

ENVIRONMENTAL ASSESMENT

for the

**Legend Lake and Moshawquit Lake
Aquatic Invasive Species Treatment and Monitoring**

**Menominee Indian Tribe of Wisconsin
Menominee Indian Reservation**

Prepared for the Applicant

**Menominee Indian Tribe of Wisconsin
Post Office Box 910
Keshena, Wisconsin 54135**

Prepared By

**Menominee Indian Tribe of Wisconsin
Environmental Services Department
Post Office Box 910
Keshena, Wisconsin 54135**

March 18, 2015

I. PURPOSE AND NEED	1
FEDERAL UNDERTAKINGS	1
II. ALTERNATIVES	1
NO ACTION ALTERNATIVE	1
PREFERRED ALTERNATIVE	1
III. AFFECTED ENVIRONMENT	2
LAND RESOURCES AND DESCRIPTION	2
SOILS AND TOPOGRAPHY	2
WATER RESOURCES	2
VEGETATION	2
WILDERNESS AREAS	3
AGRICULTURAL.....	3
WILDLIFE	3
CULTURAL RESOURCES	3
AIR QUALITY	3
SOCIOECONOMIC	3
TRANSPORTATION & TRAFFIC.....	4
HAZARDOUS WASTE	5
SANITATION & UTILITIES INFRASTRUCTURE.....	5
IV. ENVIRONMENTAL CONSEQUENCES	5
PROJECT LOCATION & SITE DESCRIPTION.....	5
<i>No action alternative</i>	5
<i>Preferred alternative</i>	5
SOILS AND TOPOGRAPHY	5
<i>No action alternative</i>	5
<i>Preferred alternative</i>	5
WATER RESOURCES	6
<i>No action alternative</i>	6
<i>Preferred alternative</i>	6
VEGETATION	6
<i>No action alternative</i>	6
<i>Preferred alternative</i>	6
<i>No action alternative</i>	6
<i>Preferred alternative</i>	7
WILDLIFE	7
<i>No action alternative</i>	7
<i>Preferred alternative</i>	7
CULTURAL RESOURCES.....	7
<i>No action alternative</i>	7
<i>Preferred alternative</i>	7
AIR QUALITY	7
<i>No action alternative</i>	7
<i>Preferred alternative</i>	8
SOCIOECONOMIC	8
<i>No action alternative</i>	8
<i>Preferred alternative</i>	8
TRANSPORTATION	8
<i>No action alternative</i>	8
<i>Preferred alternative</i>	8

SANITATION/UTILITIES.....	8
<i>No action alternative</i>	8
<i>Preferred alternative</i>	8
V. MITIGATION	8
<i>Water Resources</i>	8
<i>Wildlife</i>	9
<i>Traffic Safety</i>	9
<i>Cultural Resources</i>	9
VI. CONSULTATION AND COORDINATION	9
<i>Preparer:</i>	9
<i>Consultation and Coordination</i>	9
APPENDIX A	A
APPENDIX B	C
APPENDIX C	E
APPENDIX D	D
APPENDIX E	E

I. PURPOSE AND NEED

The Menominee Indian Tribe of Wisconsin (tribe) continues to support projects that provide for the needs of its members. The proposed project will allow the tribe to control Eurasian Water Milfoil (EWM) and Curly-leaf Pondweed (CLP) on 1,497 acres in two of the most populated and used lakes on the Reservation. (see site location maps Appendix A). Proposed treatments will improve fish habitat and overall lake diversity, restore native aquatic species and provide improved recreation opportunities. This project is consistent with the goals and objectives identified in the tribe's Strategic Plan and the Invasive Species Management Plan (ISMP), as well as the goals and objectives of the Tribe's Environmental Department. In addition it offers tribal members quality lake habitat on a system that has been impacted by invasives and has resulted in degradation of available fishing opportunities.

This project will assist the Tribe in meeting its Strategic Plan by addressing Natural Resources Goal 15; Water Use – Restoration of Impaired and Impeded Waters, Goal 17, Water Use – Develop a Plan to Control and Remove Invasive Species, Goal 19; Fish and Wildlife – Maintain and Enhance Diversity of Native Species for Cultural Wellbeing, (Strategic Plan, Omaeqnomenewak 2007)

Federal Undertakings

This undertaking is being assessed as part of the Great Lakes Restoration Initiative Funding awarded through the United States Fish and Wildlife Service and the Environmental Protection Agency, which is a result of Federal undertaking to better manage and restore waterways nationwide. The Tribal Environmental Services Department (ESD) has conducted coordinated communication with the respective federal agencies. A listing of the federal personnel and agency concurrence can be found in the coordination and consultation section.

II. ALTERNATIVES

No Action Alternative

This alternative would include no treatment or monitoring of the existing EWM and CLP. Under this alternative no work would be done resulting in the further spread of the EWM and CLP in other areas within Legend and Moshawquit Lakes. No treatment would result in additional degradation and loss of diversity within the lake basins and community members will lose opportunities for quality fishing and recreational activity.

Preferred Alternative

The preferred alternative is to control EWM and CLP on 1,497 acres in two of the most populated and used lakes on the Reservation. See attached lake maps for additional details of the areas to be restored (Appendix B). This alternative will result in treatment of the EWM and CLP impacted areas within the Legend and Moshawquit Lake systems. Treatment of the invasives will allow for the native vegetation to reestablish and restore the diversity to the areas currently impacted by EWM and CLP. Continued monitoring will allow for measuring success of treatments and to detect any new occurrences.

III. AFFECTED ENVIRONMENT

Land Resources and Description

The Menominee Reservation is located in northeastern Wisconsin and is home to approximately 3,700 tribal members of the Menominee Indian Tribe of Wisconsin (Menominee Indian Tribe of Wisconsin Facts and Figures Volume 2, available for viewing at the Menominee Environmental Services Department). The reservation is approximately 240,000 acres in size and is primarily forested.

The project occurs within Legend Lake and Moshawquit Lake, in parts of Sections 13 – 17, 19, 21-24, T28N, R16E Menominee Indian Reservation, WI (see site location maps Appendix A).

Soils and Topography

The existing soils and topography at the project site are classified in the Menominee County Soils Survey as Karlin sandy loam 0-6% slopes, Mequithy-Rock outcrop complex 6-15% slopes, and Padus fine sandy loamy sand 6-15% slopes.

Water Resources

Surface waters from the Reservation drain into Lake Michigan via the Wolf River, Oconto River Watersheds, and the Lower and Upper Green Bay Basins respectively. Today the Reservation contains an abundance of pristine water resources, many with little or no connected development. The project site is within Legend Lake and Moshawquit Lake basins, which flows eastwardly toward the Oconto River Watershed and into Green Bay.

Wetlands in the project areas consist of riparian, shallow marsh and floodplain wetlands. These types of wetlands occur throughout the reservation and are very common.

Vegetation

The Tribe manages the forest through the Menominee Tribal Enterprise (MTE) operations, which is the management arm of the tribe. MTE has adopted a Forest Habitat Type

Classification for the Reservation, “Forest Habitat Type Classification for the Menominee Indian Reservation” by John Kotar and Timothy Burger, Department of Forestry, University of Wisconsin Madison (available for viewing at the Menominee Environmental Services Department). The project area is classed **PArVAo** Quercus/Vaccinium (Pin Oak/Blueberry) and exists basically throughout the southeastern portion of the reservation.

Wilderness Areas

Formally designated wilderness areas do not exist within the Menominee Reservation.

Agricultural

There are no agriculture lands within the project area.

Wildlife

Wildlife species of the area are very diverse and abundant and include whitetail deer, timber wolf, black bear, turkey and small mammal such as raccoon, rabbit, and other small rodents. Surrounding wooded parcel of the project area supports woodland songbirds such as blue jays, chickadees, sparrows, woodpeckers, etc. At present USFWS and the tribe have determined that a federally listed threatened or endangered species does occur near the project area. (see Appendix C).

Cultural Resources

The Menominee Reservation and forest contain many valuable cultural resources. The specific locations of the cultural resources are not publicly available to help protect them from adverse action. To help prevent potential adverse actions from federal actions, Congress created Section 106 of the National Historic Preservation Act (NHPA) 16 U.S.C. 470, as amended, that directs federal agencies, like USFWS to consult with Tribes when these actions are proposed. The tribe currently has on staff a Tribal Historic Preservation Officer (THPO). The THPO has the authority to act on issues of concurrence for Environmental Assessments and the National Historic Preservation Act. Clearance for this project is attached in appendix D.

Air Quality

The existing air quality at the project site is exceptional.

Socioeconomic

The seat of government for the Menominee Indian Tribe of Wisconsin (hereinafter, the “Tribe”) is located approximately 45 miles northwest of Green Bay, Wisconsin, on the Menominee Indian Reservation, in the Village of Keshena. The Reservation shares nearly coterminous geopolitical boundaries with Menominee County, is situated on the ancestral homelands of its 8,962 tribal

members, and includes 5 main communities: Keshena, Neopit, Middle Village, Zoar, and South Branch. The Reservation is comprised of 235,523 acres, or approximately 357.96 square miles, and includes over 407 miles of improved and unimproved roads, 187 rivers and streams, and 53 lakes.

According to the US Census, the total population that actually resides in Menominee County is 4,232, with 88% (or 3,703) accounting for the Native American population. According to the current Demographic Report provided by the Tribe's Enrollment Department, the Menominee enrolled population residing on the Reservation, from ages 0 to 105, is actually 4,211, which includes 2,165 males and 2,046 females; there is an additional 364 Menominee descendants residing on the Reservation, including 200 males and 164 females. Total Tribal enrollment is 8,968.

The Menominee Indian Reservation/Menominee County has a high rate of poverty with 31.4% of individuals living below poverty level (source: 2009-2013 American Community Survey 5-year Estimates). Further, while the median household income is \$33,333 the percapita income for families is \$14,710. According to the 2014 U.W. County Health Rankings, the average unemployment rate is 15.3% is more than double the State of Wisconsin's average rate of 6.9%; also, children are in poverty at 47% in comparison to the State of Wisconsin's 17% and children in single-parent households is 55% in comparison to the State's 30%. It further shows the premature death (i.e., years of potential life loss before the age of 75 per 100,000) is at 15,929 in comparison to the State of Wisconsin at 5,878.

The reported school enrollment for the tribe grades K-12 in January 2000 is 1,738 and there are 709 students enrolled at the College of the Menominee Nation (Menominee Indian Tribe of Wisconsin Facts and Figures Volume 2).

The tribe operates the Menominee Tribal Clinic, located in the village of Keshena, that serves the tribal community as well as members of the surrounding communities. The clinic services include medical, dental, mental health, ambulance and EMT staff and physicians. The nearest hospital is located in the city of Shawano, WI.

Maehnowesekiyah is the tribally controlled, licensed community based residential AODA treatment facility. In 2003 it was reported that there were 537 AODA cases treated or referred (Menominee Indian Tribe of Wisconsin Facts and Figures 3rd Edition, Supp. 2008).

Transportation & Traffic

The main mode of transportation in this rural area is vehicular traffic. The Tribe provides a public transportation system, which serves all parts of the Reservation. Five vans and two buses currently run various routes to and from the communities from 6:30 a.m. to 5:00 p.m. five days a week.

The arterial highways into the reservation are State Highways 47 & 55. The proposed project will be near or adjacent to State Highway 47/55, CTH VV and various arterial tertiary roads.

Hazardous Waste

The project site has not been used for hazardous waste storage nor is it a route for hazardous waste transportation.

Sanitation & Utilities Infrastructure

The Menominee Tribe have capped historic open trash dumps and shifted to a modern solid waste management system consisting of curbside pick up, recycling, transfer station and transfer to approved regulated landfills off the reservation. The solid waste system has been planned with adequate capacity to handle the solid waste stream from the proposed project areas.

The tribe has infrastructure in the communities for sewer and water utilities. Community wells service the residents within the villages and the remaining areas are served by private wells. Keshena and Neopit have lagoon systems for wastewater treatment and Middle village is serviced by a Sequence batch reactor facility. The remaining areas are treated through filtration septic systems. The proposed project will not be utilizing sanitation or utilities.

IV. ENVIRONMENTAL CONSEQUENCES

The following beneficial and adverse environmental impacts have been identified with respect to the project.

Project Location & Site Description

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

The existing project location and description will remain as described above. Changes to the lake environment and other changes affecting the overall environmental conditions related to the project will be described in the following sections. The lake system and surface acreage overall will not change as a result of this project.

Soils and Topography

No action alternative

This alternative will result in no change to the soils and topography of the area.

Preferred alternative

Implementation of the project will have a minimal impact on the soil. The topography of the site

will not change as there will not be soil removal at the site. Erosion will not be a concern with this project due to non-soil disturbance and work occurring only within the waterbody.

Water Resources

No action alternative

In this alternative there would be no change in the existing conditions at the project location. This no action would result in further degradation of conditions associated with accelerated plant growth that can lead to excessive oxygen demand during die off, as well as excessive algal blooms (<http://www.michigan.gov/dnr/0,1607,7-153-10364-119822--,00.html>).

Groundwater would not be affected in this alternative.

Preferred alternative

Considerations will be required when the application of the following herbicides are made. Detailed permit conditions issued by Wisconsin Department of Natural Resources, and approved by the Tribe, will address protection of water quality and aquatic life. The herbicides proposed to be used during this project are; Navigate and Aquastrike, both products have specific water use restrictions (see product labels Appendix E.) dependent on the activity or use, but are expected to be very short term and will result in minimal impacts to water quality.

The groundwater is being utilized in the area for the drinking water supply, but the project is not expected to result in any detrimental effects. Drinking water restrictions related to both chemicals only will apply if the application is made directly to the potable water source or near intake facilities.

Vegetation

No action alternative

In this alternative there would be continued loss in plant diversity and increases in non-native EWM and CLP resulting in significant impacts to existing conditions at the project location.

Preferred alternative

The proposed activity will have immediate and long term impacts to existing EWM and CLP stands. Past treatments have shown that the reduction in EWM and CLP have resulted in the return of a more diverse native aquatic plant community. Due to the application of herbicides there will be short term alteration of the aquatic vegetation in the project areas.

Agriculture

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

There are no agricultural activities in the area of the proposed project.

Wildlife

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

At present the tribe has determined that a federally listed threatened or endangered species does occur near the project area. The initial step of the Section 7 consultation was to obtain a list of threatened or endangered species from the USFWS Midwest Region's *Wisconsin County Distribution of Federally Listed Endangered, Threatened, proposed and Candidate Species*. For Menominee County/Reservation, the list includes the KBB and wild blue lupine as the sole food source for KBB caterpillars. The biology staff of the Menominee Conservation Fish and Wildlife Department indicated that KBB have been observed on three acres of wild blue lupine habitat in a power line right-of-way located in the southeastern portion of the Menominee Reservation. Tribal Environmental staff has inventoried wild blue lupine in habitats suitable for KBB. Because this activity is entirely within the surface waters of the lakes and no disturbance of upland areas will occur, USFWS has determined that this action would have "No Effect" on the KBB or its critical habitat. Additionally the gray wolf and northern long-eared bat also are listed to occur within the Menominee Reservation. As stated previously, this activity is entirely within the surface waters of the lakes and no disturbance of upland areas will occur.

The determination that no adverse or significant effects would occur as a result of treatment is formally communicated to USFWS as part of this EA. Endangered Species concerns have been addressed through coordination with USFWS (see letter appendix C).

Some short term impacts may occur to fish and aquatic invertebrates as a result of direct contact with herbicide use and short term dissolved oxygen reductions (see label restrictions). Fish and aquatic life populations will not be impacted as a result of this activity.

Cultural Resources

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

Historic Preservation has reviewed the site and the correspondence is in appendix D.

Air Quality

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

During treatment all personnel will be required to wear protective equipment to avoid contact with eyes and skin. The label provides specific information on personal protective equipment.

Socioeconomic

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

The preferred alternative provides for short term impacts to lake areas but will improve overall activity uses that will include; fishing, boating and other related recreational opportunities.

Transportation

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

The proposed project should not impact transportation as no road access will be lost or limited as part of the treatment activities.

Sanitation/Utilities

No action alternative

In this alternative there would be no change in the existing conditions at the project location.

Preferred alternative

The proposed project will not be utilizing sanitation or utilities facilities, so there will be no change to the existing conditions.

V. MITIGATION

Water Resources

Efforts will be taken to minimize the impacts to native plant communities through proper timing of treatment. Tribal approval of permits will be required as part of the project to ensure that water quality and Tribal Uses are protected. Permit conditions will include proper Best Management Practice conditions, as well as other requirements outlined in the Wisconsin Department of Natural Resources permit controls. Previous requirements by DNR included; pre-

treatment surveys to monitor established native plant conditions, consecutive treatments in each basin within 8 hour period and no treatments in winds greater than 15mph.

There will be required public notices issued as part of permitting. Notices will be provided at six public access points on the lakes, as well as notification requirements identified on the product label. Navigate requires notification via posting along shorelines to include the date and time of the day of treatment. Notification will include description of any water use restrictions in accordance with the labels or Federal, State or Local laws. The tribe will also provide public notice via the internet and email system of the ESD.

Wildlife

Because the use of this area will not impact endangered or threatened species there will not be a need for mitigation.

Potential short term impacts will be mitigated by the pending results of the establishment of desired native vegetation and improved habitat that will occur after treatment.

Traffic Safety

The project will not impact traffic activity, so no mitigation will be necessary.

Cultural Resources

In the affected environment, section III, the description of cultural resources and the survey completed indicate that there are not any significant archeological sites in the areas being treated. If anything is discovered during treatment activities the letter from the THPO provides guidance and recommendations on protection of those sensitive areas within the development.

VI. CONSULTATION AND COORDINATION

Preparer:

Douglas Cox, Environmental Program Coordinator, Menominee Indian Tribe of Wisconsin

Consultation and Coordination

The following is a list of entities that were consulted during the preparation of this environmental assessment. Consultation letters and reports can be found in the appendices.

Tribal Government:

Menominee Indian Tribe of Wisconsin

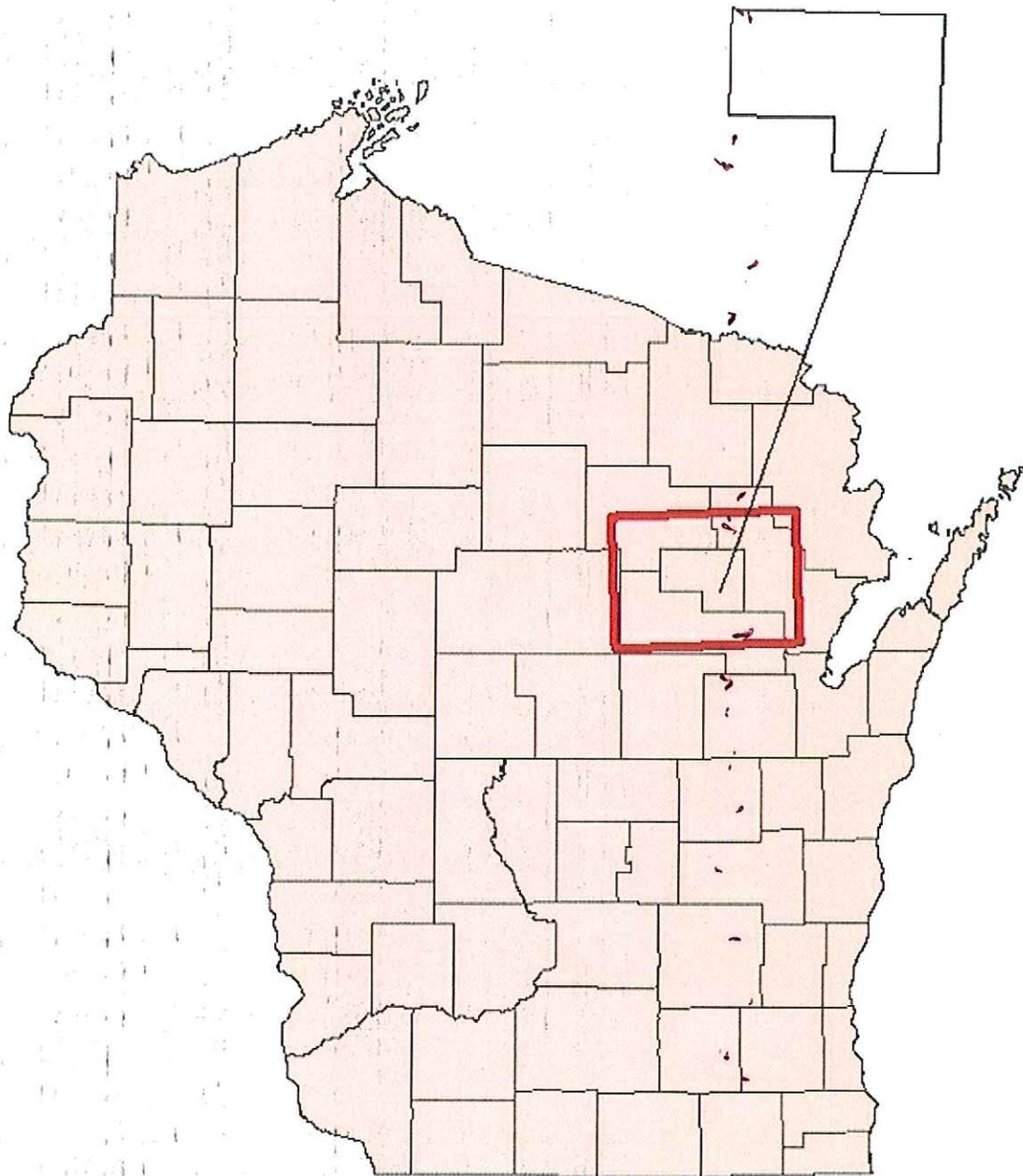
Menominee Tribal Enterprises

Federal Government:

U.S. Fish and Wildlife Services

U.S. Bureau of Indian Affairs

APPENDIX A



Site Location Map

 Menominee Reservation

**Menominee Indian
Reservation**



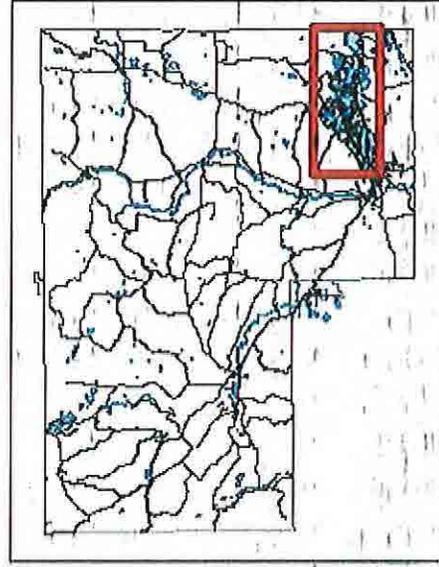
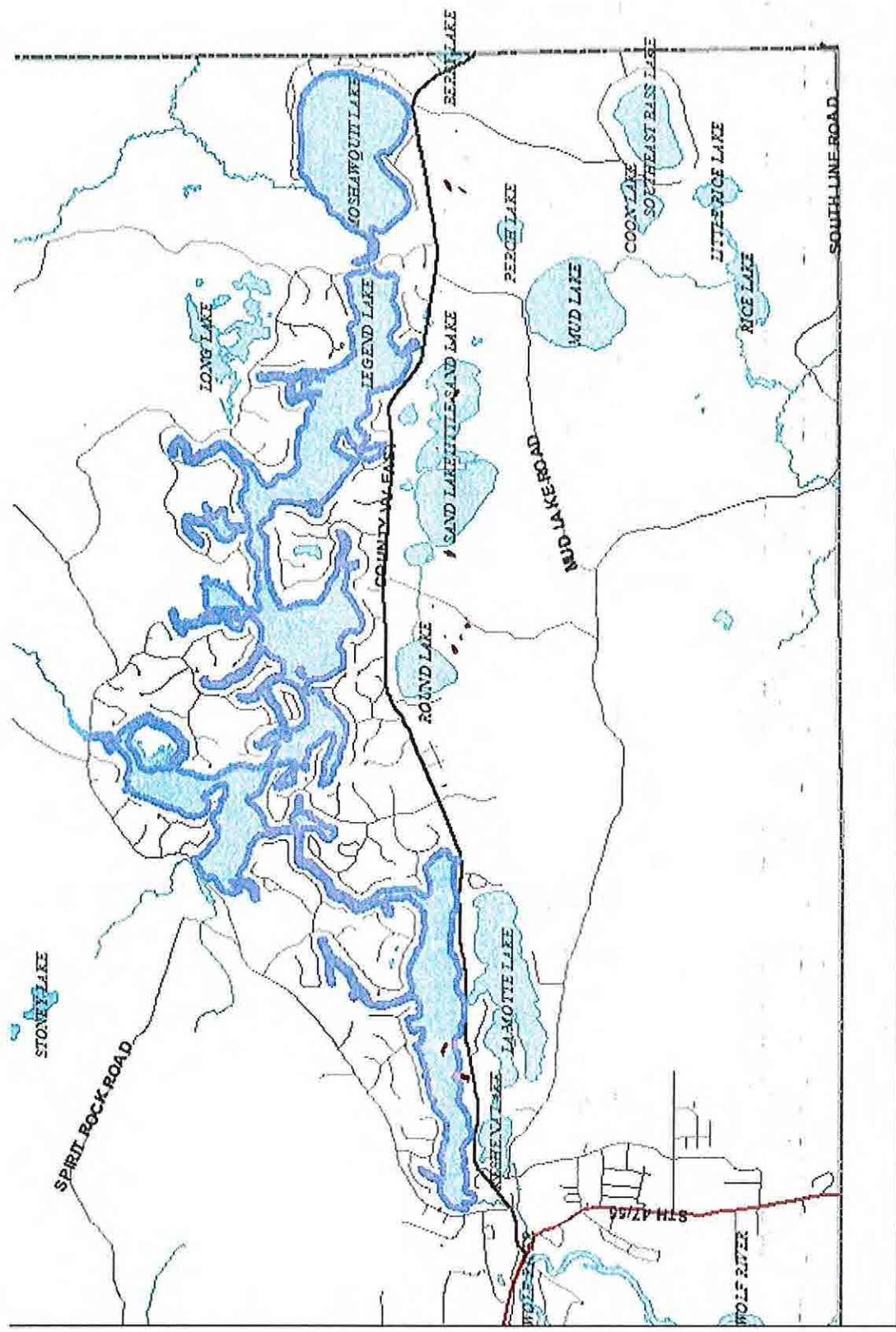
**GLRI Treatment
and Monitoring Area**

Roads

- CTH
- STH
- TBR
- Rivers

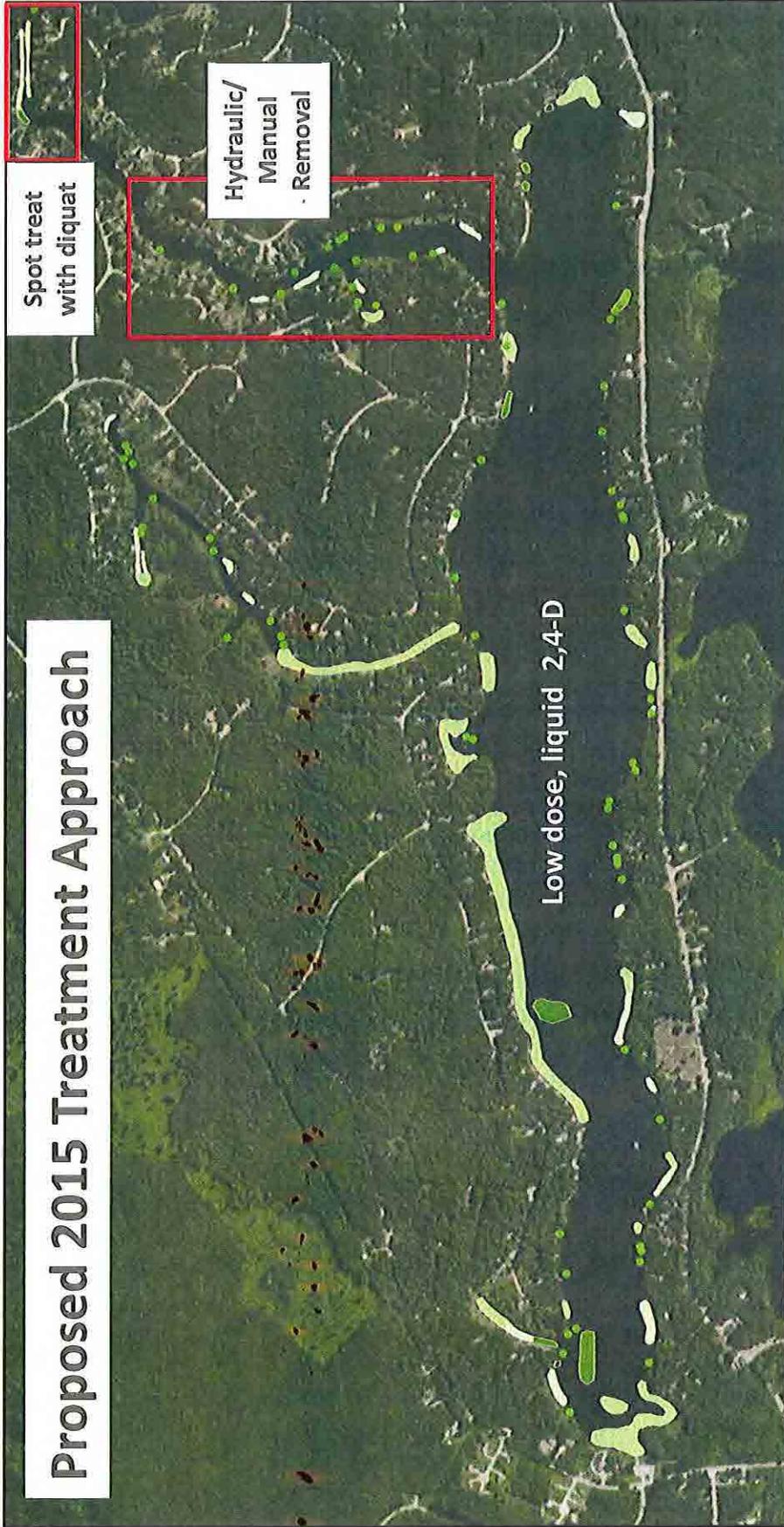
Reservation Boundary

Lakes & Rivers



APPENDIX B

Proposed 2015 Treatment Approach

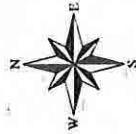


Spot treat with diquat

Hydraulic/Manual Removal

Low dose, liquid 2,4-D

- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/RWM
- Moderately dense EWM/HWM
- Dense EWM/HWM



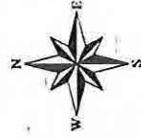
Cason & ASSOCIATES, LLC
LAKE & POND MANAGERS

Proposed 2015 Treatment Approach

Hydraulic/
Manual
Removal

Spot treat
with 2,4-D
and endothall

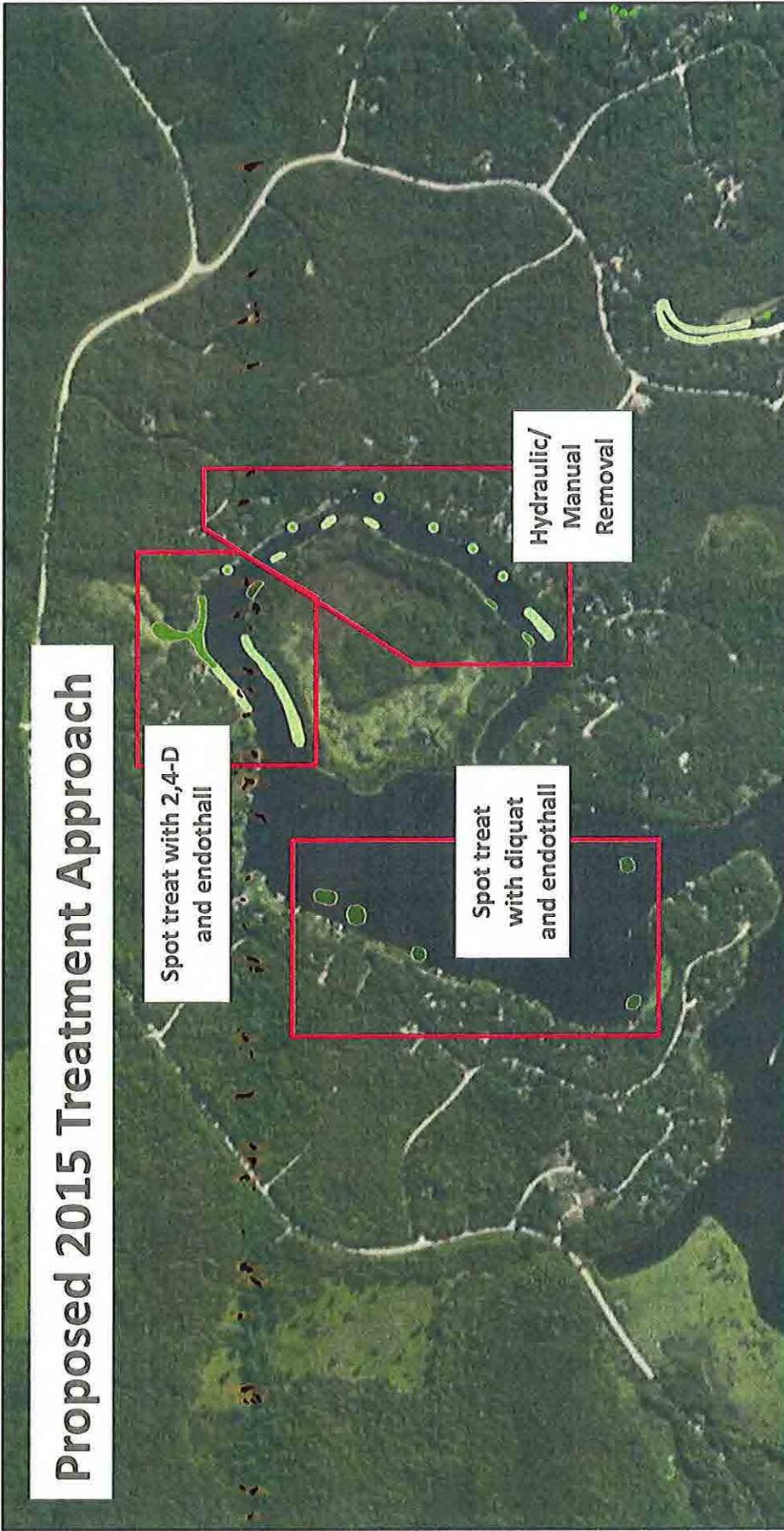
- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/HWM
- Moderately dense EWM/HWM
- Dense EWM/HWM



Cason
& ASSOCIATES, LLC
LAKE & POND MANAGERS



Proposed 2015 Treatment Approach



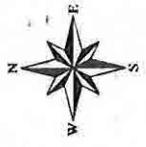
- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/HWM
- Moderately dense EWM/HWM
- Dense EWM/HWM



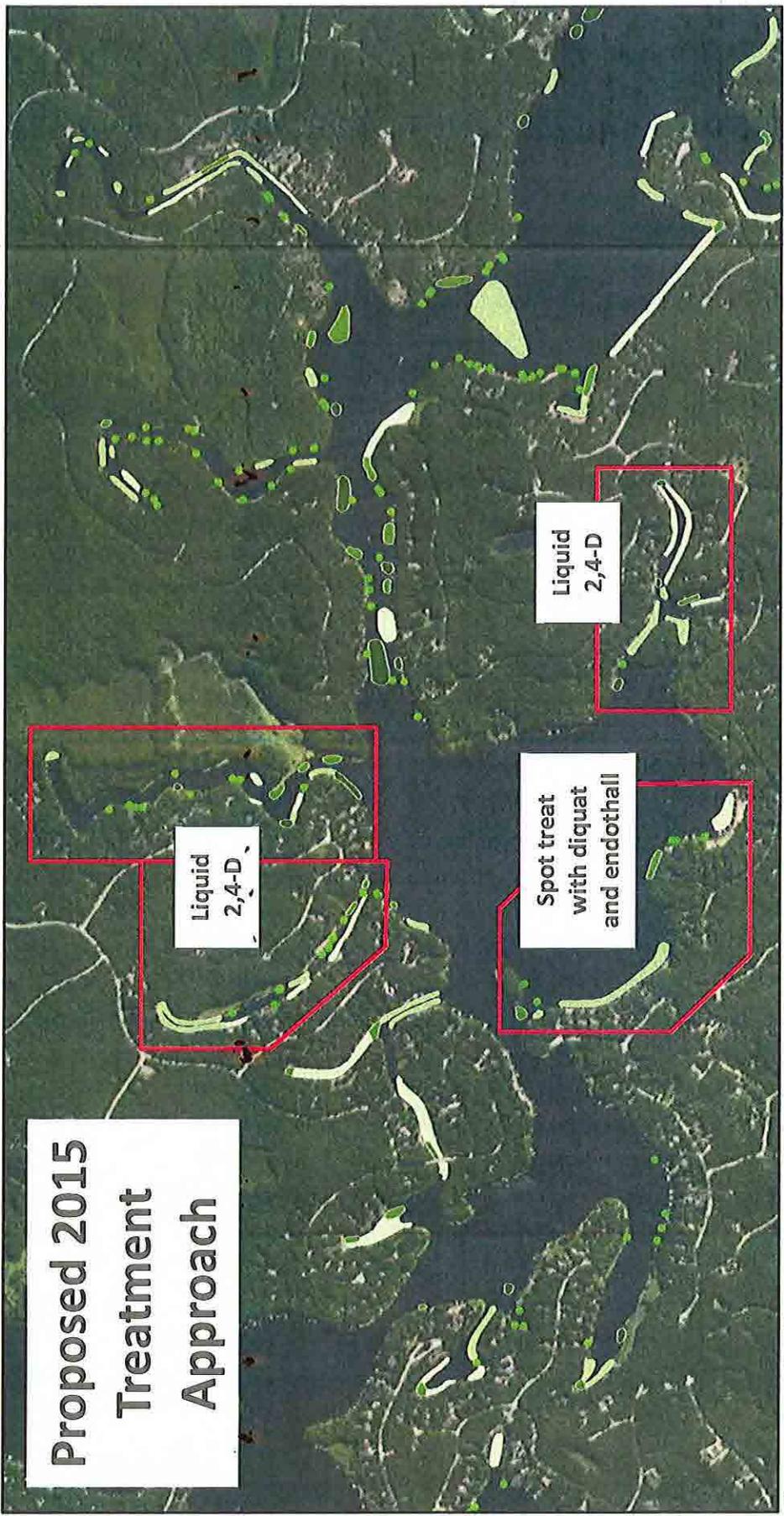
Proposed 2015 Treatment Approach



- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/HWM
- Moderately dense EWM/HWM
- Dense EWM/HWM



Proposed 2015 Treatment Approach



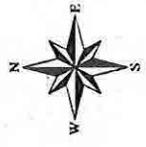
- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/HWM
- Moderately dense EWM/HWM
- Dense EWM/HWM





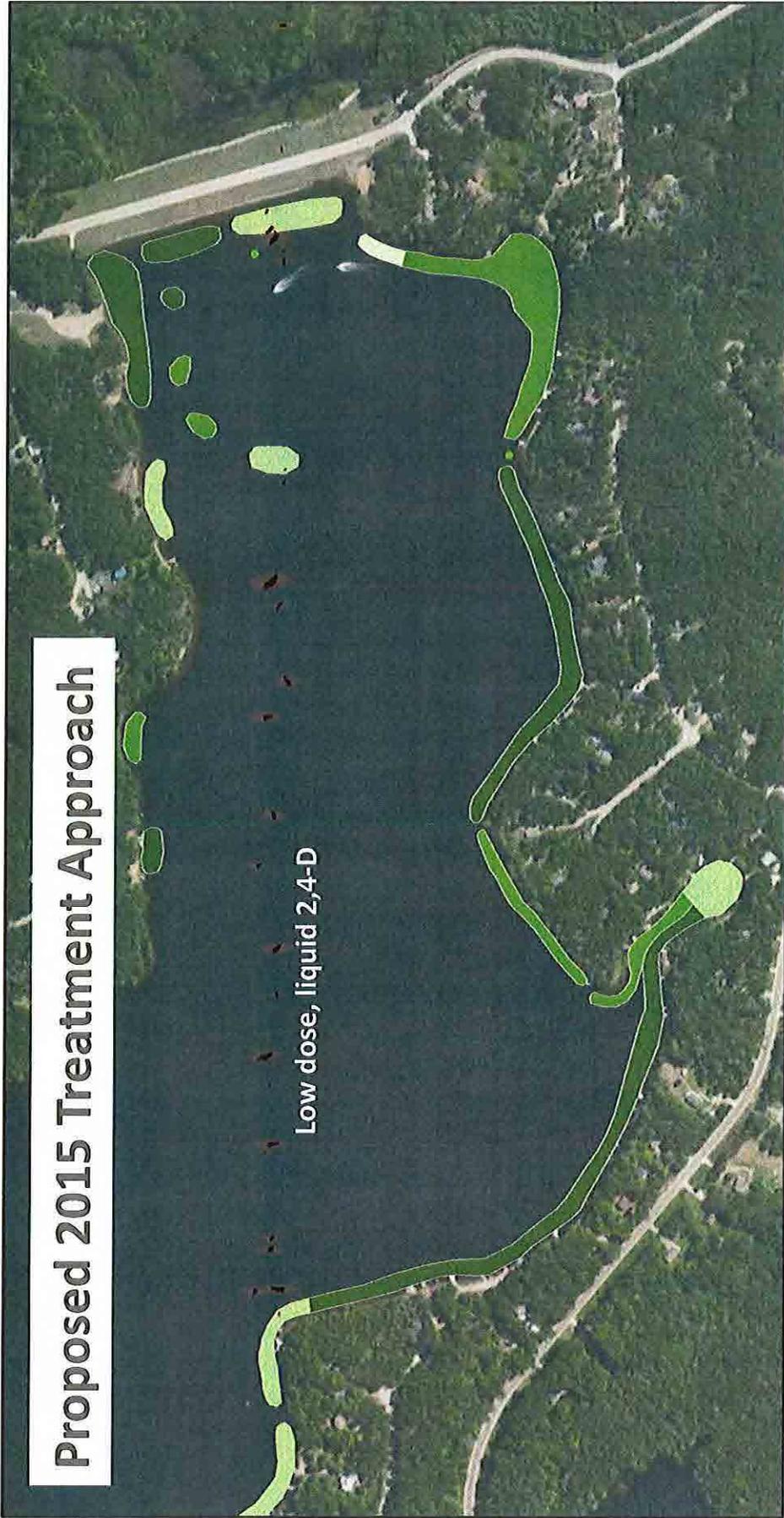
- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/HWM
- Moderately dense EWM/HWM
- Dense EWM/HWM

Low dose,
liquid 2,4-D

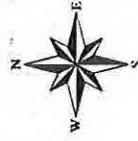


Proposed 2015 Treatment Approach

Low dose, liquid 2,4-D



- Individual plants/small groups of plants
- Highly Scattered EWM/HWM
- Scattered EWM/HWM
- Moderately dense EWM/HWM
- Dense EWM/HWM



Cason
& ASSOCIATES, LLC
LAKE & POND MANAGERS

APPENDIX C

Memo

To: File
From: Doug Cox, Environmental Program Coordinator *D.C.*
CC: Peter Fasbender, USFWS
Date: March 26, 2015
Re: **Section 7 Determination**

The USFWS has asked the Menominee Indian Tribe to assist with the NEPA compliance for a GLRI Grant that will be utilized in treatment of Eurasian Milfoil and Curly Leafed Pond Weed on Legend Lake and Moshawquit Lake near the village of Keshena. Tribal Environmental Department (ESD) staff has inventoried and surveyed wild blue lupine in habitats suitable for KBB. Because this activity is entirely within the surface waters of the lakes and no disturbance of upland areas will occur, the ESD has determined that this action would have "No Effect" on the KBB or its critical habitat. Additionally the gray wolf and northern long-eared bat also are listed to occur within the Menominee Reservation. As stated previously, this activity is entirely within the surface waters of the lakes and no disturbance of upland areas will occur. Based on the above information, I would conclude that the project will result in a no effect to the federally listed threatened and endangered species.

Project Locations:

The project occurs within Legend Lake and Moshawquit Lake, in parts of Sections 13 – 17, 19, 21-24, T28N, R16E Menominee Indian Reservation, WI (see attached map)

APPENDIX D



MENOMINEE INDIAN TRIBE OF WISCONSIN

Environmental Services Department
P.O. Box 910
Keshena, WI 54135-0910

March 20, 2015

David Grignon
Historic Preservation Officer
Menominee Indian Tribe of Wisconsin
P.O. Box 910
Keshena, WI 54135

RE: Consultation Request for Legend and Moshawquit Lake Project

Posoh Dave,

The Environmental Services Department is proposing to implement an invasive species treatment project on Legend and Moshawquit Lake. The project will entail application of herbicide to Control Aquatic Invasive Species on a total of 1,497 acres of waterways (Legend Lake – 1,196 acres; Moshawquit Lake – 301 acres) I have attached a project map with the locations identified.

The information provided includes description of the project itself, and essentially it will entail a contractor hired to continue with treatments that have been occurring on the lakes for approximately the past 10 years. This request is for your concurrence, which is required as part of the review under the National Environmental Policy Act and NHPA Section 106. If there are questions that remain please feel free to contact me at 715-799-4937.

Sincerely,

A handwritten signature in black ink that reads "Douglas G. Cox".

Douglas G. Cox
Environmental Services Department
Menominee Indian Tribe of Wisconsin

Encl.

APPENDIX E

SPECIMEN LABEL



Navigate

A SELECTIVE HERBICIDE
FOR CONTROLLING CERTAIN
UNWANTED AQUATIC PLANTS

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

GENERAL PRECAUTIONS AND RESTRICTIONS

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
Do not enter or allow others to enter the treated area until dusts have settled.
Do not use in or near a greenhouse.

OXYGEN RATIO

Fish breathe oxygen in the water and a water/oxygen ratio must be maintained. Decaying weeds use up oxygen, but during the period when this product should be used, the weed mass is fairly sparse and the weed decomposition rate is slow enough so that the water/oxygen ratio is not disturbed by treating the entire area at one time.

If treatments must be applied later in the season when the weed mass is dense and repeat treatments are needed, spread granules in lanes, leaving buffer strips which can then be treated when vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment.

Buffer lanes should be 50 to 100 feet wide. Treated lanes should be as wide as the buffer strips. (See illustration to the right.)



WATER pH

Best results are generally obtained if the water to be treated has a pH less than 8. A pH of 8 or higher may reduce weed control. If regrowth occurs within a period of 6 to 8 weeks, a second application may be needed.

PERMIT TO USE CHEMICALS IN WATER

In many states, permits are required to control weeds by chemical means in public water. If permits are required, they may be obtained from the Chief, Fish Division, State Department of Conservation or the State Department of Public Health.

GENERAL INFORMATION

This product is formulated on special heat treated attapulgite granules that resist rapid decomposition in water, sink quickly to lake or pond bottoms and release the weed killing chemical into the critical root zone area.

This product is designed to selectively control the weeds listed on the label. While certain other weed may be suppressed, control may be incomplete. Reduced control may occur in lakes where water replacement comes from bottom springs.

WHEN TO APPLY

For best results, spread this product in the spring and early summer, during the time weeds start to grow. If desired, this timing can be checked by sampling the lake bottom in areas heavily infested with weeds the year before.

If treatments are delayed until weeds form a dense mat or reach the surface, two treatments may be necessary. Make the second treatment when weeds show signs of recovery. Treatments made after September may be less effective depending upon water temperature and weed growth. Occasionally, a second application will be necessary if heavy regrowth occurs or weeds reinfest from untreated areas.



EPA REG. NO. 228-370-0959
FPA EST. NO. 41291-GA-1

ACTIVE INGREDIENT

Butoxyethyl Ester of 2,4-Dichlorophenoxyacetic Acid*	77.6%
OTHER INGREDIENTS:	72.4%
TOTAL:	100.0%

*Isomer specific by AOAC Method, Equivalent to 2,4-Dichlorophenoxyacetic Acid 15%

**KEEP OUT OF REACH OF
CHILDREN
CAUTION**

See Inside For
Additional Precautionary Statements

Manufactured For
 **Applied Biochemists**
1170N1153 Stonewood Dr. Ste. 334
Germantown, WI 53022 • 1-800-558-6156
www.appliedbiochemists.com

AQUASTRIKE[®]

AQUATIC HERBICIDE

For aquatic plant control in quiescent, slow moving, and flowing water aquatic sites

TO PREVENT ACCIDENTAL POISONING, NEVER PUT INTO FOOD, DRINK, OR OTHER CONTAINERS, AND USE STRICTLY IN ACCORDANCE WITH ENTIRE LABEL.

ACTIVE INGREDIENTS:

Dipotassium salt of endothal* 28.8%

Diquat dibromide [6,7-dihydrodipyrido (1,2-a:2',1'-c) pyrazinedium dibromide] 10.6%

OTHER INGREDIENTS: 60.8%

TOTAL: 100.0%

Contains 3.0 lbs. dipotassium endothal* per gallon (2.11 lb. 7-oxabicyclo [2.2.1]heptane-2,3-dicarboxylic acid* equivalent per gal.)

Contains 0.6 lbs. diquat cation per gal. (1.10 lb. diquat dibromide per gal.)

KEEP OUT OF REACH OF CHILDREN

DANGER PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID

If in Eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. • Call a poison control center or doctor for treatment advice.
If Swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything to an unconscious person.
If on Skin or Clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If Inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Contact the Rocky Mountain Poison Control Center at 1-866-673-6671 for emergency medical treatment information.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

To be effective, treatment for diquat poisoning must begin IMMEDIATELY. Treatment consists of binding diquat in the gut with suspensions of activated charcoal or bentonite clay, administration of cathartics to enhance elimination, and removal of diquat from the blood by charcoal hemoperfusion or continuous hemodialysis.

EPA Registration No. 70508-302

Batch/Lot No.: _____

Net Contents: _____ Gallons



United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19386 • 1-800-438-6071