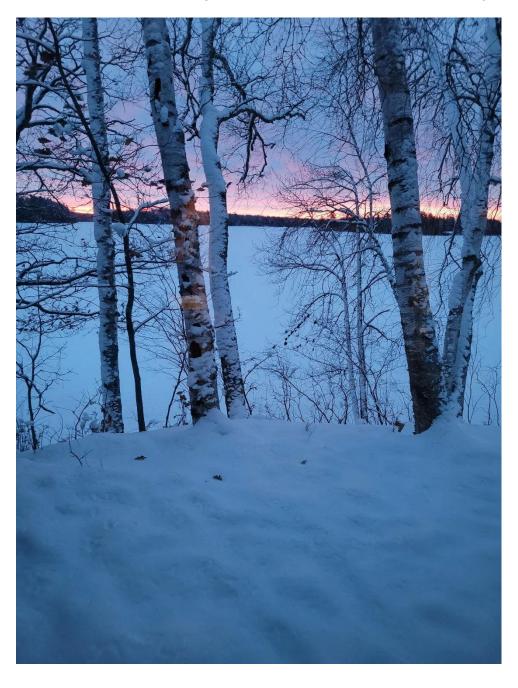
# DIAMOND LAKERS, INC. STRATEGIC PLAN

<u>MISSION</u> - To preserve and protect Diamond Lake located in the Town of Grandview, Bayfield County, Wisconsin and the surrounding land for the benefit of present and future generations.



## **GUIDING PRINCIPLES**

This Strategic Plan is intended as an adaptable road map to guide Diamond Lakers, Inc. (the "DL Association") in fulfilling its mission to conserve and protect Diamond Lake and the surrounding land. The DL Association also recognizes that Diamond Lake is, pursuant to the Wisconsin Constitution, held in trust for the public.

The Public Trust Doctrine protects the people of Wisconsin's rights to:

- Transportation and navigation on waterways.
- Protection of water quality and aquatic habitat,
- Recreational activities, including boating, fishing, hunting, trapping and swimming in waterways, and
- Enjoyment of scenic beauty while on the water.

It is also important to note that Diamond Lake is located within the Ceded Territory and is subject to rights of our First Nation citizens who are members of the Lake Superior Band of Chippewa (Ojibwe) of Wisconsin.<sup>1</sup>

Actions taken by the DL Association will be based on scientifically sound practices and solutions developed through discussions among stakeholders. The DL Association acknowledges that Diamond Lake is part of a dynamic, resilient landscape and that in carrying out and advocating for management of the Diamond Lake ecosystem, the Association shall take a holistic and contextual view.

## **OBJECTIVES**

The Board has adopted the following four primary objectives to help fulfill the Mission.

- 1. Protect, Maintain and Improve Water Quality of Diamond Lake.
- 2. Develop and Lead Diamond Lake Ecosystem Conservation Efforts.
- **3.** Maintain an Enduring Organization.
- **4.** Monitor the Impact of Climate Change on Diamond Lake and Support Climate Change Mitigation Efforts.

<sup>&</sup>lt;sup>1</sup> https://dnr.wisconsin.gov/topic/Fishing/ceded

- 1. PROTECT, MAINTAIN AND IMPROVE WATER QUALITY OF DIAMOND LAKE. "Under the Clean Water Act, every state must adopt water quality standards to protect, maintain and improve the quality of our nation's surface waters." The DL Association desires to build on efforts of the Wisconsin Department of Natural Resources and other stakeholders to help protect, maintain, and improve the water quality of Diamond Lake. These efforts shall include the following activities:
  - **1.1. Citizen Lake Monitoring**. The Water Quality Lake Management Committee will continue to complete annual comprehensive water quality studies, assess historic data, and organize ongoing Citizen Lake Monitoring efforts. Historic data is found here: <a href="https://dnr.wi.gov/lakes/waterquality/Station.aspx?id=043126">https://dnr.wi.gov/lakes/waterquality/Station.aspx?id=043126</a>.
    - **1.1.1.** Trophic State Index (TSI). Invoke scientific expertise via the assistance of a reputable lake manager to address whether the TSI of Diamond Lake is optimal and to gain a greater understanding of the variables that affect states of TSI (Eutrophic, Mesotrophic, Oligotrophic).
    - 1.1.2. Secchi Disk. The DL Association will continue to organize and promote Secchi disk readings. In doing so, we will work to identify the variables that affect Secchi disk (water clarity) values, why they vary, and quantify apparent changes over time. This shall include the application of statistical analysis to determine if there are significant changes over time and attempt to identify variables that may be important; assess whether apparent change over time may be due to "artifact," such as changes involving the subjective nature of the readings both inter- and intra-individual, or whether these are attributable to other variables.
  - 1.2. Point Intercept Survey(s). The DNR will be conducting an early detection survey of Diamond Lake in the summer of 2021. A "point intercept survey" will be conducted in August of 2021. The Board acknowledges that these surveys will provide a snapshot in time of the vegetative composition of Diamond Lake. If invasive species are not present, then the Water Quality Lake Management Committee shall submit recommendations about the frequency of additional surveys based on best practices. If invasive species are present, the Board shall marshal available resources to address the threat to Diamond Lake.
  - 1.3. Lake Management Planning. Pursuant to recent consultation with DNR personnel, it is understood that a comprehensive lake management plan may not be a necessary endeavor for the DL Association at this time. By October 31, 2021 the Water Quality Lake Management Committee of the DL Association will present for Board consideration a recommendation on whether to engage professional expertise in the development of a comprehensive lake management plan in the near future. Regardless of whether a comprehensive lake management plan is recommended, the Water Quality Lake

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<sup>&</sup>lt;sup>2</sup> https://dnr.wisconsin.gov/topic/SurfaceWater/Standards.html

Management Committee will proceed to develop a framework (the "Framework") for collecting information about Diamond Lake and organizing lake conservation efforts that builds upon historic monitoring efforts and the 2021 surveys. The Framework will provide for the assessment, monitoring and planning with respect to the four designated uses identified under the Clean Water Act: (i) Recreation, (ii) Health and Welfare, (iii) Aquatic Life, and (iv) Wildlife. The Framework will be designed to assess both narrative and numeric water quality standards. The Framework will be developed in consultation with Wisconsin DNR and other sources of scientific expertise. The Framework shall address the results of the Stakeholder Survey (discussed below) and how to involve stakeholders in the collecting of annual data.<sup>3</sup> In developing the Framework, the WQC shall consider the following issues:

- **1.3.1.** Aquatic Vegetation. Using the 2021 surveys results as a baseline, the Framework shall provide for a systematic strategy for monitoring the health of aquatic vegetation, both native and non-native species, within Diamond Lake.
- 1.3.2. Aquatic Invasive Species. The Framework shall address preliminary assessment and ways to prevent the introduction and/or establishment of aquatic invasive species. Prior to the 2021 surveys there had been two invasive species that have been identified in DL: Rainbow Smelt<sup>4</sup> and the Chinese Mystery Snail.<sup>5</sup> The Framework shall address how to monitor, manage, and to the extent possible, eliminate or reduce the impact of invasive species in DL based upon input from experts.
- 1.3.3. Boat Launch. Continue to monitor and evaluate the DL boat launch data for compliance with prevention of aquatic invasive species in DL and assess whether any further decontamination efforts are warranted. Determine if volunteer/paid workers at certain times might make this effort more effective. Identify other actions that the DL Association should consider with respect to the public boat launch and identify current best management practices.
- 1.3.4. Nutrient Assessment and Management. Address how to systematically survey and identify all areas where shoreland erosion, runoff, and changes in bottom conditions (mass loss or gain) are occurring and develop means to address these. Identify sources of exogenous phosphorus and develop a plan to reduce these. Identify factors that may influence movement of endogenous phosphorus (lake)

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<sup>&</sup>lt;sup>3</sup> https://www.uwsp.edu/cnr-ap/UWEXLakes/Documents/programs/convention/2007/lake-planning-overview.pdf

<sup>&</sup>lt;sup>4</sup> https://www.seagrant.wisc.edu/our-work/focus-areas/ais/invasive-species/invasive-species-fact-sheets/fish/rainbow-smelt/

<sup>&</sup>lt;sup>5</sup> https://www.seagrant.wisc.edu/our-work/focus-areas/ais/invasive-species/invasive-species-fact-sheets/mollusks/chinese-mystery-snail/

bottom) and whether these are significant and controllable. Specific areas to be addressed shall include:

- 1.3.4.1. Runoff. The Framework shall address ways to investigate the nature and extent of shoreland erosion with a lake manager/DNR to substantiate anecdotal evidence for both point and nonpoint source inputs of sediment and pollutants. Specific items that will be addressed include:
  - 1.3.4.1.1. Pioneer Road. The impact of runoff from Pioneer Road on water chemistry and clarity and if deemed necessary.
  - 1.3.4.1.2. Recreational Impact. Investigate available literature that pertains to the effects of boat wake on shoreland erosion/lake ecosystems.
  - 1.3.4.1.3. Property Development Impact. Provide educational materials regarding best practices for lake property development.
- 1.3.5. Shoreland Management Best Practices. Develop a lake shore erosion education plan for DL residents regarding effects of lake shore erosion and runoff from point locations and how these effects may be mitigated. Address programs/funding available for these activities e.g., Bayfield County shoreland assessment services, DNR grants and other resources that are available to improve the shoreline zone where needed.

#### 1.3.6. Inflows/Outflows.

- 1.3.6.1. Inflows. Gather information regarding the flow and chemistry of input sources to DL: Crystal Lake, including the culvert adjacent to the boat launch, and the (unnamed) east shore creek and lake springs.
- 1.3.6.2. Outflows. Gather information regarding the interrelation of Eighteen Mile Creek and Diamond Lake, including the impact of the culvert under North Diamond Lake Road.
- 1.3.7. Aquatic Invertebrates. As noted above, the Chinese Mystery Snail is one of two previously identified aquatic invasive species. The Framework shall make recommendations regarding the relative importance of gaining a better understanding of the impact of this invasive species and the overall health of the aquatic invertebrate population within the Diamond Lake ecosystem, including a possible aquatic macroinvertebrate study.
- 2. DEVELOP AND LEAD DIAMOND LAKE ECOSYSTEM CONSERVATION EFFORTS.

  Diamond Lakers recognize the interconnected nature of Diamond Lake to the surrounding

lands. The Association shall be a leader in conservation efforts for Diamond Lake and surrounding lands while also supporting broader conservation efforts.

- **2.1. General Land Protection**. Identify and catalog significant areas of the DL natural habitat and the potential benefit of conservation easements to protect in perpetuity the lands surrounding Diamond Lake.
- **2.2. Fishery Management.** Continue an active and timely dialogue with the DNR to assess the current status of the DL fishery and future goals.<sup>6</sup> Specific areas to be addressed shall include:
  - **2.2.1.** Review the goals and objectives of the fish stocking program for Diamond Lake and the secondary impacts that fish stocking has on the health of Diamond Lake.
  - 2.2.2. Evaluate input from the DL Stakeholder Survey, DNR surveys, and DNR stocking data regarding the status of the DL fishery. Based upon Stakeholder Survey results, determine the desire/need for the DLA to pursue programs designed to enhance the DL fishery such as the DNR "fish sticks" program. Seek data on the latter from nearby lakes (Crystal) that have utilized this program.
  - **2.2.3.** Study the impact of the North Diamond Lake Road culvert as a barrier between 18 Mile Creek as a spawning ground and Diamond Lake.
- 2.3. Wildlife Habitat Enhancement. Develop a science-based plan to conserve and enhance the natural habitat surrounding Diamond Lake. This shall include the continuation of the maintenance of the artificial "loon island" nesting site, located in the east cove on the north end of DL. Other enhancement activities could include construction and placement of nesting boxes for wood ducks, bat boxes, native shoreland plantings, pollinator gardens and similar small-scale efforts that can be undertaken by individual landowners.
- 3. MAINTAIN AN ENDURING ORGANIZATION. The DL Board recognizes that the best way to see the fulfillment of the Mission over the long term is to build and maintain an enduring organization that has a high level of stakeholder engagement. The DL Board will continue the efforts of former and current members through the following initiatives:

## 3.1. Inspire Stakeholder Involvement.

**3.1.1. Events**. Establish defined individual and/or committee structure to schedule and coordinate events such as guest speakers, welcoming committee for new lake

<sup>&</sup>lt;sup>6</sup>https://dnr.wisconsin.gov/sites/default/files/topic/Fishing/Reports BayfieldDiamond2018Comp.p df

members, fish boils, boat parades, recruitment of new membership from current lake residents, and overall improvement of participation in the workings of the DL Association. Create specific goals and the means to enhance the percentage of active participation in the DL Association and hence, the success of the Mission.

- 3.1.2. Communication. Publish documents (email listings, DL resident locations) and share information that inform the association of membership status and promote camaraderie and goodwill. Continue the excellence in publication of the DL newsletter and website through recognition of those who publish, contribute to, and improve it. Explore social media tools to help improve communication between members and with other stakeholders.
- **3.1.3. Preserve our Shared History**. Seek to include DL history and the contributions of our forebears by, in part, honoring and recording the rich history of DL. Toward this end the DLA will support and encourage the following:

To remember and honor those in DL's history who have impacted DL in significant fashion. Some means to achieve this are: inception of a regular DL Newsletter story in the form "Did You Know?" E.g., Did you know about the resorts that were at one time present on DL? (Names, locations, longevity, etc.) or Did you know about the logging operations near DL? (Where, when) "Do You Know?" Perhaps in the form of short stories, presentations by notables in the history of DL e.g., Earl Goeltz, Dianne Klump, Scott Byrd, Jessie Meschevitz, Frosty Palmer, and many others.

- 3.1.3.1. Initiate an effort to update the more recent history of DL via the designation of a "DL historian," who could coordinate a history of property ownerships up to the present time. The most recent attempt at recording DL history is a pamphlet entitled A History of Diamond Lake. Cable, WI produced by Diamond Lakers, Inc, 1990. It was compiled from tapes and interviews by Tom Stavrum, the founding member and officer of Diamond Lakers, Inc, and also edited and compiled by Terry Doonan. Hence, we now have a void of 31y! Clearly, much has changed in 3 decades and a recorded update is needed.
- **3.2. Gather Stakeholder Input.** Develop, conduct, and evaluate a "Stakeholder Survey." The Stakeholder Survey results will be used to inform and educate DL stakeholders regarding lake management issues and to prioritize initiatives. Where feasible, utilize this data to insure that the DL Board's initiatives are in concert with the priorities of our stakeholders.
- **3.3. Establish DLA Financial Stability.** The DL Association has a history of excellent financial resource management and has recently been granted status as a public charity under Section 501(c)(3) of the Internal Revenue Code. In addition, recent improvements in overall governance and the corresponding documents made it possible to receive a DNR Grant for the 2021 Point Intercept Survey, described above. The Board desires to continue these efforts towards financial stability and recognizes that the efforts outlined

in this Strategic Plan will require greater resources than are currently available to the DL Association. In conformity with the Bylaws, and regulations governing Wisconsin lake associations, the DL Association is limited in the amount of money that can be raised through membership dues. To supplement these funds the Board will undertake efforts to:

- **3.3.1.** Seek assistance from the DNR for all appropriate DL management studies and activities:
- **3.3.2.** Continue to build long-term reserves that will assist implementation of lake planning and management projects via solicitation of gifts and donations concurrent with annual membership dues; and
- **3.3.3.** Increase contributions from stakeholders.
- 3.4. Adopt Best Practices for Governance. In 2020 the Board completed revisions to the DL Association Bylaws and Articles of Incorporation to bring those documents in line with DNR and statutory requirements for lake grant recipients. The Board recognizes that these documents should be reviewed on a regular basis and invite member comments and suggestions on how the governance of the DL Association may be improved. Near term efforts shall be focused on organizing committees, working groups and action teams to help build out the efforts generally described in this Plan.
- 3.5. Engage Other Lake Organizations. The DL Association recognizes the impact that the health of surrounding lakes has on the health of Diamond Lake. The DL Association shall work cooperatively with the Crystal Lake, Lake Owen and Lake Namekagon organizations.
- **4. MONITOR THE IMPACT OF CLIMATE CHANGE ON DIAMOND LAKE.** According to the U.S. Global Change Research Program, "Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities." (2018, 13 U.S. government departments and agencies).<sup>7</sup>
  - **4.1. Monitor.** The DL Association shall work with stakeholders to monitor and analyze the impacts of climate change on Diamond Lake, including changes in: lake temperature, ice patterns (especially "ice out" changes), ice thickness, significant rainfall events and lake levels, levels of chlorophyll and frequency and severity of algal blooms and any other relevant parameters.<sup>8 9</sup>

<sup>&</sup>lt;sup>7</sup> https://climate.nasa.gov/scientific-consensus/

Adrian, R et.al., Limnol. Oceanogr. 2009, Nov 54(6): 2283-2297. Lakes as sentinels of climate change

<sup>&</sup>lt;sup>9</sup> Woodward, G. <u>et.al.</u>, Philos Trans, R Soc London B Biol.Sci. 2010 Jul. 12; 365 (1549): 2093-2106. *Climate change & Freshwater ecosystems: impacts across multiple levels of organization* 

- **4.2. Educate.** The DL Association shall share information with its members about ways we can all help fight climate change. For example, publication of information regarding solar energy and energy saving practices that individual DL Association members may want to implement on their DL properties to help them decrease their carbon footprint.
- **4.3. Lead**. The DL Association shall also lead by example, by integrating lake event(s) that are non-motorized e.g., a "people-powered mini flotilla/parade" of sail boats, row boats, pedal boards, canoes, kayaks, pedal craft, etc. while providing access to the water for all.