

Appendix A: 2021-25 Rice Lake, Barron County Aquatic Plant Management Plan Goals, Objectives, and Actions

- 1) **Goal 1:** Maintain a level of aquatic plant growth (native and non-native) that supports a healthy lake system and multiple human uses of the lake system.
 - a) **Obj. 1:** Implement aquatic plant management actions that do not reduce values of a healthy aquatic plant community including # of species, Simpson's Diversity Index (SDI), Floristic Quality Index (FQI) value, Mean Coefficient of Conservatism (Mean C) to below the average over the last three whole-lake PI surveys (41 species, 0.88 SDI, 39.35 FQI, and 6.13 Mean C).
 - (1) **Action 1:** Repeat the same summer, whole-lake, aquatic plant, point-intercept survey that was completed in 2008, 2013, and 2018.
 - b) **Obj. 2:** Maintain the distribution of CLP in the central and north basins below 25-acres based on annual CLP recon and bedmapping surveys.
 - (1) **Action 1:** Annual mechanical harvesting
 - (a) Conditions:
 - (i) Harvesting of CLP will occur between May 15 and July 15th
 - (ii) The minimum depth for mechanical harvesting in shallow water is 3-ft
 - (iii) GPS mapping, harvest logs, and total harvest of CLP in tons will be documented
 - (2) **Action 2:** Application of aquatic herbicides.
 - (a) Conditions:
 - (i) Herbicide application along Lakeshore Dr.
 1. Implemented when the amount of CLP exceeds 10-ac in a prior year bedmapping survey
 2. Will be completed prior to May 31, depending on water temperature and stage of CLP growth, based on a treatment plan prepared by a consultant
 3. Endothall and/or diquat based herbicides will be used at approved and appropriate label rates
 4. Herbicide will be applied sub-surface by a certified pesticide applicator
 5. Pre/post chemical treatment point-intercept survey will be completed
 - (ii) Herbicide application along the east shore south of the Red Cedar River Inlet
 1. Implemented when the amount of CLP exceeds 10-ac in a prior year bedmapping survey
 2. Will be completed prior to May 31, depending on water temperature and stage of CLP growth, based on a treatment plan prepared by a consultant
 3. Endothall and/or diquat based herbicides will be used at approved and appropriate label rates
 4. Herbicide will be applied sub-surface by a certified pesticide applicator
 5. Pre/post chemical treatment point-intercept survey will be completed
 - c) **Obj. 3:** Maintain the distribution of CLP in the south basin below 10-acres based on annual CLP recon and bedmapping surveys.
 - (1) **Action 1:** Application of aquatic herbicides

- (a) Conditions:
 - (i) Implemented when the amount of CLP exceeds 8-ac in the south basin in a prior year bedmapping survey
 - (ii) Will be completed prior to May 31, depending on water temperature and stage of CLP growth, based on a treatment plan prepared by a consultant
 - (iii) Endothall and/or diquat based herbicides will be used at approved and appropriate label rates
 - (iv) Herbicide will be applied sub-surface by a certified pesticide applicator
 - (v) Pre/post chemical treatment point-intercept survey will be completed if application exceeds 10-ac
- d) **Obj. 4:** Maintain the distribution of EWM/HWM in Clearwater Bay below 1-ac based on annual fall and spring/early summer HWM recon and bedmapping surveys.
 - (1) **Action 1:** Physical removal via rake and snorkel diving
 - (a) Conditions:
 - (i) Completed during recon surveys and as a separate management action
 - (ii) Completed when the number of identified EWM/HWM plants are less than 50
 - (iii) Completed by a consultant, Lake District employees, and/or trained volunteers
 - (2) **Action 2:** Physical removal via scuba divers or DASH (diver-aided suction harvest)
 - (a) Conditions:
 - (i) Implemented when the number of identified EWM/HWM plants exceed 50
 - (ii) Completed by experienced divers under the guidance of a consultant or other trained person or persons familiar with aquatic plants
 - (iii) DASH will only be considered if the density of EWM/HWM exceeds a level capable of harvest by individual divers (to be determined under given conditions in any given year)
 - (3) **Action 3:** Application of aquatic herbicides
 - (a) Conditions:
 - (i) Herbicide will only be applied when the amount of area included in a treatment scenario exceeds 2-ac
 - (ii) 2,4D or triclopyr based herbicides or ProcellaCOR will be used at approved and appropriate label rates
 - (iii) Herbicide will be applied sub-surface by a certified pesticide applicator
 - (iv) Pre/post chemical treatment point-intercept survey will be completed if application exceeds 10-ac
- e) **Obj. 5:** Prevent the expansion of EWM/HWM into the south basin and other parts of the lake
 - (1) **Action 1:** Minimize mechanical harvesting in areas of Clearwater Bay with live EWM/HWM plants present
 - (a) Conditions:
 - (i) Mechanical harvesting will be delayed until all identified EWM/HWM has been managed in any given year

- (ii) If mechanical harvesting is prevented due to the presence of EWM/HWM, the application of aquatic herbicides will be considered to control nuisance/navigation native vegetation
 - 1. Application of herbicides will only occur in previously designated harvesting channels
 - 2. Diquat or another approved contact herbicide will be used at approved and appropriate label rates
 - 3. Herbicide application will occur no later than July 15
 - 4. Herbicide will be applied sub-surface by a certified pesticide applicator
- (2) **Action 2:** Complete monthly recon surveys of the south basin
 - (a) Conditions:
 - (i) Record GPS points of any suspect plants
 - (ii) Complete rake and/or snorkel removal of any new plants
- (3) **Action 3:** Complete at least two recon surveys of the littoral area of the rest of the lake annually
 - (a) Conditions:
 - (i) Record GPS points of any suspect plants
 - (ii) Complete rake and/or snorkel removal of any new plants
- (4) **Action 4:** Physical removal via scuba divers or DASH (diver-aided suction harvest)
 - (a) Conditions:
 - (i) Implemented when the number of identified EWM/HWM plants exceed 50
 - (ii) Completed by experienced divers under the guidance of a consultant or other trained person or persons familiar with aquatic plants
 - (iii) DASH will only be considered if the density of EWM/HWM exceeds a level capable of harvest by individual divers (to be determined under given conditions in any given year)
- (5) **Action 5:** Application of aquatic herbicides
 - (a) Conditions:
 - (i) Herbicide will only be applied when the amount of area included in a treatment scenario exceeds 2-ac
 - (ii) 2,4D or triclopyr based herbicides or ProcellaCOR will be used at approved and appropriate label rates
 - (iii) Herbicide will be applied sub-surface by a certified pesticide applicator
 - (iv) Pre/post chemical treatment point-intercept survey will be completed if application exceeds 10-ac
- f) **Obj. 6:** Maintain navigation and lake access through areas of dense growth native aquatic vegetation.
 - (1) **Action 1:** Mechanical harvesting of pre-determined navigation lanes and access lanes
 - (a) Conditions:
 - (i) Mechanical harvesting will only occur in navigation and access lanes previously identified by planning efforts and approved in a harvesting permit.

- (ii) Harvesting of native aquatic vegetation will occur between June 15 and August 30th
 - (iii) The minimum depth for mechanical harvesting in shallow water is 3-ft
 - (iv) GPS mapping, harvest logs, and total harvest of native vegetation in tons will be documented
 - (v) Formal requests with representative maps and photos of the impairment caused will be made if new harvesting areas are needed
- 2) **Goal 2:** Reduce the threat and impact of AIS to and in Rice Lake.
 - a) **Obj. 1:** Implement actions to prevent new AIS from entering and existing AIS from leaving Rice Lake
 - (1) **Action 1:** Implement a Clean Boats Clean Waters watercraft inspection program annually
 - (a) Conditions:
 - (i) Provide coverage at three landings: Arnolds, Stein St., and Orchard Beach Lane
 - (ii) Apply for CBCW grant support annually
 - b) **Obj. 2:** Prevent existing AIS in the lake from increasing in distribution and density
 - (1) **Action 1:** Annual AIS recon and mapping surveys
 - (a) Conditions:
 - (i) Participate in CLMN AIS Monitoring
 - (ii) Hire specialists to survey the lake
 - (iii) Train volunteers to survey the lake
 - (iv) Report suspect new AIS to appropriate entities
 - (2) **Action 2:** Management of purple loosestrife (could also apply to yellow iris)
 - (a) Conditions:
 - (i) Physical removal of individual and small areas of purple loosestrife
 - (ii) Removal of flowering heads if too many individual plants to physically remove
 - (iii) Removal of flower heads with application of aquatic herbicides following “wicking” or “cut stem” methods
 - c) **Obj. 3:** Increase the level of lake property owners and lake users awareness and knowledge about AIS and how to identify them
 - (1) **Action 1:** Support a “lake educator” or “lake coordinator” who spends time promoting the Lake District and the activities they are involved with
 - (a) Conditions:
 - (i) Work in cooperation with the Barron County Soil and Water Conservation District to hire and support a full time position
 - (ii) Add a budget item to the annual budget to support the position
 - (2) **Action 2:** Maintain current AIS signage at public landings
 - (3) **Action 3:** Distribute AIS materials, sponsor workshops, and discuss AIS at public meetings
 - (4) **Action 4:** Publish AIS materials on Facebook, District webpage, and in the local newspaper

- 3) **Goal 3:** Improve fish and wildlife habitat, reduce runoff, and minimize nutrient loading into Rice Lake.
- a) **Obj. 1:** Continue to promote and support nearshore, riparian, and watershed best management practices
- (1) **Action 1:** Provide funding annually through the Lake District Residential and Riparian Owner Best Management Practices Program
 - (a) Conditions:
 - (i) Must be approved by the Lake District and their consultant
 - (ii) Provides up to \$500 per individual project
 - (iii) Limited to \$10,000.00 annually
 - (2) **Action 2:** Consider making requests for funding of nearshore BMPs through the WDNR Healthy Lakes and Rivers Initiative
 - (a) Conditions:
 - (i) Promote property owner participation through the Lake District Facebook page, webpage, newsletter, and public meetings
 - (ii) Healthy Lakes grant applications are due in November and cover a period of two years for implementation
 - 1. One extension and additional funding request can be made per grant award if additional project are identified in the two year time frame.
 - (3) **Action 3:** Increase the amount of coarse woody habitat along undeveloped or restored shoreline on Rice Lake
 - (a) Conditions:
 - (i) Complete a shoreland habitat assessment to document existing coarse woody habitat and identify shoreline where they could be installed.
 - (ii) Plan and install “fishsticks” projects through the Healthy Lakes and Rivers Initiative
 - (iii) Plan and install fish cribs in locations where they have been placed before
 - (4) **Action 4:** Implement actions included in the Comprehensive Lake Management Plan for Rice Lake
 - (a) Conditions:
 - (i) This action is dependent on projects identified in the existing 2015 Comprehensive Lake Management Plan or that may be identified in a new 9-Key Element or Comprehensive Management Plan.
- 4) **Goal Four:** Implement monitoring and evaluation that supports adaptive management of aquatic plants and water quality
- a) **Obj. 1:** Document changes in the aquatic plant community
- (1) **Action 1:** Complete a whole-lake, summer, point-intercept survey in the last year included in this management plan
 - (2) **Action 2:** Complete AIS recon and mapping surveys annually
 - (a) Conditions:
 - (i) Early summer CLP bedmapping surveys annually
 - (ii) EWM/HWM recon and mapping surveys monthly

- (iii) Purple loosestrife recon and mapping surveys in late July/August
 - (3) **Action 3:** Complete pre and post chemical treatment aquatic plant point-intercept surveys
 - (a) Conditions:
 - (i) Complete when chemical treatments of CLP and/or EWM/HWM exceed 10 acres, 10% of the littoral zone, or are funded by WDNR grant funding
 - b) **Obj. 2:** Document trends in water quality
 - (1) **Action 1:** Water quality monitoring
 - (a) Conditions:
 - (i) Continue CLMN expanded water quality testing at the central and south basins
 - (ii) Strive to better follow the recommended schedule for CLMN expanded water quality monitoring
- 5) **Goal Five:** Assess the progress and results of this project annually and report to and involve other stakeholders in planning efforts.
 - a) **Obj. 1:** Complete annual project activity and assessment reports
 - (1) **Action 1:** Use what is learned from the reports to improve management planning
 - b) **Obj. 2:** Complete end-of-project summary reporting
 - (1) **Action 1:** Review overall project successes and failures
 - (2) **Action 2:** Revise or rewrite the Comprehensive Plan as needed
 - c) **Obj. 3:** Develop and maintain partnerships to support management actions
 - (1) **Action 1:** Communicate with local, county, and state entities; local businesses, schools, clubs and community organizations, etc. to generate support for management actions
 - (2) **Action 2:** Share project results at least annually