

CLEAR LAKE SKAGIT COUNTY, 2011



1/12/2012

Clear Lake – 2011 Aquatic Plant
Management Report

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CLEAR LAKE - 2011 AQUATIC PLANT MANAGEMENT REPORT

Introduction

Clear and Beaver lakes are both located near Mt. Vernon, Washington in Skagit County. Noxious weeds have been a problem in these lakes for quite a while and their presence has impacted the beneficial uses of the lakes. Both lakes have public access points in the form of Fish and Wildlife maintained boat ramps, and as such represent an important recreational outlet for the residents. In addition to the public boat access ramp Clear Lake has a county swim beach that is managed for summer swimmers and the possible presence of a noxious weed represents a potential safety hazard.

There are two dominant noxious weeds in both Clear and Beaver Lakes. Eurasian water milfoil (*Myriophyllum spicatum*) and Fragrant Water Lily (*Nymphaea odorata*) are both noxious weeds present in the lakes. Fragrant Water Lily (FWL) is a floating leaf plant which has a tendency to dominate the shoreline habitat if left alone, and has in fact colonized much of the littoral zone. Eurasian water milfoil (EWM) is a submerged species which grows beneath the water surface. This plant grows in depths up to 20 feet and once it reaches the surface will form a surface mat of plant matter. This plant has been known to be a serious navigation and safety hazard in lakes as an entanglement issue for both boats and swimmers. The Lake Management district formed to manage these plants has the following strategy:

1. Monitor and identify any new introductions of noxious weeds.
2. Continue current control and eradication efforts on remaining and new infestations of YFI, EWM, and FWL.

The Lake Management Districts have a history of managing these species in Beaver and Clear Lakes. In 2007, the lakes were treated with Sonar (fluridone) for EWM in an effort to bring the plant community down to a more manageable level. Clear Lake remained milfoil free until 2009 when a few locations were identified and treated, and Beaver Lake had a few isolated plants. FWL has been treated annually with a systemic herbicide which utilizes Glyphosate to kill the plants. Treating FWL in these two lakes has been a steady effort to reduce the populations each year while reducing the possibility of killing too much at once and having chunks of the lake bottom peel off the bottom and float up to the surface – buoyed by the gases trapped inside the rotting lily root systems.

Yellow-Flag Iris (*Iris pseudacorus*) is a shoreline emergent plant that also occupies the shoreline at Clear Lake. Yellow-Flag (YFI) is fairly common on shorelines in Washington State. Often planted as an ornamental in the landscaping business, YFI has become an increasing problem. Though often seen as pleasant looking and providing habitat, this noxious species has the ability to easily crowd out native plants such as cattails along the lake shore. Though known to be in the lakes, measures to control this plant were not taken until the 2010 season.

AquaTechnex has been contracted by Skagit County and the Lake Management District to provide services which include the aquatic plant surveys as well as control efforts for the two problematic noxious weeds. This report summarizes these efforts in 2011.

Survey Methods

The primary objective of the June survey at Clear and Beaver Lakes is to determine the extent and locations of the noxious weeds in the lakes. This survey is focused on the littoral edge of the lake to map the floating leaf plants (FWL), emergent such as YFI, and the submerged milfoil.

Prior to beginning the survey on the lakes, maps from previous years were reviewed. Aquatic biologists then went to both lakes to complete the surveys. To do this a 16-foot Lund was used to navigate the lakes. A complete visual survey of the lakes, along with rake-toss samples was completed. The boat was outfitted with a Panasonic Toughbook running Trimble GIS mapping software paired with a Trimble ProXT GPS receiver. The

extent of the FWL community was mapped by “drawing” a line along the outside edge of the plant. Rake-toss samples were taken at regular intervals around the lake and the survey points were marked, and data was collected and entered into our database.

This field data was brought back to our offices where they were transferred into ArcGIS and further corrected to increase their accuracy when charted on a map. The following observations were made based on the June survey:

1. Milfoil: populations in Clear Lake appear to be expanding; no plants were found in Beaver Lake during the June survey though it is known to have milfoil in the lake. Much of the new EWM patches located during the survey are being found in acres which previously had Fragrant Water Lily – but the lilies had been treated the previous year and the EWM was now exposed.
2. A few isolated locations in Beaver Lake still have FWL growing.
3. FWL is still abundant in Clear Lake but treatments in 2009 and 2010 cut back the population significantly. Additional clearing around docks is still needed in some locations.
4. YFI was located and marked in Clear Lake in order to create a baseline map to track its decline in future surveys. The 2011 survey saw populations beginning to decline.

Maps displaying the results of the survey can be found at the end of this report.

2011 Treatments

Treatments on both Beaver and Clear Lakes began on with the first applciatoin on July 22nd. In Beaver Lake, the June survey did not turn up any milfoil so the treatments focused on the Fragrant Water Lily. A boat was launched into the lake and a technician traveled the lake to apply the herbicide to the lily pads. The shallow water in Beaver Lake as well as the excessive growth of several species of pondweeds and coontail made getting to some of the FWL very difficult.

Clear Lake was treated on July 22nd for Eurasian Milfoil and Fragrant Water Lily. First the water lilies were treated with a mix of AquaPro (glyphosate) and a penetrant. After this

application, the zones that had been identified as having milfoil growing in them were treated with Renovate OTF. Both of these herbicides are systemic in nature and take about 2 weeks before the plants show signs of damage.

Follow up applications for the FWL occurred on August 17th and September 2nd. Care is taken each summer not to eliminate too much of the FWL at one time to avoid the formation of “mud islands”.

Conclusions and Future Considerations

With the persisting presence of EWM in both Clear and Beaver Lakes, and aggressive early-season treatment program may be required in 2012. Using the maps we made this year we are able to perform treatments in the areas we already know to have milfoil in an effort to contain the spread of the plants throughout the summer.

This summer we used a granular product called Renovate OTF (active ingredient – Triclopyr). This product is systemic in nature and is designed to increase the contact time with the plants by releasing the herbicide over a 24-hour period. This is a great method in areas where the plants entire expanse is known, but one thing we are noticing from the surveys is that new plants seem to be appearing nearby known plants but escape the treatment. This may be because the product is not moving far from the designated treatment area (which is generally desired for many reasons) and that the plants are starters and are not reaching heights that are identifiable during the early surveys. Another observation we are noting is that most of the newly discovered plants continue to appear in locations where Lilies had previously been (yet are gone following treatment), only to become exposed when the lilies are treated and die back.

Based on the overall observations from the 2011 season we would like to make the following early recommendations to the Lake Management District for the 2012 management season:

1. An early season treatment should take place in June to treat known milfoil zones identified in the fall 2011 survey. This will give us a jump on the season

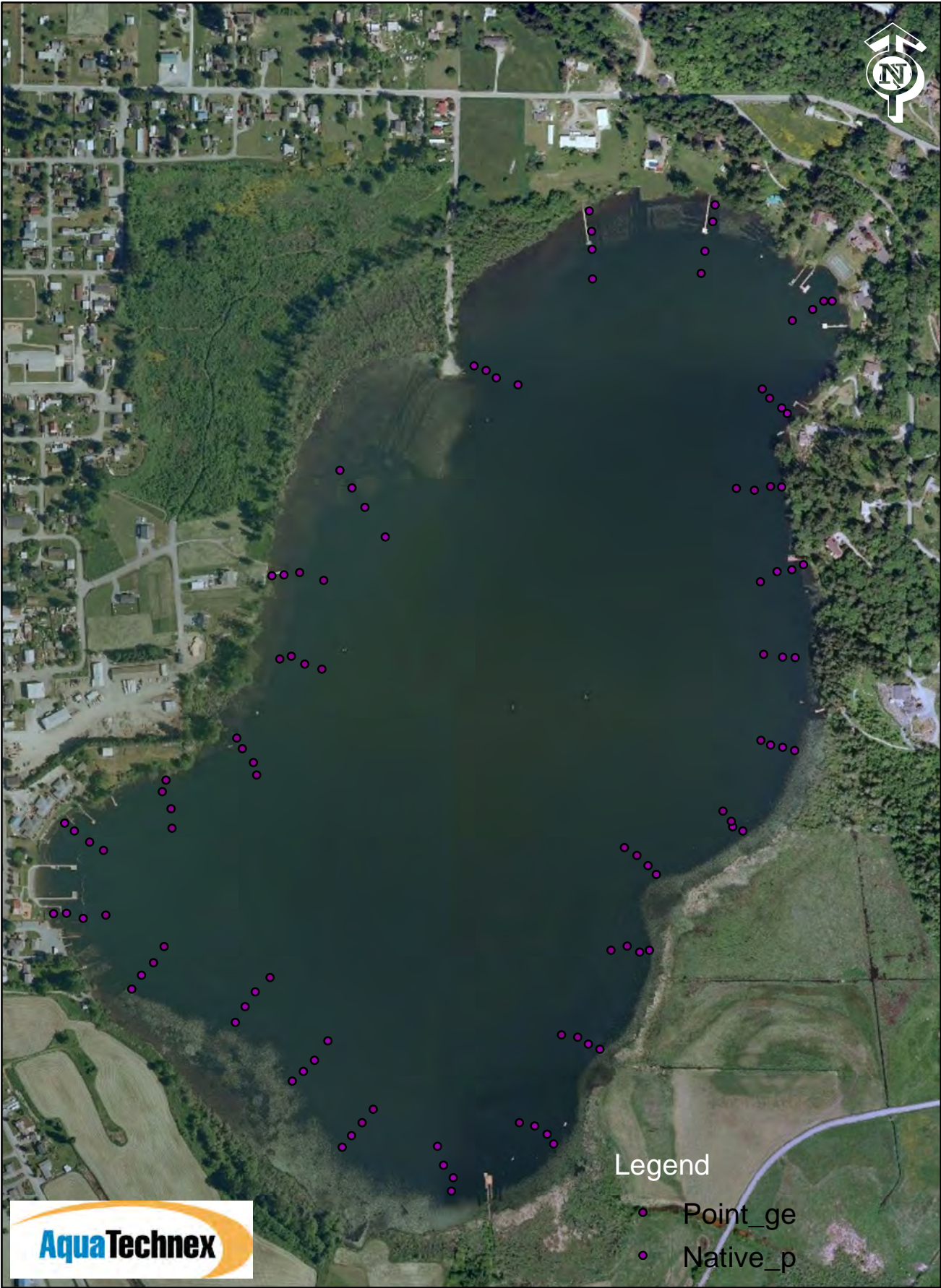
and reduce the likelihood of these plants fragmenting and spreading milfoil in the lake.

2. A combination of herbicides (liquid and granular) should be considered. Liquid applications in areas close to existing lilies may allow for contact with plants lurking just on the edge of any treatment area we might draw. Additionally new combination herbicides have been developed which have proven to be extremely effective in treating milfoil in hard to treat areas.
3. We have been opening much more of littoral zone up with aggressive Fragrant Water Lily treatments. This program should continue in 2012 with the goal of eliminating as much as possible while still avoiding the formation of “mud islands”.

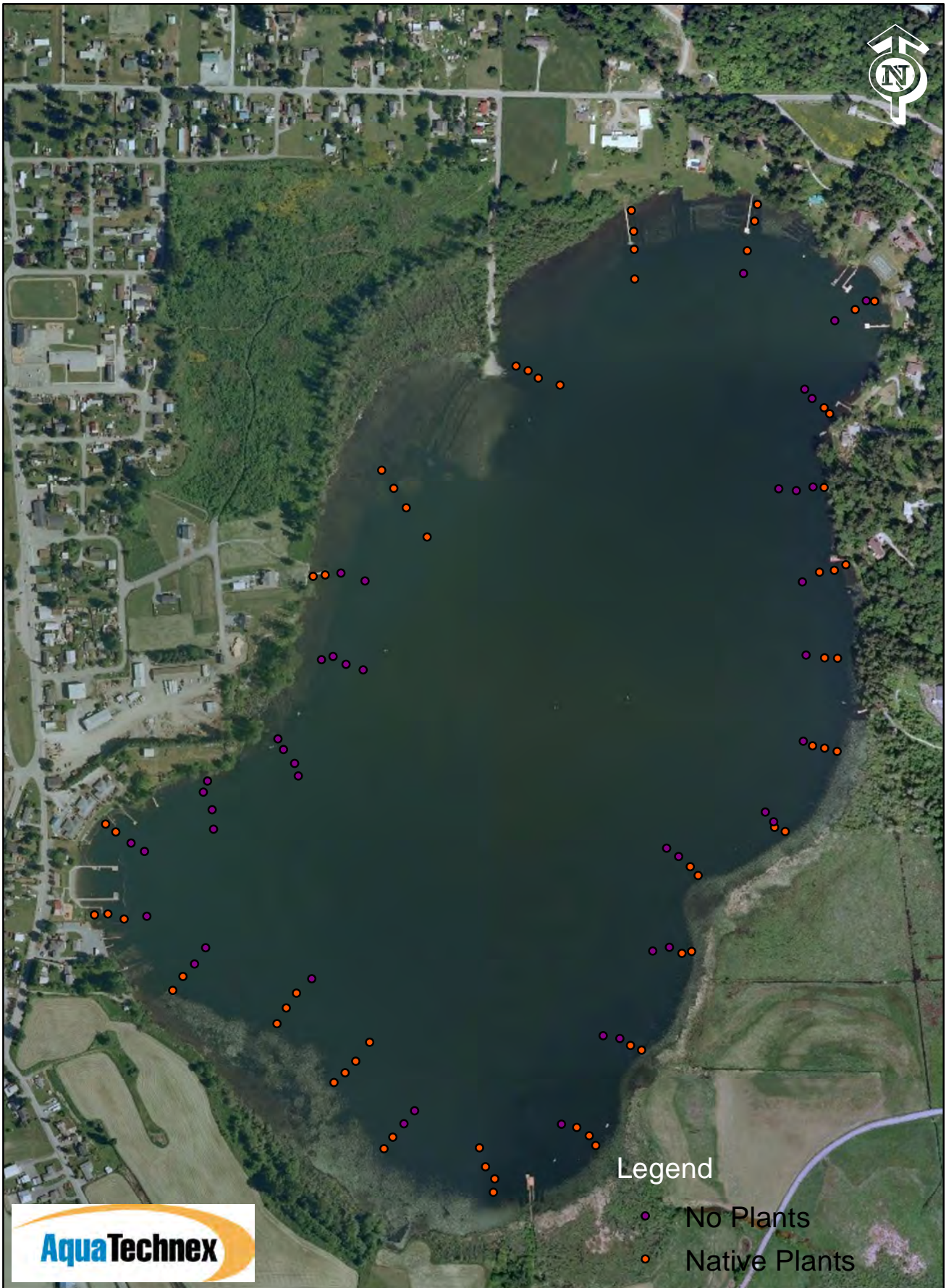
A few of the shoreline residents made mention of the fact that they did not wish to have herbicide applications made to the lilies along their shore. Though they did agree that any milfoil applications would be ok, they felt the chance of a mud island off their property was too high and did not want to continue with applications. The area infested off their properties is quite small, and possibly with some outreach they would allow for careful applications to clear their zone. If not their area could possibly be a source for future issues but generally the spread of FWL is not so rapid as to lose control of the lake altogether.

AquaTechnex would like to thank the Lake Management District for the continuing opportunity to work with them in the management of their resource. If there are any questions related to this document please contact Adam Kleven at Adam@aquatechnex.com or 360-508-1276.

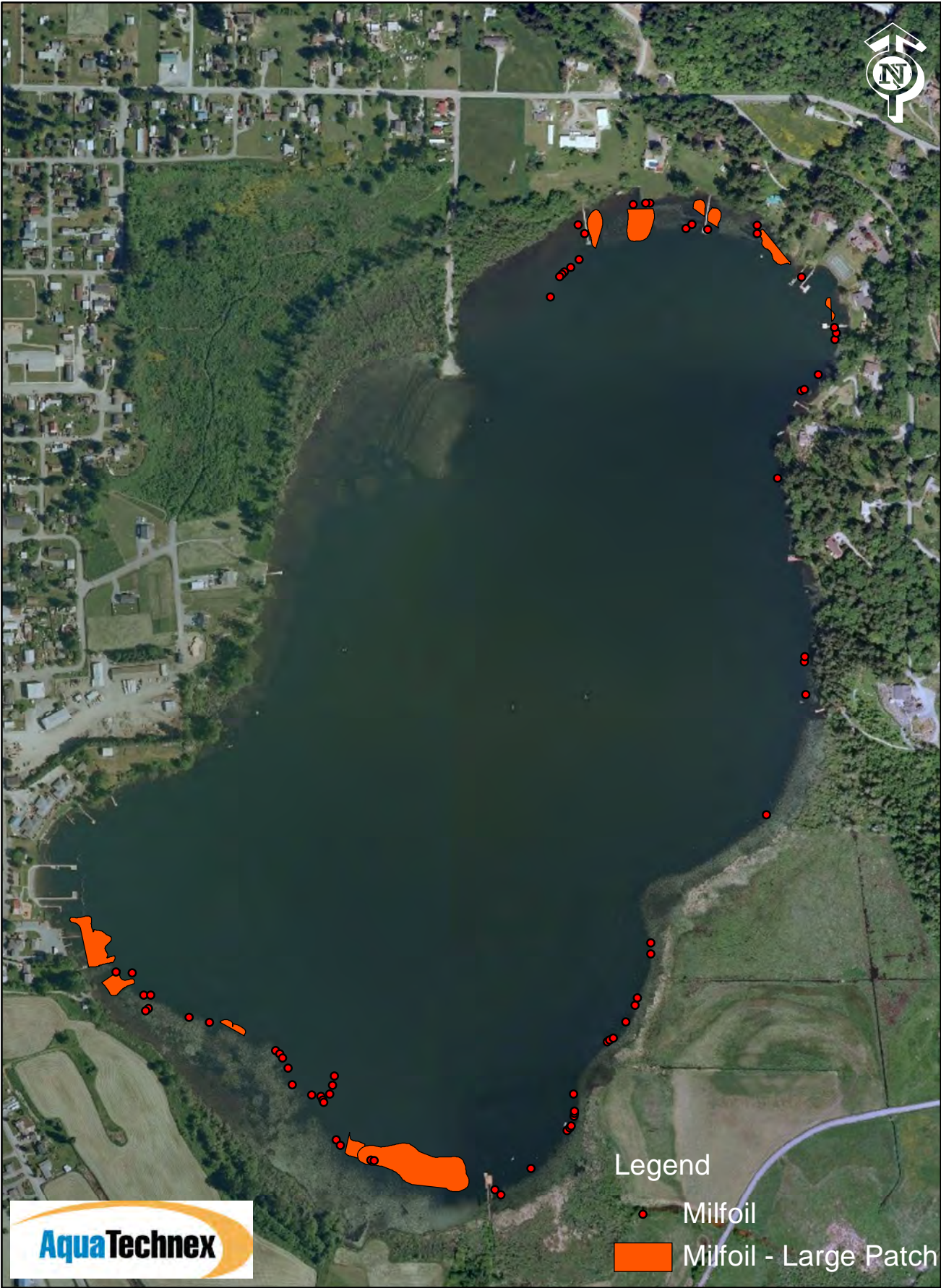
Clear Lake Survey Points 2011



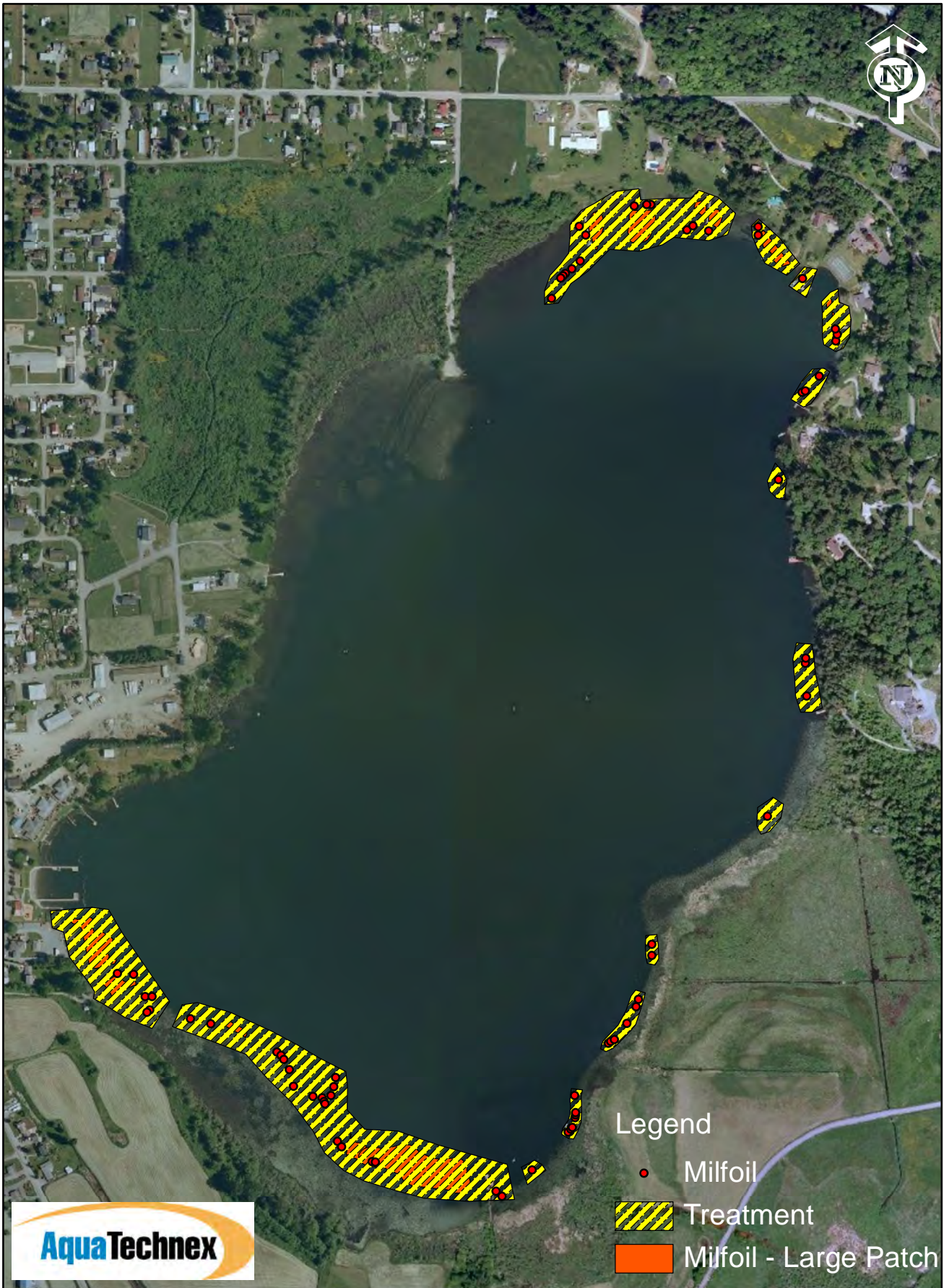
Clear Lake Survey 2011



Clear Lake Milfoil 2011



Clear Lake Milfoil Treatment Zones 2011



Specimen Label

Renovate® OTF

Aquatic Herbicide



Aquatic Sites: For control of emerged, submersed and floating aquatic weeds in the following aquatic sites: ponds; lakes; reservoirs; marshes; wetlands; impounded rivers, streams and other bodies of water that are quiescent; non-irrigation canals, seasonal irrigation waters and ditches which have little or no continuous outflow.

For use in New York State, comply with Section 24(c) Special Local Need labeling for Renovate® OTF, SLN NY-070004

Active Ingredient:

triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid,	
triethylamine salt	14.0%
Other Ingredients	86.0%
TOTAL	100.0%

Acid equivalent: triclopyr - 10.0%.

Keep Out of Reach of Children CAUTION/PRECAUCIÓN

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.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes moderate eye irritation. Avoid contact with eyes or clothing.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside, then wash thoroughly and put on clean clothing.

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 eye.• Call a poison control center or doctor for treatment advice.
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 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 a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
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 mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency endangering health or the environment involving this product, call **INFOTRAC** at **1-800-535-5053**.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read “Warranty Disclaimer”, “Inherent Risks of Use”, and “Limitation of Remedies” at end of label booklet. If terms are unacceptable, return at once unopened.**

If you wish to obtain additional product information, please visit our web site at www.sepro.com.

EPA Reg. No. 67690-42
FPL 011808

Renovate is a registered trademark of Dow AgroSciences LLC.
Manufactured by: **SePRO Corporation** 11550 North Meridian Street, Suite 600
Carmel, IN 46032 U.S.A.

ENVIRONMENTAL HAZARDS

Under certain conditions, treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants, which may cause fish suffocation. Therefore, to minimize this hazard **DO NOT** treat more than one-half (1/2) of the water area in a single operation *and* wait at least 10 days between treatments when susceptible plants are mature and have grown to the water's surface, or when the treatment would result in significant reductions in total plant biomass. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State agency for fish and game before applying to public water to determine if a permit is needed.

AGRICULTURAL CHEMICAL: Do not ship or store with food, feeds, drugs or clothing.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all *Directions for Use* carefully before applying.

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. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

General Information

When applying this product follow all applicable use directions, precautions and limitations.

For Aquatic and Wetland Sites: Use Renovate OTF Granular herbicide for control of emersed, submersed and floating aquatic weeds in the following aquatic sites: ponds; lakes; reservoirs; marshes; wetlands; impounded rivers, streams and other bodies of water that are quiescent; non-irrigation canals, seasonal irrigation waters and ditches which have little or no continuous outflow.

Obtain Required Permits: Consult with appropriate state or local water authorities before applying this product in and around public waters. State or local public agencies may require permits.

Recreational Use of Water in Treatment Area: There are no restrictions on use of water in the treatment area for recreational purposes, including swimming and fishing.

Livestock Use of Water from Treatment Area: There are no restrictions on livestock consumption of water from the treatment area.

GENERAL USE PRECAUTIONS AND RESTRICTIONS

Chemigation: Do not apply this product through any type of irrigation system.

Irrigation: Water treated with Renovate OTF may not be used for irrigation purposes for 120 days after application or until triclopyr residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less. This label describes both required and recommended uses of a chemical analysis for the active ingredient, triclopyr. SePRO Corporation recommends the use of an Enzyme-Linked Immunoassay (ELISA) test for the determination of the active ingredient concentration in water. Contact SePRO Corporation for the incorporation of this analysis in your treatment program. Other proven chemical analysis for the active ingredient may also be used. The ELISA analysis is referenced in this label as the preferred method for the rapid determination of the concentration of the active ingredient in the water.

– **Seasonal Irrigation Waters:** Renovate OTF may be applied during the off-season to surface waters that are used for irrigation on a seasonal basis, provided that there is a minimum of 120 days between Renovate OTF application and the first use of treated water for irrigation purposes

or until triclopyr residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

– **Irrigation Canals/Ditches:** Do not apply Renovate OTF to irrigation canals/ditches unless the 120 day restriction on irrigation water usage can be observed or triclopyr residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

– **There is no restriction on use of treated water to irrigate established grasses.**

- **Do not** apply Renovate OTF directly to, or otherwise permit it to come into direct contact with grapes, tobacco, vegetable crops, flowers, or other desirable broadleaf plants, and do not permit dust to drift into these areas.
- **Do not** apply to salt water bays or estuaries.
- **Do not** apply directly to un-impounded rivers or streams.
- **Do not** apply on ditches or canals currently being used to transport irrigation water or that will be used for irrigation within 120 days following treatment or until triclopyr residue levels are determined to be 1.0 ppb or less.
- **Do not** apply where runoff water may flow onto agricultural land as injury to crops may result.

Grazing and Haying Restrictions:

Except for lactating dairy animals, there are no grazing restrictions following application of this product.

- **Grazing Lactating Dairy Animals:** Do not allow lactating dairy animals to graze treated areas until the next growing season following application of this product.
- **Do not** harvest hay for 14 days after application.
- Grazed areas of non-cropland and forestry sites may be spot treated if they comprise no more than 10% of the total grazable area.

Slaughter Restrictions: During the season of application, withdraw livestock from grazing treated grass at least 3 days before slaughter.

BEST MANAGEMENT PRACTICES FOR DRIFT MANAGEMENT

Equipment used in the application of Renovate OTF should be carefully calibrated to be sure it is working properly and delivering a uniform distribution pattern. Aerial application should be made only when the wind velocity is 2 to 10 mph.

Applications should be made only when there is little or no hazard for volatility or dust drift, and when application can maintain Renovate OTF placement in the intended area. Very small quantities of dust, which may not be visible, may seriously injure susceptible plants, and Renovate OTF may be blown outside of the intended treatment area under extreme conditions. **Do not** spread Renovate OTF when wind is blowing toward susceptible crops or ornamental plants that are near enough to be injured.

Avoiding drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for drift. The applicator is responsible for considering all these factors when making decisions.

Ground Application Equipment: To aid in reducing drift, Renovate OTF should be applied when wind velocity is low (follow state regulations; see *Sensitive Area* under *Aerial Drift Reduction Advisory* below) or using a slurry injection system.

AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and does not supersede the mandatory label requirements.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces drift potential.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by

adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (e.g. higher wind).

Wind: Drift potential is lowest between wind speeds of 2 - 10 mph (follow state regulations). However, many factors, including equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential.
Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Sensitive Areas: Renovate OTF should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

AQUATIC WEEDS CONTROLLED BY RENOVATE OTF

alligatorweed	pennywort
American lotus	smartweed
bladderwort	water chestnut ^{†,††}
Eurasian watermilfoil	yellow water lily (<i>Nuphar</i> spp., spatterdock)
milfoil species	white water lily (<i>Nymphaea</i> spp.)
parrotfeather ^{††}	water primrose (<i>Ludwigia</i> spp.)
pickerelweed	watershield (<i>Brasenia</i> spp.)

[†] Not for use in California.

^{††} Retreatment may be needed to achieve desired level of control.

Application Methods

Surface Application

Use a mechanical spreader such as a fertilizer spreader or mechanical seeder, or similar equipment capable of uniformly applying Renovate OTF. Before spreading any product, carefully calibrate the application equipment. When using boats and power equipment, you must determine the proper combination of (1) boat speed, (2) rate of delivery from the spreader, and (3) width of swath covered by the granules.

Use the following formula to calibrate the spreader's delivery in pounds of Renovate OTF per minute:

$$\frac{\text{miles per hour} \times \text{swath width (feet)} \times \text{pounds per acre}}{495} = \text{pounds per minute}$$

Aerial Application (Helicopter Only)

Ensure uniform application. All equipment should be properly calibrated using blanks with similar physical characteristics to Renovate OTF. To avoid streaked, uneven or overlapped application, use an appropriate tracking device (e.g. GPS). Refer to the *Aerial Drift Reduction Advisory* section of this label for additional precautions and instructions for aerial application.

Floating and Emerged Weeds

For control of water lily's (*Nymphaea* spp. and *Nuphar* spp.), watershield (*Brasenia* spp.), and other susceptible emerged and floating herbaceous weeds, apply 1.0 to 2.5 ppm a.e. triclopyr per acre. Apply when plants are actively growing.

Use higher rates in the rate range when plants are mature, when the weed mass is dense, in areas of greater water exchange, or for difficult to control species. Repeat as necessary to control regrowth, but do not exceed a total of 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

Submersed Weeds

For control of Eurasian watermilfoil (*Myriophyllum spicatum*) and other susceptible submersed weeds in ponds, lakes, reservoirs, impounded rivers, streams, and other bodies of water that are quiescent; non-irrigation canals, and seasonal irrigation waters, or ditches that have little or no continuous outflow, apply Renovate OTF using mechanical or portable granule spreading equipment. Rates should be selected according to the rate chart below to provide a triclopyr concentration of 0.50 to 2.5 ppm a.e. in treated water. Use of higher rates in the rate range is recommended in areas of greater water exchange. These areas may require a repeat application. However, total application

of Renovate OTF must not exceed an application rate of 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

For optimal control, apply when Eurasian watermilfoil or other submersed weeds are actively growing.

Concentration of Triclopyr Acid in Water (ppm a.e.)

Avg. Water Depth (ft)	Pounds Renovate OTF / acre					
	0.5 ppm	0.75 ppm	1.0 ppm	1.5 ppm	2.0 ppm	2.5 ppm
1	14	20	27	41	54	67
2	27	41	54	81	108	135
3	41	61	81	122	162	202
4	54	81	108	162	216	270

For applications greater in depth than 4 feet, when targeting difficult to control species and/or in sites with high dilution potential, the following formula should be used to calculate applications rates should greater than 270 pounds of Renovate OTF be needed to achieve desired weed control.
NOTE: Do not exceed 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

$$\text{average depth} \times \text{target ppm} \times 27 = \text{pounds of Renovate OTF per acre}$$

Example Calculation:

6 foot average depth x 2.5 ppm x 27 = 405 pounds of Renovate OTF per acre

SMALL SITE (LESS THAN 1/2 ACRE) / SPOT TREATMENT APPLICATION

For small treatment sites of 1/2 acre or less use the rate chart below to determine the application rate depending on average water depth to achieve a concentration of 1.25 to 2.5 ppm a.e. **Do not exceed 2.5 ppm a.e. triclopyr** for the treatment area per annual growing season. Use higher rates in small treatment areas and in areas prone to higher dilution and for heavy weed infestation. Use the lower rates for spot treatment application of areas less prone to dilution and lighter weed infestations. For best results, split the total application rate into three equal applications 8 to 12 hours apart. Apply when water is calm.

Example: A 100 ft. by 40 ft. lakeshore swimming area with a 4 ft. average depth, heavily infested with Eurasian watermilfoil

Step 1: Determine the area to be treated in square feet (ft²) by multiplying the length of the area by the width.
 – 100 ft. x 40 ft. = 4,000 ft²

Step 2: Determine the amount of Renovate OTF to be used by consulting the Renovate OTF Rate Chart for Areas Less than 1/2 Acre.
 – Use 24.7 lbs. of Renovate OTF total based on 4 foot average depth in Rate Chart below.

Step 3: Apply Renovate OTF uniformly over weeds in treatment site in three equal applications of 8.2 lbs. each, 8 - 12 hours apart.

Renovate OTF Rate Chart for Areas Less than 1/2 Acre

Area (ft ²)	Pounds Renovate OTF			
	3 foot average depth		4 foot average depth	
	1.25 ppm a.e.	2.5 ppm a.e.	1.25 ppm a.e.	2.5 ppm a.e.
500	1.2	2.3	1.5	3.0
1,000	2.3	4.6	3.1	6.1
4,000	9.3	18.6	12.4	24.7
10,000	23.2	46.5	31.0	61.9
20,000	46.5	93.0	62.0	123.9

For applications with an area or depth not included in the above chart, the following formula should be used to calculate application rates.

$$\text{area (ft}^2\text{)} / 43,560 \times \text{average depth} \times \text{target ppm} \times 27 = \text{pounds of Renovate OTF}$$

Example Calculation:

8,250 ft²/43,560 x 4 foot average depth x 1.25 ppm x 27 = 25.6 pounds of Renovate OTF

Small treatment application of Renovate OTF is recommended with waterproof gloves or a hand spreader to uniformly distribute flakes on target weeds.

Precautions for Potable Water Intakes:

For applications of Renovate OTF to control floating, emersed, and submersed weeds in sites that contain a functioning potable water intake for human consumption, see the chart below to determine the minimum setback distances of the application from the functioning potable water intakes.

Concentration of Triclopyr Acid in Water (ppm a.e.)					
Area Treated (acres)	Required Setback Distance (ft) from Potable Water Intake				
	0.75 ppm	1.0 ppm	1.5 ppm	2.0 ppm	2.5 ppm
<4	300	400	600	800	1000
>4 - 8	420	560	840	1120	1400
>8 - 16	600	800	1200	1600	2000
>16 - 32	780	1040	1560	2080	2600
>32 acres, calculate a setback using the formula for the appropriate rate	Setback (ft) = $\frac{(800 \cdot \ln(\text{acres}) - 160)}{/3.33}$	Setback (ft) = $\frac{(800 \cdot \ln(\text{acres}) - 160)}{/2.50}$	Setback (ft) = $\frac{(800 \cdot \ln(\text{acres}) - 160)}{/1.67}$	Setback (ft) = $\frac{(800 \cdot \ln(\text{acres}) - 160)}{/1.25}$	Setback (ft) = $\frac{(800 \cdot \ln(\text{acres}) - 160)}{}$

Note: ln = natural logarithm

Example Calculation 1:

to apply 2.5 ppm Renovate OTF to 50 acres:

$$\begin{aligned} \text{Setback in feet} &= (800 \times \ln(50 \text{ acres}) - 160) \\ &= (800 \times 3.912) - 160 \\ &= 2970 \text{ feet} \end{aligned}$$

Example Calculation 2:

to apply 0.75 ppm Renovate OTF to 50 acres:

$$\begin{aligned} \text{Setback in feet} &= \frac{(800 \times \ln(50 \text{ acres}) - 160)}{3.33} \\ &= \frac{(800 \times 3.912) - 160}{3.33} \\ &= 892 \text{ feet} \end{aligned}$$

Note: Existing potable water intakes which are no longer in use, such as those replaced by potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.

To apply Renovate OTF around and within the distances noted above from a functioning potable water intake, the intake must be turned off until the triclopyr level in the intake water is determined to be 0.4 parts per million (ppm) or less by laboratory analysis or immunoassay.

WETLAND SITES

Wetlands include flood plains, deltas, marshes, swamps, bogs, and transitional areas between upland and lowland sites. Wetlands may occur within forests, wildlife habitat restoration and management areas and similar sites as well as areas adjacent to or surrounding domestic water supply reservoirs, lakes and ponds.

For control of emersed, floating or submersed aquatic weeds in wetland sites, follow use directions and application methods associated with the *Floating and Emersed Weeds* or *Submersed Weeds* sections on this label.

Use Precautions

Minimize unintentional application to open water when treating target vegetation in wetland sites. Note: Consult local public water control authorities before applying this product in and around public water. Permits may be required to treat such areas.

IF ANY CONTENT ON THIS LABEL IS NOT UNDERSTOOD, OR YOU NEED FURTHER ASSISTANCE, CONTACT A SEPRO AQUATIC SPECIALIST WITH QUESTIONS SPECIFIC TO YOUR APPLICATION.

Terms and Conditions of Use

If terms of the following *Warranty Disclaimer*, *Inherent Risks of Use*, and *Limitation of Remedies* are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under *Warranty Disclaimer*, *Inherent Risks of Use* and *Limitations of Remedies*.

Warranty Disclaimer

SePRO Corporation warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. SEPRO CORPORATION MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of SePRO Corporation as the seller. To the extent permitted by applicable law all such risks shall be assumed by buyer.

Limitation of Remedies

To the fullest extent permitted by law, SePRO Corporation shall not be liable for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

SePRO Corporation shall not be liable for losses or damages resulting from handling or use of this product unless SePRO Corporation is promptly notified of such losses or damages in writing. In no case shall SePRO Corporation be liable for consequential or incidental damages or losses.

The terms of the *Warranty Disclaimer* above and this *Limitation of Remedies* cannot be varied by any written or verbal statements or agreements. No employee or sales agent of SePRO Corporation or the seller is authorized to vary or exceed the terms of the *Warranty Disclaimer* or *Limitations of Remedies* in any manner.

Storage and Disposal

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Do not contaminate water, food, or feed by storage and disposal. Open dumping is prohibited.

Pesticide Storage: Store in original container. Do not store near food or feed. In case of leak or spill, contain material and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal (Plastic Bags): Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

General: Consult federal, state, or local disposal authorities for approved alternative procedures.