

**CONSOLIDATED WATER POWER COMPANY**

*General Offices*

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

*A subsidiary of Verso Corporation*

September 27, 2019

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

(VIA ELECTRONIC FILING)

**Wisconsin Rapids Project, FERC No. 2256 - Article 409 Purple Loosestrife Monitoring –  
Biennial Report for 2018/19**

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 2018/19 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 for control. 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, with the last pots placed in 2016.

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.

Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2018/2019

**Biennial 2018/19 Observations**

The biennial 2018/19 saw no new purple loosestrife sites observed. For the period, purple loosestrife was present at three sites (sites 1, 2, 12) in 2018 and four sites (sites 2, 11, 12, 16) in 2019, with sites 2 and 12 being repeat sites when compared to the 2016/17 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 and 2016/17 biennials 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.

2018/19 Control Methods

Control methods administered in 2018/19 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](mailto: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)

## Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2018/2019

**Table 1 – Purple Loosestrife Monitoring Site Data**

## Wisconsin Rapids Hydroelectric Project – Purple Loosestrife Monitoring for 2010 - 2019

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 2 plts None None 2 plts None	None Heavy  None  Heavy	No No  No  No	2010 – removed 2011 - removed flower tops, rest for beetles 2012/13 - no plants 2014 – removed 2015 – no plants 2016/17 – no plants 2018 - removed 2019 – no plants
2	Sandy shoreline of a small island	Lat 44.4249, Long -89.7944	2 plts None 2 plts None 7 plts 5 plts 4 plts 3 plts 2 plts	None  None  Medium Heavy Heavy Heavy Heavy	No No No No No No No No	2010 – removed 2011 - no plants 2012 - removed 2013/14 - no plants 2015 – removed 2016/17 – removed flower tops, rest for beetles 2018 – removed 2019 – removed
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   None	No  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 2016/19 - no plants
5	SE Shoreline of Hunter Is. (Kraft Mill)	Lat 44.4039, Long -89.8221	2 plts 2 plts None	None None	No No	2010 – removed 2011 - removed 2012/19 - 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 None	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 2018/19 – no plants

## Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2018/2019

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 2 plts None	None  Light	No  No	2010 – removed 2011 - no plants 2012/16 - no plants 2017 – removed 2018/19 – no plants
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 2016/19 – no plants
9	E. Shoreline of Big Island	Lat 44.4165, Long -89.8007	None None		No	2010/11 - no plants 2012/19 – 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	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 2018/19 – no plants
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 None 2 plts	   Heavy Medium  Medium  Light  Light	No  No No 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 2018 – no plants 2019 – 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 50-100 plts 50-100 plts	Heavy  Light  Light  Light  Medium  Medium – Heavy Medium – Heavy Medium – Heavy Medium – Heavy	No  No No 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  2018/19 – monitor

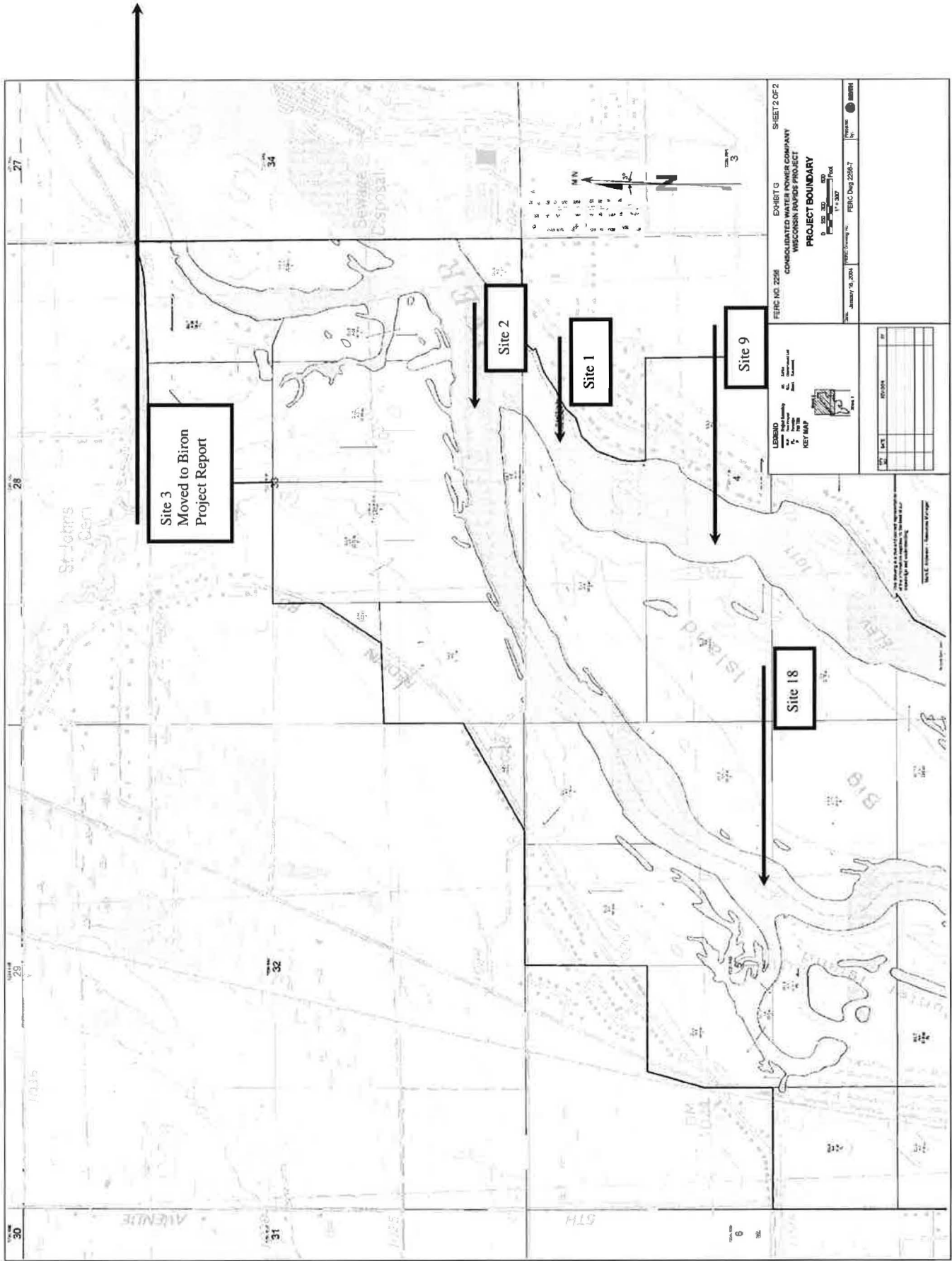
## Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2018/2019

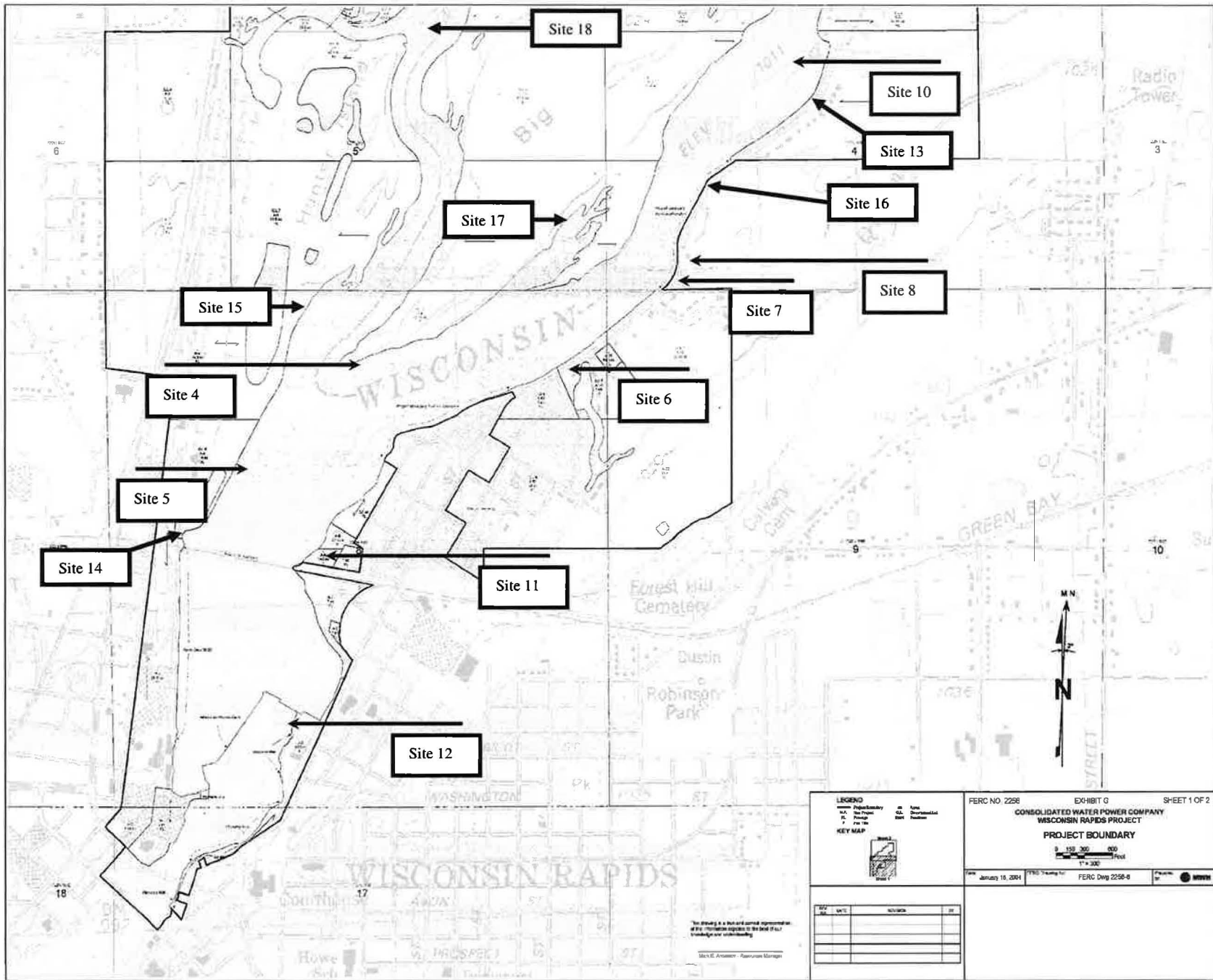
Site No	Description	GPS Coordinates Google Earth	Plt Density	Beetle Activity	Chem Applied	Action Taken
13	E Shoreline below Cranberry Ditch Outfall	Lat 44.4155, Long -89.7980	6 plts 5 plts None	Heavy Heavy	No No	2010 - removed flower tops, rest for beetles 2011 - removed flower tops, rest for beetles 2012/19 - no plants
14	W Shoreline, above RR trestle	Lat 44.4024, Long -89.8241	4 plts None None	Heavy	No	2010 - removed flower tops, rest for beetles 2011 - no plants 2012/19 - no plants
15	W Shoreline above Kraft Mill area	Lat 44.4085, Long -89.8194	None 3 plts None	None	No No	2010 - no plants 2011 - removed 2012/19 - no plants
16	E. Shoreline above Shorewood Terrace	Lat 44.4123, Long -89.8031	4 plts 1 plt None None None None 2 plts	None None    Medium	No No    No	2010 - removed 2011 - removed 2012/13 - no plants 2014/15 - no plants 2016/17 - no plants 2018 - no plants 2019 - removed
17	Small Island above Hunter Island	Lat 44.4106, Long -89.8087	None 4 plts 1 plt None None	None Medium	No No No	2010 - no plants 2011 - removed 2012 - removed 2013 - no plants 2014/19 - 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 2016/19 - no plants

Notes: No chemical applications for 2010 - 2019. 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%.

Wisconsin Rapids Hydroelectric Project - Purple Loosestrife Monitoring for 2018/2019

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





**LEGEND**

Proprietary	AS	AS
Public	CL	AS
Private	DL	AS
Other	DL	AS

**KEY MAP**

FERC NO 2296 EXHIBIT G SHEET 1 OF 2  
**CONSOLIDATED WATER POWER COMPANY**  
**WISCONSIN RAPIDS PROJECT**  
**PROJECT BOUNDARY**

Scale: 1" = 300' Feet

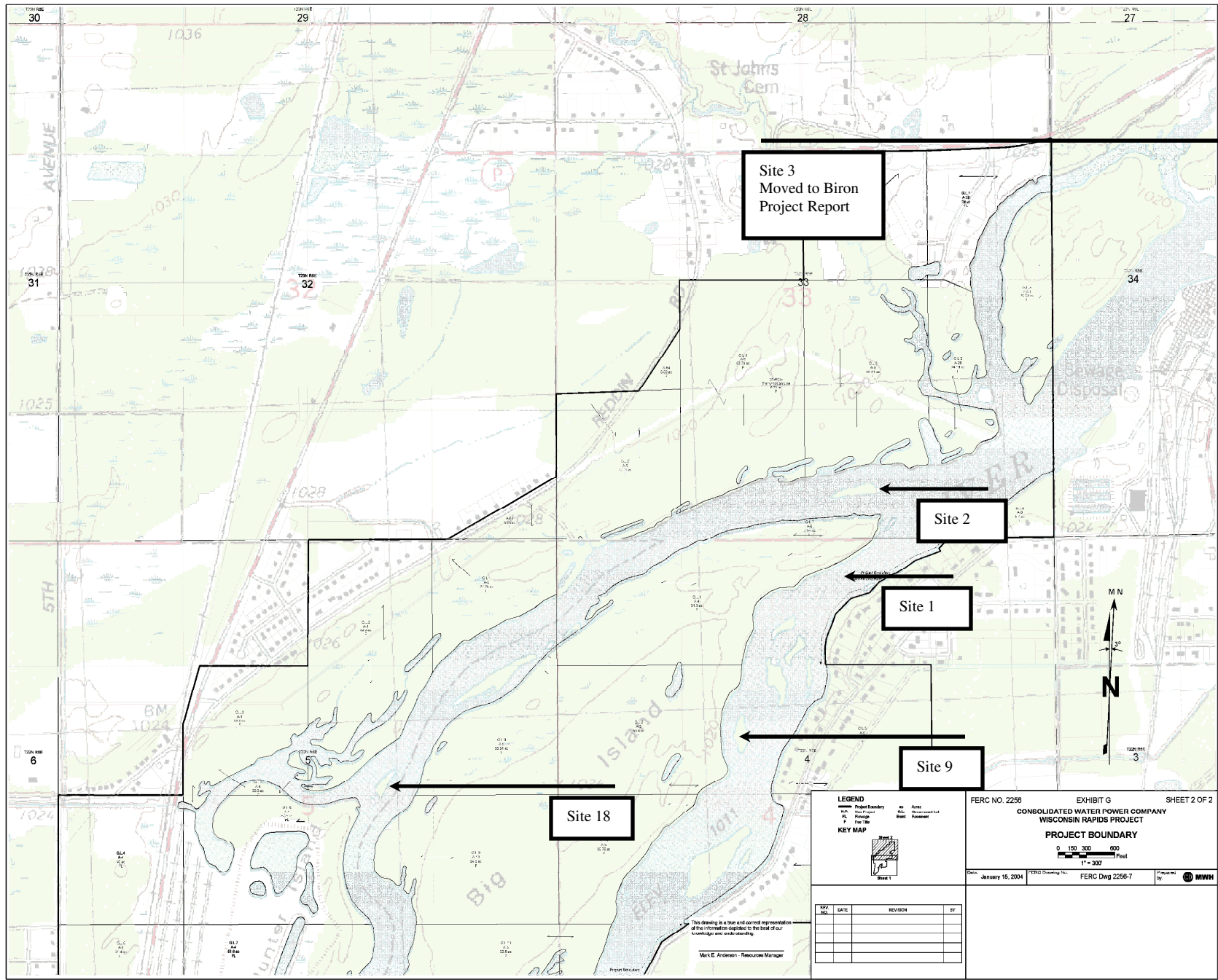
January 16, 2004 FPD Drawing for FERC Dwg 2296-6

REV	DATE	DESCRIPTION	BY

The drawing is a final and correct representation of the project as approved by the Wisconsin Department of Natural Resources and the Wisconsin Department of Transportation.

Mark E. Anderson - Project Manager





Site 3  
Moved to Biron  
Project Report

Site 2

Site 1

Site 9

Site 18

**LEGEND**

Symbol	Project Boundary	As Shown
Symbol	Water	As Shown
Symbol	Flowage	As Shown
Symbol	Flowage	As Shown
Symbol	Flowage	As Shown

**KEY MAP**

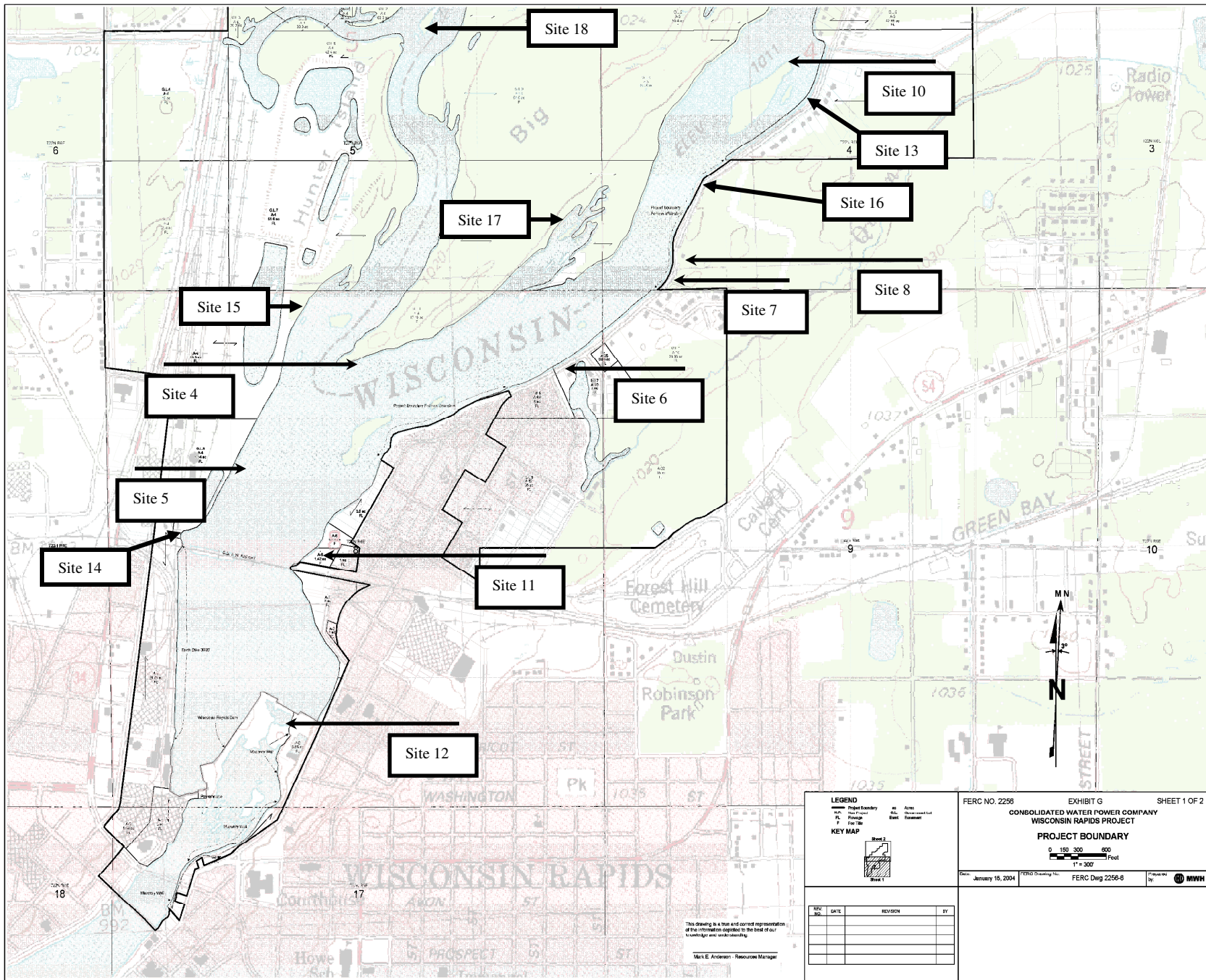
FERC NO. 2258 EXHIBIT G SHEET 2 OF 2  
**CONSOLIDATED WATER POWER COMPANY**  
**WISCONSIN RAPIDS PROJECT**  
**PROJECT BOUNDARY**

Scale: 0 150 300 600 Feet  
 1" = 300'

Date: January 16, 2004 FERC Drawing No. FERC Dwg 2258-7 Prepared by: MWH

REV.	DATE	REVISION	BY

This drawing is a true and correct representation of the information depicted to the best of our knowledge and understanding.  
 Mark E. Anderson - Resource Manager



**LEGEND**

Project Boundary	As Shown
Flow Project	As Shown
Storage	As Shown
Flow Path	As Shown

**KEY MAP**

Sheet 1

FERC NO. 2256 EXHIBIT G SHEET 1 OF 2

**CONSOLIDATED WATER POWER COMPANY**  
**WISCONSIN RAPIDS PROJECT**

**PROJECT BOUNDARY**

0 150 300 600  
 Feet  
 1" = 300'

Date: January 16, 2004 FERC Drawing No. FERC Dwg 2256-6

REV. NO.	DATE	REVISION	BY

This drawing is a true and correct representation of the information depicted to the best of our knowledge and understanding.

Mark E. Anderson - Resource Manager

Document Content(s)

WR2019Report.PDF.....1-8

WR2019RPTMaps.PDF.....9-10