

February 21, 2014

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

Re: FINAL 2013 Purple Loosestrife Report Flambeau Hydro, LLC Danbury Project #9184 Article 401(b)(M) Clam River Project #9185 Article 401(b)(M)

Dear Secretary Bose,

Attached you will find the 2013 Purple Loosestrife Final Report conducted by Flambeau Hydro, LLC for the Danbury and Clam River hydroelectric projects. This report is respectfully submitted by Renewable World Energies, LLC on behalf of Flambeau Hydro, LLC. As per the license article 401(b), amended April 04, 2013, this was the year for Galerucella beetle release and no survey. A survey was completed in 2013 since the southern side of the impoundment was silted in during the 2012 survey and a canoe was not available to check on the Purple Loosestrife in that area. We used a canoe in 2013 to view those areas and see how many Purple Loosestrife plants were actually there. Before this survey, during July, the Grantsburg high school science class with teacher Matt Berg placed 2,000 -3,000 Galerucella beetles out at ATRNPL008 to start treating the purple loosestrife on the Clam River project.

Danbury

A purple loosestrife survey was completed on August 12th, 2013 at the Danbury Project in Burnett County, Wisconsin. No purple loosestrife was observed.

Clam River

A purple loosestrife survey was completed on August 5th and August 14th, 2013 at the Clam River Project in Burnett County, Wisconsin. Due to increased silting and low water level of the river on the south side

Corporate Office

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of the project, the crew brought along a canoe to access the major purple loosestrife infestations to get an accurate count. During the 2012 survey there was no canoe available to get closer to the largest areas of purple loosestrife, which is why a survey was done once again in 2013 along with the release of 2000-3000 Galerucella beetles.

Draft copies of the purple loosestrife reports for Danbury and Clam River were sent out to both the Wisconsin DNR and the US Fish and Wildlife Service on October 22, 2013. The FWS did not respond with comments. The DNR emailed November 4, 2013 with no comments.

The next *scheduled* survey will be conducted in 2014. We will start seeing in 2014 if the Galerucella beetles released in 2013 have had any adverse effect on the health of the purple loosestrife within the project boundaries.

If you have any questions concerning this survey please feel free to contact Aneta Rietveld at Renewable World Energies, LLC offices phone (855) 994-9376 ext. 108 or email at arietveld@rwehydro.com.

Sincerely,

Renewable World Energies, LLC

Agent for the Licensee,

Mr. Jason Kreuscher

Vice President Operations

Cc:

RWE Corporate

Mr. Peter Fasbender

Ms. Cheryl Laatsch

Attachment: Final 2013 Purple Loosestrife Report for Clam River and Danbury

CLAM RIVER

Clam River Project Purple Loosestrife Inventory-Final Report August 5th and 12th, 2013 FERC Project # 9185 Article 401(b)(M)

Flambeau Hydro LLC 100 S. State St. Neshkoro, WI 54960

Purple Loosestrife

On August 5th and August 12th, 2013, Flambeau Hydro, LLC (FHLLC) performed an inventory of purple loosestrife plants at the Clam River Project in Burnett County, Wisconsin. As per the license article 401(b), amended April 04, 2013, this was the year for Galerucella beetle release and no survey. A survey was completed in 2013 since the southern side of the impoundment was silted in during the 2012 survey and a canoe was not available to check on the Purple Loosestrife in that area. We used a canoe in 2013 to view those areas and see how many Purple Loosetrife plants were actually there. Before this survey, during July, the Grantsburg high school science class with teacher Matt Berg placed 2,000 -3,000 Galerucella beetles out at ATRNPL008 to start treating the purple loosestrife on the Clam River project.

The method of inventory was defined as follows:

While Purple Loosestrife is blooming in mid-July to early August, the inventory should be conducted using a boat to survey the impoundment above the dam within the Project Boundary and on foot or by boat 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, percent cover, stem density, plant density, and location with reference to established GPS coordinates. Photos and/or videotape will be taken of the largest occurrences. The licensee will retain a record of the GPS coordinates, approximate number of beetles or larvae released at each coordinate, and if there is any beetle damage to the surrounding purple loosestrife plants before the release and include this information on a map and information matrix sent in with the survey data the next year.

Example:

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GPS point CLRVPL001; Location Lat N45 54.493' Lon W92 31.128'; Plant height 2' - 6'; Density \sim 5' x 50' \sim 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 Clam River Project Boundary was divided into four different areas; *the impoundment* (from approximately 3.1 miles upstream of the Clam River powerhouse downstream to the Clam River powerhouse), *FHLLC-owned property within the project boundary* (FHLLC owned property adjacent to the dam and powerhouse), *the tailrace* (from the powerhouse to a point approximately 900 feet downstream), and the *by-pass reach* (from the spillway to a point approximately 800 feet downstream).

On August 5th the *by-pass reach* was surveyed on foot and no purple loosestrife plants were observed.

On August 5th the *tailrace* was surveyed on foot and no purple loosestrife plants were observed.

On August 5th the *FHLLC-owned property within the project boundary* was surveyed on foot and no purple loosestrife plants were observed.

On August 12th *the impoundment* was surveyed by boat and the silted in area on the south side was surveyed by canoe. Seven areas of purple loosestrife plants were observed in 2013.

At sites CLRVPL001, CLRVPL002, CLRVPL009, CLRVPL010, CLRVPL013, AND CLRVPL014 no purple loosestrife was observed during 2013.

CLRVPL003 to CLRVPL004 make up a large 10 acre site in the higher ground of the bogs within wild rice beds of the southern end of the impoundment. This site was first observed in 2007. In 2009 the amount of plants observed at this site had declined with major reductions occurring in the northern half of the 10 acre site. Overall estimates of this site by the survey crew indicated an increase in the amount of plants in 2010, but less than in the 2007 and 2008 surveys. There appeared to be a considerably greater amount of purple loosestrife plants at this location in 2011, specifically near the end of the wild rice beds. Photos taken in 2012 with a digital camera show this area from around 100 feet away. This was as close as the crew could get with the increased silting of the riverbed and low water. In 2013 a canoe was used to access the river and a closer photo of the large area of PL was taken. When the survey is done in 2014 we will take a canoe and get close enough to see if the Galerucella beetles have expanded their territory and started feeding upon this large patch.

CLRVPL005 was first observed in 2007. In 2009 this site showed an increase in purple loosestrife, with the survey crew counting 30 plants where only four plants were visible in 2008. There were no changes at this site in 2009-2011. There appears to be a few more plants in the 2012 survey. 2013- This area has not expanded any since last year- no beetle damage visible. In 2014 we will see if the beetles on CLRVPL008 have moved over to this site.

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CLRVPL006 was first observed in 2007. 1 plant located in 2013, no beetle damage. This will be hand pulled in 2014.

CLRVPL007 was first observed in 2007. 1 plant located in 2013, no beetle damage. This will be hand pulled in 2014.

CLRVPL008 was first observed in 2008. We accessed this area by canoe in 2013 and viewed purple loosestrife plants that had shot patterns in the leaves and main stems missing from Galerucella beetle damage. Photos included. In 2013 the Grantsburg high school science class raised and released 2000-3000 Galerucella beetles in July of 2013 within this patch of purple loosestrife. We will be watching during the survey of 2014 to see if they multiply and remove more plant material during their 2nd year and also if they move to nearby patches of purple loosestrife.

CLRVPL011 was first observed in 2010. 2 plants located in 2013 in the swamp, no beetle damage. These will be hand pulled in 2014.

CLRVPL012 was first observed in 2010. They are in very shallow water and in a marsh. If possible they will be hand pulled in 2014.

These purple loosestrife plants were inventoried and have been noted on the survey sheet and map at the end of this report. No other occurrences of purple loosestrife were observed.

During the inventory, the following tools were used: boat with motor, canoe, GPS, binoculars, range finder, compass, and a digital camera.

Purple Loosestrife Survey

Clam River #9185 Project: August 5 and August 12, 2013

AKR & GGR

Crew: Date:

WGS 84 1 of 4 Datum:

2007 & 2008. Seed heads clipped in 2009. No treatment in 2010. plants located in 2012. 1 plant located in 2013-no beetle damage. First observed in 2007. Located 1500' upstream from the Project damage observed, old cane is present, and most plants blooming occurrence was partially recorded on video in 2007. In 2012 the First observed in 2007. Located 100' S of GPS point. No beetle CLRVPL004. No treatment from 2007-2012. Same as last year-Approximately same number of plants in 2011. No photos. No damage. No plants observed in 2008. No treatment in 2007 and area appears to be melding with the loosestrife at CLRVPL005. pulled in 2007. Site inaccessible in 2010, 2011, or 2012. Video inaccessible in 2012. Accessed by canoe 2013- no plants found First observed in 2007. Located on right side of river and close declined with few plants visible in the northern half of the site. to shoreline in low lying area. No beetle damage observed and Points as end-points. In 2009 and 2010 the amount of PL had In 2011 and the amount of plants considerably increased. The no old cane present. All plants were pulled with root mass in 2009. No photos. Could not be located in 2010 or 2011. Site Boundary. No plants observed in 2008 and 2009. All plants First observed in 2007. Located 150' West of GPS point. In channel. Photos taken in 2012. Accessed marsh by canoe in 2009, some plants in full bloom, no old cane, and no beetle site was only viewable at a distance due to silting up of the First observed in 2007. Located on higher ground and bogs within wild rice on either side of the channel with the GPS No beetle damage observed. Has never been treated. This in 2012. Appears to be melding with CLRVPL003 and in 2007. Accessed by canoe 2013-no plants found 2 pictures taken- no beetle damage visible. 2013 and closer photo taken. Comments Stand Area ~250 plants stem plants multi-stem and single 35 multi-15' x 15' 10 acres $1' \times 1'$ stem N/A N/A Plant Height 1,-7, 4,-6, N/A N/A 4 W92 30.949° W92 31.014' W92 31.0287 W92 31.128° W92 30.756° W92 30.505° Longitude N45 54.998' N45 55.240' N45 54.493° N45 55.2847 N45 54.812' N45 55.529° Latitude CLRVPL001 CLRVPL005 CLRVPL002 CLRVPL003 CLRVPL004 CLRVPL006 GPS point

Project: Clam River #9185

August 5 and 12, 2013

AKR & GGR

Date: Crew:

 Datum:
 WGS 84

 Page:
 2 of 4

First observed in 2007. Location estimated. No insect damage or First observed in 2008. Located 470' S/SE of GPS point. No old patterns on their leaves and the main stem chewed off by beetles First observed in 2009. Located on left side of river and close to yards East of GPS point. Three multi stem plants found in 2011. shoreline in low lying area. No beetle damage. No treatment in yards in 2013 -plants are located in low water in a swamp with First observed in 2010. GPS point is estimated at 345' north of 2010. Number of plants increased in 2011. Site inaccessible in First observed in 2010. Located on East side of impoundment and close to shoreline in low lying area. The site is located 83 old cane was present. No treatment in 2007, 2008, 2009. This cane present. Could not get close enough to determine beetle plant could not be located in 2010, 2011, or 2012. No photos. CLRV BR001 boat launch. Approx. 50 plants found again in tree stumps in the way. No beetle damage noted to flowering 2011. No treatment either year. No plants located in 2012. 2 No treatment. Site inaccessible in 2012. Boat got within 175 damage. No treatment in 2008, 2009, 2010, 2011. Photos in First observed in 2009. Located 60' SSW of GPS point. No 2009 and 2010. Three plants found in 2011. No Photos. No plants in 2013 in swamp- no beetle damage noted. 1 Photo. treatment in 2009. This plant could not be located in 2010, 2012. Accessed by canoe in 2013- some plants have shot 2013 found 1 plant -no photo- no beetle damage. that were released in July. Photos included. 2011,2012 or 2013. No photos. plants located in 2012 or 2013. Comments Stand Area 12-15 stems area around 2 plants 6-7 7 stems –all l clump of multistems 15+ plants blooming flowers-all 66' x 15'. flowering N/A N/A Plant Height $4^{\circ} - 5^{\circ}$ $4^{\circ} - 5^{\circ}$ 3,-4, N/A N/A 2 W92 30.606' W92 30.8587 W92 30.8747 W92 30.8637 W92 30.495 W92 30.697 Longitude N45 55.685' N45 55.541° N45 55.173° N45 55.5687 N45 55.292' N45 55.233' Latitude CLRVPL012 CLRVPL010 CLRVPL007 CLRVPL008 CLRVPL009 CLRVPL011 GPS point

Purple Loosestrife Survey

Clam River #9185 Project: Date:

August 5 and August 12, 2013

AKR & GGR

Crew:

WGS 84 3 of 4 Datum: Page:

GPS point	Latitude	Longitude	Plant Height Stand Area Comments	Stand Area	Comments
CLRVPL013	N45 54.871'	W92 30.968'	N/A	N/A	First observed in 2010. Located on left side of river and close to rivers edge in low lying area. One plant found in 2011. No beetle damage. No treatment. Site inaccessible in 2012. Accessed by
CLRVPL014	N45 55.372'	W92 30.596°	N/A	N/A	First observed in 2012. Located 115 yards ENE of GPS point. No treatment. Site not accessible. No plant observed in 2013.

13-10-18 AKR GGR CLRV PL Survey 2013

Purple Loosestrife Survey

Clam River #9185 Project:

August 5 and August 12, 2013

AKR & GGR

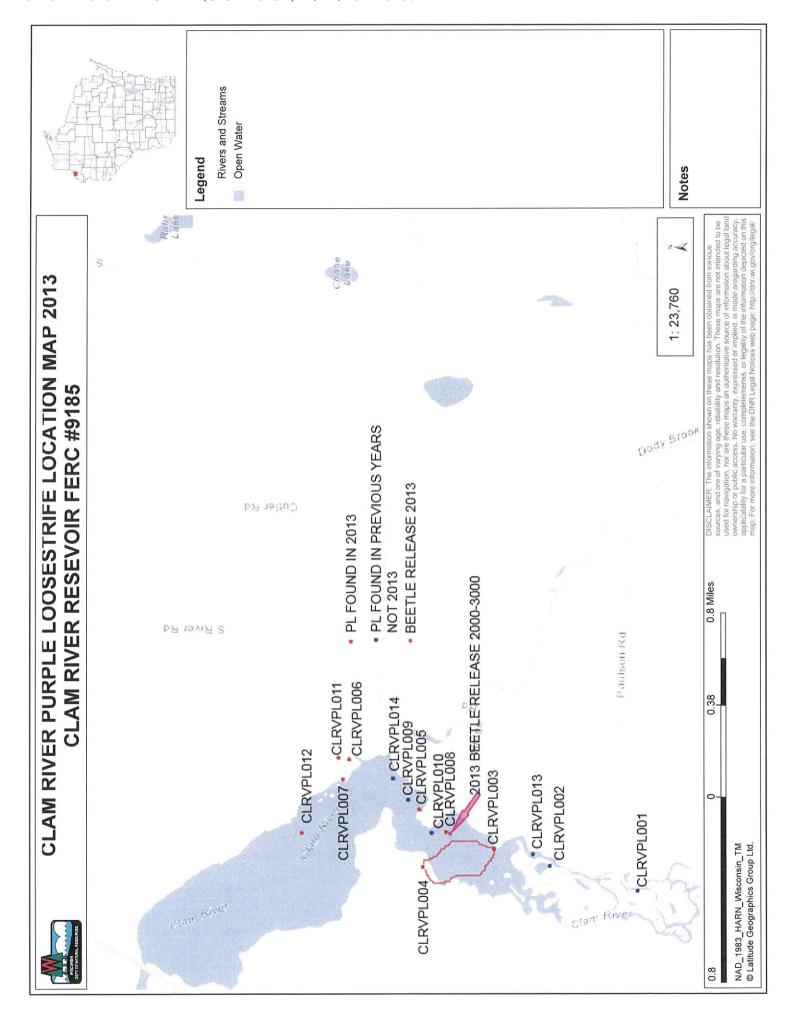
Crew: Date:

Datum:

WGS 84 4 of 4

Page:

Beetle Release Year	Latitude	Longitude	Number of beetles released	Comments
2013	N45 55.91604	W92 30.51129	2000-3000	Released in July within CLRVPL008.





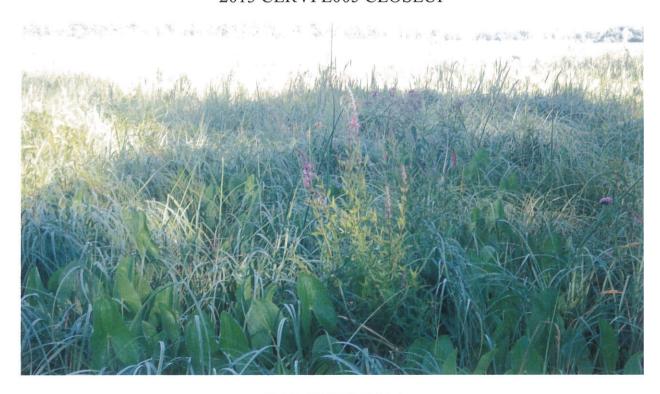
2013 CLRVPL003- PL004



2013 CLRVPL005



2013 CLRVPL005 CLOSEUP



2013 CLRVPL011



2013 CLRVPL008 STEM REMOVED BY BEETLES



2013 CLRVPL008 MORE STEMS REMOVED



2013 CLRVPL008 SHOT HOLES IN LEAVES FROM BEETLES



2013 CLRVPL008

Year Durple Loosestrife/Erosion Survey

Clam River Hydroelectric Project – FERC # 9185

Date: 8-5-13	Coi	nducted By:	AKR		
HWL:		/L:			
Time Survey Started: _	4100	Time Survey	Ended: 5	1135	
Weather Conditions:					_
	-				
Location of Survey Area	: Tailrace	Bypass Rea	ch <u> </u>	Impoundment	_
Time of Sighting(s):					
Location of Sighting(s) (GPS Coordinates): _				_
				Photos & Map if Applicable)	_
Purple Loosestrife:	one seen		(Attaci	Thous & Map it Applicable)	
Erosion:		Yes	No		
Other Species Observed:					
	Other Pert	inent Survey Inf	ormation		
	-			•	

Year 2013 Purple Loosestrife/Erosion Survey

Clam River Hydroelectric Project – FERC # 9185

Date: 8-5-13	Conducted By:	AKR SE
HWL:	TWL:	
Time Survey Started: 4740	Time Survey	Ended: 5 1 30
Weather Conditions:Sun	ny	
Location of Survey Area: Tailrace	Bypass Read	ch Impoundment
Time of Sighting(s):		
		(A44-al Dl-4 C M 'S A L'-alla)
Purple Loosestrife: one &	een	(Attach Photos & Map if Applicable)
Erosion: (Photo:		No
Other Species Observed:		
other species observed.		
	ther Pertinent Survey Info	ormation
<u>-</u>		

20140224-5152 FERC PDF (Unofficial) 2/24/2014 3:36:41 PM

Year 2013 Purple Loosestrife/Erosion Survey

Clam River Hydroelectric Project – FERC # 9185

Date: 8-12-13	Conducted By:	KR +66R
HWL: 898,56	TWL: 863.16	142 CFS
Time Survey Started: 8 5	Time Survey End	ed: / pm
Weather Conditions: SUMY	77°	
Location of Survey Area: Tailrace_	Bypass Reach	Impoundment
Time of Sighting(s):		
Location of Sighting(s) (GPS Coordin	nates): OS Den	survey sheets
-		(Attach Photos & Map if Applicable)
Purple Loosestrife: <u>Ves-</u> s	outh end	
Erosion: (Photos	Taken) Yes No	·
Other Species Observed: 1 Bal	d egale, 16 a	2256
1 blue ha	eron 1-trump	eter swam - legret
<u>Ot</u>	her Pertinent Survey Informa	tion

Aneta Rietveld

From:

Matt Berg <mberg@grantsburg.k12.wi.us>

Sent:

Monday, October 21, 2013 1:07 PM

To:

Aneta Rietveld

Subject:

RE: Beetle Release Location

Brad consolidated our pots together into just five sleeves when we released – I can't remember how many we started with. 15-20ish though sounds right. I try to get really big plants to work with. Again – I'm just estimating numbers.

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Monday, October 21, 2013 1:02 PM

To: Matt Berg

Subject: RE: Beetle Release Location

Sure- you can send it to me and I will get it to Robin for payment.

Just curious, how many potted plants does it take to get that many beetles raised? Teri usually has 7 pots and we get around 500-700 beetles.

Aneta

From: Matt Berg [mailto:mberg@grantsburg.k12.wi.us]

Sent: Monday, October 21, 2013 1:00 PM

To: Aneta Rietveld

Subject: RE: Beetle Release Location

Actually it was pretty minor – I hope to raise a lot more last year. We definitely had a hard time finding stock with the late spring.

Thanks much! I'll get it out in the next day or two. Is an electronic invoice o.k. if it's in pdf form?

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Monday, October 21, 2013 12:57 PM

To: Matt Berg

Subject: RE: Beetle Release Location

That sounds fine. I will be interested to see how many plants are attacked next year when we do our survey. Thanks for

all you did for us this year.

Aneta Rietveld RWE Hydro Phone (906)828-0808 ext 108 Cell(920)293-1251 Home (906)563-9745 From: Matt Berg [mailto:mberg@grantsburg.k12.wi.us]

Sent: Monday, October 21, 2013 12:28 PM

To: Aneta Rietveld

Subject: RE: Beetle Release Location

I'd say we released 2-3 thousand. Does \$300 total sound o.k?

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Monday, October 21, 2013 12:26 PM

To: Matt Berg

Subject: RE: Beetle Release Location

Hi Matt,

If you charge for the \$57.00 for the 100 miles of gas and \$.10 per beetle released that is fair. Just figure out the approximate numbers of beetles released and send an invoice. Use the money to buy something for your science class.

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

Aneta,

This location is not exact as my GPS died, but it's very close. We were 100m upstream from where the river comes into the flowage. N45.91604 W92.51129

I already sent info to Burnett Co. Land and Water as they track releases in the county.

Hope that helps. Not sure what the invoice would total as we really didn't have expenses (I had a pool already/although it's pretty well shot now) other than gas, and we didn't drive more than 100 miles total. Thoughts?

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Friday, October 18, 2013 3:13 PM

To: Matt Berg

Subject: RE: Environmental work for RWE Hydro

Well, that is good news- only the UP bugs were screwed up by the weather When you have a little time can you send the numbers of beetles and gps coordinated of where you released them so I can add that to my report for DNR/ FWS/ and FERC. The fact that there was some eating was good- it may take many years to get enough beetles going on the plants to make any impact on the numbers there. Next year we will do a survey and see if they have had a chance to spread, then the year after we will see about adding more beetles if needed. Make sure you send an invoice from your project to RWE here at 1001 Stephenson St. Norway, MI 49870 so the class gets reimbursed for their work.

Thanks,

Aneta Rietveld

RWE Hydro

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

From: Matt Berg [mailto:mberg@grantsburg.k12.wi.us]

Sent: Friday, October 18, 2013 2:20 PM

To: Aneta Rietveld

Subject: RE: Environmental work for RWE Hydro

No we actually released several thousand on the Clam Flowage. I guess I thought I emailed you, but maybe not. I would have to check my records when we went out, but I think it was early July. Perhaps we should try again next year if you didn't see any damage.

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Friday, October 18, 2013 2:18 PM

To: Matt Berg

Subject: RE: Environmental work for RWE Hydro

Hi Matt,

How are things going? I haven't heard from you for a while, so should I take a guess that the beetles crashed and burned for you also? Our regular supplier up in the Munising, MI area only had a tiny spring hatch and no summer hatch at all—Teri figured it was the late spring and odd weather that did it for her. Let me know how things went and if anything came out of the beetle rearing experience out in Western WI or if we will need to try again next year. I know when I went out in August to survey the Purple loosestrife at Clam River there were only a few plants with shot holes through the leaves and I didn't see any beetles or larvae on any of the tons of plants. Every once in a while I would see a plant with a dead top, but the side branches seemed to be very healthy. When I get the survey written up I will drop a copy to you.

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

From: Matt Berg [mailto:mberg@grantsburg.k12.wi.us]

Sent: Sunday, June 16, 2013 9:50 PM

To: Aneta Rietveld

Subject: RE: Environmental work for RWE Hydro

I have a bunch of beetles being reared to release. Everything is late with the spring so I don't know when we'll be releasing them, but I'll keep you posted.

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Sunday, June 16, 2013 6:17 PM

To: Matt Berg

Subject: RE: Environmental work for RWE Hydro

Hi Matt,

How has your spring been going during this odd year? Were you able to find purple loosestrife and loosestrife beetles this year since the ice went out so late? Drop me a note to let me know, Thanks,

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

From: Matt Berg [mailto:mberg@grantsburg.k12.wi.us]

Sent: Wednesday, January 16, 2013 11:14 AM

To: Aneta Rietveld

Cc: Joshua Watt; Stan Marczak

Subject: RE: Environmental work for RWE Hydro

Aneta,

We've raised beetles in the past, and **would be happy** to do it again. I do NOT currently have kiddie pools or netting to set up the rearing stations as we gave ours back to WDNR when we finished the last project for a local marsh about five or six years ago. If you send me GPS coordinates of where the loosestrife is (along with coordinate projection – preferably WGS 84), I can get my students up there to harvest rootstock in late April. The place I used to go harvest beetles from no longer has them, but I can try to make contact with Brock Woods (WDNR) and find a place that's reasonably close to get some from.

Could we discuss further next week? I don't have much time this week as it's finals, and I teach all day as I'm on overload. Next week will be a lot better as the new term starts, and I have time available each day from 11-12. My direct line is 715-463-5165 ext 112.

Thanks for the invite! That will make two projects for us on the Clam next summer,

Matt

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Wednesday, January 16, 2013 11:01 AM

To: Matt Berg

Subject: Environmental work for RWE Hydro

Hi Matt,

I have heard good things about your environmental class from Josh Watt and my boss Bill Harris when he went in to talk to you one day last year. It sounds like your students like to be hands on with environmental issues. I have a project that I wanted to see if your class was interested in. One of our Hydro Projects is located on the Clam River and we must do purple loosestrife surveys for the agencies like DNR, US FWS, and FERC. There is a section of the Clam River upstream from the dam where we have approximately 10 acres of purple loosestrife plants thriving in a rice bog. There are too many for herbicidal treatment, so the DNR has requested that we start doing releases of Galerucella beetles at this area. Would your class be interested in a beetle raising project this year? The WI DNR has free starter beetles for teachers and RWE would reimburse your class for raising them. We have a lady up in MI at the conservation district who raises 500+ beetles for \$250.00 for us. We can also talk about using our Renewable World Foundation canoes to go get the purple loosestrife root stock in the early spring and to actually do the release in the summer.

The information on the DNR website is here, although you have probably read this all before. http://dnr.wi.gov/topic/Invasives/documents/2012PurpleLoosestrife.pdf http://dnr.wi.gov/topic/invasives/loosestrife.html http://dnr.wi.gov/topic/invasives/loosestrife.html

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

AGENCY COMMENTS

Aneta Rietveld

From:

Laatsch, Cheryl - DNR < Cheryl. Laatsch@wisconsin.gov>

Sent:

Monday, November 04, 2013 11:00 AM

To:

Gary Rast; Aneta Rietveld

Subject:

FW: Danbury and Clam River 2013 Draft Purple Loosestrife survey

Hi Gary & Aneta – Reports look good. See Craigs comments below. Thanks

Cheryl Laatsch

Statewide FERC Coordinator

Wisconsin Dept of Natural Resources

N7725 Hwy 28

Horicon WI 53032

(T) 920-387-7869 (Fax) 920-387-7888

Cheryl.laatsch@wisconsin.gov

From: Roesler, Craig P - DNR

Sent: Monday, November 04, 2013 10:57 AM

To: Laatsch, Cheryl - DNR

Subject: RE: Danbury and Clam River 2013 Draft Purple Loosestrife survey

These are my sites. Reports look o.k. The Danbury report has 2 identical site maps; one could be deleted.

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Wednesday, October 23, 2013 8:38 AM

To: Laatsch, Cheryl - DNR; Peter Fasbender@fws.gov

Cc: nick utrup@fws.gov

Subject: Danbury and Clam River 2013 Draft Purple Loosestrife survey

Hi Cheryl, Peter, and Nick,

Attached you will find the draft copy of this year's purple loosestrife survey/ Galerucella beetle release information for both Danbury Hydroelectric project FERC #9184 and Clam River Hydroelectric project FERC #9185.

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

PROOF OF DRAFT TO AGENCIES



October 22, 2013

Mr. Peter Fasbender Field Supervisor U.S. Fish and Wildlife Service 2661 Scott Tower Drive New Franken, WI 54229 Ms. Cheryl Laatsch Statewide FERC Coordinator Wisconsin Department of Natural Resources N7725 Hwy 28 Horicon, WI 53032

Re: Clam River Project
FERC # 9185
Flambeau Hydro, LLC
Article 401(b)(M), DRAFT 2013 Purple Loosestrife Inventory

Dear Ms. Laatsch, and Mr. Fasbender:

Attached you will find a copy of the 2013 Flambeau Hydro, LLC "Purple Loosestrife Inventory" for Clam River Hydroelectric Project FERC #9185. This annual report has been prepared to comply with the federal hydropower license of the project and article named above and will be filed with the Federal Energy Regulatory Commission after the stipulated review and comment period is finished.

If you have any questions regarding this submission, please contact Mr. Gary Rast at Renewable World Energies Neshkoro office @ (855)994-9376, ext 105 or Aneta Rietveld at Renewable World Energies Norway office @ (855)994-9376, ext 108. They can also be reached via email at grast@rwehydro.com or arietveld@rwehydro.com.

Sincerely,

Renewable World Energies, LLC

Agent for the Licensee

Mr. Jason Kreuscher Vice President Operations

Cc: RWE Energies, Corporate Mr. Nick Utrup, US FWS

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

DANBURY

Final Report- Danbury Project Purple Loosestrife Inventory August 12, 2013 FERC Project # 9184 Article 401(b)(M)

Flambeau Hydro LLC 100 S. State St. Neshkoro, WI 54960

Purple Loosestrife

On August 12, 2013, Flambeau Hydro, LLC (FHLLC) performed an inventory of purple loosestrife plants at the Danbury Project in Burnett County, Wisconsin. The method of inventory was defined as follows:

While Purple Loosestrife is blooming in mid-July to early August, the inventory should be conducted using a boat to survey the impoundment above the dam within the Project Boundary and on foot or by boat 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, percent cover, stem density, plant density, and location with reference to established GPS coordinates. Photos and/or videotape will 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 Danbury Project Boundary was divided into three different areas; the impoundment (from the Danbury powerhouse #2 to the County HWY U bridge approximately 6.0 miles upstream), FHLLC-

14-02-21 GGR AKR DNBY FINAL 2013 PL Report

owned property within the project boundary (FHLLC owned property adjacent to the dams and powerhouses), the tailrace (from the powerhouse #1 to a point approximately 2,500 feet downstream, including the 200 foot long tailrace area of powerhouse #2).

The tailrace was surveyed on foot and no purple loosestrife plants were observed.

The FHLLC-owned property within the project boundary was surveyed on foot and no purple loosestrife plants were observed.

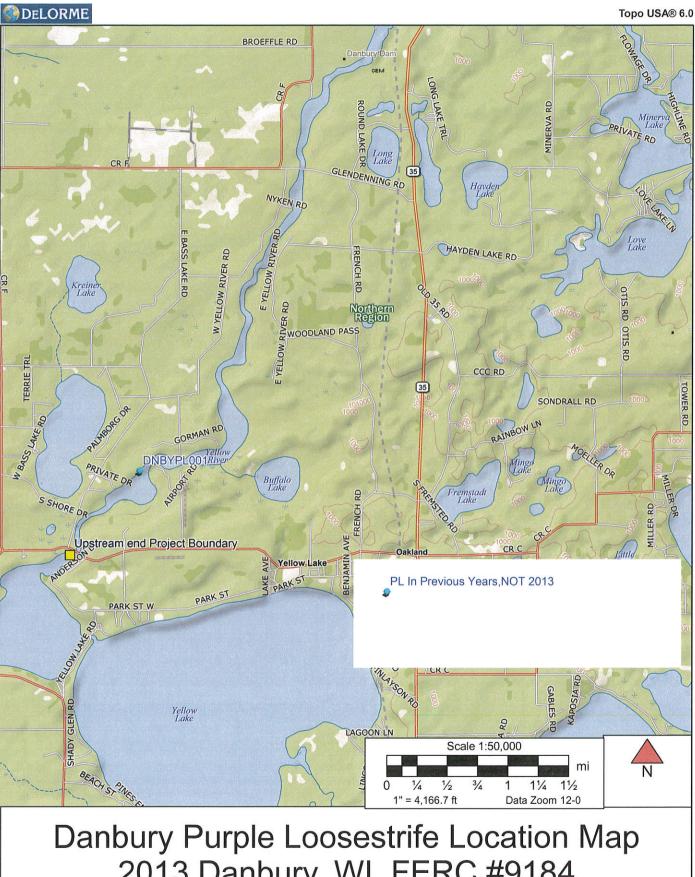
The impoundment was surveyed by boat and no purple loosestrife plants were observed.

Other species observed during the day were a blue heron, otter, 8 painted turtles and an eagle.

During the inventory, the following tools were used: boat with motor, binoculars, range finder, compass, and a digital camera.

Purple Loosestrife Survey

							4-11-1-1		
			Comments	First observed in 2007. Located on left side of	river in bogs. Plant was cut at the base in 2007,	not found in 2008. Single plant found and	pulled with root mass in 2009. Photos in 2007	and 2009. Could not be located in 2010, 2011,	2012, or 2013.
WGS 84	<u>1 of 1</u>		Stand Area	N/A					
Datum:	Page:		Plant Height	N/A					
			Longitude	W92 24.768					
9184	2013	AKR	Latitude	DNBYPL001 N45 56.846'					
Danbury #9184	August 12,2013	GGR and AKR	GPS Point	DNBYPL001					
Project:	Date:	Crew:	Sighting #	1					



2013 Danbury, WI, FERC #9184



DNBY 2013 PL survey



DNBY 2013 PL Survey

Year 2013 Purple Loosestrife/Erosion Survey

Danbury Hydroelectric Project – FERC # 9184

Date: 8-12-13	Conducted By:	AKR,66R
HWL: 929, 32	TWL: 899,	20 CFS- 144
Time Survey Started: 2',00 -	2:/9 Time Survey I	Ended: <u>245-5:00</u>
Time Survey Started: 2',00 - Weather Conditions: part	ly cloudy	narm 70'5
Location of Survey Area: Tailrace	Bypass Reach	Impoundment X
Time of Sighting(s):		
Location of Sighting(s) (GPS Coordi	nates):	
Purple Loosestrife:	seen.	(Attach Photos & Map if Applicable)
Erosion: (Photos	s Taken) Yes	No
Other Species Observed:	e Her on	otten
8 painted turtle	5 PG	gle
<u>O</u>	ther Pertinent Survey Info	rmation
5 5		
1		В

Year <u>2013</u> Purple Loosestrife/Erosion Survey

Danbury Hydroelectric Project – FERC # 9184

Date: 8-12-13 Conducted By: AKR
Date: 8-12-13 Conducted By: 4KR HWL: 929.32 TWL: 899.20 CFS 144
Time Survey Started: 219 Time Survey Ended: 2145
Weather Conditions: Partly Cloudy warm 720
Location of Survey Area: Tailrace Bypass Reach Impoundment
Time of Sighting(s): Location of Sighting(s) (GPS Coordinates):
Purple Loosestrife: Seen
Erosion: (Photos Taken) Yes No Other Species Observed:
Other Pertinent Survey Information

Year_____Purple Loosestrife/Erosion Survey

Danbury Hydroelectric Project – FERC # 9184

Date: $\frac{2-12-13}{2}$	Conducted By:6(5 K
HWL: 929.32	TWL: 899, 20	CFS 144
Time Survey Started: 2:19	Time Survey Ende	d:2145
Weather Conditions: Partly	cloudy wa	1M 70'S
	0	
Location of Survey Area: Tailrace	Bypass Reach	Impoundment
Time of Sighting(s):		
Location of Sighting(s) (GPS Coordin	nates):	a .
		(Attach Photos & Map if Applicable)
Purple Loosestrife:	Seen	
Erosion: (Photos	Taken) Yes No _	
Other Species Observed:		
Ot	ther Pertinent Survey Informati	on
<u></u>		

AGENCY COMMENTS

Aneta Rietveld

From:

Laatsch, Cheryl - DNR < Cheryl. Laatsch@wisconsin.gov>

Sent:

Monday, November 04, 2013 11:00 AM

To:

Gary Rast; Aneta Rietveld

Subject:

FW: Danbury and Clam River 2013 Draft Purple Loosestrife survey

Hi Gary & Aneta - Reports look good. See Craigs comments below. Thanks

Cheryl Laatsch

Statewide FERC Coordinator

Wisconsin Dept of Natural Resources

N7725 Hwy 28

Horicon WI 53032

(T) 920-387-7869 (Fax) 920-387-7888

Cheryl.laatsch@wisconsin.gov

From: Roesler, Craig P - DNR

Sent: Monday, November 04, 2013 10:57 AM

To: Laatsch, Cheryl - DNR

Subject: RE: Danbury and Clam River 2013 Draft Purple Loosestrife survey

These are my sites. Reports look o.k. The Danbury report has 2 identical site maps; one could be deleted.

From: Aneta Rietveld [mailto:arietveld@rwehydro.com]

Sent: Wednesday, October 23, 2013 8:38 AM

To: Laatsch, Cheryl - DNR; Peter Fasbender@fws.gov

Cc: nick utrup@fws.gov

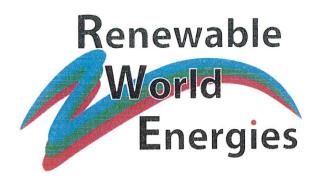
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Re:

Danbury Project

FERC # 9184

Flambeau Hydro, LLC

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Cc: RWE Energies, Corporate Mr. Nick Utrup, US FWS

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Document Content(s)
14-02-21 DANB and CLRV AKR GGR Final PL.PDF1-40