assorted songbirds, deer and (3) geese. One additional note is that a Bald Eagle Nest was discovered during the survey. It is located about half way between the diversion dam and the upper project boundary on the left (N-N/W) hand side of the river as traveling upstream. It is in the crotch of a big Pine tree. The Licensee is not sure if it is within the project boundary and believes it is on Forest Service lands. RWE notified WDNR, FS, and USFWS of this find via e-mail on June 26, 2015 asking guidance on the matter. No responses were received from any of the respective agencies. The survey notes and photos are included under the section titled Survey Documents page 19. The next survey will be completed in the early summer of 2016

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 Jim Tesch of RWE on August 13, 2015. The Tailrace, Bypass Reach, and FHLLC Property were surveyed on foot from 1:30 pm – 2:30 pm and the Impoundment from 9:45 a.m. - 1:30 pm by boat. The HWL was 1370.45, TWL 1344.60, and Project Flow was 65 CFS. No Aquatic Invasive species or Living Asiatic Honeysuckles were observed. The Honeysuckles had been treated by the USFS in late June or early July. All survey information about the invasives found on the Winter Project (Asiatic Honeysuckle and Purple Loosestrife) has been added to the SWIMS database for the 2015 year. Survey documents and photos may be found at the end of the report under the section titled Survey Documents page 19.

5. Purple Loosestrife

On August 13, 2015, Flambeau Hydro, LLC (FHLLC) performed an inventory of purple loosestrife plants at the Winter Project in Sawyer County, Wisconsin in conjunction with the above survey. 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 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 1:30 p.m. – 2:30 p.m.) and no purple loosestrife plants were observed.

The FHLLC owned property within the project boundary was surveyed on foot (1:30 p.m. -2:30 p.m.) and no purple loosestrife plants were observed.

The impoundment was surveyed by boat beginning at 9:45 p.m. and ending at 1:30 p.m. The HWL was 1370.45, TWL 1344.60, and Project Flow was 65 CFS. WNTRPL001 was not seen this year. WNTRPL002/WNTRPL003 is located in a marshy low lying peninsula of grasses and cattails adjacent to the river and was the only site to contain Purple Loosestrife. The site has 15-25 plants blooming in the middle of a grassy inaccessible swamp. The area is estimated at approximately 1 acre in size and appears to be increasing from previous year's survey results. These plants are not in a navigable section of the river, so they were not pulled. WNTRPL004 was not seen this year. 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 as well as using binoculars and no Purple Loosestrife was observed in 2015. The only animal life seen this day were various songbirds and a family of (6) Ducks.

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 under survey documents (page 19) with notations added for 2015. No other occurrences of purple loosestrife were observed.

During the inventory, a boat and motor, compass, Digital Camera, Laser Rangefinder, GPS, and a pair of binoculars were used to document occurrences of purple loosestrife. All survey information about the invasives found on the Winter Project (Asiatic Honeysuckle and Purple Loosestrife) has been added to the SWIMS database for the 2015 year.

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.

6. Land Disturbance & Erosion Control

Erosion

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 sites. The next formal spring inspection will be performed in 2017 and will be added to the 2017 Land and Wildlife Management Report as a Tri-Annual Reporting (2015-2017).

7. Zebra Mussels

No Zebra Mussels were observed during the Wood Turtle survey performed during 2015. At the end of the survey the boat and trailer 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 took place in 2013.

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

Under standards and guidelines (number 9) of the Land and Wildlife Management Plan 2013 was the first year for a formal consultation between FHLLC and Chequamegon-Nicolet National Forest Service. During a phone conference call between Aneta Rietveld (RWE, Environmental Quality), Steven Spickerman (Forest Service, Plant Ecologist), and Sue Reineke (Forest Service, Fisheries Biologist) both agreed that there were no new standards and guidelines added for the Chequamegon-Nicolet National Forest during the last 5 years that RWE has not already addressed in their plan. They agreed that no changes need to be made to the Land and Wildlife Management Plan. RWE Hydro will continue to follow the plan as written unless a new environmental concern is brought to our attention before the next 5 year formal consultation.

Survey Documents

Wolf

Winter Hydro Project FERC 2064 Wolf Survey Form Year 401

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Winter Hydro Project FERC 2064 Wolf Survey Form Year 220/5

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Winter Hydro Project FERC 2064 Wolf Survey Form Year 2015

_	WOLEN				 		
Notes & Co. L. C. G. State	Notes & Conducted by	M. 1815 J.					
Den Location	NIS						
Wolves V/N	-						
Dens Y/N	7			2		n.	
Tracks Y/N	Der						
Scat Y/N	8						
Fresh Snow Y/N Scat Y/N Tracks Y/N Dens Y/N Wolves V/N	>-						
Weather	June 2,1						
Time	9:30		2				
Date T	4/10						

1

Wood Turtle

HWL-1370.26

Wood Turtle Survey Form Winter Hydroelectric Project – FERC # 2064

TWL-1346.45

(P)-016
Date: 6/10/15 Conducted By: GARY RAST & IMTESCH
Time Survey Started: 12:20Pm Time Survey Ended: 4:00 Pm.
Weather Conditions: SUNNY, CLEAR, 68°F, FAIR, WINDS UARIBLE @ 7MPH + BAR @ 29.82
Location of Survey Area:TailraceBypass ReachImpoundment
Time of Sighting(s):
Location of Sighting(s) (GPS Coordinates):
(Attack Dhates & Man if Amiliaghla)
(Attach Photos & Map if Applicable)
Sex of Turtles Sighted:MaleFemaleUnknown
Total # Turtles Sighted: NO WOOD TURTLES
Other Species Observed: BEESE, ASST SONG BIRDS, (1) EAGLE
NEST-UNDECUPTED-DOES NOT APPEAR ACTIVE FOR
Some TIME - Other Pertinent Survey Information
SURVEY BEGAN AT BOAT LANDING-TRAVELING
UPSTREAM THRU POWER CANAL + UPRIVER
TO NEAR PROSERT BOUNDARY. CONLDN'T
ACCESE LAST SEVERAL 100 YARDS-TO SHALLOW
USED BINO'S TO SURVEY. FROM HERE WE
TRAVELED DOWNSTREAM TO BOATLANDENCE. ABOUT
1/2 BETWEEN BOUNDARY LIPSTREAM + DTU DAM IS
WHERE BE NEST OBSERVED ON N-NW STDE
OF RIVERIN BIG PINE.
09-04-01 GGR WNTR Wood Turtle Survey Form
·



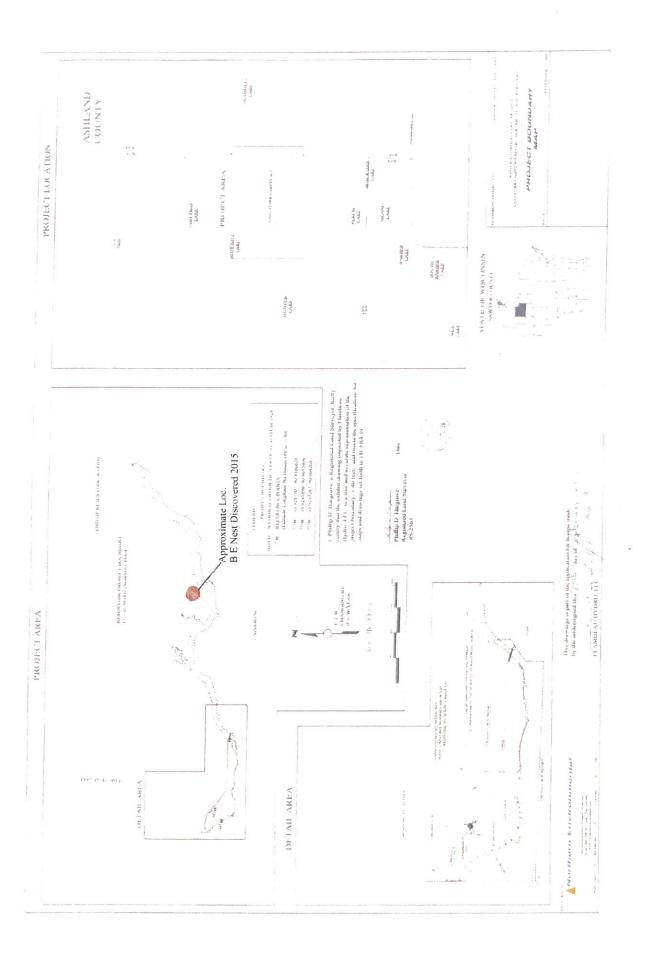
Wood Turtle Survey June 10, 2015 - Winter Power Canal



Wood Turtle Survey June 10, 2015 - Winter Impoundment



Winter Wood Turtle Survey June 10, 2015 - Winter Impoundment Eagle Nest - Not Active & Appears Abandoned



HWL-1370.26

Wood Turtle Survey Form
Winter Hydroelectric Project – FERC # 2064 (FS – 6/b)

Date: 6/10/15 Co	onducted By:	GARYF	RAST
Time Survey Started: 4:00PM.			
Weather Conditions: WINDS U	ARTBO	E @ 7/1/	PH + G 23ME
FAIR, CLEAR, 75°F	,+81	AROS	79.80
Location of Survey Area:Tailrace			
Time of Sighting(s): Location of Sighting(s) (GPS Coordinates):	1110		
Location of Signting(s) (GPS Coordinates): _	0//-		
		(Attac	h Photos & Map if Applicable)
Sex of Turtles Sighted:Male	-	Female	Unknown
Sex of Turtles Sighted:Male Total # Turtles Sighted: Moo	DTUF	TIES	
Other Species Observed:			
9			
Other Pert	inent Survey	/ Information	*
			2
		<u>J</u>	

09-04-01 GGR WNTR Wood Turtle Survey Form

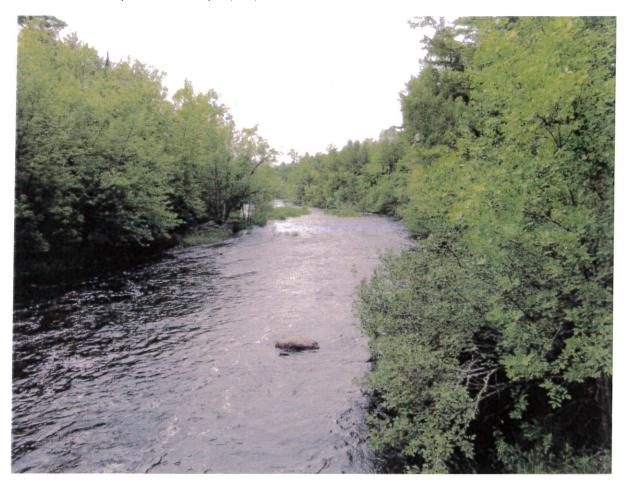
HWL-1370.26

Wood Turtle Survey Form Winter Hydroelectric Project – FERC # 2064

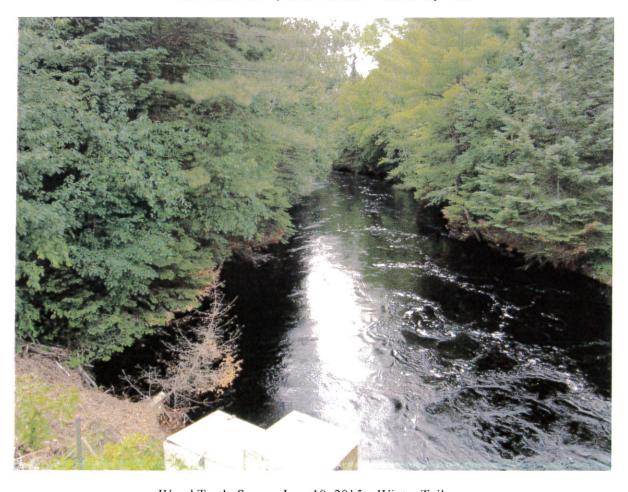
TWL-1346.45 OFS-616

Date: 6/10/15 Conducted By: GARY RAST
Time Survey Started: 4:30 PM Time Survey Ended: 5:00 PM
Weather Conditions: WINDS NW @ 8MPH, SUNNY, FAIR CLEAR, 74°F, + BAR @ 29.81.
Location of Survey Area:TailraceBypass ReachImpoundment
Time of Sighting(s):
(Attach Photos & Map if Applicable)
Sex of Turtles Sighted:MaleFemaleUnknown
Total # Turtles Sighted: NO WOOD TURTLES
Other Species Observed:
Other Pertinent Survey Information

09-04-01 GGR WNTR Wood Turtle Survey Form



Wood Turtle Survey June 10, 2015 - Winter By-Pass



Wood Turtle Survey June 10, 2015 – Winter Tailrace

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Purple Loosestrife/Invasive

Year – 2015 – Invasive Species/Erosion Survey

Winter Hydroelectric Project – FERC # 2064

			ROJECT HOW-65CF	5
Date: 8/13/15	_ Conducted E	By: GARYRA	T + JM TESCH	
HWL: 1370.45	TWL:/	344.60		
Time Survey Started: 9145	Time	Survey Ended:	30	
Weather Conditions: WINOS	SW @ 8	MPH, BRI	GHT SUN, A FEW	1
(MOUDS, BAR @	29.95, 4	7408.		
Location of Survey Area: Tailrace	Ву	pass Reach	_ Impoundment	
Time of Sighting(s):			and the second s	
Location of Sighting(s) (GPS Coordin	nates): SEE	SURUEYS)	HEET	
		(Attac	h Photos & Map if Applicable)	
Asiatic Honeysuckles: Lonicera tar	tarica	L. morrowii	L. x bella	
Buckthorns: Rhamnus carthartica	R. :	frangula		
Curly Pondweed:				
Japanese Knotweed: Photos	Purple Loosestrife	X eft	002 LPL003	
Erosion: (Photos 7	Γaken) Yes	No	AND ABOUT I AORE.	NT.
Other Species Observed: 60	icks & Sc	NGBIRDS	OBSERVED	
<u>Ot</u>	her Pertinent Surv	ey Information		
	adique em gyggene aggregans en men en en gengagen men en en men af de de set fen af de la comunica.			
		ee- Mit		
			DE OBSERVED Q	
INTR PL002 : PL003. W	WTR PL001, 1	2004, & PLO	05 SAME ASIN	/
2014. TIME OF SURU	EY ABOUT 3;	34 Hours Ja am	Ray	



2015 Winter Purple Loosestrife - 15-25 Multi Stem Plants Covering Approximately 1 Acre

Year – 2015 – Invasive Species/Erosion Survey

Winter Hydroelectric Project – FERC # 2064

PROJECT FLOW = 65CFS

Date: 8/13/15 Conducted By:
HWL: 1370.45 TWL: 1344.60
Time Survey Started: 1:30 Time Survey Ended: 2100
Weather Conditions: WINDS W @ 7MP14, PARTLY CLOUDY
BAR@ 29.94, +80°F.
BAR @ 29.94, +80°F. Location of Survey Area: Tailrace X Bypass Reach X Impoundment
Time of Sighting(s):
Location of Sighting(s) (GPS Coordinates):
(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 1/01/E
Erosion: (Photos Taken) Yes No
Other Species Observed: SONGBIRDS
Other Pertinent Survey Information
HONEYSUCKLES TREATED BY FS LATE JUNE OR
EARLY JULY. TIME OF SURVEY ABOUT 1/2 HOUR.
NO LOOSESTRIFF OBSFRUED + ANY HONEY SUCKLE FOUND
IS DEAD OR DIETNG.
Gaez Rat

PAGE 3

Year - 2015 - Invasive Species/Erosion Survey

Winter Hydroelectric Project – FERC # 2064 PROJECT How = 6503

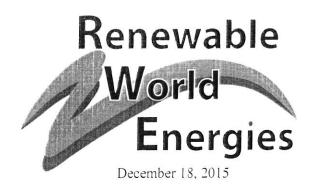
Date: 8/13/15 Conducted By: GARY RAST
HWL: 1370.45 TWL: 1344.60
Time Survey Started: 2:00 Time Survey Ended: 2:30
Weather Conditions: WINDS SW @ 8MPH, PARTLY CLOUD
BAR @ 29,94, 1830 F.
Location of Survey Area: Tailrace Bypass Reach Impoundment Time of Sighting(s):
Location of Sighting(s) (GPS Coordinates):
Asiatic Honeysuckles: Lonicera tartaricaL. morrowii L. x bella
Buckthorns: Rhamnus carthartica R. frangula
Curly Pondweed: Garlic Mustard Eurasian Water Milfoil
Japanese Knotweed: Purple Loosestrife NONE
Erosion: (Photos Taken) Yes No
Other Species Observed: SONG BIRDS
NEXTTO BLACKTOP Other Pertinent Survey Information HONEY SUCKLE TREATED BY FS LATE JUNE OR EARLY JULY. TIME OF SURVEY ABOUT 1/2 HOUR.
Lang Rat



2015 Winter Purple Loosestrife – 15-25 Multi Stem Plants Covering Approximately 1 Acre

Appendix 1

Agency Correspondence





Mr. Nick Utrup WI/MN Ecological Field Office U.S. Fish and Wildlife Service 4101 American Blvd. East Bloomington, MN 55425

Ms. Cheryl Laatsch Statewide FERC Coordinator Wisconsin Dept. of Natural Resources N7725 HWY 28 Horicon, WI 53032 Mr. Paul Strong, Forest Supervisor USDA Forest Service Chequamegon Nicolet NF Forest Headquarters Offices 500 Hanson Lake Road Rhinelander, WI 54501

Re:

Winter Hydroelectric Project FERC Project Number P-2064 Flambeau Hydro LLC

Draft Report 2015 Land & Wildlife Management Report

Dear Agencies:

<u>Purpose</u>

On behalf of Flambeau Hydro LLC "Flambeau" (Licensee), Renewable World Energies is submitting an electronic copy of the <u>Draft Report 2015 Land & Wildlife Management Report</u> 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: 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.

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



Wood Turtle Survey

The wood turtle survey was conducted on June 10, 2015. The Impoundment (12:20 – 4:00 p.m.), By-Pass (4:00 – 4:30 p.m.), and Tailrace (4:30 – 5:00 p.m.) were surveyed in succession. Conditions for the survey were sunny and clear. No wood turtles were sighted by the licensee although other animal species were seen including assorted songbirds, deer and (3) geese. One additional note is that a Bald Eagle Nest was discovered during the survey. It is located about half way between the diversion dam and the upper project boundary on the left (N-N'W) hand side of the river as traveling upstream. It is in the crotch of a big Pine tree. The Licensee is not sure if it is within the project boundary and believes it is on Forest Service lands. RWE notified WDNR, FS, and USFWS of this find via e-mail on June 26, 2015 asking guidance on the matter. No responses were received from any of the respective agencies. The survey notes and photos are included under the section titled Survey Documents page 19. The next survey will be completed in the early summer of 2016.

Invasive Species Survey/Past Consultation

It was reported in the 2014 report that during the 2014 season Flambeau Hydro, LLC was in contact with Steven Spickerman Plant Ecologist for the Chequamegon-Nicolet National Forest. They were to treat the invasive honeysuckle near the tailrace and along the canoe portage trail by spraying in place (basal bark treatment) during the 2014 growing season. An email from Mr. Spickerman on November 3, 2014 revealed that they treated the honeysuckle infestation on September 22 and 23, 2014 with Element 4(61.6% triclopyr) mixed with a surfactant Liberate as a basal bark treatment. The FS reassessed in 2015 and retreated any existing problem areas in mid to late June or early July 2015. The invasive species survey was conducted on August 13 which also includes Purple Loosestrife Discussed below and several aquatic plant species. The Impoundment (9:45 a.m. – 1:30 p.m.), Tailrace (1:30 p.m. – 2:00 p.m.), and By-Pass (2:00 p.m. – 2:30 p.m.) were surveyed in succession. No living Asiatic Honeysuckles were observed. No Aquatic Invasive species or Living Asiatic Honeysuckles were observed. Photos and survey notes are included under the section titled Survey Documents page 19.

Purple Loosestrife Survey

On August 13, 2015 the licensee conducted a survey for purple loosestrife plants in conjunction with the Invasive Species Survey. Of the four previously noted sites only one (WNTR PL002-PL003) had 15-25 plants blooming in the middle of a grassy swamp. The area is estimated at approximately 1 acre in size and appears to be increasing from previous year's survey results. The only animal life seen this day was various songbirds and a family of (6) Ducks. Photos and survey notes included under the section titled Survey Documents page 19. The next survey will be completed in the late summer of 2016.

Wolf Survey

The Gray Wolf was relisted in December of 2015. The Licensee immediately began consultation with the agencies on how to conduct the survey, see correspondence. It was decided that the <u>survey would be</u> conducted in the winter when the operator does daily checks at the project after fresh snowfall as a <u>foot/vehicle survey</u> of the accessible project property. After winter 2015 the surveys would be conducted beginning with the first snowfall of the Fall season and continuing through March 31st.



Formal surveys were conducted for the Gray Wolf at the Winter Hydro Project in 2015 per approved survey protocol and began on January 14, 2015. They ended with the last snowfall on April 10, 2015. No Wolves or Dens were noted. However, tracks were observed several times in February and March of 2015. The 2015 – 2016 Wolf survey will begin with the first snow fall in the fall of 2015 and end on March 31, 2016. This will be reported in the 2016 report.

Erosion Survey

The next formal erosion survey will be conducted in the spring of 2017 and the results will be added to the 2017 Land and Wildlife Report as a Tri- Annual Report (2015-2017).

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, 2016 with the FERC.

If you have any questions concerning this report, please contact Mr. Gary Rast at the Renewable World Energies LLC offices (ā, 855-994-9376 ext. 105, or by email at; grast(ā,rweḥydro.com.

Sincerely,

Renewable World Energies, LLC

Agent for Licensee

Mr. Jason Kreuscher

Vice President Operations

Attachment:

Draft Report 2015 Land & Wildlife Management Report – December 18, 2015

Cc:

RWE Corporate Sue Reinecke, USFS Dale Higgins, USFS

Gary Rast

From:

Gary Rast

Sent:

Thursday, December 17, 2015 3:14 PM

To:

Utrup, Nick; 'Laatsch, Cheryl - DNR'; 'pstrong@fs.fed.us'

Cc:

'Reinecke, Sue -FS'; Higgins, Dale -FS (dhiggins@fs.fed.us)

Subject:

Winter Draft L W Management Report

Attachments:

15-12-18 GGR WNTR 2015 DRAFT L W REPORT.pdf



Everyone,

Please find attached your electronic copy of the 2015 Draft Land & Wildlife Management Report for the Winter Hydro Project FERC #2064. Officially it is dated December 18, 2015. However, I completed it a moment ago and saw there was time to send it out today rather than tomorrow (a few hours ahead of my anticipated finish time). Thanks

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 a rwehydro.com

Gary Rast

From:

Gary Rast

Sent:

Friday, June 26, 2015 11:48 AM

To:

Utrup, Nick; jack_dingledine@fws.gov; 'Laatsch, Cheryl-DNR'; 'Reinecke, Sue -FS';

COST

Higgins, Dale -FS (dhiggins@fs.fed.us)

Cc:

'Jason Kreuscher'

Subject:

Eagle Nest at Winter

Attachments:

IMG 0149.JPG

Everyone,

I recently did a Wood Turtle Survey at the Winter Hydro Project on June 10, 2015. No Wood Turtles observed. However, we did spot an Eagle Nest during the survey. No formal Bald Eagle surveys are being conducted at the project per the approved plan but the plan does say you will be notified if a nest is found. The nest did not appear active and even appeared abandoned. It is located about $\frac{1}{2}$ way between the diversion dam and the upper project boundary on the left (N - NW) hand side of the river as traveling upstream. It is located in a large Pine. I don't know if this is technically within the project boundary as it is away from the water's edge a bit. I would say it is on FS lands. Attached is a photo of it taken on June 10, 2015. Please advise if there is anything more RWE needs to do in respect to Bald Eagles at the Winter Hydro Project. Thanks

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

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Document Content(s)	
16-01-25 GGR WNTR F 15 LW MNGT RPT TO FERC.PDF1-50	