***Turtle River Watershed Aquatic Invasive Species Action Plan 2024***

***Location:*** Rice Lake, Turtle River, Pike Lake, down the Turtle River to Lake of the Falls.

***Abundance:*** Abundance is ranked on a rake fullness scale.

***2024 Action Plan***

1). June 10th,11th, 12th : July 8th, 9th, 10th: August 6th, 7th, 8th: CLP pull on the Turtle River, Pike Lake, Turtle River down to Lake of the Falls. The LWCD crew will be hosting these pulls and providing canoes, paddles, and lifejackets. Volunteers are encouraged to pack a lunch, bring water shoes, and prepare for a day on the water. Locations, dates, and times will depend on the amount of CLP. Meet at the Arrowhead Bridge at 9:30.

2). July 5th: Pike Lake Curly Leaf Pondweed Education Outreach-and Pull. Times to be determined. Check Pike lake Pikers Facebook page or Pike Lake Neighbors Inc. website for more details on events.

3). Lake of the Falls: The DNR Directed Lakes program will be monitoring Lake of the Falls this year and conducting a variety of surveys. These include Point Intercept (PI) aquatic plant surveys, shallow water shoreline surveys, AIS meandering Surveys (these surveys look for invasives in addition to the PI Surveys), and water quality monitoring.

4). NLDC paid contractor services? We have not heard from Randy Payne on the status of a contract yet, however we think the flowage might continue this in 2024.

5). CLP Area Management- (CLP Monitoring and Hand pulling). Typically, monitoring and hand-pulling events are needed from June -October. Over the last three years, the largest amount of plant growth occurred in August. Follow-up surveys are recommended throughout the season after hand-pulling with roughly 15-20 days after hand-pulling events. To organize monitoring and pulling locations and volunteer assignments, CLP Areas have been set up. Volunteers will be assigned to each location/ section.

Map

Description automatically generated ***Map 1-Turtle River to Pike Lake***

***Map

Description automatically generatedMap 2- Pike Lake to Lake of the Falls***

**Online Map:** [**https://arcg.is/1fvfrj0**](about:blank)

***\*\*\*\*Area Descriptions- (***There are 13 designated areas of CLP. Each area may be made up of several sites.)

***Area 1:*** ***Rice Lake:*** CLP was first detected in 2011 and is estimated to have over 40 acres of pondweed. Several events are scheduled for this area. A large-scale removal project has been implemented for the past three years and appears to be showing some success in reducing the number of plants. Follow-up monitoring and evaluation should be added to a work plan. There are concerns that the activities on the lake are also causing plant fragments and turions to float down steam increasing the spread of CLP downstream. Efforts to prevent the spread are underway. Contact Rice Lake Association for details.

***Area 1a:*** ***South Bay of Rice Lake***: This area encompasses about 10 acres, however most of the plants are along the south shore. Some areas have as high as a 3-rake fullness however most of this area is a 1-2 with a few plants in clusters scattered within the 10 acres. Minimal hand pulling efforts have occurred in this area.

***Area 2: Turtle River- Rock Dam to Arrowhead Road Bridge:*** This area has seen the largest growth and spread in the last four years. Additional help is needed in this area. I suggest a contract with the Discovery Center for hand-pulling in area 2 would help. With the work schedule in late July or early August. No hand pulling was conducted in 2023.

***Area 3:* Arrowhead Bridge to Jerry Leiterman’s:** This stretch has roughly 12 sites of clp that have been managed regularly throughout the years. In 2023, this area saw a large increase in plant occurrence and abundance. June monitoring and pulling events, showed more growth and most sites were pulled with good success however the plants rebounded in July and August. Recommendations are to monitor and pull in mid-June and mid-July and early August. Due to the amount of work between sites, it is recommended to takeout at the Leiterman’s property.

***Area 4:* Leiterman’s to Ruggers:** This stretch needs careful monitoring. Two of the four sites are large and continue to show plant growth in late July/ August. The site near the small canoe landing near Ruggers can appear early and late into the growing season. The other large site is near Ruggers docks (Turtle River outlet) where there is an eddy on the river pushing turions up to the shallows just downstream from the docks. This site was pulled in 2019, and no plants were found in 2020-2021, plants reappeared late in 2022 and 2023. Rake fullness 2-3.

***Area 5:*  East shore of Tiptop Bay:** The area has a mixture of sites. Mostly in deep water and mixed amongst a rocky substrate. We have probably seen the most success at this site. In 2022, snorkeling down to the bottom was the most successful method for pulling. Rake fullness-0-1 with scattered plants.

***Area 6:*** **L-Shaped Pier:** This area has been one of the largest problems on Pike Lake. Continued plant growth has been observed from June through October even with continued monitoring and pulling. A combination of raking and snorkeling is the best method for control. Rake Fullness 1-2

***Area 7:* Gronen’s:** Just a few plants here and there appear from June through August. Careful monitoring is recommended. The site has a sandy substrate with a mixture of native plants along the shoreline. Rake Fullness-1-2. No plants were found in 2023.

***Area 8:* Weber Creek Outlet:** The largest of the sites on Pike Lake makes this location a high priority for monitoring and management. Rake fullness from 1-3 occurs with very short dense populations in 1-foot of water near the outlet. The site also has a quick drop-off and mucky marrow substrate making hand pulling and snorkeling difficult.The area has three defined sites up near the island, down to the Weber Creek outlet, and down the shoreline towards the Pike Lake outlet. Late in the season, the clp is mixed with native plants.May-October is recommended for monitoring and Management.Rake Fullness-1-3.

***Area 9:*** This area is new as of 2022 and is located on a bend in the river. There is a drainage coming from a beaver pond/wetland at the bend where the plants are mixed with native aquatic plants. Rake fullness is 0-1 with plants here and there.

***Area 10:*** New in 2022 and is also on a bend in the river. Rake fullness 0-1 mixed with natives.

***Area 11***: New in 2022 and mixed with natives. Early and late monitoring is recommended. In 2022, volunteers from Lake of Falls pulled a 5-gallon bucket full. Rake Fullness 0-2

***Area 12:*** New in 2023. Cindy documented this site, and I am unsure of the rake fullness. More monitoring needed in 202.

***Area 13:*** New in 2023. Anderson Bay. Steve Anderson discovered this new site late in 2023. 10-20 plants. More monitoring needed in

***Action Plan, Events, Education, and Communication***

Multiple Events have been planned for CLP Monitoring and Hand Pulling. In addition to these events, I would like to actively search and assign areas on Pike Lake and the Turtle River below Pike to volunteers. Area assignments for the growing season will help us organize and prioritize resources. For example, Cindy Moriarity and the Lake of the Falls crew monitor and pull areas 9, 10, 11, and 12. The same may be said for Areas 7, 6, 5, and 13 on Pike Lake. Areas 8, 4,3, and 2 are more difficult and take a long time to monitor and control and will need additional help from as many people as possible. These areas can be “Events” vs. “Volunteer Assignments”. Area 1 is on a different scale and therefore needs its own management plan. The Rice Lake Association is working on a 5-year management plan. Efforts to control the spread of turions and plant fragments should also be a priority while pulling events are happening.

***Events Calendar:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Time | Area | Meeting Location | Notes |
| June 10th | 9:30am |  | Arrowhead Bridge | Contact Zach Wilson |
| June 11th | 9:30 am |  | Arrowhead Bridge | Contact Zach Wilson |
| June 12th | 9:30 am |  | Arrowhead Bridge | Contact Zach Wilson |
| July 5th | TBD | Pike Lake | TBD | Pike Lake Neighbors |
| July 8th | 9:30 am |  | Arrowhead Bridge | Contact Zach Wilson |
| July 9th | 9:30 am |  | Ruggers Landing | Contact Zach Wilson |
| July 10th | 9:30 am |  | Arrowhead Bridge | Contact Zach Wilson |
| August 6th | 9:30 am |  | Arrowhead Bridge | Contact Zach Wilson |
| August 7th | 9:30 am |  | Arrowhead Bridge | Contact Zach Wilson |
| August 8th | 9:30 am |  | Ruggers Landing | Contact Zach Wilson |

**Education:** Education and invasive species awareness may be one of our biggest tools for combating invasive species. Many studies throughout the Midwest have indicated that the largest mode of transport of invasive species is by individual watercraft. The state has adopted a Clean, Drain, Dry, and Never Move campaign to increase awareness. Prevention signage has been installed at all public boat landings in Iron County, including many private landings.

The Iron County Land and Water Conservation Department has multiple educational events scheduled for 2023. Starting with a table display at the Mercer Library’s Earth Day, Conservation on Tap, Loon Days, Press Releases, Social Media, and Lake Association Presentations.

***Clean Boats Clean Waters:*** In addition to educational events, the ICLWCD staff will be at random boat landings throughout the Turtle Flambeau Flowage educating boaters and inspecting watercraft through the clean boats clean waters program.

***Future Prevention Strategies:*** Watercraft decontamination is a must after all waterbody’s exposure. Clean, Drain, Dry, and Decontamination are part of the protocol. In some situations, a hot water portable decontamination unit may be employed.

***Partnerships:*** Pike Lake Neighbors Inc., Rice Lake Association, Turtle Flambeau Flowage Trude Lake Property Owners Association, Lake of the Falls Association, North Lakeland Discovery Center, and Wisconsin DNR.