

CONSOLIDATED WATER POWER COMPANY

General Offices

P.O. Box 8050, Wisconsin Rapids, WI 54495-8050

A subsidiary of Verso Corporation

October 2, 2017

Office of the Secretary
Federal Energy Regulatory Commission
888 1st Street, N.E.
Washington, D.C. 20426

(VIA ELECTRONIC FILING)

**Wisconsin Rapids Project, FERC No. 2256 - Article 409 Purple Loosestrife Monitoring –
Biennial Report for 2016/17**

Dear Secretary:

Article 409 of the Wisconsin Rapids Hydroelectric Project License and the Order approving and modifying Consolidated Water Power Company's (CWPCo) Purple Loosestrife Monitoring Plan required annual monitoring of the noxious plants within project waters, filing a report every two years. Enclosed are the results for the 2016/17 monitoring along with the accompanying purple loosestrife plant location project maps.

Background

Article 409 requires purple loosestrife monitoring while it is in boom and documenting plant sites and plant densities. CWPCo denotes plant densities by: (1) small; 1-5 plants, (2) medium; 6-50 plants and (3) dense; >50 plants. For small to medium densities, past control methods included: (1) hand pulling and removal of whole plant or (2) cut plant flower tops off and leave rest of plant for beetles to feed on when beetle activity observed or (3) chemical treatment. For site 12 located in the bedrock below the Wisconsin Rapids dam, control is with the introduction of beetle pots to further establish the beetle population has been applied. This area is difficult to control the plants with other means due to the rock outcroppings. CWPCo partners with the Wood County Conservation agency to raise the beetles for transplanting to site 12.

The biennial 2010/11 report had a total of 17 sites monitored for purple loosestrife or 5 additional sites when compared to the 2008/09 time period. Overall, the plant counts were similar to the 2008/09 levels. In 2010, a total of 12 sites were observed with plant density breakdown of 8 small, 3 medium, 1 dense (site 12) with beetle activity at 5 sites. In 2011, a total of 10 sites were observed with plant density breakdown of 9 small and 1 dense (site 12) with beetle activity at 4 sites (see Table 1).

The biennial 2012/13 period, purple loosestrife was present at three sites (sites 2, 12, 17) in 2012 and two sites (sites 11, 12) in 2013, with total plant counts trending lower when compared to the 2010/11 time period (see Table 1). No new monitoring sites were observed during this biennial period.

The biennial 2014/15 saw no new purple loosestrife sites observed. For the period, purple loosestrife was present at five sites (sites 1, 4, 8, 11, 12) in 2014 and six sites (sites 2, 6, 8, 11, 12, 18) in 2015, with sites 8, 11 and 12 being repeat sites over the biennial period. For each year, all sites except for one were observed with either medium or heavy beetle activity, thus indicating a thriving beetle population exists within the project boundary to assist with the control of purple loosestrife. Overall, the plant sites observed with purple loosestrife increased when compared to the 2012/13 biennial time

period with a slight increase overall plant count totals. With these reported levels and observed beetle activity, project operations were not being impacted by the presence of purple loosestrife.

Site 12 (below Wisconsin Rapids spillway) continues to have a dense stable purple loosestrife population with at least medium beetle activity on all plants. CWPCo continued to work with the Wood County Conservation agency and placed 10 raised beetle pots in 2014 and 4 more in 2015 to supplement the beetle population

Starting with the 2014/15 biennial report and continuing after, the Google Earth based coordinate system will be used to mark the purple loosestrife locations. CWPCo feels this coordinate system is more universal for tracking the purple loosestrife colonies.

Biennial 2016/17 Observations

The biennial 2016/17 saw no new purple loosestrife sites observed. For the period, purple loosestrife was present at two sites (sites 2, 12) in 2016 and six sites (sites 2, 6, 7, 10, 11, 12) in 2017, with sites 2 and 12 being repeat sites when compared to the 2014/15 biennial period. For this biennial, all sites were observed with beetle activity, thus indicating a thriving beetle population exists within the project boundary to assist with the control of purple loosestrife. Overall, the plant sites observed had similar counts to the 2014/15 biennial period or a slight increase compared to the 2012/13 biennial period. With these reported levels and observed beetle activity, project operations were not being impacted by the presence of purple loosestrife.

2016/17 Control Methods

Control methods administered in 2016/17 involved either: (1) hand pulling and removal of whole plant or (2) flower seed top removal where beetle activity was observed with plant densities less than 50 plants. For more than 50 plant densities, the control method is to maintain a healthy beetle population through raised beetle pot introduction (site 12). Beetle activity was ranked and recorded by % leaf damage (observed bee-bee like holes in leaves) as follows: (1) light, <15% leaves, (2) medium, 15% to 30%, or (3) heavy, >30%.

CWPCo continues to distribute information regarding invasive species (PUBL-WM-250-95) via its recreational brochure which is free to the public.

If there are any questions, please feel free to contact us at (715) 422-3927 or email tom.witt@versoco.com.

CONSOLIDATED WATER POWER COMPANY

Thomas J. Witt

Thomas J. Witt
Resources Manager

Enclosure: Purple Loosestrife Location Maps (2)

File: Wisconsin Rapids, LG-90-30, Article 409

cc: Ms. Cheryl Laatsch, Wisconsin Department of Natural Resources (email copy)
Mr. Nicholas Utrup, U.S. Fish & Wildlife Service, St. Paul, MN (email copy)

Table 1 – Purple Loosestrife Monitoring Site Data

Wisconsin Rapids Hydroelectric Project – Purple Loosestrife Monitoring for 2010 - 2015

Site No	Description	GPS Coordinates Google Earth	Plt Density	Beetle Activity	Chem Applied	Action Taken
1	Small bedrock outcrop E. of Big Island	Lat 44.4202, Long -89.7984	2 plts 5 plts None None 2 plts None None	None Heavy None	No No No	2010 - removed 2011 - removed flower tops, rest for beetles 2012 - no plants 2013 - no plants 2014 – removed 2015 – no plants 2016/17 – no plants
2	Sandy shoreline of a small island	Lat 44.4249, Long -89.7944	2 plts None 2 plts None None 7 plts 5 plts 4 plts	None None Medium Heavy Heavy	No No No No No	2010 – removed 2011 - no plants 2012 - removed 2013 - no plants 2014 – no plants 2015 – removed 2016/17 – removed flower tops, rest for beetles
3	Island below Biron Dam – Out of Project Boundary	Observations under Biron Project Report				Starting with 2017 biennial report, this site will no longer be part of this report as it is under the Biron Hydroelectric Project, P-2192
4	S. Tip of Big Island	Lat 44.4072, Long -89.8171	2 plts None None None 2 plts None None	Heavy Heavy	No No	2010 - removed flower tops, rest for beetles 2011 - no plants 2012 - no plants 2013 - no plants 2014 - removed flower tops, rest for beetles 2015 – no plants 2016/17 - no plants
5	SE Shoreline of Hunter Is. (Kraft Mill)	Lat 44.4039, Long -89.8221	2 plts 2 plts None None None None	None None	No No	2010 – removed 2011 - removed 2012 - no plants 2013 - no plants 2014/15 - no plants 2016/17 - no plants
6	E. Shoreline adjacent to Pleasant View Lane	Lat 44.4069, Long -89.8090	16 plts 2 plts None None None 1 plt None 3 plts	Heavy Heavy Heavy Light	No No No No	2010 - removed flower tops, rest for beetles 2011 - removed flower tops, rest for beetles 2012 - no plants 2013 - no plants 2014 - no plants 2015 - removed flower tops, rest for beetles 2016 – no plants 2017 – removed

Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2016/2017

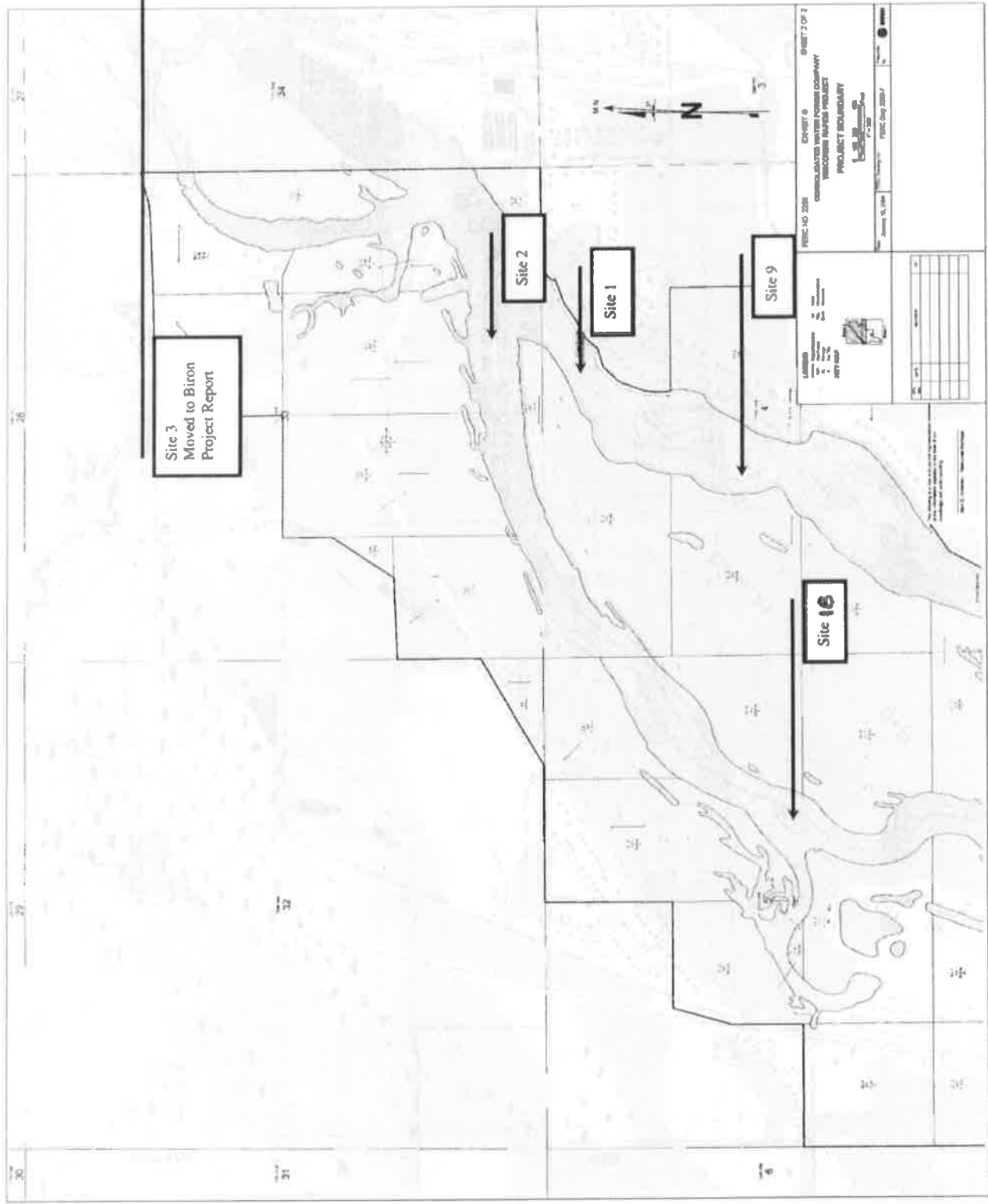
Site No	Description	GPS Coordinates Google Earth	Plt Density	Beetle Activity	Chem Applied	Action Taken
7	Small Island and E Shoreline / Strawberry Lane	Lat 44.4087, Long -89.8059	4 plts None None None None 2 plts	None Light	No No	2010 – removed 2011 - no plants 2012/13 - no plants 2014/15 - no plants 2016 – no plants 2017 – removed
8	E. Shoreline above Strawberry Lane	Lat 44.4093, Long -89.8046	8 plts 1 plt None 4 plts 4 plts None	None None Medium Heavy	No No No No	2010 – removed 2011 – removed 2012/13 - no plants 2014 - removed flower tops, rest for beetles 2015 - removed flower tops, rest for beetles 2016/17 – no plants
9	E. Shoreline of Big Island	Lat 44.4165, Long -89.8007	None None None None		No	2010/11 - no plants 2012/13 - no plants 2014/15 - no plants 2016/17 - no plants
10	Sm Island E of Big Island near Cranberry ditch outfall	Lat 44.4154, Long -89.7996	4 plts None None None None 4 plts	None Heavy	No No	2010 – removed 2011 - no plants 2012/13 - no plants 2014/15 - no plants 2016 - no plants 2017 - removed flower tops, rest for beetles
11	E Shoreline near Canoe Take Out	Lat 44.4019, Long -89.8187	None None None 2 plts 2 plts 4 plts None 2 plts	 Heavy Medium Medium Light	No No No No No	2010 - no plants 2011 - no plants 2012 - no plants 2013 – removed 2014 - removed flower tops, rest for beetles 2015 - removed flower tops, rest for beetles 2016 – no plants 2017 – removed
12	Tail water area of Spillway Section	Lat 44.3965, Long -89.8206	50-100 plts 50-100 Plts 50-100 plts 50-100 plts 50-100 plts 50-100 plts 50-100 plts 50-100 plts 50-100 plts	Heavy Light Light Light Medium Medium – Heavy Medium – Heavy Medium – Heavy	No No No No No No No No	2010 - place 8 beetle pots, monitor 2011 - place 2 beetle pots, monitor 2012 – monitor 2013- place 4 beetle pots, monitor 2014 - place 10 beetle pots, monitor 2015 - place 4 beetle pots, monitor 2016 - place 6 beetle pots, monitor 2017 - monitor

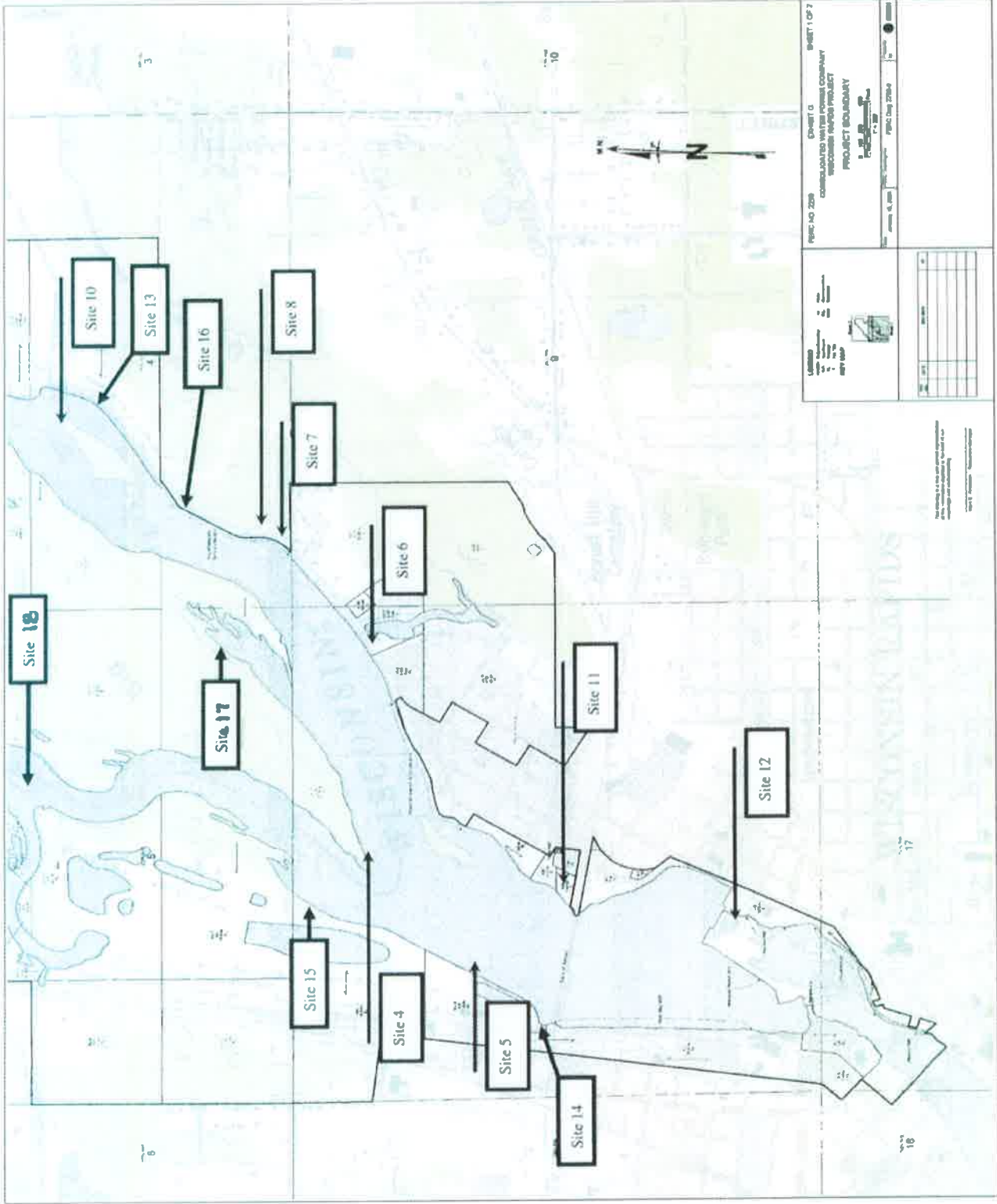
Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2016/2017

Site No	Description	GPS Coordinates Google Earth	Plt Density	Beetle Activity	Chem Applied	Action Taken
13	E Shoreline below Cranberry Ditch Outfall	Lat 44.4155, Long -89.7980	6 plts 5 plts None None None	Heavy Heavy	No No	2010 - removed flower tops, rest for beetles 2011 - removed flower tops, rest for beetles 2012/13 - no plants 2014/15 - no plants 2016/17 - no plants
14	W Shoreline, above RR trestle	Lat 44.4024, Long -89.8241	4 plts None None None None	Heavy	No	2010 - removed flower tops, rest for beetles 2011 - no plants 2012/13 - no plants 2014/15 - no plants 2016/17 - no plants
15	W Shoreline above Kraft Mill area	Lat 44.4085, Long -89.8194	None 3 plts None None None	None	No No	2010 - no plants 2011 - removed 2012/13 - no plants 2014/15 - no plants 2016/17 - no plants
16	E. Shoreline above Shorewood Terrace	Lat 44.4123, Long -89.8031	4 plts 1 plt None None None	None None	No No	2010 - removed 2011 - removed 2012/13 - no plants 2014/15 - no plants 2016/17 - no plants
17	Small Island above Hunter Island	Lat 44.4106, Long -89.8087	None 4 plts 1 plt None None None	None Medium	No No No	2010 - no plants 2011 - removed 2012 - removed 2013 - no plants 2014/15 - no plants 2016/17 - no plants
18	Big Is., SE Cove	Lat 44.4165, Long -89.8147	None 2 plts None None 2 plts None	None Heavy	No No No	2010 - no plants 2011 - removed 2012/13 - no plants 2014 - no plants 2015 - removed 2016/17 - no plants

Notes: No chemical applications for 2010 - 2013. Beetle activity rating based on percentage of leaves with bee-holes from beetle feeding: light less than 15%, medium 15% to 30%, heavy greater than 30%.

**Attached Purple Loosestrife Plant Location Maps
(two maps)**





SHEET 1 OF 2
 PROJECT BOUNDARY
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 CONSULTANTS

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Document Content(s)

WR2017Report.PDF.....1-8