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# AQUATIC PLANT AND ALGAE MANAGEMENT GENERAL PERMIT

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit

**State of Washington**
**Department of Ecology**
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington
(State of Washington Water Pollution Control Act)
and
Title 33 United States Code, Section 1251 et seq.
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions that follow.

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# SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for submittal requirements.

**Table 1.** Required permit submittals

| Permit Section | Submittal | Frequency | Due Date(s) |
|---|---|---|---|
| S2. | Application for New Coverage | As necessary | At least 60 days prior to the start of discharge |
| S3.D. | Discharge Management Plan (for projects where the total proposed treated area in the water body is five or more acres) | Once per coverage | New applicants: With NOI;<br>Continuing Permittees: By March 18, 2012 |
| S3.G & S10. | Plant Survey and Mitigation Measures | As necessary | As necessary |
| S5.A. | Ecology Pre-and Post-Treatment Notice | Each week or as necessary during the treatment season | By 8:00 a.m. Monday of the first week of treatment each treatment season |
| S5.C. | Business and Residential Notice | As necessary | No later than one business day following notification |
| S6.A.2 | Dissolved Oxygen Data from 303(d) – Listed Water Bodies for Dissolved Oxygen When Using Contact Herbicides | As necessary | Within 30 days for the post-treatment monitoring date |
| S8.A | Annual Monitoring Report | Annually | December 31 |
| S8.D. | Noncompliance Notification | As necessary | As necessary |
| G5. | Permit Modification and Revocation | As necessary | Within 14 days of request |
| G6. | Request for Modification | As necessary | As necessary |
| G13. | Request for Transfer of Coverage | As necessary | As necessary |
| G.18. | Re-Application for Permit Coverage | Once per permit cycle | At least 180 days prior to the permit expiration date |

The text of this permit contains words or phrases in ***bold and italics***. These words or phrases are the first usage in the permit and are defined in Appendix A.

# SPECIAL PERMIT CONDITIONS

## S1. PERMIT COVERAGE

The Aquatic Plant and Algae Management General Permit regulates the use of ***pesticides*** and other products applied to manage ***aquatic nuisance plants***, ***noxious weeds***, ***quarantine-listed weeds***, ***algae***, and nutrients in fresh ***surface waters of the state of Washington***.

### A. Activities Covered Under This Permit

This general permit covers aquatic plant and algae management activities that result in a discharge of ***herbicides***, ***algaecides***, ***adjuvants***, ***marker dyes***, ***shading products***, ***biological water clarifiers***, and ***nutrient inactivation products*** (referred to hereafter as chemicals) into fresh water bodies of the state of Washington. The permit also covers lake ***shoreline*** and roadside/ditch bank ***emergent vegetation*** management activities where chemicals may enter the water.

Aquatic plant and algae management activities are organized into three categories: ***Eradication, Control,*** and ***Nutrient Management***. The permit has different requirements for each category.

1. Eradication

   Eradication projects target only state-listed noxious weeds or quarantine-list weeds. The goal is the complete and permanent removal of these species from the **entire water body**. As such, littoral zone limitations do not apply to eradication of noxious weeds or weeds on the quarantine list. Impacts to non-target plants are acceptable to the extent needed to eradicate the target plants. Eradication is ***allowed*** only for:

   a. All noxious weeds as identified in chapter 16-750 of the Washington Administrative Code (WAC).

   b. Plants listed on the quarantine list as identified in chapter 16-752 WAC.

   c. ***Non-native*** and ***potentially invasive plants*** not listed on the above lists, as determined by the Washington State Noxious Weed Control Board, the Washington State Department of Agriculture (WSDA), or the Washington State Department of Ecology (Ecology).

2. Control

   Ecology limits direct herbicide application to a percentage of the ***littoral zone*** for most control ***treatments*** to preserve native plant habitat.

a. ***Aquatic plant control***

The goal is to maintain native aquatic vegetation for habitat while allowing partial plant removal for ***recreation*** and other ***beneficial uses***. Permit requirements differ depending on ***plant growth forms*** and the legal status of the plant species. Minimal ***impact to non-target plants*** is acceptable to the extent needed to control the target plants.

i. Aquatic noxious weed control

Littoral zone limitations do not apply to control of noxious weeds or weeds on the quarantine list, but some treatment limitations may apply - see (2) below. The ***Permittee*** may ***intentionally apply*** herbicides to:

(1) 100 percent of noxious weeds if they are Class A weeds, Class B weeds in areas where they are designated for control, as identified in chapter 16-750 WAC, and Class C weeds where they are selected for control by a county Noxious Weed Control Board (RCW 17.10.080).

(2) 100 percent of any ***submersed*** noxious or quarantine-list weeds not covered under (1) if the Permittee conducts weed control using a ***selective herbicide***.

(3) 100 percent of any ***emergent*** or ***floating-leaved*** noxious weeds and quarantine listed weeds.

ii. Aquatic nuisance plant control

The Permittee may intentionally apply chemicals to:

(1) No more than 25 feet on either side of a dock or no more than an area 50 feet wide per ***lot*** for ***individual treatments*** targeting submersed and floating-leaved plants. Treatment of the vegetated area may extend up to 25 feet beyond the end of the dock. On individual lots with no docks, treatment of the vegetated area can extend up to 50 feet from the shore.

(2) No more than 40 percent of emergent shoreline plants such as cattails and bulrush on individual lots for individual treatments.

(3) A percentage of a water body's littoral zone based on the littoral acres of the water body and the size of the water body.

a. The geographic area where the Permittee intentionally applies chemicals must remain the same for the entire length of the permit coverage up to the maximum percentage of the littoral zone allowed for by water body size.

b. All untreated littoral areas must include native vegetation from the shore to the edge of the littoral zone where the plants stop growing in deeper water.

c. The cumulative percentage of the littoral zone where herbicides[1] may be intentionally applied must not exceed the amount allowed below:

a) In water bodies up to 15 acres in size, the Permittee may intentionally apply herbicides to no more than 75 percent of the littoral zone.

b) In water bodies over 15 acres and up to 50 acres in size, the Permittee may intentionally apply herbicides to no more than 60 percent of the littoral zone.

c) In water bodies over 50 acres and up to 500 acres in size, the Permittee may intentionally apply herbicides to no more than 50 percent of the littoral zone.

d) In water bodies over 500 acres in size, the Permittee may intentionally apply herbicides to no more than 30 percent of the littoral zone.

iii. Roadside and ditch bank plant control

(1) For activities conducted by state and local agencies, the Permittee may intentionally apply herbicides to 100 percent of the plants within the ***right of way***.

(2) The Permittee may intentionally apply herbicides to no more than 40 percent of native vegetation of roadsides and ditches on privately owned individual lots, but may intentionally apply herbicide to 100 percent of any noxious or quarantine-listed weeds.

b. ***Algae control***

i. The Permittee may intentionally apply algaecides to the entire water body or sections of the water body, as needed, when ***cyanobacteria*** or other potentially toxic or environmentally harmful algae species are expected to form ***blooms*** in the water body.

ii. The Permittee may intentionally apply algaecides to ***filamentous algae*** so long as the ***treated areas*** do not exceed the maximum amount of littoral zone allowed for treatment in S1.A.2.a.ii.

[1] Different littoral zone limitations apply to the herbicide fluridone. See Treatment Limitations in Table 3.

c. Nutrient Inactivation

The Permittee may intentionally apply approved buffering agents and alum and calcium hydroxide/oxide and calcium carbonate as phosphorus inactivation products to the entire water body or sections of the water body per permit sections S4.D.Table 4 and S6.B and C. Limited use of other nutrient inactivation products is allowed under permit section S4.C.

### B. Geographic Area Covered

This general permit covers the activities listed in S1.A throughout surface freshwaters of the state of Washington, except for federal and tribal lands.

### C. Activities Excluded from Coverage Under This Permit

Ecology will not require coverage under this permit for the use of chemicals on the following sites:

1. Constructed ***detention or retention ponds*** designed specifically for wastewater or stormwater treatment that do not discharge to other water bodies during and for two weeks after treatment, or where Ecology regulates the discharge under another permit that allows chemical treatment.

2. Any ***constructed water body*** five acres or less in surface area with no discharge to other surface waters of the state during and for two weeks after treatment.

3. Any constructed water body ten acres or less in surface area under single ownership with no ***public access*** and no discharge to other surface waters of the state during and for two weeks after treatment.

4. ***Upland farm ponds*** with no discharge to other surface waters of the state during and for two weeks after treatment.

5. Treatment conducted on ***seasonally dry land surfaces*** (including seasonally dry ***wetlands***) so long as the treatment occurs when the area is dry and the active ingredient is not biologically available when the water returns.

6. Research activities when applying chemicals or products to water bodies under a ***State Experimental Use Permit*** (See S4.C).

## S2. APPLICATION FOR COVERAGE

### A. Who May Obtain Permit Coverage

1. Pesticide ***applicators*** (WAC 16-228-1545) may apply for coverage. Applicators must be licensed in Washington State with an aquatic endorsement (WAC16-228-1545 3(t)).

a. Applicators must obtain separate permit coverage for each water body that they plan to treat. Each coverage requires a ***sponsor***. Applicators may obtain a single permit coverage for multiple water bodies where a single, non-governmental sponsor has authority to treat more than one water body. The water bodies need not be hydraulically connected, but must be part of the same distinct community (e.g., ABC Homeowners Association).

b. In water bodies with multiple sponsors or multiple permit coverages, applicators must obtain separate permit coverages for each location within the water body (e.g., Lake Washington).

2. Dischargers are not required to be licensed to apply nutrient inactivation chemicals. For these projects, the discharger may apply for permit coverage. ***Applicants*** must have a sponsor for each nutrient inactivation coverage.

3. Any state or local government entity may apply for coverage.

   a. Government entities may obtain a single coverage that includes multiple water bodies under its jurisdiction. Government entities are considered sponsors.

   b. Government entities must keep Ecology updated with a current list of its ***licensed pesticide applicator(s)***, including license numbers and license expiration dates.

## B. How to Apply for Coverage

Applicants that propose to begin aquatic plant or algae management activities that will result in a discharge to waters of the state on or after the effective date of this permit must:

1. Submit a complete permit application (***Notice of Intent*** or NOI) to Ecology **at least 60 days before** starting the activity.

2. Complete the NOI for the proposed activity online. The applicant must access Ecology's online data management system *SecureAccess Washington* (http://secureaccess.wa.gov), fill out the NOI online, print it, and sign it. Applicators must ensure that their sponsor(s) also sign the document.

   a. The sponsor's signatory must certify to Ecology in the NOI that he or she has the authority to administer the treatment. Sponsors must also certify that they either represent an entity that has the authority to administer common areas of the water body or locations within the water body for the purposes of aquatic plant and algae management or that the sponsor intends to form an entity with that authority. New sponsors that do not represent such an entity may apply for and get coverage, but they must form an entity with authority to manage aquatic plants and algae in common areas of the water body within three years

from the date of the coverage letter. After that time, Ecology may terminate permit coverage.

b. Sponsors continuing coverage from the previous permit that do not currently represent an entity that has the authority to administer common areas of the water body or locations within the water body for the purposes of aquatic plant and algae management have three years from the date of permit reissuance to form an entity for these purposes. After that time, Ecology may terminate permit coverage.

c. The requirements in 2.a. and 2.b. above regarding sponsor entities do not apply to individual lot treatments or government entities. In such cases, the government entity or the sponsor of the individual lot treatment must certify to Ecology in the NOI that he or she has the authority to administer the treatment.

3. Applicants for projects where the total proposed treated area in the water body is less than five acres or when the project is for only ditch bank or roadside vegetation control must complete and submit a ***State Environmental Policy Act (SEPA)*** checklist for the proposed activity. The applicant can access the SEPA checklist at http://www.ecy.wa.gov/programs/sea/sepa/forms.htm.

4. Applicants for projects where the total proposed treated area in the water body is five or more acres must complete, sign, and submit a ***Discharge Management Plan (DMP) and SEPA Addendum*** for the proposed activity (see S3.D). The applicant can access the DMP/SEPA Addendum template at http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/aquatic_plant_permit_index.html

5. Government applicants submitting a NOI for multiple water bodies under their jurisdiction must complete, sign, and submit a separate DMP/SEPA addendum for each water body where the proposed treatment area is five or more acres or a SEPA checklist for each water body where the proposed treatment area is less than five acres.

6. If the treatment affects potable water use on water bodies with ***municipal or community drinking water intakes***, the applicant must obtain and submit written consent to the treatment from the municipality or community.

7. Mail the complete NOI to:

   Department of Ecology
   Water Quality Program
   Attn: Aquatic Pesticide Permit Manager
   P.O. Box 47600
   Olympia, WA 98504-7600

8. After the applicant has submitted the completed NOI to Ecology, fill out the Public Notice Template provided in Appendix B. Publish the public notice twice, one week apart, in a local newspaper of general circulation (or a regional newspaper if a local newspaper is not available) that an application for permit coverage has been made. At the time the second notice is published, a 30-day comment period begins.

9. Mail or deliver the public notice to all potentially affected waterfront residents (those within one-quarter mile in each direction along the shoreline or across the water from proposed treatment areas) within one week of publishing the first newspaper notice.

At the end of the required 30-day public comment period, Ecology will consider comments about the applicability of this permit to the proposed aquatic plant or algae management activity before issuing a decision on permit coverage. If the applicant does not receive notification of a coverage decision from Ecology, coverage under this permit will begin automatically on the 61st day following Ecology's acceptance of a completed NOI.

### C. How to Terminate Permit Coverage

A Permittee may request termination of permit coverage by submitting a Notice of Termination form (NOT) to Ecology. The Permittee will continue to incur an annual permit fee unless it submits a NOT.

## S3. DISCHARGE LIMITS

### A. Compliance with Standards

1. The application of pesticides must not cause or contribute to a violation of the Water Quality Standards for Surface Waters of the State of Washington (chapter 173-201A WAC), Ground Water Quality Standards (chapter 173-200 WAC), Sediment Management Standards (chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CRF 131.36). Ecology prohibits discharges that do not comply with these standards.

2. Permittees must use ***all known, available, and reasonable methods of pollution control, prevention, and treatment*** (***AKART***) when applying pesticides. Compliance with this permit, the ***Washington Pesticide Control Act*** and the requirements of the ***Federal Insecticide, Fungicide, and Rodenticide Act*** (FIFRA) label constitute AKART.

### B. Temporary Exceedance of Water Quality Standards

Short and long-term exceedance of water quality standards are allowed under this permit provided the Permittee complies with the provisions of WAC 173-201A-410.

## C. Application Requirements

The Permittee must comply with the FIFRA label when using pesticides. Permit requirements do not reduce the requirements on the FIFRA label. The Permittee must ensure that:

1. A licensed pesticide applicator, with the appropriate Washington State Department of Agriculture (WSDA) license and certification, has ***direct supervision responsibilities*** for the use of pesticides during application.

2. All applicators (either under the direct supervision of the licensed applicator for pesticides or under the supervision of the discharger for non-pesticides) have current training in the use of the equipment necessary to apply chemicals correctly and that they use approved application techniques.

3. Appropriately trained personnel calibrate the application equipment for the chemical used.

## D. Discharge Management Plan

1. New applicants and Permittees continuing coverage do not need to develop a DMP when:

    a. The total treatment area for each coverage is less than five acres.

    b. Treating only for ditchbank or roadside vegetation.

    c. Treating under experimental use permits where the sole purpose is for research and development.

2. New applicants and Permittees continuing coverages where the total treatment area for each coverage is equal to or greater than five acres must develop a DMP for each coverage using the appropriate template http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/aquatic_plant_permit_index.html

    a. New applicants must submit their DMP with their NOI. The DMP template for new applicants is also a SEPA addendum.

    b. Permittees that continued coverage from the previous permit must submit their DMPs to Ecology by March 18, 2012.

3. Applicators must develop their DMPs jointly with each sponsor.

4. Government Permittees with single permit coverages for multiple water bodies must develop a separate DMP for each water body where the treatment area is

equal to or greater than five acres. Permittees must make these DMPs available to the water body residents on request.

5. If a water body plan exists that is equivalent to the DMP, the applicant/Permittee may submit this plan in lieu of developing a DMP. However, the applicant/Permittee must certify to Ecology that the equivalent plan contains all the elements included in the DMP template. If the equivalent plan lacks some elements of the DMP template, the applicant/Permittee may attach an addendum with the additional information to the equivalent plan.

6. After the effective date of this permit, the Permittee must keep the DMP updated. The Permittee should update the plan when significant project changes occur. The Permittee must keep an updated copy of the DMP at its business office and make it available upon request to Ecology.

## E. Impaired Water Bodies

1. The Permittee must not cause further permanent impairment of any ***303(d)-listed*** water body for any listed parameter.

2. The Permittee must prevent further permanent impairment of water bodies listed on the 303(d) list for dissolved oxygen as a result of treatment. It may do so by choosing appropriate chemicals such as a ***systemic herbicide*** instead of a ***contact herbicide*** and must implement one or more of the following mitigation measures:

    a. Do not treat in the summer or when water temperatures are warm enough to contribute to low dissolved oxygen concentrations after treatment.

    b. Limit the area treated each time that treatment occurs.

    c. Remove decaying plants following treatment.

    d. Aerate the water following treatments.

3. The Permittee must prevent further permanent impairment of water bodies listed on the 303(d) list for phosphorus as a result of treatment. It may do so by choosing appropriate chemicals to minimize release of phosphorus from non-target plants or algae and must implement at least one or more of the following mitigation measures.

    a. When treating for a ***floating plant*** such as duckweed or for algae blooms ensure that a healthy population of native emergent, submersed, or floating-leaved plants remain in the water body after treatment.

    b. Time treatment so that plant nutrients are not released during summer months.

    c. Limit the area treated at any one time.

d. Remove decaying plants following treatment

### F. Identified *Wetlands*

The Permittee may treat only ***high use areas*** to provide for safe recreation (e.g., ***defined swimming corridors***) and boating (e.g., ***defined navigation channels***) in ***identified and/or emergent wetlands***. The Permittee must limit the treated area to protect native wetland vegetation. For eradication projects, the Permittee must make every effort to protect native wetland vegetation while removing noxious weeds.

### G. Additional Requirements for Discharges to Water Bodies Where Sensitive, Threatened, or Endangered Plants Are Present

Before issuing permit coverage, Ecology will determine whether ***sensitive***, ***threatened***, ***or endangered (rare) plants*** are present in the proposed treatment area. If present:

1. For eradication projects, Ecology will consult with the Washington Natural Heritage Program and may condition the permit coverage based on the consultation.

2. For aquatic plant control projects, the Permittee must submit a detailed plant survey and if a rare plant is present in the treatment area, implement one or more mitigation measures (see S10.).

## S4. THE APPLICATION OF PRODUCTS

### A. Prohibited Discharges

Ecology prohibits treatment that causes oxygen depletion to the point of stress or lethality to aquatic biota from plant or algae die-off, the mortality of aquatic vertebrates, or unintended impacts to water quality or biota.

### B. Authorized Discharges

1. Beginning on the effective date of this permit and until Ecology modifies, reissues, or revokes this permit; this permit authorizes the Permittee to discharge the chemicals listed in the permit into freshwaters of the state.

2. This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to ***private property*** or any invasion of personal rights.

3. The Permittee must comply with the specific restrictions/limitations on the use of each chemical listed in Tables 3-5.

4. The Permittee may apply the following listed active ingredients that are labeled for use on aquatic sites:

a. 2,4-D: 2,4-Dichlorophenoxyacetic acid, butoxyethyl ester

b. 2,4-D: 2,4-Dichlorophenoxyacetic acid, dimethylamine salt

c. Diquat: Dibromide salt of 6,7-dihydrodipyrido (1,2-a:2',1"-c) pyrazinediium

d. Endothall: Dipotassium salt of 7-oxabicyclo[2.2.1]heptane-2,3dicarboxylic acid

e. Endothall: mono(N,N-dimethylalkyalmine) salt of 7-oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid

f. Fluridone: 1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1H)-pyridinone

g. Glyphosate: N-(phosphonomethyl)glycine, isopropylamine salt

h. Imazamox: 2-[4,5-dihydro-4-methyl-(1-methylethyl)-5-oxo-1H-imidazol-2yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid

i. Imazapyr: 2-(4,5-dihydro-4-methyl-4-(1-methyleth7yl)-5-oxo-1H-imidazol-2-y1)-3-pyridinecarboxylic acid

j. Sodium carbonate peroxyhydrate: $2Na_2CO_3\ 3H_2O_2$

k. Triclopyr TEA: Triethylamine salt of 3,5,6-trichloro-2-pyridyloxyacetic acid

5. The Permittee may apply the adjuvants listed in Table 2.

**Table 2:** Listed Adjuvants

| Adjuvant (Trade Name) | Product use |
|---|---|
| Agri-Dex™ | Crop Oil Concentrate |
| Bond™ | Spreader, Sticker, and Deposition Aid |
| Bronc Max™ | Water Conditioning Agent |
| Bronc Plus Dry-EDT™ | Water Conditioning Agent, Surfactant, Deposition Aid, and Anti-foam Agent |
| Class Act NG™ | Water Conditioning Agent and Surfactant |
| Competitor™ | Modified Vegetable Oil and Surfactant |

| Adjuvant (Trade Name) | Product use |
|---|---|
| Cut-Rate™ | Water Conditioning Agent |
| Cygnet Plus™ | Surfactant and Modified Vegetable Oil |
| Dyne-Amic™ | Modified Vegetable Oil and Surfactant |
| Exciter™ | Water Conditioning Agent and Surfactant |
| Fast Break™ | Antifoaming Agent and Defoaming Agent |
| Fraction™ | Water Conditioning Agent |
| Intensify™ | Water Conditioning Agent and Surfactant |
| Interlock™ | Deposition Aid and Drift Control Agent |
| Kinetic™ | Surfactant |
| Level 7™ | Surfactant, Water Conditioning Agent, and Acidifier |
| LI-700™ | Surfactant, Acidifier, Deposition Aid, and Drift Control Agent |
| Liberate™ | Surfactant, Deposition Aid, and Drift Control Agent |
| Magnify™ | Water Conditioning Agent and Surfactant |
| One-Ap XL™ | Water Conditioning Agent, Surfactant, Deposition Aid, and Antifoaming Agent |
| Pro AMS Plus Activator Penetrant™ | Water Conditioning Agent and Surfactant |
| Sinker™ | Carrier, Drift Control Agent, and Deposition Aid |
| Spray-Rite™ | Water Conditioning Agent |
| Tactic™ | Spreader/sticker and Deposition Aid |
| Tronic™ | Surfactant |

6. The Permittee may apply nutrient inactivation products, including aluminum sulfate, sodium aluminate, calcium hydroxide/oxide, and calcium carbonate and the approved buffering agents. See Table 4 for specific restrictions on nutrient inactivation products.

7. The Permittee may apply marker dyes, shading products, and water clarification products (including bacterial products). See Table 5 for specific restrictions on these products.

## C. Experimental Use

1. The Permittee may apply chemicals not listed in this permit on a limited basis in the context of a research and development effort under the jurisdiction of the Environmental Protection Agency (EPA) through the issuance of a federal experimental use permit (40 CFR 172) and the WSDA through the issuance of a state experimental use permit (EUP). Discharges for the sole purpose of research and development are not required to be covered under a DMP (S3.D.1.c.).

    a. Project proponents must obtain coverage under this general permit for any in-water projects conducted under a federal EUP (projects over one acre or more in size), unless the project is conducted at a site excluded from coverage under this permit.

    b. Ecology does not require coverage under this general permit for research and development projects of one acre or less in size where the project proponent operates under a state EUP (issued by WSDA).

2. The Permittee may apply nutrient inactivation products not listed in this permit on a limited basis in the context of a research and development effort so long as the Permittee develops a plan that is approved by Ecology for this activity. The plan must undergo a public review process.

## D. General Application Restrictions

1. The Permittee must avoid treatments that restrict public water use during the opening week of fishing season or during tribal fisheries, Memorial Day weekend, Independence Day weekend, and Labor Day weekend and must minimize treatments that restrict public water use during weekends.

2. When there are potable water restrictions on the label and the treatment is within the setback distance listed on the product label, the Permittee must not apply any chemical until it has notified people who withdraw potable water from the water body. If requested by the affected water user(s), the Permittee must provide an alternative potable water supply until the intake water tests at or below the concentration specified for that chemical in Table 3, or until the time period specified in Table 3 for that chemical has elapsed. If there is no potable water

restriction listed in Table 3, the Permittee must follow all label conditions for potable water supply. If requested by an affected water user, the Permittee must provide at least two weeks advance notice of pending treatments.

3. People withdrawing water under a ***legal water right or claim*** for irrigation or livestock watering purposes may request an alternate water supply during the treatment if the label has restrictions for those uses and the treatment is inside the setback distance listed on the product label. The Permittee must provide an alternative water supply until the intake water tests at or below the irrigation restriction concentration or livestock drinking water concentration on the label or until the time interval specified on the label has elapsed. If requested by an affected water user, the Permittee must provide at least two weeks advance notice of pending treatments.

4. The Permittee must avoid treatments that adversely affect salmon or steelhead in hatcheries when applying treatments to areas upstream of a hatchery water intake. Ecology will coordinate with the Permittee, the Washington State Department of Fish and Wildlife (WDFW), and affected tribes to ensure treatments proposed upstream of a hatchery intake do not adversely affect hatchery fish or hatchery operations.

5. The Permittee must ensure that there is adequate contact time between the targeted vegetation and the selected herbicide when treating in reservoirs or in flowing water to avoid non-target downstream impacts.

6. The Permittee must comply with WDFW timing windows referenced in Tables 3 and 4 to protect salmon, steelhead, and bull trout populations and WDFW ***priority habitats and species***. WDFW may periodically update this table as new information becomes available or on request from Ecology. The timing table is available at: http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/aquatic_plant_permit_index.html.

    a. Timing windows do not apply to nonnative fish such as bass. At their discretion, Permittees may choose to comply with the bass timing windows noted in the WDFW timing table.

    b. Permittees may consult with Ecology and WDFW to develop alternate timing windows if necessary so long as the new treatment windows do not adversely impact priority species and habitats.

7. The Permittee must follow the specific restrictions and advisories identified in Tables 3 and 4. ***Swimming restrictions***/advisories apply to primary contact activities such as swimming, wading, and water skiing. Drinking water restrictions apply to residents drinking lake water as their sole source of potable water or where they hold a water right for potable water.

**Table 3:** Specific Restrictions on the Application of Herbicides and Algaecides for Control and Eradication Projects

| Active Ingredient | Subject to Timing | Restrictions/ Advisories | Treatment Limitations | Other Specific Restrictions |
|---|---|---|---|---|
| **2, 4 – D (amine)** | Yes for salmon, steelhead, bull trout – check timing table for other priority species | ***Swimming advisory*** during treatment, and for 24-hours post-treatment (in the treated area) | **Control projects only**: Do not apply within 400 feet of an outlet stream if there is an outflow. | Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 28 days following application. As an alternative to waiting, treated water may be used for drinking once the 2,4-D level in the intake water is determined to be 0.07 mg/L or less, or the applicator complied with label setback distances. |
| **2, 4 – D (ester)** | See other specific restrictions – Yes for salmon, steelhead, bull trout – check timing table for other priority species | Swimming restriction during treatment, and for 24-hours post-treatment (in the treated area) | None | Do not use in salmon-bearing waters. |
| **Diquat** | Yes for salmon, steelhead, bull trout –check timing table for other priority species | Swimming advisory during treatment, and for 24-hours post-treatment (in the treated area) | ➢ Do not pour Diquat directly from the container into the water body.<br>➢ Do not apply to emergent shoreline vegetation (e.g., cattails, bulrush) | Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 10 days following application. As an alternative to waiting, treated water may be used for drinking once the Diquat level in the intake water is determined to be 0.02 mg/L or less. |

| Active Ingredient | Subject to Timing | Restrictions/ Advisories | Treatment Limitations | Other Specific Restrictions |
|---|---|---|---|---|
| **Endothall (dipotassium salt)** | Yes for salmon, steelhead, bull trout – check timing table for other priority species | Swimming advisory during treatment, and for 24-hours post-treatment (in the treated area) | **Control projects only**: Do not apply within 400 ft of an outlet stream if there is an outflow. | Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 28 days following application. As an alternative to waiting, treated water may be used for drinking once the endothall level in the intake water is determined to be 0.10 mg/L or less. |
| **Endothall (mono salt)** | Yes for salmon, steelhead, bull trout –check timing table for other priority species | Swimming advisory during and for 24-hours after treatment (in the entire water body) | ➢ Use for control of filamentous algae, cyanobacteria, or harmful algae only. See S1.A.2(b)<br>➢ Limit concentrations to 0.2-mg/L of active ingredient | ➢ Treatment must occur from the shoreline outward into the water body.<br>➢ Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 14 days following application. As an alternative to waiting, treated water may be used for drinking once the endothall level in the intake water is determined to be 0.1 mg/L or less. |
| **Fluridone** | No for fish - check timing table for other priority species. | None | Unless operating under an integrated aquatic plant management plan for noxious weed eradication, Ecology further limits fluridone application to no more than 50 percent of the littoral zone in lakes up to 50 acres and no more than 40 percent of the littoral zone in lakes from 50 - 500 acres. | None |
| **Glyphosate** | No for fish - check timing table for other priority species. | None | None | None |

| Active Ingredient | Subject to Timing | Restrictions/ Advisories | Treatment Limitations | Other Specific Restrictions |
|---|---|---|---|---|
| **Sodium carbonate peroxyhydrate** | No for fish - check timing table for other priority species. | Swimming advisory during treatment, and for 2-hours post-treatment (in the treated area) | Do not treat plants growing on the shore. | None |
| **Imazapyr** | No for fish - check timing table for other priority species. | None | None | None |
| **Imazamox** | No for fish - check timing table for other priority species. | None | None | None |
| **Triclopyr TEA** | No for fish - check timing table for other priority species. | Swimming advisory during treatment, and for 12-hours post-treatment (in the treated area) | Aerial applications are not allowed. | Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 28 days following application. As an alternative to waiting, treated water may be used for drinking once the triclopyr level in the intake water is determined to be 0.4 mg/L or less, or the applicator complied with label setback distances. |

**Table 4:** Specific Restrictions on Application of Products for Inactivation of Phosphorus

| Nutrient Inactivation Products | Subject to Timing | Restrictions/ Advisories | Treatment Limitations | Other Specific Restrictions |
|---|---|---|---|---|
| **Alum** | ➢ No for fish - check timing table for other priority species.<br>➢ Timing should address aquatic plant biomass that may interfere with inactivation of sediment phosphorus (requiring early spring or fall treatment). | None | ➢ Application must cease when wind speed is greater than 15 miles per hour<br>➢ Powdered alum must be mixed with water to form a slurry before applying to the water surface.<br>➢ The pH of lake water during treatment must remain between 6.0 and 8.5 based on lake average.<br>➢ Only aluminum compounds suitable for water treatment may be used.<br>➢ Buffering materials must be available for use. | ➢ A jar test must be completed prior to whole lake treatments only if a buffer other than sodium aluminate is used or a ratio of liquid alum to liquid sodium aluminate differs from 2:1 by volume.<br>➢ An on-site storage facility is required for any treatment requiring 9,000 gallons of alum or more, or the project proponent must have a plan to store any unused alum or buffering products.<br>➢ Follow the monitoring requirements in S6.B. |
| **Calcium** | No for fish - check timing table for other priority species. | None | The pH must remain between 6.0 and 9.0. | ➢ A jar test must be completed prior to treatment to identify proper dosing levels. This jar test needs to be conducted at least over a 24-hour period to ensure that the pH response is at equilibrium with water chemistry.<br>➢ Follow the monitoring requirements in S6.B. |

**Note**: The products listed above are not registered as pesticides through FIFRA. A licensed applicator is not needed for the application of any of these products to waters of the United States.

**Table 5:** Restrictions on Applications of Shading Products and Biological Water Clarifiers

| Product | Restrictions |
|---|---|
| Shading products | Do not apply directly to rivers or streams or any lake that discharges to other surface waters of the state. |
| Biological Water Clarifiers | Use only in water bodies with no discharge to other surface waters of the state during and for two weeks after treatment. |

**Note**: These restrictions are in addition to the federal FIFRA label requirements (when applicable).

## S5. NOTIFICATION, INSPECTION, AND POSTING REQUIREMENTS

### A. Ecology Notification Requirements

1. Pre- and post-treatment notification

   The Permittee must email pre-and post-treatment information to Ecology each week that treatment occurs using the form in Appendix C. Ecology headquarters and appropriate regional staff must receive the form no later than 8:00 am on each Monday (see the contact list below). For unforeseen events, the Permittee may ***occasionally*** provide Ecology with less notice so long as pre-treatment notification occurs at least two days prior to the treatment.

| Contact Information | Telephone | Email |
|---|---|---|
| Central Regional Office, Yakima | (509) 457-7107 | Charlie.McKinney@ecy.wa.gov |
| Eastern Regional Office, Spokane | (509) 329-3610 | Jeremy.Ryf@ecy.wa.gov |
| Northwest Regional Office, Bellevue | (425) 649-7000 | Tricia.Shoblom@ecy.wa.gov |
| Southwest Regional Office, Lacey | (360) 690-4796 | Rod.Thysell@ecy.wa.gov |
| Ecology Headquarters, Lacey | (360) 407-6283 | Jonathan.Jennings@ecy.wa.gov |

2. Adverse incidents or spills

   The Permittee must immediately call the appropriate Ecology regional contact and Ecology headquarters or 1-800-6457-911 when they are made aware of any of the following conditions occurring during or after a treatment:

   a. Any person(s) exhibiting or indicating any toxic and/or allergic response as a result of the treatment.

   b. Any fish or fauna exhibiting stress or dying inside or outside of the treatment area.

   c. Any spill of chemicals covered under this permit that occurs into the water or onto land with a potential for entry into waters of the state.

### B. Ecology Inspection Coordination Requirements

1. At Ecology's request, each Permittee must coordinate and schedule inspections with Ecology staff. The location and starting time for the scheduled inspection must be on record in writing at Ecology.

2. For scheduled inspections, the Permittee must not apply chemicals until Ecology staff is present, unless they do not arrive within 30 minutes of the scheduled start time.

## C. Residential and Business Notification

1. Using the template in Appendix E, the Permittee must provide Residential and Business Notice (notice) to all waterfront residences and businesses within one-quarter mile in each direction along the water body shoreline or across the water from proposed treatment areas.

2. The Permittee may provide the notice by mail, newsletter, or handbills delivered directly to the residences or businesses. If using handbills, the Permittee must secure the notice to the door in a fashion that will hold it in place but will not damage property. If the residence or business is gated or guarded by dogs, the Permittee may secure the notice in clear view on the outside of the gateway or may attach the notice to the outside of the residence or business in a fashion that will hold it in place but will not damage property.

3. Businesses and residents must receive the notice at least 10 days in advance and at most 42 days before the first treatment of each year. If the notice explains the ***application schedule*** for the entire treatment season and there is no deviation from that schedule (with an exception for cyanobacteria treatment), Ecology requires no further notice for the rest of the treatment season. On water bodies with a history of cyanobacterial blooms, the Permittee may explain in the notice that algae treatment may occasionally occur outside of the scheduled time periods without prior notice depending on bloom conditions. The Permittee must provide additional notification to any resident or business that specifically requests further notification of treatment dates.

4. The Permittee must provide a copy of the notice including the date of distribution to the appropriate Ecology regional office contact and to the Department of Natural Resources (DNR) contact (todd.palzer@dnr.wa.gov) no later than one business day following public distribution. The Permittee need not notify DNR for treatments occurring on privately-owned lakes with no public access.

5. Ecology does not require notice for applications made to limited access highways, fenced wetland mitigation sites, or other facilities where no ***reasonable public access*** exists.

## D. *Children's Camp* Notification Requirements

1. Permittees must coordinate with camp managers to ensure that the manager notifies the parents or guardians of campers if a pesticide application is expected to occur in or within 400 feet of a camp swimming area or a camp recreational area during or up to one week before their child attends camp.

2. Camp notification must include the name of the product being applied, the time period during which treatment will occur, any swimming or recreational advisories or restrictions, and camp and Permittee contact information.

## E. Shoreline Posting Requirements

Ecology does not require shoreline posting in areas where public access is limited to boat only access and there are no private residents.

1. General Requirements for Posting Shorelines

   The Permittee must:

   a. Use templates provided in Appendix E.

   b. Post signs no more than 48 hours prior to treatment.

   c. Post signs so that they are secure from the normal effects of weather and water currents, but cause minimal damage to property.

   d. Make best efforts to ensure that the signs remain in place and are legible until the end of the period of water use restrictions.

   e. Remove all old signs before a new treatment begins or before the end of the treatment season, whichever comes first.

   If applying more than one chemical in an area, the Permittee may list all chemicals on the sign, but must use the template and restrictions for the chemical with the most stringent water use restrictions.

   If the majority of the affected community speaks a language other than English, the Permittee may use online translation websites to make signs for these communities.

2. Posting ***Privately or Publicly-Owned Shoreline*** Areas (excluding ***public access areas***) with 8 ½ by 11 Inch Signs

a. The Permittee must post signs at each waterfront private residence or business property that is within 400 feet of a treated area.

b. The Permittee must post the signs to face both the water and the shore and site them where they are most visible to residents (within approximately ten feet of the shoreline). The Permittee must post one sign for approximately every 100 feet of shoreline.

c. If the shoreline is only accessible by entering through a gate, the Permittee may post a sign at each gate that allows access to, or is within 400 feet of a treated area. The Permittee does not need to post additional signs.

3. Posting Shoreline ***Public Access Areas*** with Two Foot by Three Foot Signs

a. The Permittee must post signs at all public access areas on the water body that are within 400 feet of a treated area and at all ***public boat launches*** on the water body within one quarter mile of a treated area.

b. The Permittee must site the signs so that they are clearly visible to people using the public access area, spacing the signs approximately every 100 feet of shoreline and within approximately 25 feet of the shoreline. Signs must face both the water and the shore. At public boat launches, signs need only face the shore.

c. If a public shoreline is only accessible by entering through a gate, the Permittee may post a sign at each gate that allows access to, or is within 400 feet of a treated area. The Permittee does not need to post additional signs.

d. Signs must be a minimum size of two feet by three feet and constructed of durable weather-resistant material. The Permittee must attach an 8 ½ by 11 inch weather resistant map detailing the treatment areas for each chemical used. The map must identify the location(s) of the treatment site(s) and mark the reader's location. If the Permittee applies more than one chemical, it must mark each treated area and appropriate chemical on the map.

Signs must:

i. Include the word "CAUTION" in bold black type at least two inches high.

ii. Use a font at least ½ inches high for all other words.

4. Posting ***Public Pathways*** Along a Treated Water body

a. The Permittee must post two foot by three foot signs at ***public entrances*** to public pathways that allow reasonable direct access to the water body and that

are within 400 feet of a treated area.

b. The Permittee must post 8 ½ by 11 inch signs at approximately 100 foot intervals along the pathway along any treated areas and within 400 feet of any treated areas.

5. Posting for Roadside/Ditch Bank Aquatic Applications

a. The Permittee does not need to post signs for roadside applications or applications to areas with no reasonable public access.

b. For those sites with public access areas, the Permittee must:

i. Post signs no more than 48 hours before an application.

ii. Place signs at any boat launch within 1/4 mile of any treated area. Signs must be within 25 feet of the shoreline, facing both the water and shore.

The Permittee is responsible for the removal of all signs at the end of each treatment season, but may use biodegradable sign material so that removal is not necessary.

## S6. MONITORING REQUIREMENTS

### A. Application of Herbicides and Algaecides

1. Eradication Projects

Under the Aquatic Weeds Management Fund, Ecology requires monitoring for herbicide residues for herbicide treatments funded by Ecology grants. Grant-funded monitoring is in lieu of additional monitoring under this permit.

2. Control Projects

The Permittee must monitor dissolved oxygen levels pre- and post-treatment when contact herbicides are used in water bodies on the 303(d)-list for dissolved oxygen.

a. Immediately before treating, the Permittee must monitor surface and bottom dissolved oxygen concentrations at a sampling location in the center and at the edge of the proposed treatment area(s). The Permittee must select at least one representative treatment area to monitor each time the water body is treated.

b. The Permittee must monitor post-treatment surface and bottom dissolved oxygen concentrations no earlier than seven days and no later than 14 days after the treatment, at the ***same time of day*** that the pre-treatment monitoring

occurred and at the same sites and depths.

c. The Permittee must submit these data to the Ecology permit manager no later than 30 days after the post-treatment monitoring date.

**B. Application of Phosphorus Inactivation Products**

1. Aluminum sulfate or sodium aluminate (alum).

   a. The minimum monitoring requirement for whole or partial lake treatments is one surface water pH measurement in the morning prior to any alum addition and one surface water pH measurement one hour after alum addition has stopped for that day. The Permittee must monitor pH for the duration of the treatment and for 24 hours following treatment completion. The monitoring location must be representative of water body-wide conditions. If the pH decreases to less than 6.2, the Permittee must stop treatment, analyze for alkalinity, and must take immediate steps to increase the pH.

   b. For continuous injection treatments, the Permittee must measure pH at a minimum once every two weeks during the first month of continuous injection and thereafter once a month for the duration of the injection process. The Permittee must ensure that pH measurements represent water body-wide conditions, unless the injection system is in an isolated area in relation to the main water body (e.g., in a bay with a narrow channel to the main water body). For isolated areas of water bodies, the Permittee must measure pH at the end of the bay and in the main water body.

2. Calcium hydroxide/oxide or calcium carbonate treatment

   a. The Permittee must measure pH once on the day before treatment, and once in the morning and once in the afternoon for the duration of the treatment and for 24 hours following treatment. If the pH is above 9.0 due to the effects of the treatment (rather than through photosynthesis), the Permittee must stop treatment.

   b. For continuous injection systems, the Permittee must measure pH at a minimum once every two weeks during the first month of continuous injection and thereafter once a month for the duration of the injection process. The Permittee must ensure that pH measurements represent water body-wide conditions, unless the injection system is in an isolated area in relation to the main water body (e.g., in a bay with a narrow channel to the main water body). For isolated areas of water bodies, the Permittee must measure pH at the end of the bay and in the main water body.

## S7. ANALYTICAL PROCEDURES

A. The Permittee must use either an EPA method or one of the methods specified in section S7.C. or S7.D. to fulfill the analytical requirements of this permit.

B. The Permittee must ensure that all monitoring data are analyzed by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, Accreditation of Environmental Laboratories.

C. Ecology does not require the use of an accredited laboratory for temperature, dissolved oxygen, pH, alkalinity titration, or Secchi disk measurement. All dissolved oxygen and pH monitoring must follow the protocols in *A Citizens Guide to Understanding and Monitoring Lakes and Streams* which may be accessed at www.ecy.wa.gov/programs/wq/plants/management/joysmanual/index.html.

D. Analyses conducted using enzyme linked immunosorbent assay (ELISA) methods may substitute for the requirements in S7.A.

## S8. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee must submit pesticide/product application information in accordance with the following conditions.

### A. Annual Treatment/Monitoring Reports

1. By December 31 of each year, the Permittee must submit its report electronically through Ecology's online data management system (SecureAccess Washington at https://secureaccess.wa.gov). A signed and dated copy of the report must be mailed to:

   Department of Ecology
   Water Quality Program
   Attn: Aquatic Pesticide Permit Manager
   P.O. Box 47600
   Olympia, WA 98504-7600

2. The Permittee must submit an annual treatment/monitoring report regardless of whether treatment or monitoring occurred and this report must include: Water body name, dates treatment occurred, chemicals used, amount of active ingredient applied, acreage treated, monitoring results, and the plant species targeted.

3. The Permittee must submit any dissolved oxygen monitoring data to the Aquatic Pesticide Permit Manager and the appropriate regional contact, no later than 30 days after the post-treatment monitoring date.

### B. Records Retention

1. The Permittee must retain records of all permitting and monitoring information for a minimum of five (5) years. Such information must include copies of all reports required by this permit, plant surveys, and records of all data used to complete the application for this permit.

2. The Permittee must keep records longer in the event of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

3. The Permittee must make the records, reports, surveys, plans, public notices (including a list of locations or addresses to which they were delivered), and other information required by this permit available to Ecology upon request.

### C. Recording of Results

For each measurement or sample taken, the Permittee must follow the recording provisions outlined in WAC 173-226-090 (2).

### D. Noncompliance Notification

If the Permittee is unable to comply with any of the terms and conditions of this permit for any cause, the Permittee must immediately stop the activity causing the noncompliance, correct the problem, notify Ecology of the failure to comply, and return to compliance as quickly as possible.

## S9. SPILL PREVENTION AND CONTROL

### A. Spill Prevention

The Permittee must:

1. Handle, store, and use all oil, fuel, chemicals, or products authorized under this permit in a manner that prevents spills.

2. Ensure that it maintains all mobile equipment to prevent leaks or spills of petroleum products.

3. Have absorbent materials available for cleanup or the spill containment materials recommended in the Material Safety Data Sheet for that product, including appropriate cleanup materials for a spill of the products being applied.

### B. Spill Notification Requirements

The Permittee must immediately report spills to Ecology by calling 1-800-6457-911. See http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm for more environmental reporting information.

### C. Spill Cleanup Requirements

1. In the event of a spill, the Permittee must begin immediate containment and cleanup using appropriate materials. Cleanup takes precedent over normal work.

2. Cleanup includes proper disposal of any spilled materials and used cleanup materials.

## S10. MITIGATION FOR PROTECTION OF SENSITIVE, THREATENED, OR ENDANGERED PLANTS: AQUATIC PLANT CONTROL PROJECTS

### A. Survey Requirements

If Ecology notifies the Permittee that a rare plant species (rare plant) is reported to be present in a proposed treatment area, the Permittee must conduct a detailed plant survey (unless Ecology waives this requirement).

1. The survey must be performed by a ***professional aquatic botanist*** or ***wetland specialist***. The person conducting the survey must not have a financial or personal interest in the treatment.

2. The botanist or wetland specialist must survey when plants are present and can be positively identified, but no earlier than three months before treatment. Ecology may waive the three month requirement if the plant cannot be positively identified during that time frame.

3. The Permittee must survey each year before treatment for rare submersed, floating, or floating-leaved plants and once every five years for rare emergent shoreline plants.

4. The Permittee must submit the survey data to Ecology no later than thirty days before treatment. Ecology may modify or suspend the annual survey requirement if it determines that the treatment(s) have had no adverse effect on the rare plant population.

### B. Mitigation

1. When a rare plant is in the treatment area, the Permittee must apply prescribed buffers (where required) and select one or more mitigation choices listed below to

minimize treatment impacts to the rare plant. Monitoring the vitality of rare plant populations after treatment may be required by Ecology. The Permittee must not allow treatment to affect the viability of the rare plant population.

2. Mitigation measures for:

   a. Submersed, floating, or floating-leaved plants: If the rare plant is submersed, floating, or floating-leaved and the herbicide application is intended to control submersed species, the Permittee must maintain a no-treatment buffer around the rare plants. The Permittee must maintain a 100-foot buffer when using contact herbicides and must consult with Ecology when using systemic herbicides to determine appropriate buffer distances. If the Permittee has difficulty maintaining a buffer from the majority of the rare plant population, it must consult with Ecology for other options (e.g., physically relocating the plants).

      In addition to the buffer, the Permittee must choose one or more mitigation measures below:

      i. Use a selective herbicide (if applicable) or an herbicide demonstrated to have little effect on the rare plant.

      ii. Use the lowest effective concentration of herbicide for the target plant if the Permittee can demonstrate that the rare plant is tolerant to the herbicide at that concentration.

      iii. Use barriers or containment structures (e.g. silt curtains) to protect the rare plant.

      iv. For floating rare plants, temporarily relocate the plants to an untreated area.

      v. Time the treatment.

   b. Emergent plants: If the rare plant is emergent or floating-leaved and the targeted plants are being treated above the water (i.e., target plants are emergent), the Permittee must maintain a no treatment buffer of 10 feet from the rare plant and choose one or more of the following mitigation measures:

      i. Use a selective herbicide (if applicable) or an herbicide demonstrated to have little effect on the rare plant.

      ii. Select an application technique designed to cause less non-target damage (e.g., low-drift nozzle heads, wiper applications, sponge bars, temporarily covering the rare species, etc.).

iii. Time the treatment during the growing season to prevent impacts to the rare plant.

## S11. APPENDICES

The attached appendices are incorporated by reference into this permit.

APPENDIX A - DEFINITIONS

APPENDIX B - PUBLIC NOTICE

APPENDIX C - ECOLOGY NOTIFICATION TEMPLATE

APPENDIX D - BUSINESS AND RESIDENTUAL NOTICE TEMPLATE

APPENDIX E - POSTING TEMPLATES

## GENERAL CONDITIONS

### G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess authorized by this permit, constitutes a violation of the terms and conditions of this permit.

### G2. PROPER OPERATION AND MAINTENANCE

The Permittee must at all times properly operate and maintain all systems of treatment and control to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit. The Permittee must not allow concentrations of the product(s) to exceed FIFRA label or permit conditions.

### G3. RIGHT OF ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law, at reasonable times:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;

B. To have access to and to copy any records that must be kept under the terms of the permit;

C. To inspect any postings, monitoring equipment, or method of monitoring required in this permit;

D. To inspect any collection, treatment, pollution management, or discharge facilities; and

E. To sample any discharge of pollutants.

### G4. PERMIT COVERAGE REVOCATION

Pursuant to chapter 43.21B RCW and chapter 173-226 WAC, the Director may require any discharger authorized by this general permit to apply for and obtain coverage under an individual permit or another more specific and appropriate general permit. Cases where revocation of coverage may be required include, but are not limited to the following:

A. Violation of any term or condition of this general permit.

B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts.

C. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

D. A determination that the permitted activity endangers human health or the environment, or significantly contributes to water quality standards violations.

E. Nonpayment of permit fees or penalties assessed pursuant to chapter 90.48.465 RCW and chapter 173-224 WAC.

F. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable; or Permittees who have their coverage revoked for cause according to WAC 173-226-240, may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form

## G5. GENERAL PERMIT MODIFICATION OR REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of chapter 173-226 WAC. Grounds for modification or revocation and reissuance include, but are not limited to, the following:

A. When a change that occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.

B. When effluent limitation guidelines or standards are promulgated pursuant to the Federal Water Pollution Control Act or chapter 90.48 RCW for the category of dischargers covered under this general permit.

C. When a water quality management plan containing requirements applicable to the category of dischargers covered under this general permit is approved.

D. When information is obtained which indicates that cumulative effects on the environment from dischargers covered under this general permit are unacceptable.

## G6. REPORTING A CAUSE FOR MODIFICATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for revocation under condition G5 above or 40 CFR 122.62 must report such information to Ecology so that a decision can be made on whether action to modify or revoke coverage under this general permit will be required. Ecology may then require submission of a new application for coverage under this, or another general permit, or an application for an individual permit. Submission of a new application does not relieve the Permittee of the duty to comply with all the terms and conditions of the existing general

permit until the new application for coverage has been approved and corresponding permit has been issued.

## G7. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

## G8. OTHER REQUIREMENTS OF 40 CFR

All other applicable requirements of 40 CFR 122.41 and 122.42 are incorporated in this general permit by reference.

## G9. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

## G10. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this general permit by administrative order or permit modification.

## G11. PAYMENT OF FEES

The Permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit coverage or take enforcement, collection, or other actions, if the permit fees established under chapter 173-224 WAC are not paid.

## G12. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER A GENERAL PERMIT

Any discharger authorized by this general permit may request to be excluded from coverage under this general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons must fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request The Director may either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to this general permit, the applicability of this general permit to that Permittee is automatically terminated on the effective date of the individual permit.

## G13. TRANSFER OF PERMIT COVERAGE

This permit coverage may be automatically transferred to a new Permittee if:

A. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.

B. The notice includes a written signed agreement between the existing and the new Permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them.

C. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke permit coverage.

## G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit will incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

## G15. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to Ecology must be signed and certified.

A. In the case of a municipal, state, or public facility, all permit applications must be signed by a principal executive officer or ranking elected official. In the case of a corporation, partnership, or sole proprietorship, all permit applications must be signed by either a principal executive officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   1. The authorization is made in writing by a person described above and submitted to Ecology.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of a regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for environmental matter, a new authorization satisfying the requirements of paragraph B.2 must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section must make the following certification:

*I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiries of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.*

## G16. APPEALS

The terms and conditions of the Aquatic Plant and Algae Management general permit are subject to appeal. There are two different appeal categories.

A. The permit terms and conditions as they apply to the appropriate class of dischargers are subject to appeal within thirty (30) days of issuance of this general permit in accordance with chapter 43.21(B) RCW and chapter 173-226 WAC; and

B. The applicability of the permit terms and conditions to an individual discharger are subject to appeal in accordance with chapter 43.21(B) RCW within thirty (30) days of effective date of coverage of that discharger.

An appeal of the coverage of this permit to an individual discharger is limited to the applicability or non-applicability of this permit to that same discharger. Appeal of this permit coverage of an individual discharger will not affect any other individual dischargers. If the terms and conditions of this general permit are found to be inapplicable to any discharger(s), the matter must be remanded to Ecology for consideration of issuance of an individual permit or permits.

## G17. SEVERABILITY

The provisions of this general permit are severable, and if any provision of this general permit, or application of any provision of this general permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this general permit shall not be affected thereby.

## G18. DUTY TO REAPPLY

The Permittee must reapply for coverage under this general permit at least one hundred and eighty (180) days prior to the specified expiration date of this general permit. An expired general permit and coverage under the permit continues in force and effect until Ecology issues a new general permit or until Ecology cancels it. Only those Permittees that reapply for coverage are covered under the continued permit.

# APPENDIX A – DEFINITIONS

## All definitions listed below are for use in the context of this permit only.

*303(d):* Section 303(d) of the federal Clean Water Act requires states to develop a list of polluted water bodies every two years. For each of those water bodies, the law requires states to develop Total Maximum Daily Loads (TMDLs). A TMDL is the amount of pollutant loading that can occur in a given water body (river, marine water, wetland, stream, or lake) and still meet water quality standards.

*Adjuvant*: An additive, such as a surfactant, that enhances the effectiveness of the primary chemical (active ingredient).

*Algae*: Primitive, chiefly aquatic, one-celled, or multicellular plant-like organisms that lack true stems, roots, and leaves but usually contain chlorophyll.

*Algaecide:* A chemical compound that kills or reduces the growth of algae or cyanobacteria.

*Algae control*: Applying algaecides to kill or suppress the growth of cyanobacteria, filamentous algae, or any algal species that have the potential to affect human or environmental health.

*All known, available, and reasonable methods of pollution control, prevention, and treatment* (*AKART*): A technology-based approach to limiting pollutants from discharges.
Described in chapters 90.48 and 90.54 RCW and chapters 173-201A, 173-204, 173-216 and 173-220 WAC.

*Applicant*: The licensed pesticide applicator or state or local government entity choosing to get coverage under this permit. For nutrient inactivation projects the applicant does not need to be a licensed applicator but may be a government entity or the person that discharges the product.

*Application schedule:* The proposed treatment date(s) for a specific water body or specific area within a water body during one treatment season.

*Applicator*: The person that discharges the chemical to a water body. Applicators are required to be licensed to apply registered pesticides. Some chemicals such as alum are not registered or used as pesticides and therefore the applicator does not, by state law, have to be licensed.

*Aquatic nuisance plants*: Any non-noxious aquatic plants that are at a density and location so as to substantially interfere with or eliminate some beneficial uses of the water body. Typically these beneficial uses include activities such as boating, swimming, fishing, or waterskiing.

*Aquatic plant control*: The partial removal of aquatic plants within a water body or along a shoreline to allow for the protection of beneficial uses of the water body.

*Beneficial uses*: See WAC 173-201A-200.

*Biological water clarifiers*: Microbial or bacterial products sold for the purpose of water clarification, removal of organic materials from sediment, and reduction of nutrients (as claimed by manufacturers).

*Blooms*: A high density or rapid increase in abundance of algae (cyanobacteria).

*Children's camps:* A site located along a water body that provides water contact recreation and other activities for children particularly during the summer months and includes day camps as well as residential camps.

*Constructed water body*: A man-made water body created in an area that was not part of a previously existing watercourse, such as a pond, stream, wetland, etc.

*Contact herbicide*: An herbicide that typically affects only the part of the plant that the herbicide is applied to. Contact herbicides often act as chemical mowers, leaving roots available for re-growth. Contact herbicides are fast-acting, but tend to result in temporary removal of the targeted plants.

*Control*: The partial removal of native plants, non-native non-noxious plants, algae, and noxious or quarantine-list weeds (that are not being eradicated lake-wide) from a water body. The purpose of control activities is to protect some of the beneficial uses of a water body such as swimming, boating, water skiing, fishing access, etc. The goal is to maintain some native aquatic vegetation for habitat while allowing some removal for beneficial use protection.

*Cyanobacteria*: A group of usually unicellular photosynthetic organisms without a well-defined nucleus; sometimes called "blue-green algae" although they are not actually algae. Some genera of cyanobacteria produce potent liver or nerve toxins.

*Defined navigation channels*: Clearly delineated areas that are intended to provide safe access to different sections of the water body by boat.

*Defined swimming channels*: Clearly delineated areas intended for safe passage of swimmer between swimming areas on a water body.

*Detention or retention ponds*: Man-made water bodies specifically constructed to manage stormwater. Detention ponds are generally dry until a significant storm event. Retention (wet) ponds are designed to have a permanent pool of water and gradually release stormwater through an outlet.

*Direct supervision responsibilities*: Licensed certified applicators may directly supervise unlicensed applicators. Direct supervision by aquatic certified applicators means direct on-the-job supervision and requires that the certified applicator be physically present at the application site and that the person making the application be in voice and visual contact with the certified applicator at all times during the application.

*Discharge Management Plan*: A site-specific water body plan that incorporates elements of integrated pest management. For new applicants with projects five or more acres, the Discharge Management Plan also serves as a SEPA addendum.

*Emergent vegetation*: Aquatic plants that generally have their roots in the water, but the rest of the plant is above water (e.g., cattails, bulrush).

*Eradication*: Eradication is the permanent removal of all non-native, ***invasive*** aquatic plants of one or more species within a water body or along a shoreline. The goal of eradication projects is to allow a diverse native plant community to flourish once the invasive species is eliminated. It may take years to achieve eradication of a target species.

*Federal Insecticide, Fungicide, and Rodenticide Act* (*FIFRA*)**:** A set of EPA regulations that establishes uniform pesticide product labeling, use restrictions, and review and labeling of new pesticides.

*Filamentous algae*: Typically green algae species that grow in long strings or form cloud-like mats in water. Filamentous algae do not produce toxins.

*Floating plants*: Plants that are not rooted in the sediment (e.g., duckweed). These plants freely float in or on the water surface, but are most often observed in shallow water.

*Floating-leaved plants*: Plants that are rooted in the sediment but have leaves floating on the water's surface (e.g., water lilies).

*Herbicide*: Any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any weed or other higher plant (see chapter 17.21.020 RCW).

*High use areas*: Any areas that get a high level of human use. Examples include community and public boat launches, marinas, public or community swim beaches, and canals.

*Identified and/or emergent wetlands*: Identified wetlands are those identified by either local, state, or federal agencies as being important wetlands. Emergent wetlands (marshes) are characterized by plants growing with their roots underwater and leaves extending above the water (emergent plants).

*Impact to non-target plants*: Plants inadvertently affected by an herbicide treatment that was intended to treat other plants. Impacts to the non-target plants may include death or affected growth or vigor.

*Individual treatments*: Treatments done at the request of an individual owner under a permit coverage specific to that property only.

*Intentionally apply*: The permit allows the applicator to directly discharge an herbicide, algaecide, or other product identified in this permit into areas designated for treatment (e.g., via

hoses, granular pellets, etc.). Note that products applied directly to the water may disperse outside of the boundaries of the treated area.

*Invasive*: Tending to spread and then dominate the area by outcompeting other plants. Some non-native species can become invasive when introduced outside of their native range. Some native plants can be invasive too (e.g., cattails).

*Legal oversight*: Having authority under the law to manage aquatic plants or algae in a water body. See also the sponsor definition.

*Legal water right*: A water right is a legal authorization to use a predefined quantity of public water for a designated use. The purpose must qualify as a beneficial use such as irrigation, domestic water supply, etc. Any use of surface water which began after the state water code was enacted in 1917 requires a water-right permit or certificate.

*Legal water right claim*: A water right claim is statement of beneficial use of water that began prior to 1917 for surface water. Claims remain valid until such time that adjudication occurs, whereby the validity of the claim must be proven before a court of law. During adjudication, claimants are required to prove that water has been in constant beneficial use prior to 1917 for surface water. Five or more consecutive years of non-use may invalidate a claim.

*Licensed pesticide applicator*: Any individual who is licensed as a commercial pesticide applicator, commercial pesticide operator, public operator, private-commercial applicator, demonstration and research applicator, or certified private applicator, or any other individual who is certified by the director of WSDA to use or supervise the use of any pesticide which is classified by the EPA as a restricted use pesticide or by the state as restricted to use by certified applicators only. WSDA classifies aquatic herbicides as restricted use pesticides.

*Littoral zone:* The vegetated area from the water body's edge to the maximum water depth where plant growth occurs. The littoral zone varies between water bodies depending on bathometry, water clarity, water quality, and other environmental conditions.

*Lot*: A parcel of land having fixed boundaries.

*Marker dyes*: Colorants that are sprayed onto the targeted weed along with the herbicide. Marker dyes allow better targeting of herbicide sprays since treated and untreated areas are more clearly seen by the applicator.

*Municipal or community drinking water intakes*: A drinking water intake that supplies water to a city, town, or a community.

*Native and non-native plants*: Native plants are plants that are indigenous to the region; non-native plants are not indigenous to the region, but are not on Washington's quarantine list or noxious weed list.

*New applicants*: An applicator or government entity that proposes to discharge pesticide into waters of the state, but does not already have coverage under the Aquatic Plant and Algae Management Permit for the proposed treatment site.

*Non-native*: A plant living outside of its natural or historical range of distribution. Plants considered to be non-native were not present in Washington prior to European settlement. Most non-native plants are not considered to be noxious weeds.

*Notice of Intent* (NOI): An application to obtain coverage under an NPDES permit.

*Noxious weed*: A legal term defined in chapter 17.10 RCW that means a non-native plant that when established is highly destructive, competitive, or difficult to control by cultural or chemical practices. The Washington State Noxious Weed Control Board maintains a legal list of noxious weeds (see chapter 16.750 WAC for the current list of noxious weeds).

*Nutrient management*: The use of chemical precipitants to bind soluble reactive phosphorus into an insoluble form that is unavailable to aquatic organisms, to clarify the water column, and to reduce the release of phosphorus from sediments. Nutrient inactivation is typically used to prevent algae blooms by inhibiting phosphorus release from sediments.

*Nutrient inactivation products*: Products used to inactivate nutrients in the sediments include aluminum sulfate or sodium aluminate (alum) and calcium hydroxide.

*Occasionally*: No more than a few times (1-3) per treatment season and only for unforeseen events (e.g., disruption with product deliveries or severe adverse weather conditions).

*Permittee*: The licensed applicator or government entities that have obtained coverage under the permit. For nutrient inactivation projects, the Permittee may be the discharger that most closely resembles a licensed applicator.

*Pesticide*: WAC 15.58.030 (31) "Pesticide" means, but is not limited to:

a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, snail, slug, fungus, weed, and any other form of plant or animal life or virus, except virus on or in a living person or other animal which is normally considered to be a pest or which the director may declare to be a pest;

b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant; and

c) Any spray adjuvant.

*Plant growth forms*: The growth characteristics (morphology) of aquatic plants such as emergent plants (cattails), submersed plants (Eurasian watermilfoil), and floating-leaved plants (water lilies).

*Potentially invasive plants*: Species that are not indigenous to the region, have been shown to have invasive tendencies, and have a probability of becoming listed as a noxious weed.

*Private property*: Any property owned by a single person or multiple persons or business that provides no public access to a water body.

*Priority habitats and species*: Habitats and species that WDFW considers priorities for conservation and management in Washington. Priority species require protective measures for their survival due to their population status, sensitivity to habitat alternation, and/or recreational, commercial or tribal importance. Priority habitats are habitat types or elements with unique or significant value to a diverse assemblage of species.

*Privately or publicly-owned shoreline*: Any shoreline area **without public access**, owned by an individual, business, or a public entity.

*Professional aquatic botanist*: A scientist that specializes in the study and identification of aquatic plants.

*Public access*: Identified legal passage to any of the public waters of the State, assuring that members of the public have access to and use of public waters for recreational purposes. Public access areas include public- or community-provided swimming beaches, picnic areas, docks, marinas, and boat launches at state or local parks and private resorts.

*Public access areas*: These areas include public- or community-provided swimming beaches, picnic areas, docks, marinas, and boat launches at state or local parks and private resorts.

*Public boat launch*: A public- or community-provided location on a water body that is designated for the purpose of launching or placing a boat in the water, usually for recreational purposes. Boat launches also include sites used as put-ins and take-outs for small watercraft such as canoes or kayaks.

*Public entrance*: A location where people typically access a public pathway.

*Public pathway*: A trail along a water body that allows access to the water body by the public.

*Quarantine-listed weeds*: Plants listed on the WSDA Quarantine list as identified in chapter 16.750 WAC.

*Reasonable public access*: Identified legal passage to any of the public waters of the State, or areas where it is apparent that the public have been accessing the water (well worn pathways or other indications of recent human usage of the site).

*Recreation*: Water skiing, boating, swimming, wading, fishing, and other such water-related activities.

*Right of way*: A strip of land that is granted, through an easement or other mechanism, for transportation or other typically public uses. Right of way locations may include roadsides and/or highways, railroads, power lines and irrigation ditches.

*Same time of day*: The same two-hour time window for pre- and post-treatment monitoring on any given day (applies to pH and dissolved oxygen monitoring).

*Selective herbicide*: An herbicide that kills or affects specific plant species, sparing other less-susceptible species. Selectivity occurs through different types of toxic action or by the manner in which the material is used (its formulation, dosage, timing, placement, etc.).

*Sensitive, threatened, or endangered plants*:

Sensitive: Any species that is vulnerable or declining and could become endangered or threatened in the state without active management or removal of threats.

Threatened: Any species likely to become endangered in Washington within the foreseeable future if factors contributing to its population decline or habitat degradation or loss continue.

Endangered: Any species in danger of becoming extinct or extirpated from Washington within the foreseeable future if factors contributing to its decline continue. Populations of these species are at critically low levels or their habitats have been degraded or depleted to a significant degree.

*SEPA addendum*: See also the definition for the State Environmental Policy Act (SEPA). "Addendum" means an environmental document used to provide additional information or analysis that does not substantially change the analysis of significant impacts and alternatives in the existing environmental document. The term does not include supplemental EISs. An addendum may be used at any time during the SEPA process (WAC 197-11-706)." A SEPA addendum provides additional site-specific information about a project.

*Shading products*: These compounds are usually non-toxic dyes and are designed to reduce the amount of light penetrating the surface of a water body, thereby reducing plant and algae growth.

*Shoreline*: The area where water and land meet.

*Shoreline emergent vegetation*: Plants growing along the edges of lakes, ponds, rivers, and streams that have at least part of their stems, leaves, and flowers emerging above the water surface and are rooted in the sediment (e.g., cattails, bulrush, bogbean).

*Sponsor*: A private or public entity or a private individual with a vested or financial interest in the treatment. Typically the sponsor contracts with a licensed applicator to apply pesticides for aquatic plant or algae management. A sponsor is an individual or an entity that has authority to administer common areas of the water body or locations within the water body for the purposes of aquatic plant and algae management. Entities with this authority include Lake Management Districts formed under chapter 36.61 RCW, Special Purpose Districts formed under Title 57 RCW, Homeowners Associations formed under chapter 64.38 RCW, and groups operating under

the provisions of chapter 90.24 RCW. There may be other entities with the authority to manage common areas in public or private water bodies. For treatment on individual lots, the sponsor must have the authority to contract for aquatic plant and algae management within the lot boundaries.

*State Environmental Policy Act (SEPA)*: A state policy that requires state and local agencies to consider the likely environmental consequences of a proposal before approving or denying the proposal (See chapter 43.21C RCW and chapter 197 -11 WAC).

*State experimental use permit*: A permit issued by WSDA allowing use of pesticides that are not registered, or for experiments involving uses not allowed by the pesticide label. Aquatic applications are limited to one acre or less in size.

*Submersed*: Underwater. Submersed plants generally always remain under water, although many submersed species produce above-water flowers (e.g., pondweeds, milfoil).

*Surface waters of the state of Washington*: All waters defined as "waters of the United States" in 40 CRF 122.2 within the geographic boundaries of the state of Washington. All waters defined in RCW 90.48.020. This includes lakes, rivers, ponds, streams, inland waters, and all other fresh or brackish surface waters and water courses within the jurisdiction of the state of Washington. Also includes drainages to surface waters.

*Swimming advisory*: Information required to be posted on all public signs advising people not to swim in the treated area for a number of hours after treatment. An advisory is a recommendation rather than a restriction.

*Swimming restriction*: Information required to be posted on all public signs stating that no swimming must occur in the treatment area for a number of hours after treatment.

*Systemic herbicide*: A chemical that moves (translocates) throughout the plant and kills both the roots and the top part of the plant. Systemic herbicides are generally slower-acting than contact herbicides, but tend to result in permanent removal of the targeted plants.

*Treatment*: The application of an aquatic herbicide, algaecide, or control product to the water or directly to vegetation to control vegetation, algae, or remove or inactivate phosphorus.

*Treated area*: The area where pesticide is applied and where the concentration of the pesticide is sufficient to cause the intended effect on aquatic plants or algae.

*Upland farm pond*: Private farm ponds created from upland sites that did not incorporate natural water bodies (WAC 173-201A-260(3)(f)).

*Washington Pesticide Control Act*: Chapter 15.58 RCW.

*Wetland*: Any area inundated with water sometime during the growing season, and identified as a

wetland by a local, state, or federal agency.

*Wetland Specialist*: A biologist who specializes in the study and identification of wetland plant species.

**In the absence of other definitions set forth herein, the definitions set forth in 40 CFR Part 403.3 or in chapter 90.48 RCW apply.**

# APPENDIX B – PUBLIC NOTICE

Public notice must be published at least once each week for two consecutive weeks, in a single newspaper of general circulation in the county or counties where the treatment will take place. The applicant must mail or deliver this notice to all potentially affected waterfront residents (those within one-quarter mile in each direction along the shoreline or across the water from proposed treatment areas) within one week of publishing the first newspaper notice.

The applicant may add additional project information to this template, but must not remove or change any bolded language (other than changing fonts or removing bolding).

## PUBLIC NOTICE TEMPLATE

*Applicant name and contact information (e.g., phone number, Email address, website)* **is seeking coverage under the NPDES Waste Discharge General Permit for aquatic plant and algae management.**

**The proposed coverage applies to** *list water body name, acres proposed for treatment, and their location within the water body*.

*Water body name* **may be treated to control aquatic plants and algae**. **The chemicals planned for use are:** *list all active ingredients anticipated for use*.

**Any person desiring to present their views to the Department of Ecology regarding this application must do so in writing within 30 days of the last date of publication of this notice. Comments must be submitted to the Department of Ecology. Any person interested in the Department's action on the application may notify the Department of their interest within 30 days of the last date of publication of this notice.**

**Submit comments to:**

**Department of Ecology**
**P.O. Box 47696**
**Olympia, WA 98504-7600**
**Attn: Water Quality Program, Aquatic Pesticide Permit Manager**
**Email: jonathan.jennings@ecy.wa.gov**
**Telephone: 360-407-6283**

**The chemicals planned for use have** (*name water use restrictions – such as drinking water or irrigation water use restrictions*) **for up to** (*number of days or other information about use restrictions*)**. Persons with legal water rights should contact the applicant if this coverage will result in a restriction of these rights. Permittees are required to provide an alternative water supply during treatment. Copies of the application are available by contacting the Aquatic Pesticide Permit Manager.**

## APPENDIX C – ECOLOGY NOTIFICATION TEMPLATE

# Email Form

**Email to:** (Regional contact and Aquatic Pesticide Permit Manager)

**From:** **Permittee or Applicator**: (name)
**Cell Phone No**: (contact number for the applicator)

# Pre-Treatment Notification

**Week of Treatment**:

| **Water body name & permit no.** | **County** | **Location where treatment will begin** | **Chemicals/products proposed for use** | **Targeted plants & algae** | **Proposed date & treatment start time** |
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**Additional Information:** _____

## Post-Treatment Notification

**Week of Treatment:**

| **Water body name & permit no.** | **County** | **Chemicals or products used** | **Targeted plants/ algae** | **Acres treated** | **Amount of product applied (lbs. or gallons)** | **Treatment date** |
|---|---|---|---|---|---|---|
| | | | | | | |
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**Additional Information:**
**Knowingly submitting false information will result in permit termination.**

## Permittee may add additional rows if needed

## APPENDIX D – BUSINESS AND RESIDENTIAL NOTICE TEMPLATE

The applicant may add project information to this template but must not remove or change any bolded language (other than changing fonts or removing bolding).

# Business and Residential Notice

**Distribution Date:** *Date notices mailed or delivered*

*Water body* **will be treated with** *name type of product (e.g., aquatic herbicides, algaecides, bacterial products, etc.)* **on or between** *treatment dates*.

**Product(s) planned for use:** *list product names*

**Active ingredient(s):** *list the active ingredients*

**Plants/Algae targeted:** *describe what will be treated and why*

**Location of treatment(s):** *describe locations or include a map*

**The applicator will post signs in the treated and potentially affected areas no more than 48 hours prior to treatment. The signs will describe any water use restrictions or advisories.**

**If you are withdrawing water for potable or domestic water use, livestock watering, or irrigation, and have no alternate water source, please contact** *name of applicator* **at** *phone number or e-mail* **to arrange an alternate water supply.**

*Note: Business and residential notification only goes ¼ mile from each treatment site. Check the product label to ensure that treatment does not impact potable water users more than ¼ mile from treatment area.*

**If you want additional notification prior to treatment, or have further questions, please contact me using the information above.** *Optional: include contact information for the sponsor here.*

**This herbicide treatment is regulated under a permit issued by the Washington State Department of Ecology. Permit No.** applicator to enter the permit coverage number

# APPENDIX E – POSTING TEMPLATES

# CAUTION

The aquatic herbicide 2, 4-D (amine formulation) will be applied under permit to these waters on _____ to control aquatic vegetation.

Ecology recommends no swimming in the sign-posted area for 24 hours following treatment due to possible eye irritation.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____

Phone number: (___)_____

This application is regulated by Department of Ecology: Phone (___)_____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# WARNING

The aquatic herbicide 2,4-D (ester formulation) will be applied under permit to these waters on _____ to control aquatic vegetation.

Use Restrictions: No swimming in the sign-posted area during and for 24-hours following treatment.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____
Phone number: (___) _____

This application is regulated by the Department of Ecology: Phone (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

The biological water clarifier _____ will be applied under permit to these waters on _____.

There are no swimming or recreation restrictions.

For more information contact the applicator: _____

Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

Diquat Dibromide will be applied under permit to these waters on _____ to control aquatic vegetation.

Ecology recommends no swimming in the sign-posted area for 24 hours following treatment due to possible eye irritation.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Domestic Animal Watering Restrictions:

For more information contact the applicator: _____
Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION**

# CAUTION

Endothall (Dipotassium salt) will be applied under permit to these waters on _____ to control aquatic vegetation.

Ecology recommends no swimming in the sign-posted area for 24 hours following treatment due to possible eye irritation.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Fishing Restrictions:

For more information contact the applicator: _____
Phone number: (___)_____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# WARNING

Endothall (Hydrothol 191™) will be applied under permit to these waters on _____to control algae.

Ecology recommends no swimming in the sign-posted area during and for 24-hours following treatment.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator:_____
Phone number: (___)_____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

Fluridone will be applied under permit to these waters on _____ to control aquatic vegetation.

There are no swimming or recreation restrictions.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____
Phone number: (___)_____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION**

# CAUTION

Glyphosate will be applied under permit to these waters on _____ to control aquatic vegetation.

There are no swimming or recreation restrictions.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____
Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

Imazapyr will be applied under permit to these waters on _____ to control aquatic vegetation.

There are no swimming or recreation restrictions.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____
Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

The shading product _____ will be applied under permit to these waters on _____ to control aquatic vegetation and/or algae.

There are no swimming or recreation restrictions.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____

Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

Sodium carbonate peroxyhydrate will be applied under permit to these waters on _____ to control algae.

Ecology recommends no swimming in the sign-posted area for 12 hours following treatment due to possible eye irritation.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____

Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

Triclopyr TEA will be applied under permit to these waters on _____ to control aquatic vegetation.

Ecology recommends no swimming in the sign-posted area for 12 hours following treatment due to possible eye irritation.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Fishing Restrictions:

For more information contact the applicator: _____

Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**

# CAUTION

Imazamox will be applied under permit to these waters on _____ to control aquatic vegetation.

There are no swimming or recreation restrictions.

**Applicator to put additional label restrictions or advisories here:**

Drinking Water Restrictions:

Irrigation Restrictions:

Stock Watering Restrictions:

For more information contact the applicator: _____
Phone number: (___) _____

Or the Department of Ecology at (___) _____

**THIS SIGN MUST REMAIN IN PLACE UNTIL 2 DAYS AFTER APPLICATION.**