

Recommended Implementation Plan for the Lake Redstone Aquatic Plant Management Plan (1-6-2015)

Goals/Objectives/Actions	Priority Level	AIS Grant Eligibility	LPL Grant Eligibility	Implementers	2015	2016	2017	2018	2019
1. Protect, Preserve, and Enhance Native Aquatic Plant Communities in Lake Redstone									
1.1 Maintain or increase three measures (FQI, C, and # of Species) of the quality of the native aquatic plant community									
1	Continue education efforts focused on establishing the importance of the native plant community			LRPD	x	x	x	x	x
2	Encourage only limited removal of native aquatic vegetation around individual property owner docks and beaches			LRPD	x	x	x	x	x
3	Encourage and support property owners willing to attempt native aquatic plant restoration in the nearshore area			LRPD	x	x	x	x	x
1.2 Reduce negative impacts in Sensitive Areas caused by aquatic plant management actions									
1	Require property owner documentation of physical/manual removal efforts in Sensitive Areas			LRPD	x	x	x	x	x
2	Incorporate herbicide management actions that will maintain or improve the quality of the aquatic plant community, not just provide property owner relief			LRPD, PO	x	x	x	x	x
1.3 Minimize negative impacts to the fishery that could be caused by aquatic plant management actions									
1	Promote physical/manual removal of aquatic plants as the management action having the least negative impact on the fishery			LRPD, PO	x	x	x	x	x
2	Seek and discuss WDNR and other stakeholder input related to aquatic plant management proposals			LRPD	x	x	x	x	x
2. Annual Monitoring and Mapping of Aquatic Plants most Affected by Management Actions									
2.1 Track the expansion or decline in distribution and density of EWM caused by management actions and/or seasonal variation									
1	Complete pre chemical treatment, point-intercept aquatic plant survey work annually		x	LRPD, RP	x	x	x	x	x
2	Complete post chemical treatment, point-intercept aquatic plant survey work annually		x	LRPD, RP	x	x	x	x	x
3	Complete mid season, visual survey of the littoral zone prior to mid season chemical management		x	WDNR, LRPD, RP	x	x	x	x	x
4	Complete summer PI surveys in any bay recommended for treatment in the year prior to and the year after the expected treatment		x	RP	x	x	x	x	x
5	Complete annual fall bed mapping of EWM incorporating GPS and rake head density documentation		x	LRPD, RP	x	x	x	x	x
2.2 Track the expansion or decline in distribution and density of CLP caused by management actions and/or seasonal variation									
1	Complete a visual and rake survey of the littoral zone in late May or early June to identify and quantify CLP growth annually		x	LRPD, RP	x	x	x	x	x
2	Implement physical/manual removal as a first management action for problematic CLP		x	LRPD, PO	?	?	?	?	?
3	Complete June bed mapping of CLP incorporating GPS and rake head density documentation		x	LRPD, RP	?	?	?	?	?
4	Complete pre chemical treatment, point-intercept aquatic plant survey work annually		x	LRPD, RP	?	?	?	?	?
5	Complete post chemical treatment, point-intercept aquatic plant survey work annually		x	LRPD, RP	?	?	?	?	?
2.3 Complete a mid season visual and rake survey of the littoral zone adjacent to developed properties before implementing management actions									
1	Complete a mid season visual and rake survey of the littoral zone prior to management implementation		x	WDNR, LRPD, RP	x	x	x	x	x
	a. Requires supervision by the WDNR or other resource professional approved by the WDNR and LRPD participation								
2	Record additional information if a proposed management action is in a Sensitive Area		x	WDNR, LRPD, RP	x	x	x	x	x
2.4 Track the expansion or decline in distribution and density of floating leaf aquatic plants caused by management actions and/or seasonal variation									
1	Complete August bed mapping of floating-leaf and emergent aquatic plants annually incorporating GPS and a visual estimate of density		x	LRPD, RP	x	x	x	x	x
2.5 Implement a EWM Weevil Monitoring Program									
1	Implement an EWM weevil monitoring program in at least one year of this five year plan		x	LRPD, RP, WDNR	?	?	?	?	?
	a. Follow CLMN AIS Monitoring Guidelines								
2	Evaluate the feasibility of establishing a volunteer EWM weevil rearing program		x	LRPD, RP	?	?	?	?	?
	a. Implement if determined feasible								
3. Implement Physical/manual Removal to Control Aquatic Invasive Species and Nuisance Growth of Native Aquatic Plants									
3.1 Minimize physical/manual removal of aquatic plants inside Sensitive Areas									
1	Develop a "Notice of Intent" for property owners and LRPD/WDNR permitting purposes		x	LRPD, WDNR, RP	x				
2	Require property owners in Sensitive Areas to complete and file the Notice if Intent		x	PO	x	x	x	x	x
3	File a physical/manual removal permit application with the WDNR each spring		x	LRPD	x	x	x	x	x
4	Encourage property owners to attend an Aquatic Plant ID and Removal Training Session sponsored by the LRPD		x	LRPD, PO	x	x	x	x	x
3.2 Minimize physical/manual removal of aquatic plants outside Sensitive Areas									
1	Encourage property owners to complete and file a Notice if Intent with the LRPD		x	LRPD	x	x	x	x	x
2	Encourage property owners to attend an Aquatic Plant ID and Removal Training Session sponsored by the LRPD		x	LRPD, PO	x	x	x	x	x
3.3 Sponsor and annual Aquatic Plant ID and Physical Removal Training Session									
1	Plan and implement an annual workshop/session for interested property owners		x	LRPD, RP, SC, TLV	x	x	x	x	x
3.4 Raking/removal of free floating aquatic plants washed into shore									
1	Support property owner removal of free floating aquatic plants washed into shore		x	PO	x	x	x	x	x
3.5 Aquatic plant management to maintain swimming conditions at the Lake Redstone Beach									
1	Complete regular monitoring of the public beach area for potential nuisance level aquatic plant growth		x	LRPD, PO	x	x	x	x	x
2	Implement physical/manual removal as a first management action for problematic aquatic vegetation		x	LRPD, PO	?	?	?	?	?
3.6 Evaluate the need and value of a LRPD sponsored Physical Removal Team									

1	Survey the lake constituency to determine support for hiring an Aquatic Plant Removal Team		x		LRPD	x	?	?	?	?
2	Determine the logistics needed to support an Aquatic Plant Removal Team		x		LRPD	x	?	?	?	?
3	Determine the cost to support an Aquatic Plant Removal Team, then if feasible hire a team		x		LRPD	x	?	?	?	?
4. Implement Herbicide Application to Control Aquatic Invasive Species and Nuisance Growth or Native Aquatic Plants										
4.1 Herbicide application to control the distribution and density of EWM										
1	Implement whole bay, early season, low dose application of aquatic herbicides		x		LRPD, RP, WDNR	?	?	?	?	?
4.2 Herbicide application to control the distribution and density of CLP										
1	Implement early season herbicide application		x		LRPD, RP, WDNR	?	?	?	?	?
4.3 Herbicide application to provide mid-season, individual developed property relief for EWM, CLP, nuisance level native aquatic plant growth, and algae										
1	Implement mid season herbicide application once during the open water season between July 5 and August 1				LRPD, RP, WDNR	x	x	x	x	x
2	Follow WDNR permit parameters for mid season application of herbicides where there is a navigational, swimming, or fishing need				LRPD, RP	x	x	x	x	x
3	Complete no summer nuisance treatments in early season treated bays in the same year they are treated				LRPD, RP	x	x	x	x	x
5. Monitor and Manage Non-native, Invasive Aquatic Plant Species other than CLP and EWM										
5.1 Purple loosestrife monitoring and management										
1	Complete an annual lake wide shoreland survey in July or August to identify and document purple loosestrife locations		x		LRPD, PO	x	x	x	x	x
2	Complete annual management of purple loosestrife		x		LRPD, PO, TLV, SC	?	?	?	?	?
5.2 Japanese knotweed monitoring and management										
1	Complete an annual lake wide shoreland survey in June or July or August to identify and document Japanese knotweed locations		x		LRPD, PO	x	x	x	x	x
2	Develop and implement a Japanese knotweed management plan		x		LRPD, WDNR, SC, TLV, RP, PO	x	x	x	x	x
5.3 Incorporate shoreland restoration practices that will help reduce the amount of reed canary grass along the shore										
1	Encourage property owners to replace reed canary grass with native plant species		x		LRPD	x	x	x	x	x
2	Sponsor shoreland restoration education events and/or provide education materials to help property owners		x		LRPD, TLV, SC	x	x	x	x	x
5.4 Reduce the number of sites where Yellow Flag Iris is found										
1	Complete and annual lake wide shoreland survey in May or June to identify and document locations		x		LRPD, WDNR, PO	x	x	x	x	x
2	Develop and implement a Yellow Flag Iris management plan		x		LRPD, WDNR, SC, TLV, RP, PO	x	x	x	x	x
6. Educate the Lake Community and Lake Users about AIS and Management Actions										
6.1 Implement a watercraft inspection program										
1	Incorporate a CLMN/UW Extension Lakes Clean Boats Clean Waters program at public boat landings		x		LRPD, WDNR, UW-Ex	x	x	x	x	x
2	Install and maintain current WDNR approved AIS signage at all public access and beach club boat landings		x		LRPD, WDNR	x				
6.2 Implement an in-lake and shoreland AIS monitoring program										
1	Incorporate a CLMN/UW Extension Lakes AIS Monitoring Program		x		LRPD, WDNR, UW-Ex	x	x	x	x	x
6.3 Improve the level of knowledge lake property owners and lake users have about AIS and their impacts to the lake										
1	Host and/or sponsor annual lake community events		x		LRPD, TLV, SC	x	x	x	x	x
2	Distribute AIS education and information materials to lake property owners and lake users		x		LRPD, TLV	x	x	x	x	x
7. Promote Greater Understanding in the Lake Populace about How Their Actions Impact Aquatic Plants and the Lake Community										
7.1 Promote shoreland restoration and habitat improvement projects										
1	Distribute education and information materials to lake property owners and lake users about best management practices to improve the shoreline		x	x	LRPD, SC, TLV	x	x	x	x	x
2	Encourage the use of bio-stabilization practices in low energy locations instead of rock riprap to prevent shoreland erosion		x	x	LRPD	x	x	x	x	x
3	Host and/or sponsor annual lake community events that encourage land owner implementation of best management practices		x	x	LRPD, TLV	x	x	x	x	x
4	Provide some level of planning and possibly financial support to property owners who want to complete shoreland or habitat improvement projects		x	x	LRPD	x	x	x	x	x
5	Recognize property owners who implement shoreland or habitat improvement projects		x	x	LRPD	x	x	x	x	x
7.2 Maintain and enhance the amount of coarse woody debris in the lake										
1	Identify existing coarse woody debris in the lake by mapping the shoreline using GPS		x	x	LRPD, WDNR, RP, PO	x		x		x
2	Provide educational materials to property owners related to coarse woody debris		x	x	LRPD	x	x	x	x	x
3	Encourage property owners not to remove coarse woody debris from their shoreline		x	x	LRPD	x	x	x	x	x
4	Work with property owners, the WDNR and other stakeholders to promote and implement coarse woody debris projects		x	x	LRPD, PO, WDNR, RP	x	x	x	x	x
8. Continue Collection of Lake Related Data to Enhance and Support Current and Future Lake Management										
8.1 Collect data										
1	Continue CLMN water quality monitoring at multiple sites		x	x	LRPD, WDNR	x	x	x	x	x
2	Conduct water quantity monitoring including precipitation and lake level		x	x	LRPD, RP	x	x	x	x	x
3	Pursue the development of a Comprehensive Lake Management Plan		x	x	LRPD, RP, WDNR		?	?	?	
4	Apply for lake management planning grant funding to develop a Comprehensive Lake Management Plan		x		LRPD		?	?	?	
9. Complete APM Plan Implementation and Maintenance for Five Years										
9.1 Follow adaptive management practices										
1	Complete annual summary reports of management actions		x		RP, LPRD	x	x	x	x	x

2	Share reports with LRPD Constituency, WDNR, County, and Town Officials		x		RP, LRPD	x	x	x	x	x
10. Evaluate and Summarize Management Results after Five Years										
1	Complete end of project summary reporting		x		RP, LRPD					x
2	Repeat the Whole Lake Point-intercept Aquatic Plant Survey after five years of management		x		RP, LRPD					x
Implementers: LRPD, Lake Redstone Protection District; RP, resource professionals/consultant; SC, Sauk County LWCD; TLV, Town of LaValle; PO, Property Owner; UW-Ex, UW-Extension; WDNR, WI Department of Natural Resources. Note: Implementer List is not exhaustive and can change. AIS, Aquatic Invasive Species; CLMN, Citizen Lake Monitoring Network; LPL, Lake Management Planning; CLP, curly-leaf pondweed; EWM, Eurasian watermilfoil; GPS, Global Position System										