WISCONSIN DEPARTMENT OF NATURAL RESOURCES
AQUATIC INVASIVE SPECIES GRANT PROGRAM

Application Materials

Eagle River Chain of Lakes Management Planning Project – Phase II

Prepared for the

Eagle River Chain of Lakes Association

February 1, 2014

Onterra LLC
Lake Management Planning

815 Prosper Road, De Pere, WI 54115 Voice: 920.338.8860 Fax: 920.338.8865 www.onterra-eco.com

INTRODUCTION AND PROBLEM IDENTIFICATION

The Lower Eagle River Chain of Lakes, Vilas County, Wisconsin is composed of 10 lake basins and parts of two river sections comprising of 62 miles of shoreline and over 3,500 water surface acres. The complete Eagle River Chain of Lakes including the upper lakes (referred to as the Three Lakes Chain) comprises 11,295 acres. Over 1,400 riparians own real estate on the chain paying taxes on over 500 million dollars of property. Further, the chain is an integral part of Vilas County's 250 million dollar-tourist trade.

The Lower Eagle River Chain is arguably the most high profile system in northern Wisconsin and is highly sought after amongst recreationists and anglers. The chain contains 14 boat landings with over 110 vehicle parking spaces, 5 walk-in sites, 7 public parks, 15 motels/condominiums, 52 resorts and cottages, 2 bed and breakfasts, and 1 private campground. The chain is also frequented by numerous transient boaters during the 5 permitted fishing tournaments (Headwaters Muskie's Inc. Spring Classic, Professional Muskie Tournament, Annual National Championship Musky Open, Wisconsin Muskie Tour, and Paul's Pro Am).

Likely due to the intense recreational use the system sees, Eurasian water milfoil (EWM) was introduced to the Eagle River Chain at some point in time. Since 2001, various lake groups have recognized the problems caused by this invasive plant. These groups have attempted to manage varying levels of EWM infestation primarily through herbicide treatments. In 2014, the Unified Lower Eagle River Chain of Lakes Commission (ULERCLC, see below) will begin adding hand-harvesting efforts performed by professions. The latest herbicide treatment was completed during May of 2013. Data analysis shows that overall the treatments were effective at reducing densities of EWM colonies within the Eagle River Chain; a full description of herbicide activities may be found in a 2013 Treatment Report.

In 2005, the Town of Washington successfully applied for multiple Wisconsin Dept. of Natural Resources (WDNR) Lake Management Planning Grants to fund the development of aquatic plant management (APM) plans for each of the project lakes. The APM plans were completed in 2007. Understanding that the degradation of the Eagle Chain would be disastrous for the local and county economies, four municipalities including the Towns of Washington, Lincoln, and Cloverland, and the City of Eagle River, partnered to fund the completion of the plans. During the planning project, it was realized that the Lower Eagle Chain of Lakes must be viewed as a system if aquatic invasive species (AIS) were to be effectively managed. In 2006, after public discussion, the parties involved agreed to form a public/private partnership out of which a joint powers agreement was created forming the ULERCLC. The ULERCLC is a unique partnership and the first of its kind in the State of Wisconsin, consisting of representatives from each of the four municipalities bordering Lower Eagle River Chain and representatives from each of the ten main waterbodies that make up the chain. In total 25 members sit on the commission.

The Eagle River Chain of Lakes Association (ERCLA), this proposed project's sponsor, understands the importance of the Eagle River Chain, not only in terms of local and state economies, but also its importance in the lives of people from the area and well beyond. As a result, ERCLA is taking the lead in developing an updated management plan for this outstanding natural resource. The group now conducts numerous management actions on the system in addition to assisting the ULERCLC in managing Eurasian water milfoil on the Chain:

- Pre-existing (and continuing) Projects
  - The group has actively participated in a Clean Boats/Clean Waters program through Vilas County AIS Coordinator Ted Ritter, where over 400 hours are completed each year at Eagle River Chain public access points between volunteers and paid workers.
  - ERCLA volunteers have assisted the ULERCLC in collecting herbicide concentration data within and outside of EWM treatment areas as part of a collaborative study between the WDNR and United States Army Corps of Engineers that aims to understand herbicide dilution and mixing in lakes. This effort was continued in 2013.
  - Since 2010, 267 riparians, many of them ERCLA members, have signed the ULERCLC Pledge, which encourages riparian owners to reduce erosion on their shorelines and pull only non-native plants – not beneficial native plants – from the lake. This initiative was brought about through the ULERCLC's AIS monitoring grant.
  - Narrow and shallow constrictions between lakes have been designated as slow-no-wake zones, marked with buoys, to increase public safety and decrease negative effects on near-shore areas (Photo 1). Additional slow-no-wake zones have also been designated in areas of high native biodiversity to minimize the effects that high speed boating can have on the ecology of these areas.
  - A shoreline demonstration site was created at Lions Park at the Yellow Birch Lake public landing. Shoreline emergents were planted in this area to enhance the valuable shoreline habitat as well as to serve as a demonstration site of what an enhanced shoreline can look like. This area now contains bulrushes, joe-pye weed, and common bur reeds.

Photo 1. Slow-no-wake Zone Signage on the Eagle River Chain.

Photo 2. Pink Bucket at Public Landing on the Chain.

  - ERCLA continues to fund an innovative way to bridge the gap between traditional AIS signage at the boat landings and boats on the system. Named the 'Pink Bucket Program," this unique program provides bright and flashy (pink) 3-gallon buckets with an AIS and EWM identification materials at each of the boat

landings for recreationalists to take with them while on the water (Photo 2). In addition to providing an onboard AIS message, the users are prompted to put EWM fragments into the bucket and dispose of the plant materials in the waste receptacles provided at each landing by Eagle Waste, Inc. This signage is aimed at boaters leaving the system.

- In 2013, ERCLA launched a professionally-designed website.
- Since spring 2013, ERCLA has been sponsoring a scholarship for Northland Pine High School (Eagle River) students. This grant awards an annual $1,000 scholarship to a senior entering the field of natural resource management.
- For younger students, ERCLA has been sponsoring an awards program for students who do good deeds. The award is given at the discretion of a teacher, and includes a gift certificate to a local business.
- As a part of this proposed project (Phase I), an informative brochure was designed and sent to all riparian owners, local businesses and marinas with up-to-date information including AIS-related programs and initiatives, a map with useful locations pinpointed, and ERCLA membership form.

ERCLA knows that when large-scale management of AIS is conducted on a lake ecosystem, it is important to periodically assess the health of the native aquatic plant community and other components of the lake. With this understanding, ERCLA wishes to complete management plan updates for the ten lakes in the Eagle River Chain. Due to the size of the chain and the time needed for surveying, the plans are proposed to be completed in blocks of two to three lakes, starting at the upstream end of the chain and working downstream towards Watersmeet Lake and the Wisconsin River over the next three to four years (Map 1). ERCLA has elected to work from the upper end of the chain to the lower end so that water quality information collected as a part of upstream lakes would be useable during the watershed modeling of downstream lakes. This would lead to more accurate modeling on a chain-wide basis.

Developing management plans for small clusters of lakes within the chain would allow for financial savings to be realized in project costs while creating a manageable project that would allow for sufficient attention to be applied to each lake's needs. This is opposed to completing all plans simultaneously, which would facilitate great cost savings, but only produce generic plans for each lake and the chain as a whole.

This Phase II scope continues the multi-year management planning for the Eagle River Chain, with studies being conducted on Voyageur, Eagle, and Scattering Rice Lakes (Table 1 and Map 1). Field work on these lakes, as described below, would be completed in summer of 2014 and winter of 2015. Data collected and analyzed from 2012 point-intercept surveys (as a part of an Aquatic Invasive Species Established Population Control project grant) would be integrated into the updated management plans for each lake.

As described above the Eagle River Chain receives intense public use opportunities which most likely contributed to the system becoming infested with EWM. With a large-scale herbicide treatment program being conducted on the chain in past years, the proposed project would be beneficial to examine the health of these lakes while intensive management is occurring. ERCLA would like to complete the planning program for three main reasons: 1) to update

previous management plans that were created seven years ago, 2) to understand their lake ecosystem more fully, and 3) to be eligible to receive additional WDNR grant funds to address AIS and other goals of lake stakeholders. The data collected from the surveys outlined in this project will be compared to pre-existing data, and serve to guide future management of the chain. Therefore, this project is important not only in the management and protection of the chain, but also in its potential restoration. Specifically, the completed management plan would outline the specific steps necessary to restore important native habitat within and around the project lakes.

Table 1. Morphological specifics for Phase II project lakes.

Waterbody	Acres	Maximum Depth
Voyageur Lake	130	
Eagle Lake	572	34 feet
Scattering Rice Lake	267	17

PROJECT GOALS

The scope of work below outlines a project and study design that looks at the project lakes from more of an ecosystem perspective than managing their plants alone. The scope describes assessments of each lake's plants, watershed, and water quality. It also describes the integration of available fisheries information, past aquatic plant and water quality assessments, and an intensive stakeholder participation component. The study components would provide the baseline data required to assess the chain's condition, while the stakeholder participation portion would shed light on the expectations and needs of the lake users. The combination of these components and communications with WDNR specialists would allow a long-term and implementable plan to be created for the project lakes and the chain, in general.

The work required to develop the plan would rely on partnerships between the WDNR, ERCLA, Vilas County, the Town of Eagle River, and other local municipalities as applicable.

Overall, the work outlined in the following phase scopes would provide ERCLA with the following information:

- The drainage area definition (watershed) for the lakes.
- The potential point-sources of pollution that may be affecting the lakes.
- The areas of the lake's watershed that may be supplying excessive amounts of sediment and nutrients.
- A determination of plant community diversity for the lakes and how the lake's diversity compares with other lakes in the region.
- An identification and location of important plant communities (emergent, submergent, floating-leaf) within the lakes and a listing of the dominant species within those communities.
- The identification and location of any rare or threatened plant species within the lakes.

- A determination of where exotic plant species (e.g., Eurasian water milfoil, curly-leaf pondweed, purple loosestrife) occur in and around the lakes.
- Of the plant species found in the lakes, their abundances relative to each other.
- A summary and analysis of specific chemicals found in the lakes, how these concentrations compare with other lakes in the region, and what these concentrations indicate concerning the health of the lakes.
- An analysis of the limiting plant nutrient (phosphorus or nitrogen) in the lakes.
- The trophic state (e.g., oligotrophic, mesotrophic, eutrophic) of the lakes.
- Aquatic plant management alternatives.
- A summary of recent historic fisheries data, biological information relating to specific fish species, and how it applies to the management plan.
- A listing of management options that may be utilized to protect and enhance the important and sensitive areas of the lakes.
- The steps that could be taken to help improve the lake, such as work in the watershed (e.g., agricultural best management practices), shoreland restoration opportunities, in-lake native plant introductions, etc.
- The funding sources available to assist in the implementation of the pertinent management and protection options that are outlined in the lake management plan.
- An assessment of the shoreline condition and knowledge of the extent of coarse woody fish habitat on the lakes.

PROJECT SCOPE

The numerous tasks and activities involved with this important undertaking are described below. The scope is separated into various sections describing each project component, that together would provide the ERCLA with a holistic understanding of this complex ecosystem and the individuals and groups who enjoy it.

Stakeholder Participation & Education

Stakeholder participation is a very important element in any environmental planning exercise. It is important not only from the perspective of informing participants and stakeholders about the project, but also from the standpoint of enhancing their understanding of natural ecosystems and their value to a healthy environment. If participants do not understand the value of the natural ecosystem, they will not strive to protect or enhance it.

This component of the management planning effort is intended to create an exchange of information between Onterra and the lake stakeholders, including those that own property on the lake and those that enjoy the lake through its public access. The exchange of information would flow bi-directionally between the lake stakeholders and the ecologists/planners. The ecologists/planners would provide information and guidance to help stakeholders understand the

ecosystem more fully and to prepare them for the development of realistic goals and objectives concerning the management of their lake. The stakeholders would provide information pertaining to their use of the lake and their management expectations. In the end, this information would be combined to create a long-term and implementable lake management plan.

This component, as described below, would also help the ecologists/planners develop a better understanding of specific sociological needs within the district. For instance, if communication were lacking between the district board and its general membership a goal would be included within the management plan with specific actions addressing the deficiency. The need for specific or general educational initiatives would also be brought to light during this process so they too could be addressed within the management plan.

For this multi-phased project, stakeholder participation opportunities are intertwined throughout the timeline in order to solicit stakeholder thoughts, but also to keep them informed regarding the project.

Kick-off Meeting – Phase I (Completed)

Near the start of the project, a *Kick-off* meeting would be held to inform stakeholders about the project and its goals. This meeting would also provide an excellent educational opportunity that would grant an introduction to important concepts in lake ecology, such as the value and importance of a diverse aquatic plant community and the benefits of maintaining natural buffer areas around a lake. The Kick-off meeting would also provide an important forum allowing stakeholders to express their concerns and provide information about the Eagle River Chain of Lakes and its watershed to Onterra ecologists.

Stakeholder Survey – Phase II

Comments and opinions would be solicited from Eagle River Chain of Lakes stakeholders to gain important information regarding their understanding of the lakes and thoughts on how they should be managed. The information would be collected through a written survey/comment form supplied to each member household and lake property owner by mail. This information would be critical to the development of a realistic plan by supplying an indication of the needs of the stakeholders and their perspective on the management of the lakes. It would be the responsibility of the Planning Committee to prepare the survey mailing. The project budget includes tallying of survey results by a contracted professional. Onterra would create the survey content and lead the interpretation of the results. Below is an outline of these activities:

1. Onterra distributes standard survey to planning committee
2. Planning committee develops additional questions and options to be included within the survey
3. Onterra updates survey and submits to WDNR for approval
4. WDNR-approved survey is provided to planning committee
5. Planning committee prints survey, stuffs surveys in envelopes, and mails out surveys to distribution list they develop
6. Onterra provides customized Excel spreadsheet to the data entry contractor

7. Completed surveys are returned to the contractor and they tally results in provided electronic format
8. Excel spreadsheet of entered data is emailed to Onterra for analysis

Planning Meetings – Each Project Phase (Summer Following Data Collection)

Following the completion of the data collection and analysis of each project phase, a single meeting would be held in order to present the project's results and preliminary recommendations to a sub-committee (Planning or Steering Committee) of ERCLA consisting of representatives from the phase's respective lakes and to complete a prioritized implementation plan for the respective lakes. These would be very important meetings because they would facilitate the combination of the technical aspects of the project phase and the prioritized goals of the lake stakeholders. If needed, a breakout session within the Planning Meeting would be facilitated by Onterra staff should an individual lake or lakes wish for discussion on a matter pertinent to their lake alone.

As alluded to above, each phase of the project would contain a planning meeting with the representatives from that phase's lakes. During that meeting, applicable management goals and actions would be developed for the individual lakes as applicable. However, during those discussions, goals and actions more applicable to the chain as a whole may also be developed and over the course of the entire project, the chain-wide management goal and action list will become quite comprehensive. As each phase is completed, the chain-wide implementation plan would be developed and refined. Near the end of the project, that chain-wide implementation plan would be provided to all individuals that participated in a planning committee for their review. Using those reviews, the chain-wide implementation plan would be created for inclusion in the final management plan.

Mid-Project Information Meeting – Phase III (Summer 2015)

Approximately midway through the project, Onterra staff would present an update to the ERCLA general membership. The presentation would include an update on the activities that have been completed thus far in the project, some basic and interesting results, and the next steps of the project.

Wrap-up Meeting – Phase IV (Summer 2017)

At the conclusion of the project, Onterra would facilitate a *Wrap-up* meeting to present the findings and recommendations of the study and corresponding management plan to ERCLA. The presentation would be in an easy-to-follow format that would explain the study results and the reasons as to why certain alternatives were selected for inclusion within the plan. It would also allow stakeholders to express concerns and ask specific questions about the Eagle River Chain of Lakes ecosystem that could not be answered by Onterra ecologists before they were familiarized with the system.

Special Note on Meeting Schedule

As described above, stakeholder participation is an important aspect of a management planning project. Two types of meetings are outlined in the paragraphs above: those involving the general

public (Kick-off, Project Update, and Wrap-up Meetings) and those involving a subcommittee of the association (Planning Meetings). In an effort to maximize attendance at the meetings involving the general public, Onterra suggests that those meetings be held on a Saturday. Onterra staff members enjoy spending their holiday weekends with their families just as our clients enjoy spending those same weekends with their families at the lake; therefore, Onterra cannot schedule meetings for holiday weekends. Further, not all meetings can be facilitated by Onterra's founder, Tim Hoyman, some meetings and other project aspects would be handled by Onterra's other well-trained and experienced staff members.

Because the planning meetings involve a smaller group of people, we suggest that these meetings be held during a weekday afternoon or evening, preferably Monday – Thursday. Often, these meetings are held on a Thursday afternoon at a residence or other location on or near the lakes.

Informative Brochure (Phase I) (Completed)

ERCLA board members would work to create an 11x17 quad-fold colored brochure that will describe the association as well as educate readers on AIS issues and local points of interest. The brochure would be sent to all riparian property owners, as well as local businesses and marinas. Included within the brochure would be information and photos about AIS, explanation of AIS initiatives on the Eagle River Chain, a map with marinas, public access landings, beaches, parks and restaurants, and an ERCLA membership form.

During 2014, ERCLA plans to print and disburse an additional 4,000 brochures. Remaining funds in the Phase I grant will be used for this task.

Watershed Definition and Phosphorus Load Modeling (Phase IV)

The first step in this component would be an accurate delineation of each lake's watershed. GIS software would be used to generate a map of existing land cover types located within the watershed. The acreage of land currently attributed to each cover type would then be input into the Wisconsin Lake Model Suite (WiLMS) and a partitioning of watershed phosphorus loading, based on land cover type would be calculated. The sources of phosphorus loading for the watershed would also be graphically displayed using GIS software. Being that the Eagle River Chain is part of such a large flowage system, modeling the phosphorus load based purely on watershed land cover types would be unrealistic. If applicable, phosphorus concentrations and flow data from upstream areas may be utilized to treat these areas as point sources and further refine modeling of the Eagle River Chain. If these data are not available, missing variables would be provided through WiLMS. Although modeled substitutions would reduce the accuracy of the calculated loading values, they would still provide relevant information concerning the watershed's influence on the productivity of these lakes.

Overall, this task is useful in accomplishing two goals; 1) to help target specific areas for improvement within the watershed, and 2) to bring a better understanding to the lake stakeholders concerning how each lake's watershed plays a key role in its water quality regardless if problems exist or not within the watershed.

This task is being completed during the final phases of the project so sufficient water quality data can be collected on upstream lakes to facilitate more accurate modeling results. These more accurate results would be generated because upstream lakes would be treated as point-sources to the immediate downstream lake. In order to estimate each upstream lake's contribution to the immediate downstream lake, current water quality information is required; therefore, completing this task later in the project is more efficient as upstream water quality information would be available.

Lake Water Quality – Each Project Phase

Water quality conditions would be monitored within the Eagle River Chain of Lakes in order to complete the following:

- Assist in identifying potential water quality problems within the Eagle River Chain of Lakes, such as elevated nutrient levels, anaerobic conditions, etc.
- Determine the trophic state of each lake using the Trophic State Index (TSI).
    - Historic data would also be used to calculate TSI values for long-term trend analysis. This analysis would be useful in determining realistic target values for maintaining or improving the lake's water quality through watershed or in-lake management actions.
- Determine the limiting nutrient.
- Supplement and calibrate watershed assessment modeling.

Members of ERCLA currently collect data as a part of the Citizen's Lake Monitoring Network (CLMN) on some of the chain lakes. Where this is occurring, the trained volunteers would continue to collect samples using CLMN protocols; however, to facilitate consistent current water quality datasets for all chain lakes, Onterra staff would collect water quality as outlined in Table 1. Onterra staff would collect water samples at subsurface (S) and near bottom (B) depths and would occur once in spring, winter and fall and three times during the summer. This would allow determinations of limiting nutrients and internal nutrient dynamics to be made. The parameters to be measured, sample collection timing, designated collector, and cost coverage are contained in Table 2.

All samples requiring laboratory analysis would be processed through the Wisconsin State Laboratory of Hygiene (SLOH). The parameters to be measured, sample collection timing, designated collector, and cost coverage are contained in Table 3. Secchi disk transparency would also be included during each visit, as well as the creation of a temperature and dissolved oxygen profile.

Table 2. Water Quality Sample Parameters and Timing

Parameter	Spring		June		July		August		Fall		Winter	
	S	B	S	B	S	B	S	B	S	B	S	B
Dissolved Phosphorus	●	●			●	●					●	●
Total Phosphorus	●	●	●	●	●	●	●	●	●	●	●	●
Total Kjeldahl Nitrogen	●	●			●	●					●	●
Nitrate-Nitrite Nitrogen	●	●			●	●					●	●
Ammonia Nitrogen	●	●			●	●					●	●
Chlorophyll-*a*	●		●		●		●		●			
True Color	●				●							
Hardness	●				●							
Total Suspended Solids	●	●			●	●			●	●		
Laboratory Conductivity	●	●			●	●						
Laboratory pH	●	●			●	●						
Total Alkalinity	●	●			●	●						
Calcium	●				●							

Shoreland Condition Assessment – Each Project Phase

Using a GPS data collector with sub-meter accuracy, the immediate shoreline of each project lake would be surveyed and classified based upon its potential to negatively impact the system. Specifically, the shoreline of each lake would be categorized on a 5-point scale ranging from *Urbanized* to *Natural/Undeveloped*. Examples of negative qualities include shoreland areas that are maintained in an unnatural manner and impervious surfaces. The map created would assist in the prioritization of areas for protection and restoration that would likely have a benefit to the Eagle River Chain ecosystem.

As a part of the shoreline assessment survey, all incidences of coarse woody habitat would be mapped as well. This type of structure is important habitat for fish and other aquatic organisms; therefore, this information would be useful in determining whether the lake management plan should include the enhancement of woody structure in the lake.

Aquatic Plant Surveys

Aquatic plants are very important because they are the foundation of the lake ecosystem; therefore a complete and accurate assessment of the aquatic plant community is vital in every lake management project. In order to fully assess the aquatic plants, three different types of surveys would be performed: an early season AIS survey, a point-intercept survey, and an aquatic plant community mapping survey. The early season AIS survey is aimed at locating exotics early in the growing season while curly-leaf pondweed is at its peak growth and Eurasian water milfoil is higher in the water column than most native plants. The point-intercept survey is a plot-based inventory intending to characterize the relative frequency of all plants, native and exotic, and is performed at the height of the growing season. The aquatic plant community mapping survey is completed following the comprehensive survey and provides a *snapshot* of the lake's emergent and floating-leaf communities.

Overall, this task would serve to provide an accurate characterization of the lake's macrophyte community. It would indicate what species were present and where they were located, and allow for comparisons with past and future surveys. It would also help to determine where and what types of aquatic plant control, protection, and enhancement methods would be appropriate for each lake.

Point-intercept Survey

A comprehensive survey of aquatic macrophytes is used to characterize the existing plant species within the lake and includes inventories of emergent, submergent, and floating-leaved aquatic plants within each lake. The point-intercept method as described in Recommended Baseline Monitoring of Aquatic Plants in Wisconsin: Sampling Design, Field and Laboratory Procedures, Data Entry, and Analysis, and Applications (WDNR PUB-SS-1068 2010) was used in 2012 to complete these studies.

The data collected in 2012 has been analyzed by Onterra and would be used in the development of the management plan. To characterize spatial distribution, *relative frequency of occurrence* would be calculated for each species found within each lake. In addition, the plant communities of each lake would be compared to those of other lakes in the ecoregion and the state using the Floristic Quality Assessment (FQA) procedures described in Nichols (1998). In general, the FQA evaluates the species found in a lake with those found in a natural, undisturbed system; indicating the health of the current plant community in the lake.

Aquatic Plant Community Mapping

The aquatic vegetation community types within each lake (e.g., emergent, , and floating-leaved vegetation) would be mapped using the GPS technology described above, and would be based on dominant species (e.g., soft-stem bulrush, common arrowhead, large-leaf pondweed, etc.). In other words, the primary mapping unit would be the community type, but a secondary classification based on dominant species would be included on the vegetation maps. The final map would show the location of each vegetation type in each lake in relation to the lake's bathymetry. It is these communities that respond the quickest to ecological changes in a lake and the survey would provide a baseline understanding of the relative locations of these communities.

Furthermore, additional maps would indicate the areas of the lake inhabited by exotic/invasive species such as pale-yellow iris, giant reed grass, yellow garden loosestrife, and purple loosestrife if these species are located.

Representatives of all plant species located during the point-intercept and community mapping surveys would be collected and prepared for vouchering by the University of Wisconsin – Steven's Point Herbarium. A set of samples would also be provided to ERCLA.

Exotic Plant Surveys – Tie-In with current AIS Grant

Continuing EWM management is occurring on the Eagle River Chain as part of a current AIS grant. Thus, this grant proposal does not include funding for aspects of AIS surveying and treatment strategy development; however, these components (as discussed below) are scheduled

for completion during the course of this management planning project and would be integrated as appropriate.

Early Season AIS Survey (Funded through current AIS grant)

Curly-leaf pondweed has a very unusual life cycle compared to our native plants and is at peak biomass within Wisconsin lakes during late spring/early summer. Further, Eurasian water milfoil, which begins growing much earlier than most Wisconsin native plants, is often easily spotted from the surface during early summer as it towers above other lake plants. Therefore, an inventory would be conducted on the lake during the early summer to map curly-leaf pondweed and Eurasian water milfoil occurrences within the lake. Please note that this would not be a transect- or plot-based survey, but instead, would consist of a meander survey of the lake to locate these species. If curly-leaf pondweed is found, the colonies would be mapped utilizing the submeter-accuracy GPS technology. A map depicting each colony's location and density (through color-gradients) would be created based upon the data collected in June. If Eurasian water milfoil is mapped during this survey, these sites would reassessed and the plants remapped later in the summer when Eurasian water milfoil is most likely at its peak biomass.

Members of ERCLA have been conducting AIS surveys on the Eagle River Chain for a number of years. These resulting survey maps have pinpointed the location of EWM colonies, which professional ecologists have visited during late summer to map with advanced technology. The time and cost savings achieved through this well-established and fluid methodology have been great, and have overall led to an efficient way of identifying and mapping EWM on ten large waterbodies.

During summer 2013, volunteers met with Onterra ecologists to go over survey and GPS data collection techniques, and then conduct AIS surveys following the professional Early Season AIS surveys. Data from Onterra's surveys were loaded onto five volunteer GPS units so that duplicate data would not be taken. Volunteers were instructed to search areas besides those already delineated as well as 2013 treatment locations, as these were to be covered heavily by Onterra later that summer. These data were sent to Onterra staff prior to their EWM Summer Peak Biomass survey. Please note that this component will be continued throughout the planning project and is funded through a current AIS grant, but ties into the proposed Eagle River Chain Management Planning Project.

EWM Peak Biomass Survey (Funded through current AIS grant)

Much like our native plants, EWM reaches its peak growth in late summer (August/September); therefore, this is the best time to assess this species. Armed with data collected through the Early Season AIS Survey and the volunteer's surveys, Onterra ecologists would visit known EWM locations in the Eagle River Chain to refine these areas into polygon or point based colonies/occurrences. This data would be crucial in creation of treatment strategies for the following spring. Please note that this component is funded through a current AIS grant but ties into the proposed Eagle River Chain Management Planning Project.

Fisheries Data Integration – Phase III

Summary of Baseline Data

Available historic fisheries data within the past decade from the WDNR and other applicable resources would be compiled from the project lakes. This would include information relating to fish stocking, creel surveys, and comprehensive fish surveys. A list of the known fish species present in each lake along with general biological information pertaining to important fish species would be provided considering spawning habitat requirements, nursery areas, and food sources. Data collected during other surveys (coarse woody habitat data, substrate data from the point-intercept survey) would be provided and discussed within this section.

Integration within Management Plan

Although current fish data would not be collected, the compiled historic data from each project lake along with the natural history information would be considered as it pertains to the management plan. Fish habitat data collected from the coarse woody habitat survey and point-intercept survey (substrate type) would be discussed within this section and in terms of habitat enhancement goals at the conclusion of the project. As applicable, individual management actions within the Implementation Plan would be analyzed as they pertain to the health of the fish populations (e.g. timing of Eurasian water milfoil control practices to limit interference with spawning activities).

Professional *Dreissena* Mussel Monitoring

The WDNR samples over 100 waterbodies annually in search of larval and adult zebra and quagga mussels (both *Dreissena* sp.). Following discussions with the WDNR during the spring of 2006, Onterra purchased the necessary equipment and was trained by WDNR staff to sample lakes in search of these mussels. During two lake visits, the water column would be sampled at three sites using a 64-micron mesh plankton net in search of larval mussels (veligers). Mussel Monitoring would be completed once in June during the curly-leaf pondweed survey and again in July or August during the community mapping survey. Samples would be preserved and packaged according to the methodology outlined in the 2005 WDNR publication, "*Dreissena* Mussel Monitoring Protocol." Because ethyl alcohol is used in the preservation process, specific rules apply for shipment and arrangements have been made to hand-deliver samples to WDNR staff at the Northeast Region Headquarters in Green Bay where they would be responsible for shipment to the location of analysis. During these and other visits to each lake, Onterra would periodically search docks, piers, and other structures for adult forms of the mussels.

PROJECT DELIVERABLES

Two types of reports/plans would be completed as a result of this management planning effort. One type would be specific to a particular lake, while the other would be a compilation of the individual lake documents and an overview of the study results from the chain lakes as a whole.

We envision creating multiple types of documents as a result of this project and then combining those documents to create the individual lake plans and the chain-wide compilation. The following documents would be created:

Eagle River Chain of Lakes Management Plan – This document would contain an introduction to the project as a whole. It would describe how the project came about and why it is important. It would also outline the results of the studies as they pertain to all of the lakes studied within the project. By reading this section, the reader would gain an overall knowledge of the project and its results on a more general, chain-wide basis. Maps depicting the entire Chain of Lakes (project location, watershed, exotic plant inventories, etc.) would be included within this section as well.

Lake-specific Results and Conclusions – This document would outline the results of each lake's studies and the analysis of those results. It would also describe what conclusions were drawn based upon those results. Finally, this section would include the lake-specific maps described in the project scope. By reading this document, the reader would gain an understanding of the lake in particular and how that information pertains to the management of that lake. Maps depicting each lake's aquatic plant communities and exotic plant inventories (if applicable) would be included within each individual lake section.

Lake-specific Implementation Plan – This document would contain an implementation plan outlining the specifics on how the management goals and actions for that lake would be completed. Duplications of management goals and actions would of course exist between different lakes. However, lake-specific management goals and actions would also be included to assure that each lake's particular management needs are met. By reading this section, the reader would understand not only the steps that would be taken to meet the management goals of the lake, but also who would be facilitating those steps and when they would be initiated.

Appendices – Appendices would be created containing the data collected during the studies. A separate set of appendices would be created for each lake's aquatic plant, watershed, water quality, and stakeholder survey results. Further, a project-wide appendix would be made that would include all of the stakeholder participation materials.

A lake-specific report/plan would contain the *Eagle River Chain of Lakes Management Plan*, the lake's *Lake-specific Results and Conclusions*, its *Lake-specific Implementation Plan*, and the *Appendices*. The chain-wide compilation would include the *Eagle River Chain of Lakes Management Plan* and copies of each of the lake-specific documents separated by tabs.

Three hardcopies of the chain-wide compilation would be supplied to the ERCLA and single copy of each lake's specific document would be supplied to the particular lake's planning committee members. An additional hardcopy would be supplied to the Vilas County Land and Water Conservation Department. An electronic copy of the entire plan in Adobe's Portable Document Format (PDF) would also be supplied to each entity and the WDNR on CD-ROM.

TENTATIVE PHASE II PROJECT SCHEDULE

Table 3 provides an approximate timeline for completion of the tasks. The schedule needs to be flexible to accommodate for weather, scheduling conflicts, etc., but it provides a general indication of the dates for completing the proposed components. The meeting times would be very flexible and rely on availability of ERCLA members, data supplied by outside sources, and progress made on preceding tasks.

Table 3. Approximate Project Schedule for 2014 – 2015.

Task	2014											2015										
	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Water Quality Sample																							
Early Season AIS Survey																							
Plant Community Mapping Survey																							
Stakeholder Survey																							
Shoreland Assessments																							
Annual Fall Meeting																							
Data Analysis																							
Planning Comm. Meeting																							
Report – First Draft																							
Report – Final Draft																							

IN-KIND VOLUNTEER OPPORTUNITIES

Each lake will form a Planning Committee which will assist in creating their lake's management plan. In addition to attending a planning meeting, each committee member will be responsible for reviewing the lake's plan. Table 4 indicates projected committee member involvement for each lake. Note that in-kind hours from lakes scheduled for studies in Phase I would be included in the budget for this phase, Phase II lakes included in Phase II budgets, etc.

Table 4. Planning Committee In-Kind Volunteer Opportunities.

Lake	Members	Hours (10 hr/member)	Phase
Cranberry	8	80	I
Catfish	8	80	
Voyageur	4	40	II
Eagle	5	50	
Scattering Rice	5	50	
Otter	4	40	III
Lynx	4	40	
Duck	4	40	
Yellow Birch	6	60	IV
Watersmeet	6	60	

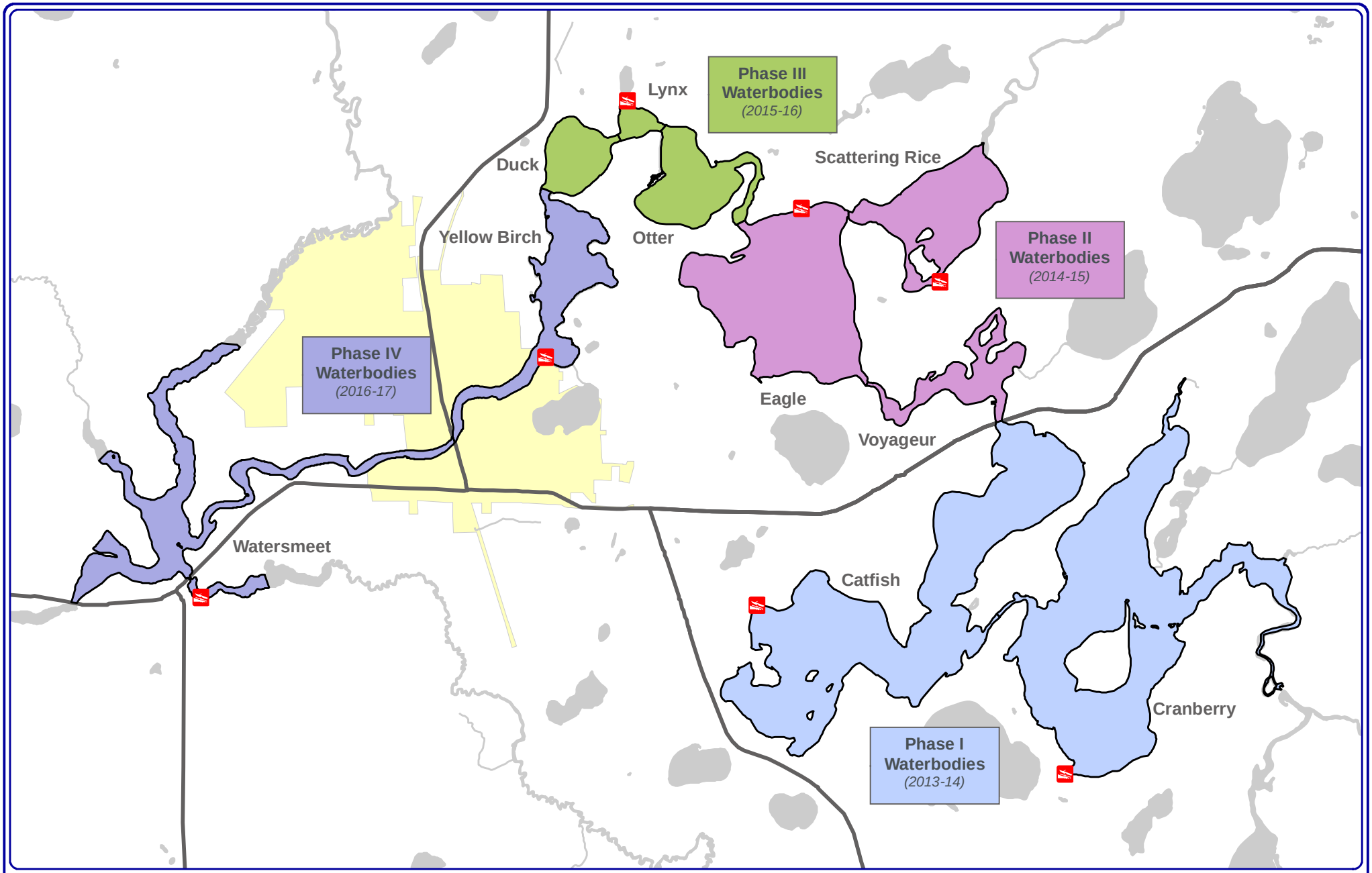
In addition to volunteer time spent by each individual lake, ERCLA will as a whole be contributing in-kind time towards the project through several additional volunteer events. ERCLA volunteer hours are displayed in Table 5 below.

Table 5. ERCLA In-Kind Volunteer Opportunities.

Task / Event	Hours
Phase I	
Kick-off Meeting (40 people x 1 hour)	40
Brochure hand delivery	38
ERCLA Grant Project Administration (40 hours)	40
Phase II	
Stakeholder Survey Development (8 people x 4 hours)	32
ERCLA Board Meetings (12 people x 4 meetings x 0.25 hours)	12
ERCLA Website Updates (2 updates x 2 hours)	4
Constant Contact Communications (2 x 1 hour)	2
ERCLA News Release (1 x 2 hours)	2
ERCLA Grant Project Administration (40 hours)	40
Phase III	
ERCLA Board Meetings (12 people x 4 meetings x 0.25 hours)	12
ERCLA Website Updates (2 updates x 2 hours)	4
Constant Contact Communications (2 x 1 hour)	2
Mid Project Information Meeting (40 people x 1 hour)	40
ERCLA News Release (1 x 2 hours)	2
ERCLA Grant Project Administration (40 hours)	40
Phase IV	
ERCLA Board Meetings (12 people x 4 meetings x 0.25 hours)	12
ERCLA Website Updates (2 updates x 2 hours)	4
Constant Contact Communications (2 x 1 hour)	2
ERCLA News Release (1 x 2 hours)	2
Wrap-up Meeting (40 people x 1.5 hours)	60
ERCLA Grant Project Administration (40 hours)	40

COST BREAKDOWN

Eagle River Chain of Lakes Management Planning Project - Phase II - February 2014	Cash Costs	Donated Value
Consulting Services		
Project Administration, Communications & Printing	$681.25	
Lake-Specific Planning Meetings	$2,735.00	
Written Stakeholder Survey	$1,200.00	
Water Quality Assessments & Travel	$6,310.00	
Shoreline Assessments & Travel	$2,685.00	
Aquatic Community Mapping & Travel	$3,795.00	
Data Analysis and Report/Plan Creation	$7,650.25	
Professional Dreissena Mussel Monitoring		$2,400.00
Other Fees		
State Lab of Hygiene Fees	$4,299.60	
Stakeholder Survey Printing, Mailing, and Entry	$5,500.00	
Volunteer & In-kind Match Opportunities		
Stakeholder Survey Development (8 people x 4 hours)		$384.00
ERCLA Board Meetings (12 people x 4 meetings x 0.25 hours)		$144.00
ERCLA Website Updates (2 updates x 2 hours)		$48.00
Constant Contact Communications (2 x 1 hour)		$24.00
ERCLA News Release (1 x 2 hours)		$24.00
ERCLA Grant Project Administration (40 hours)		$480.00
Subtotal	*$34,856.10*	*$3,504.00*
Total Project	**$38,360.10**	
State Share Requested	**$28,770.08**	

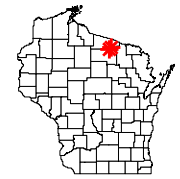


N
W E
S

4,400
Feet

Onterra LLC
Lake Management Planning
815 Prosper
De Pere, WI 54115
920.338.8860
www.onterra-eco.com

Sources:
Data: Roads and Hydro: WDNR
Map Date: October 16, 2012
Filename: *ERC_LocationPhasing.mxd*


Project Location in Wisconsin

Legend

Public Access

Map 1
Lower Eagle River Chain of Lakes
Vilas County, Wisconsin

Proposed Phased Management Planning Approach

Wisconsin Department of Natural Resources
Grant Project
Resolution

RESOLUTION OF
Eagle River Chain of Lakes Association, Inc.
Vilas and Oneida Counties, Wisconsin

WHEREAS the Eagle River Chain of Lakes, Vilas and Oneida Counties, is an important resource used by the public for recreation and enjoyment of natural beauty; and

WHEREAS we recognize that a well-planned and holistic lake *and* aquatic invasive species management project will better the lake now and for future users, and

WHEREAS the control and prevention of aquatic invasive species are important to the health and well-being of the lake; and

WHEREAS we are qualified to carry out the responsibilities of the planning project

IT IS, THEREFORE, RESOLVED THAT:

Eagle River Chain of Lakes Association, Inc. requests the funds and assistance available from the Wisconsin Department of Natural Resources under and

HEREBY AUTHORIZES William Lochte to act on behalf of the Eagle River Chain of Lakes Association, Inc.to: submit an application to the State of Wisconsin for financial aid for monitoring, planning and education purposes; sign documents; and take necessary action to undertake, direct, and complete an approved grant.

BE IT FURTHER RESOLVED THAT the Eagle River Chain of Lakes Association, Inc. will meet the obligations of the planning project including timely publication of the results and meet the financial obligations under this grant including the prompt payment of our applicable 25% or 33% commitment to project costs.

We understand the importance of a continuing management program for the Eagle River Chain of Lakes and intend to proceed on that course.

Adopted this 22nd day of January, 2014

By a vote of: _____ in favor _____ against _____ abstain

BY: _____
Carole Linn, Secretary
Eagle River Chain of Lakes Association, Inc.

State of Wisconsin
Department of Natural Resources

Aquatic Invasive Species (AIS) Control Grant Application

Form 8700-307 (12/11)

Notice: Use of this form is required by the DNR for any application filed pursuant to ch. NR 198, Wis. Adm. Code. Personal information collected on this form, including such data as your name, address, phone number, etc., will be used for management and enforcement of DNR programs, and is not intended to be used for any other purpose. Information will be made accessible to requesters under Wisconsin's Open Records laws (s. 19.32-19.39, Wis. Stats.) and requirements.

Section I: Application Type

Check one:

☒ Education, Prevention & Planning ☐ Early Detection & Response ☐ Established Infestation Control

Legislative District Numbers	
Senate	Assembly
12	34

To determine your legislative district, go to http://165.189.139.210/WAML// Type in complete address, next screen shows information

Section II: Applicant Information

Applicant: Eagle River Chain of Lakes Association, Inc.

Waterbody Name: Eagle River Chain of Lakes (See Map 1)

Project County/Township/Section/Range: Vilas T40N, R09,10,11E, Sections 15,21,23,25,28,31, & 36

Type of Eligible Lake or River Applicants

☐ County ☐ Tribe ☐ Other Gov't Unit ☐ Federal
☐ City ☐ Sanitary Dist. ☐ Nonprofit Org. ☐ State
☐ Village ☐ Dist. ☐ College, School, etc. ☐ Other _____
☐ Town ☒ Assoc.

Authorized Representative Named by Resolution	Project Contact Name
William Lochte	Tim Hoyman
Authorized Representative Title	**Project Contact Title**
President	Aquatic Ecologist
Address	**Address**
PO Box 2825	815 Prosper Road
City / State / ZIP Code	**City / State / ZIP Code**
Eagle River / WI / 54521	De Pere / WI / 54115
Daytime Phone (area code)	**Daytime Phone (area code)**
715.477.1999	920.338.8860
Evening Phone (area code)	**Evening Phone (area code)**
E-Mail Address	**E-Mail Address**
mblochte@frontier.com	thoyman@onterra-eco.com

Mail Check to: (if different from applicant)

Name and Title	Address
Organization	**City / State / ZIP Code**

For DNR Use Only

Application Type	Date Received	Date Reviewed (AIS/LC/RC)	AIS/Lake/River Coordinator Approval/Date

Waterbody ID #	Adequate Public Access ☐ Yes ☐ No	Environmental Grants Specialist Approval / Date	
Eligible Project ☐ Yes ☐ No	**Eligible Applicant** ☐ Yes ☐ No	**Project Priority Rank**	**Research / Demo Project** ☐ Yes ☐ No
Prior Grant Award(s) ☐ Yes ☐ No	**Fiscal Year(s)**	**Amount Received to Date** $	**Project Awarded** ☐ Yes ☐ No

Section III: Project Information

Project Title	Proposed Ending Date
Eagle River Chain of Lakes Management Planning Project – Phase II	December 31, 2016

Other Management Units	Letter of Support	Other Management Units	Letter of Support
1. Vilas County LWCD	☒	4. Voyageur Lake Association	☒
2. Unified Lower Eagle River Chain of Lakes Commission	☒	5. Eagle Lake Association	☒
3. Scattering Rice Lake Association	☒	6.	☐

Section IV: Public Access

Number of Public Vehicle Trailer Parking Spaces Available at Public Access Sites: 110

Number of Public Access Sites Including Boat Launches and Walk-ins: 14 boat landings, 5 walk-in sites

Section V: Cost Estimate and Grant Request

Section V must be completed or application will be returned. Details in support of Section V are welcome.	**Project Costs**		
	Column 1 Cash Costs	**Column 2 Donated Value**	***DNR Use Only***
1. Salaries, wages and employee benefits			
2. Consulting services	$25,056.50	$2,400.00	
3. Purchased services	$5,500.00		
4. Other purchased services (specify)			
5. Plant material			
6. Supplies (specify): Brochure costs			
7. Depreciation on equipment			
8. Hourly equipment use charges			
9. State Lab of Hygiene (SLOH) Costs	$4,299.60		
10. Non-SLOH Lab Costs			
11. Other (specify)		$1,104.00	
12. **Subtotals** (Sum each column)	*$34,856.10*	*$3,504.00*	
13. **Total Project Cost Estimate** (sum of **column 1** plus sum of **column 2)**	**$38,360.10**		
14. **State Share Requested (up to 75% of total costs may be requested)**	**$28,770.08**		

Subject to the following maximum grant amounts:

- Education, Prevention and Planning Projects—up to $150,000
- Early Detection and Response Projects—up to $20,000
- Established Infestation Control Projects—up to $200,000

Use of Federal funding as match: (check box below if applicable)

☐ We are using or planning to apply for Federal funds to be used as match.
If known, indicate source of funding:

Section VI: Attachments (check all that are included)

A. For all applicants: *(Refer to instructions for applicability.)*

- ☒ 1. Authorizing resolution
- ☒ 2. Letters of support
- ☒ 3. Map of project location and boundaries
- ☒ 4. Lake map with public access sites identified (per Section VI of this application and page 20 of the guidelines)
- ☒ 5. Itemized breakdown of expenses
- ☒ 6. For projects that entail sending samples to the State Laboratory of Hygiene (SLOH) only: a completed SLOH Projected Cost Form
- ☒ 7. Project scope/description:
  - ☒ a. Description of project area
  - ☒ b. Description of problem to be addressed by project
  - ☒ c. Discussion of project goal and objectives
  - ☒ d. Description of methods and activities
  - ☒ e. Description of project products or deliverables
  - ☒ f. Description of data to be collected, if applicable
  - ☒ g. Description of existing and proposed partnerships
  - ☒ h. Discussion of role of project in planning and/or management of lake
  - ☒ i. Timetable for implementation of key activities
  - ☒ j. Plan for sharing project results
  - ☒ k. Other information in support of project no described above

B. For applicants that are Lake Management Organizations (LMOs), River Management Organizations (RMOs) or Qualified Non-profit Organizations:

- ☐ 1. For first time applicant LMOs/RMOs only: A completed Form 8700-226 (Lake Association Organizational Application) or 8700-287 (River Management Organization Application)
- ☐ 2. For first time applicant Qualified Nonprofit Organizations only: Copy of IRS 501(c)(3) determination letter and copies of your Articles of Incorporation and Bylaws
- ☐ 3. List of national and/or statewide organizations with which you are affiliated
- ☐ 4. List of board members' names, including municipality and county of residence. Designate officers
- ☐ 5. Documentation of current financial status
- ☐ 6. Brochures, newsletters, annual reports or other information about your organization

C. Education, Prevention and Planning Projects: *(No additional attachments required.)*

D. Early Detection and Response Projects:

- ☐ 1. APM Permit

E. Established Infestation Control Projects:

- ☐ 1. Management Plan
- ☐ 2. APM Permit

Section VII: Certification

I certify that information on this application and all its attachments are true and correct and in conformity with applicable Wis. Statutes

Print/Type Name of Authorized Representative	Title of Authorized Representative
William Lochte	President, ERCLA
Signature of Authorized Representative	Date Signed

Unified Lower Eagle River Chain of Lakes Commission

Towns of Cloverland, Lincoln, Washington and the City of Eagle River

Unified Lower Eagle River Chain of Lakes Association
4377 Chain O'Lakes Road
Eagle River, WI 54521
January 22, 2014

Mr. Kevin Gauthier
Wisconsin Department of Natural Resources
8770 Hwy J
Woodruff, WI 54568

RE: Grant application submitted by the Eagle River Chain of Lakes Association

Dear Kevin,

The Unified Lower Eagle River Chain of Lakes Association hereby expresses its support of the application being sent to the Wisconsin Department of Natural Resources by the Eagle River Chain of Lakes Association for development of a comprehensive lake management planning project for the lower Eagle River Chain of Lakes.

Development of this plan will benefit all the lakes of the lower Eagle River Chain and aid in the continued aquatic invasive species control and prevention.

The Unified Lower Eagle River Chain of Lakes Commission appreciates the partnership with the Wisconsin Department of Natural Resources in the effort to maintain, protect, and improve the quality of the lakes.

Thank you for your support,

Dave Alleman, Treasurer
Unified Lower Eagle River Chain of Lakes Commission

Jim Spring, Chair
Carol Hendricks, Vice Chair
Town of Washington, Unified Lower Eagle River Chain of Lakes Commission
4377 Chain of Lakes Road
Eagle River, WI 54521

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS First Year FY 2014

Lake Name: Voyageur Lake
Waterbody ID#: 1603400
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.
Will the Lab be doing filtation for dissolved parameters? (Y/N) Y
Will field tests be recorded on the Lab Slip? Y

Review Period:
Application Period:

Test ID	Parameter	Samples/Month July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Analyses/ Fiscal Year	Price/ Analysis	Annual Cost For Parameter
	NUTRIENTS	2013											2014			
IC53000	DISSOLVED REACTIVE P (ORTHO)										2			2	$16.67	$33.34
IC52010	TOTAL PHOSPHORUS										2		2	4	$23.60	$94.40
IC52011	TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)													0	$23.60	$0.00
IC47001	TOTAL KJELDAHL NITROGEN										2			2	$32.99	$65.98
IC46001	NITRATE+NITRITE (AS N), DISS (EPA 353.2)										2			2	$27.00	$54.00
IC44000	AMMONIA-N, DISSOLVED										2			2	$25.89	$51.78
	OTHER WET CHEMISTRY															
IC30501	AUTOMATED CONDUCTIVITY, PH & ALKALINITY										2			2	$22.00	$44.00
IC24003	CHLORIDE													0	$20.00	$0.00
IC25110	CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED													0	$23.28	$0.00
IC25120	CHLOROPHYLL A, FLUORESCENCE LAB FILTERED													0	$24.52	$0.00
IC29000	COLOR, TRUE, PT-CO										1		1	2	$25.00	$50.00
IC34003	HARDNESS, CALCULATION METHOD (When Metals Done)										1			1	$5.37	$5.37
	HARDNESS, CALCULATION METHOD (When Metals not Done)										1			1	$54.61	$54.61
IC60001	SULFATE (EPA 375.2)													0	$26.00	$0.00
IC65000	SUSPENDED SOLIDS													0	$18.80	$0.00
IC64003	TOTAL DISSOLVED SOLIDS, 180 C										2			2	$17.13	$34.26
IC64005	TOTAL VOLATILE SOLIDS													0	$10.03	$0.00
IC66000	TURBIDITY													0	$10.00	$0.00
FLDPARAM	FIELD TESTS (For each labslip with Field Testing Recorded)	0	0	0	0	0	0	0	0	0	2	0	2	4	$0.00	$0.00
	TOTAL METALS															
IC23003	CALCIUM, TOTAL RECOVERABLE, ICP	0	0	0	0	0	0	0	0	0	1	0	0	1	$13.00	$13.00
IC37003	IRON, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC39003	MAGNESIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC40003	MANGANESE, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC54003	POTASSIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC58003	SODIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC32200	DIGESTION, TOT. RECOV. ICP	0	0	0	0	0	0	0	0	0	1	0	0	1	$23.24	$23.24
	WATER BACTI															
WM01550	E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN													0	$37.00	$0.00
														Grand Total =		$523.98

Number of Inorganic Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	2	0	2	4	**=Total Inorganic Lab Slips for Fiscal Year**
Number of Bacti Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**=Total Bacti Lab Slips for Fiscal Year**
Number of Inorganic Lab Slips (from workplans)															

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS Second Year FY 2015

Lake Name: Voyageur Lake
Waterbody ID#: 1603400
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.
Will the Lab be doing filtation for dissolved parameters? (Y/N) Y
Will field tests be recorded on the Lab Slip? Y

Review Period:
Application Period:

Parameter	2014 July	Aug	Sept	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	Jun	Analyses/ Fiscal Year	Price/ Analysis	Annual Cost For Parameter
	Samples/Month														
NUTRIENTS															
DISSOLVED REACTIVE P (ORTHO)	2							2					4	$17.17	$68.68
TOTAL PHOSPHORUS	2	2		2				2					8	$24.31	$194.46
TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)													0	$24.31	$0.00
TOTAL KJELDAHL NITROGEN	2							2					4	$33.98	$135.92
NITRATE+NITRITE (AS N), DISS (EPA 353.2)	2							2					4	$27.81	$111.24
AMMONIA-N, DISSOLVED	2							2					4	$26.67	$106.67
OTHER WET CHEMISTRY															
AUTOMATED CONDUCTIVITY, PH & ALKALINITY	2												2	$22.66	$45.32
CHLORIDE													0	$20.60	$0.00
CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED													0	$23.98	$0.00
CHLOROPHYLL A, FLUORESCENCE LAB FILTERED													0	$25.26	$0.00
COLOR, TRUE, PT-CO	1	1		1									3	$25.75	$77.25
HARDNESS, CALCULATION METHOD (When Metals Done)	1												1	$5.53	$5.53
HARDNESS, CALCULATION METHOD (When Metals not Done)	1												1	$56.25	$56.25
SULFATE (EPA 375.2)													0	$26.78	$0.00
SUSPENDED SOLIDS													0	$19.36	$0.00
TOTAL DISSOLVED SOLIDS, 180 C	2			2									4	$17.64	$70.58
TOTAL VOLATILE SOLIDS													0	$10.33	$0.00
TURBIDITY													0	$10.30	$0.00
FIELD TESTS (For each labslip with Field Testing Recorded)	2	2	0	2	0	0	0	2	0	0	0	0	8	$0.00	$0.00
TOTAL METALS															
CALCIUM, TOTAL RECOVERABLE, ICP	1	0	0	0	0	0	0	0	0	0	0	0	1	$13.39	$13.39
IRON, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
MAGNESIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
MANGANESE, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
POTASSIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
SODIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
DIGESTION, TOT. RECOV. ICP	1	0	0	0	0	0	0	0	0	0	0	0	1	$23.94	$23.94
WATER BACTI															
E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN													0	$38.11	$0.00
													Grand Total =		$909.22

Number of Inorganic Lab Slips (Machine Determined)	2	2	0	2	0	0	0	2	0	0	0	0	8	**=Total Inorganic Lab Slips for Fiscal Year**
Number of Bacti Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	0	0	0	**=Total Bacti Lab Slips for Fiscal Year**
Number of Inorganic Lab Slips (from workplans)														

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS Grand Total

Lake Name: Voyageur Lake Review Period:
Waterbody ID#: 1603400 Application Period:
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.

Parameter	Analyses For Grant	Grant Cost For Parameter
NUTRIENTS		
DISSOLVED REACTIVE P (ORTHO)	6	$102.02
TOTAL PHOSPHORUS	12	$288.86
TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)	0	$0.00
TOTAL KJELDAHL NITROGEN	6	$201.90
NITRATE+NITRITE (AS N), DISS (EPA 353.2)	6	$165.24
AMMONIA-N, DISSOLVED	6	$158.45
OTHER WET CHEMISTRY		
AUTOMATED CONDUCTIVITY, PH & ALKALINITY	4	$89.32
CHLORIDE	0	$0.00
CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED	0	$0.00
CHLOROPHYLL A, FLUORESCENCE LAB FILTERED	0	$0.00
COLOR, TRUE, PT-CO	5	$127.25
HARDNESS, CALCULATION METHOD (When Metals Done)	2	$10.90
HARDNESS, CALCULATION METHOD (When Metals not Done)	2	$110.86
SULFATE (EPA 375.2)	0	$0.00
SUSPENDED SOLIDS	0	$0.00
TOTAL DISSOLVED SOLIDS, 180 C	6	$104.84
TOTAL VOLATILE SOLIDS	0	$0.00
TURBIDITY	0	$0.00
FIELD TESTS (For each labslip with Field Testing Recorded)	12	$0.00
TOTAL METALS		
CALCIUM, TOTAL RECOVERABLE, ICP	2	$26.39
IRON, TOTAL RECOVERABLE, ICP	0	$0.00
MAGNESIUM, TOTAL RECOVERABLE, ICP	0	$0.00
MANGANESE, TOTAL RECOVERABLE, ICP	0	$0.00
POTASSIUM, TOTAL RECOVERABLE, ICP	0	$0.00
SODIUM, TOTAL RECOVERABLE, ICP	0	$0.00
DIGESTION, TOT. RECOV. ICP	2	$47.18
WATER BACTI		
E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN	0	$0.00
	Grand Total =	$1,433.20

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS First Year FY 2014

Lake Name: Eagle Lake
Waterbody ID#: 1600200
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.
Will the Lab be doing filtation for dissolved parameters? (Y/N) Y
Will field tests be recorded on the Lab Slip? Y

Review Period:
Application Period:

Test ID	Parameter	Samples/Month July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Analyses/ Fiscal Year	Price/ Analysis	Annual Cost For Parameter
	NUTRIENTS	2013											2014			
IC53000	DISSOLVED REACTIVE P (ORTHO)										2			2	$16.67	$33.34
IC52010	TOTAL PHOSPHORUS										2		2	4	$23.60	$94.40
IC52011	TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)													0	$23.60	$0.00
IC47001	TOTAL KJELDAHL NITROGEN										2			2	$32.99	$65.98
IC46001	NITRATE+NITRITE (AS N), DISS (EPA 353.2)										2			2	$27.00	$54.00
IC44000	AMMONIA-N, DISSOLVED										2			2	$25.89	$51.78
	OTHER WET CHEMISTRY															
IC30501	AUTOMATED CONDUCTIVITY, PH & ALKALINITY										2			2	$22.00	$44.00
IC24003	CHLORIDE													0	$20.00	$0.00
IC25110	CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED													0	$23.28	$0.00
IC25120	CHLOROPHYLL A, FLUORESCENCE LAB FILTERED													0	$24.52	$0.00
IC29000	COLOR, TRUE, PT-CO										1		1	2	$25.00	$50.00
IC34003	HARDNESS, CALCULATION METHOD (When Metals Done)										1			1	$5.37	$5.37
	HARDNESS, CALCULATION METHOD (When Metals not Done)										1			1	$54.61	$54.61
IC60001	SULFATE (EPA 375.2)													0	$26.00	$0.00
IC65000	SUSPENDED SOLIDS													0	$18.80	$0.00
IC64003	TOTAL DISSOLVED SOLIDS, 180 C										2			2	$17.13	$34.26
IC64005	TOTAL VOLATILE SOLIDS													0	$10.03	$0.00
IC66000	TURBIDITY													0	$10.00	$0.00
FLDPARAM	FIELD TESTS (For each labslip with Field Testing Recorded)	0	0	0	0	0	0	0	0	0	2	0	2	4	$0.00	$0.00
	TOTAL METALS															
IC23003	CALCIUM, TOTAL RECOVERABLE, ICP	0	0	0	0	0	0	0	0	0	1	0	0	1	$13.00	$13.00
IC37003	IRON, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC39003	MAGNESIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC40003	MANGANESE, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC54003	POTASSIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC58003	SODIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC32200	DIGESTION, TOT. RECOV. ICP	0	0	0	0	0	0	0	0	0	1	0	0	1	$23.24	$23.24
	WATER BACTI															
WM01550	E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN													0	$37.00	$0.00
													Grand Total =			$523.98

Number of Inorganic Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	2	0	2	4	**=Total Inorganic Lab Slips for Fiscal Year**
Number of Bacti Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**=Total Bacti Lab Slips for Fiscal Year**
Number of Inorganic Lab Slips (from workplans)															

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS Second Year FY 2015

Lake Name: Eagle Lake
Waterbody ID#: 1600200
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.
Will the Lab be doing filtation for dissolved parameters? (Y/N) Y
Will field tests be recorded on the Lab Slip? Y

Review Period:
Application Period:

Parameter	Samples/Month July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Analyses/ Fiscal Year	Price/ Analysis	Annual Cost For Parameter
NUTRIENTS															
DISSOLVED REACTIVE P (ORTHO)	2							2					4	$17.17	$68.68
TOTAL PHOSPHORUS	2	2		2				2					8	$24.31	$194.46
TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)													0	$24.31	$0.00
TOTAL KJELDAHL NITROGEN	2							2					4	$33.98	$135.92
NITRATE+NITRITE (AS N), DISS (EPA 353.2)	2							2					4	$27.81	$111.24
AMMONIA-N, DISSOLVED	2							2					4	$26.67	$106.67
OTHER WET CHEMISTRY															
AUTOMATED CONDUCTIVITY, PH & ALKALINITY	2												2	$22.66	$45.32
CHLORIDE													0	$20.60	$0.00
CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED													0	$23.98	$0.00
CHLOROPHYLL A, FLUORESCENCE LAB FILTERED													0	$25.26	$0.00
COLOR, TRUE, PT-CO	1	1		1									3	$25.75	$77.25
HARDNESS, CALCULATION METHOD (When Metals Done)	1												1	$5.53	$5.53
HARDNESS, CALCULATION METHOD (When Metals not Done)	1												1	$56.25	$56.25
SULFATE (EPA 375.2)													0	$26.78	$0.00
SUSPENDED SOLIDS													0	$19.36	$0.00
TOTAL DISSOLVED SOLIDS, 180 C	2			2									4	$17.64	$70.58
TOTAL VOLATILE SOLIDS													0	$10.33	$0.00
TURBIDITY													0	$10.30	$0.00
FIELD TESTS (For each labslip with Field Testing Recorded)	2	2	0	2	0	0	0	2	0	0	0	0	8	$0.00	$0.00
TOTAL METALS															
CALCIUM, TOTAL RECOVERABLE, ICP	1	0	0	0	0	0	0	0	0	0	0	0	1	$13.39	$13.39
IRON, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
MAGNESIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
MANGANESE, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
POTASSIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
SODIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
DIGESTION, TOT. RECOV. ICP	1	0	0	0	0	0	0	0	0	0	0	0	1	$23.94	$23.94
WATER BACTI															
E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN													0	$38.11	$0.00
													Grand Total =		$909.22

Number of Inorganic Lab Slips (Machine Determined)	2	2	0	2	0	0	0	2	0	0	0	0	8	**=Total Inorganic Lab Slips for Fiscal Year**
Number of Bacti Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	0	0	0	**=Total Bacti Lab Slips for Fiscal Year**
Number of Inorganic Lab Slips (from workplans)														

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS Grand Total

Lake Name: Eagle Lake Review Period:
Waterbody ID#: 1600200 Application Period:
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.

Parameter	Analyses For Grant	Grant Cost For Parameter
NUTRIENTS		
DISSOLVED REACTIVE P (ORTHO)	6	$102.02
TOTAL PHOSPHORUS	12	$288.86
TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)	0	$0.00
TOTAL KJELDAHL NITROGEN	6	$201.90
NITRATE+NITRITE (AS N), DISS (EPA 353.2)	6	$165.24
AMMONIA-N, DISSOLVED	6	$158.45
OTHER WET CHEMISTRY		
AUTOMATED CONDUCTIVITY, PH & ALKALINITY	4	$89.32
CHLORIDE	0	$0.00
CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED	0	$0.00
CHLOROPHYLL A, FLUORESCENCE LAB FILTERED	0	$0.00
COLOR, TRUE, PT-CO	5	$127.25
HARDNESS, CALCULATION METHOD (When Metals Done)	2	$10.90
HARDNESS, CALCULATION METHOD (When Metals not Done)	2	$110.86
SULFATE (EPA 375.2)	0	$0.00
SUSPENDED SOLIDS	0	$0.00
TOTAL DISSOLVED SOLIDS, 180 C	6	$104.84
TOTAL VOLATILE SOLIDS	0	$0.00
TURBIDITY	0	$0.00
FIELD TESTS (For each labslip with Field Testing Recorded)	12	$0.00
TOTAL METALS		
CALCIUM, TOTAL RECOVERABLE, ICP	2	$26.39
IRON, TOTAL RECOVERABLE, ICP	0	$0.00
MAGNESIUM, TOTAL RECOVERABLE, ICP	0	$0.00
MANGANESE, TOTAL RECOVERABLE, ICP	0	$0.00
POTASSIUM, TOTAL RECOVERABLE, ICP	0	$0.00
SODIUM, TOTAL RECOVERABLE, ICP	0	$0.00
DIGESTION, TOT. RECOV. ICP	2	$47.18
WATER BACTI		
E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN	0	$0.00
	Grand Total =	$1,433.20

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS First Year FY 2014

Lake Name: Scattering Rice Lake
Waterbody ID#: 1600300
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.
Will the Lab be doing filtation for dissolved parameters? (Y/N) Y
Will field tests be recorded on the Lab Slip? Y

Review Period:
Application Period:

2013 2014

Test ID	Parameter	Samples/Month July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Analyses/ Fiscal Year	Price/ Analysis	Annual Cost For Parameter
	NUTRIENTS															
IC53000	DISSOLVED REACTIVE P (ORTHO)										2			2	$16.67	$33.34
IC52010	TOTAL PHOSPHORUS										2		2	4	$23.60	$94.40
IC52011	TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)													0	$23.60	$0.00
IC47001	TOTAL KJELDAHL NITROGEN										2			2	$32.99	$65.98
IC46001	NITRATE+NITRITE (AS N), DISS (EPA 353.2)										2			2	$27.00	$54.00
IC44000	AMMONIA-N, DISSOLVED										2			2	$25.89	$51.78
	OTHER WET CHEMISTRY															
IC30501	AUTOMATED CONDUCTIVITY, PH & ALKALINITY										2			2	$22.00	$44.00
IC24003	CHLORIDE													0	$20.00	$0.00
IC25110	CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED													0	$23.28	$0.00
IC25120	CHLOROPHYLL A, FLUORESCENCE LAB FILTERED													0	$24.52	$0.00
IC29000	COLOR, TRUE, PT-CO										1		1	2	$25.00	$50.00
IC34003	HARDNESS, CALCULATION METHOD (When Metals Done)										1			1	$5.37	$5.37
	HARDNESS, CALCULATION METHOD (When Metals not Done)										1			1	$54.61	$54.61
IC60001	SULFATE (EPA 375.2)													0	$26.00	$0.00
IC65000	SUSPENDED SOLIDS													0	$18.80	$0.00
IC64003	TOTAL DISSOLVED SOLIDS, 180 C										2			2	$17.13	$34.26
IC64005	TOTAL VOLATILE SOLIDS													0	$10.03	$0.00
IC66000	TURBIDITY													0	$10.00	$0.00
FLDPARAM	FIELD TESTS (For each labslip with Field Testing Recorded)	0	0	0	0	0	0	0	0	0	2	0	2	4	$0.00	$0.00
	TOTAL METALS															
IC23003	CALCIUM, TOTAL RECOVERABLE, ICP	0	0	0	0	0	0	0	0	0	1	0	0	1	$13.00	$13.00
IC37003	IRON, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC39003	MAGNESIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC40003	MANGANESE, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC54003	POTASSIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC58003	SODIUM, TOTAL RECOVERABLE, ICP													0	$13.00	$0.00
IC32200	DIGESTION, TOT. RECOV. ICP	0	0	0	0	0	0	0	0	0	1	0	0	1	$23.24	$23.24
	WATER BACTI															
WM01550	E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN													0	$37.00	$0.00
														Grand Total =		$523.98

Number of Inorganic Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	2	0	2	4	**=Total Inorganic Lab Slips for Fiscal Year**
Number of Bacti Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**=Total Bacti Lab Slips for Fiscal Year**
Number of Inorganic Lab Slips (from workplans)															

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS Second Year FY 2015

Lake Name: Scattering Rice Lake
Waterbody ID#: 1600300
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.
Will the Lab be doing filtation for dissolved parameters? (Y/N) Y
Will field tests be recorded on the Lab Slip? Y

Review Period:
Application Period:

Parameter	Samples/Month 2014 July	Aug	Sept	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	Jun	Analyses/ Fiscal Year	Price/ Analysis	Annual Cost For Parameter
NUTRIENTS															
DISSOLVED REACTIVE P (ORTHO)	2							2					4	$17.17	$68.68
TOTAL PHOSPHORUS	2	2		2				2					8	$24.31	$194.46
TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)													0	$24.31	$0.00
TOTAL KJELDAHL NITROGEN	2							2					4	$33.98	$135.92
NITRATE+NITRITE (AS N), DISS (EPA 353.2)	2							2					4	$27.81	$111.24
AMMONIA-N, DISSOLVED	2							2					4	$26.67	$106.67
OTHER WET CHEMISTRY															
AUTOMATED CONDUCTIVITY, PH & ALKALINITY	2												2	$22.66	$45.32
CHLORIDE													0	$20.60	$0.00
CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED													0	$23.98	$0.00
CHLOROPHYLL A, FLUORESCENCE LAB FILTERED													0	$25.26	$0.00
COLOR, TRUE, PT-CO	1	1		1									3	$25.75	$77.25
HARDNESS, CALCULATION METHOD (When Metals Done)	1												1	$5.53	$5.53
HARDNESS, CALCULATION METHOD (When Metals not Done)	1												1	$56.25	$56.25
SULFATE (EPA 375.2)													0	$26.78	$0.00
SUSPENDED SOLIDS													0	$19.36	$0.00
TOTAL DISSOLVED SOLIDS, 180 C	2			2									4	$17.64	$70.58
TOTAL VOLATILE SOLIDS													0	$10.33	$0.00
TURBIDITY													0	$10.30	$0.00
FIELD TESTS (For each labslip with Field Testing Recorded)	2	2	0	2	0	0	0	2	0	0	0	0	8	$0.00	$0.00
TOTAL METALS															
CALCIUM, TOTAL RECOVERABLE, ICP	1	0	0	0	0	0	0	0	0	0	0	0	1	$13.39	$13.39
IRON, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
MAGNESIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
MANGANESE, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
POTASSIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
SODIUM, TOTAL RECOVERABLE, ICP													0	$13.39	$0.00
DIGESTION, TOT. RECOV. ICP	1	0	0	0	0	0	0	0	0	0	0	0	1	$23.94	$23.94
WATER BACTI															
E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN													0	$38.11	$0.00
													Grand Total =		$909.22

Number of Inorganic Lab Slips (Machine Determined)	2	2	0	2	0	0	0	2	0	0	0	0	8	**=Total Inorganic Lab Slips for Fiscal Year**
Number of Bacti Lab Slips (Machine Determined)	0	0	0	0	0	0	0	0	0	0	0	0	0	**=Total Bacti Lab Slips for Fiscal Year**
Number of Inorganic Lab Slips (from workplans)														

LAKE/RIVER PLANNING GRANTS PROJECTED LAB COSTS Grand Total

Lake Name: Scattering Rice Lake Review Period:
Waterbody ID#: 1600300 Application Period:
County: Vilas
Applicant Name: Eagle River Chain of Lakes Association, Inc.

Parameter	Analyses For Grant	Grant Cost For Parameter
NUTRIENTS		
DISSOLVED REACTIVE P (ORTHO)	6	$102.02
TOTAL PHOSPHORUS	12	$288.86
TOTAL DISS PHOSPHORUS (AS P), (EPA 365.1)	0	$0.00
TOTAL KJELDAHL NITROGEN	6	$201.90
NITRATE+NITRITE (AS N), DISS (EPA 353.2)	6	$165.24
AMMONIA-N, DISSOLVED	6	$158.45
OTHER WET CHEMISTRY		
AUTOMATED CONDUCTIVITY, PH & ALKALINITY	4	$89.32
CHLORIDE	0	$0.00
CHLOROPHYLL A, FLUORESCENCE, FIELD FILTERED	0	$0.00
CHLOROPHYLL A, FLUORESCENCE LAB FILTERED	0	$0.00
COLOR, TRUE, PT-CO	5	$127.25
HARDNESS, CALCULATION METHOD (When Metals Done)	2	$10.90
HARDNESS, CALCULATION METHOD (When Metals not Done)	2	$110.86
SULFATE (EPA 375.2)	0	$0.00
SUSPENDED SOLIDS	0	$0.00
TOTAL DISSOLVED SOLIDS, 180 C	6	$104.84
TOTAL VOLATILE SOLIDS	0	$0.00
TURBIDITY	0	$0.00
FIELD TESTS (For each labslip with Field Testing Recorded)	12	$0.00
TOTAL METALS		
CALCIUM, TOTAL RECOVERABLE, ICP	2	$26.39
IRON, TOTAL RECOVERABLE, ICP	0	$0.00
MAGNESIUM, TOTAL RECOVERABLE, ICP	0	$0.00
MANGANESE, TOTAL RECOVERABLE, ICP	0	$0.00
POTASSIUM, TOTAL RECOVERABLE, ICP	0	$0.00
SODIUM, TOTAL RECOVERABLE, ICP	0	$0.00
DIGESTION, TOT. RECOV. ICP	2	$47.18
WATER BACTI		
E COLI ENZYMATIC SUBTRATE QUANTITRAY MPN	0	$0.00
	Grand Total =	$1,433.20