



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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January 30, 2024

Erin Seyfried, Manager
NPDES Permits Section
United States Environmental Protection Agency - Region 10
1200 Sixth Avenue, Suite 155, OWW
Seattle, WA 98101

**RE: Clean Water Act Section 401 Water Quality Certification Order No. 22438 for EPA
National Pollutant Discharge Elimination System Pesticide General Permit**

Dear Erin Seyfried:

This letter is in response to the U.S. Environmental Protection (EPA) Agency letter, dated November 17, 2023, requesting Washington State Department of Ecology (Ecology) provide a Clean Water Act Section 401 Water Quality Certification (WQC) for the Final National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit.

With this Section 401 Water Quality Certification, Ecology certifies the EPA NPDES Pesticide General Permit (Permit) with conditions found in Order No. 22438. The Enclosed Order may be appealed by following the procedures described in the Order.

If you have any questions or would like to discuss this matter further, please contact Danielle Edelman, at 360-407-7118 or danielle.edelman@ecy.wa.gov.

Sincerely,

Jeff Killelea, Manager
Permit and Technical Services Section
Water Quality Program

WQC Order No. 22438
Aquatics ID No. 140164
January 30, 2024
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Enclosure (1)

By Certified Mail: 9489 0090 0027 6093 6760 05

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**In The Matter of Granting a Water Quality
Certification to U.S. Environmental Protection Agency pursuant
to 33 U.S.C. 1341 (FWPCA § 401), RCW 90.48.120, RCW
90.48.260 and Chapter 173-201A WAC**

U.S. Environmental Protection Agency, Region 10
NPDES Permits Section
Attn: Erin Seyfried
1200 Sixth Avenue, Suite 155, OWW
Seattle, WA 98101

WQC Order No.	22438
Site Location	EPA NPDES Pesticide General Permit authorizing discharges from the application of pesticides to surface Waters of the State in Washington.

On November 17, 2023, the U.S. Environmental Protection Agency (EPA) requested a Section 401 Water Quality Certification (WQC) for the National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit authorizing discharges to surface Waters of the State in Washington (defined in WAC 173-201 and RCW 90.48.020) from the application of pesticides. The following processing dates are listed below:

- On October 18, 2023, the EPA submitted a pre-filing meeting request.
- On November 17, 2023, Washington State Department of Ecology (Ecology) received a request for a WQC.
- On November 28, 2023, Ecology issued a public notice for the project.

EPA'S Pesticide General Permit for Point Source Discharges from the Application of Pesticides (PGP) went into effect on October 31, 2021, and will expire on October 31, 2026. The draft 2026 PGP, proposed under the Clean Water Act's (NPDES), contains permit conditions for point source discharges of biological pesticides and chemical pesticides that leave a residue. The draft PGP covers mosquito and other flying insect pest control; weed and algae pest control; animal pest control; and forest canopy pest control. On October 4, 2021, the Center for Biological Diversity (CBD) filed a petition for review with the Ninth Circuit on the 2021 Pesticide General Permit (PGP). EPA, U.S. Fish and Wildlife Services, and CBD entered into a settlement agreement on July 25, 2023. Information on the Settlement Agreement is available in Docket ID EPA-HQ-OGC-2023-0247.

EPA's proposed 2026 PGP was signed on November 8, 2023. The Federal Register Notice for the proposed permit was re-signed on November 21, 2023, to make non-substantive editorial corrections to some of the signatories' signature blocks prior to publication in the Federal Register. This proposed general permit, issued under the Clean Water Act's (CWA) National Pollutant Discharge Elimination System (NPDES) Program, contains proposed permit requirements for point source discharges of biological pesticides and chemical pesticides that leave a residue.

Pursuant to the Settlement Agreement for the petition *CBD v. EPA and US Fish and Wildlife Services*, EPA will issue the final 2026 PGP on or prior to December 17, 2024, with the effective date of October 31, 2026, when the current 2021 PGP expires. The proposed permit covers mosquito and other flying insect pest control; weed and algae pest control; animal pest control; and forest canopy pest control. The draft 2026 PGP requirements are largely the same as the current 2021 PGP requirements. Once finalized, the 2026 PGP will replace the 2021 PGP currently in place.

EPA may not issue a NPDES permit to conduct any activity that may result in any discharges into surface waters of Washington State until Ecology has granted a WQC or has waived its right to certify¹.

This Order and WQC imposes additional conditions, beyond the conditions of the draft NPDES permit, on the Project Proponent. In accordance with 40 CFR 124.53(e) Ecology has determined that no condition in the draft 2026 NPDES permit may be made less stringent without violating water quality standards in Washington State law.

Authorities

In exercising authority under 33 U.S.C. § 1341, 40 CFR Part 121, 40 CFR Part 124, RCW 90.48.120, and RCW 90.48.260, Ecology has examined the U.S. EPA's request for this WQC of the draft PGP pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA § 301, 302, 303, 306 and 307).
2. Conformance with the state water quality standards contained in chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by chapter 90.48 RCW, and with other applicable state laws; and

¹ 33 U.S.C. 1341(a)(1); 40 C.F.R. 124.53(a)

3. Conformance with the provision for industries and others to use all known, available and reasonable methods of prevention, control, and treatment (AKART) and water quality standards to protect state waters from pollution as required by RCW 90.48.010.
4. Conformance with Washington's prohibition on discharges that cause or tend to cause pollution of waters of the state of Washington as required by RCW 90.48.080.

With this WQC and through issuance of this Order, Ecology has determined that discharges consistent with the conditions imposed by this WQC will comply with applicable water quality standards or other appropriate requirements of State law. In view of the foregoing and in accordance with 33 U.S.C. §1341, 40 CFR Part 121, 40 CFR Part 124, RCW 90.48.120, RCW 90.48.260, chapter 173-200 WAC, and chapter 173-201A WAC, water quality certification is granted subject to the conditions within this Order and NPDES Permit.

With this Water Quality Certification Order (WQC Order), Ecology is granting with conditions EPA's request for a Section 401 Water Quality Certification for the proposed 2026 PGP. Ecology has determined that the proposed discharges will comply with all applicable state water quality and other appropriate requirements of State law, provided the project is conducted in accordance the conditions within this WQC Order and the proposed NPDES Permit.

Issuance of this WQC for the proposed draft PGP does not authorize the Project Proponent to exceed applicable state surface water quality standards (chapter 173-201A WAC), ground water standards (chapter 173-200 WAC) or sediment quality standards (chapter 173-204 WAC), standards in the EPA's Revision of certain Federal water quality criteria applicable to Washington (40 CFR 131.45), and other appropriate requirements of State law except as described in WQC B.5.b.

Water Quality Certification Conditions

A. Definitions

1. For purposes of this Order, the term "Project Proponent" shall mean those that are seeking coverage under this general permit, and its agents, assignees and contractors.
2. The Federal Agency shall mean the US Environmental Protection Agency (EPA). The Federal Agency shall enforce the permit and ensure that the Project Proponent complies with the conditions of the permits at all times.

B. Water Quality

1. Failure of any person or entity to comply with this Certification may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Certification.
 - **Justification:** Ecology must protect waters of the state from all discharges and potential discharges of pollution that can affect water quality to protect aquatic life and beneficial uses. Ecology has independent state authority to ensure protection of state water quality. Civil penalties and other enforcement actions are the primary means of securing compliance with water quality requirements.
 - **Citation:** Chapter 90.48 RCW, RCW 90.48.030, RCW 90.48.037, RCW 90.48.080, RCW 90.48.120, RCW 90.48.140, RCW 90.48.142, RCW 90.48.144, and WAC 173-225-010.
2. Conditions for Pesticide Applicators
 - a) Project proponents must be licensed in the State of Washington to apply aquatically labelled pesticides and must comply with chapters 16-228 of the Washington Administrative Code (WAC), 15.58 Revised Code of Washington (RCW), and 17.21 RCW.
 - **Justification:** This is a requirement of the State in order to make sure that pesticides are applied legally and appropriately.
 - **Citation:** Chapter 16-228 WAC, Chapter 15.58 RCW, and Chapter 17.21 RCW.
3. Conditions for Pesticide Application
 - a) The application of pesticide products must not cause or contribute to violations of the Water Quality Standards for Surface Water 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 CFR 131.36). Discharges that do not comply with these standards are prohibited.
 - **Justification:** Ecology must ensure that the application of pesticide products does not cause harm to aquatic life, habitats, or human health.

- **Citation:** Chapter 173-201A WAC, Chapter 173-200 WAC, Chapter 173-204 WAC, and 40 CFR 131.36.

4. Conditions for Short Term Modification of Water Quality Standards

a) Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC) allow a temporary exceedance of water quality criteria provided the Project proponent has complied with WAC 173-201A-410. Compliance with the Pesticide General Permit satisfies this requirement.

- **Justification:** Ecology may allow short term exceedance of water quality standards in order to allow for pesticide and other chemical treatments to occur to protect beneficial uses of waterbodies and human and environmental health.
- **Citation:** Chapter 173-201A WAC.

5. All discharges of pesticides directly to water, discharged above water or at the water's edge where pesticides will enter the water must submit an NOI and obtain coverage under the 2026 Pesticide General Permit.

The contents of this condition are required in order to comply with the State antidegradation policy (WAC 173-201A-300) and limit the discharge of polluting matter in water (RCW 90.48.080 and RCW 90.48.520).

- **Justification:** Ecology must track discharges of wastewater and pollutants to waters of the state as delegated authority for the Clean Water Act.
- **Citation:** WAC 173-201A-300, RCW 90.48.080, and RCW 90.48.520.

6. Conditions for Mosquito Control

a) Refer to the Washington State Aquatic Mosquito Control General Permit and Fact Sheet for more information (<https://ecology.wa.gov/regulations-permits/permits-certifications/aquatic-pesticide-permits/aquatic-mosquito-control>). Below are the allowed active ingredients and conditions for use:

1) Approved active ingredients of Aquatic mosquito control:

- i. Bacillus sphaericus (strain H-5a5b)
- ii. Bacillus thuringiensis israelensis (Bti)
- iii. Malathion
- iv. Methoprene
- v. Monomolecular surface films
- vi. Paraffinic white mineral oil
- vii. Spinosad
- viii. Etofenprox
- ix. Naled
- x. Natural Pyrethrins
- xi. Permethrin
- xii. Piperonyl Butoxide (PBO)
- xiii. Prallethrin
- xiv. Resmethrin
- xv. Sumithrin (d-phenothrin)
- xvi. Deltamethrin (adulticide)

b) Conditions for use: Endangered, Threatened, Sensitive, or Candidate Species

- 1) The Project proponent must ensure that the application of larvicides or adulticides does not cause permanent harm to vulnerable species, which include endangered, threatened, sensitive, or candidate species. Washington Department of Fish and Wildlife (WDFW) identified specific areas, which are known habitat for vulnerable species. These areas are identified in the WDFW map showing Areas of Restricted Pesticide (Larvicide and Adulticide) Use Due to Presence of Vulnerable Species (<https://wdfw.maps.arcgis.com/apps/MapSeries/index.html?appid=34533b2dd4f84932b5fd1a46e494bde6>).

- 2) The Project proponent must consult the WDFW *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species* linked above prior to conducting any treatments. For those areas within the Project proponent's jurisdiction, they must comply with WDFW restrictions to protect sensitive, threatened, or endangered species, and priority habitats and species during mosquito control activities.
- c) Conditions for Types of Mosquito Control
- 1) Larvicides: The Project proponent is not authorized to apply malathion in lakes, streams, in the littoral zone of water bodies, or the sites referenced in *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species*. Use of malathion is only allowed in response to the development of pesticide resistance within a specific larval mosquito population and after consultation with WDFW. The use of methoprene briquette formulations in marine or estuarine treatment sites is prohibited.
 - d) Adulticides: The Project proponent must use ultra-low volume (ULV) application equipment to apply adulticides if available.

Malathion and naled are not authorized to be used in the vulnerable species areas referenced in *Areas of Restricted Larvicide and Adulticide Use Due to Presence of Vulnerable Species*. Contact the WDFW habitat biologist for your area for more information about adulticide application restrictions in your area (<https://wdfw.maps.arcgis.com/apps/MapSeries/index.html?appid=34533b2dd4f84932b5fd1a46e494bde6>). Project proponents can also contact the WDFW Habitat Program at habitatprogram@dfw.wa.gov or 360-902-2534.

- **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
- **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, WAC 173-201A-320, RCW 77.15.120 and 77.15.130.

7. Conditions for Aquatic Plant and Algae Management

- a) The following pesticides are approved for use in treatments of fresh water to manage aquatic noxious weeds, algae, and native nuisance plants.
- i. 2,4-D, Amine Formulation
 - ii. 2,4-D, Ester Formulation
 - iii. Aminopyralid
 - iv. Bispyribac-sodium
 - v. Carfentrazone-ethyl
 - vi. Diquat Dibromide
 - vii. Endothall, Dipotassium salt (*e.g.*, Aquathol)
 - viii. Endothall, Monopotassium salt (*e.g.*, Hydrothol)
 - ix. Florpyrauxifen-benzyl
 - x. Flumioxazin
 - xi. Fluridone
 - xii. Glyphosate
 - xiii. Imazamox
 - xiv. Imazapyr
 - xv. Penoxsulam
 - xvi. Peroxyacetic/ Peracetic Acid plus Hydrogen Peroxide
 - xvii. Sodium carbonate peroxyhydrate
 - xviii. Topramezone
 - xix. Triclopyr TEA
 - xx. Adjuvants – Contact the Washington State Department of Agriculture (WSDA) Pesticide Registration program at pestreg@agr.wa.gov or (360) 902-2030 to determine which adjuvants are currently approved for aquatic use in Washington.
 - xxi. Nutrient Inactivation Products – Aluminum sulfate, sodium aluminate, calcium hydroxide/oxide, and calcium carbonate, lanthanum-modified bentonite clay, and powdered or granulated iron.

xxii. Marker dyes, tracer dyes, shading and water clarification products.

- a. Water clarification products must only be used in waterbodies with no discharge to other surface waters of the State during and for two weeks after treatment.

b) Conditions for Littoral Zone Limitations for Native Nuisance Plants

- 1) The Project proponent is authorized to apply chemicals to: 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.
- 2) The geographic area where the Project proponent 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.
- 3) 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.
- 4) The cumulative percentage of the littoral zone where herbicides are authorized to be applied must not exceed the amount allowed below:
 - i. In water bodies up to 15 acres in size, the Project proponent is authorized to apply herbicides to no more than 75 percent of the littoral zone.
 - ii. In water bodies over 15 acres and up to 50 acres in size, the Project proponent is authorized to apply herbicides to no more than 60 percent of the littoral zone.
 - iii. In water bodies over 50 acres and up to 500 acres in size, the Project proponent is authorized to apply herbicides to no more than 50 percent of the littoral zone.
 - iv. In water bodies over 500 acres in size, the Project proponent is authorized to apply herbicides to no more than 30 percent of the littoral zone.

c) Conditions for Shoreline and Emergent Native Nuisance Plants

- 1) The Project proponent is authorized to apply herbicides to 100 percent of the plants within the right-of-way and on levees and dikes.

- 2) The Project proponent is authorized to apply herbicides to no more than 40 percent of native vegetation on shorelines, roadsides and ditches, but is authorized to apply herbicide to 100 percent of any noxious or quarantine-listed weeds.

Note: Ecology recognizes that discharge permits can regulate the specific areas where a Project proponent discharges (or intentionally applies) a chemical. A discharge permit cannot regulate or control the extent of dispersion because it varies depending on environmental conditions. Dispersion means that sometimes the treatment affects more area or less area than anticipated.

d) Conditions for Algae Control

- 1) The Project proponent may intentionally apply algaecides to filamentous green algae provided the treated areas do not exceed the maximum amount of littoral zone allowed according to the waterbody's size.
- 2) The Project proponent may intentionally apply algaecides to the entire waterbody or sections of the waterbody, as needed, when cyanobacteria or other potentially toxic or environmentally harmful algae species are in the waterbody.
- 3) Restrictions for algaecide treatments are as follows:
- 4) If a Project proponent must conduct a full-waterbody pesticide (or algaecide) treatment for algae:
 - i. Project proponents must take at minimum one dissolved oxygen measurement approximately 24 hours prior to the planned algae treatment. Multiple dissolved oxygen measurements may be taken at the same time of day as the planned treatment to determine an average dissolved oxygen level for the waterbody.
 - ii. Project proponents must measure dissolved oxygen after the algaecide treatment is complete and the after effects of the treatment are occurring. The post-treatment dissolved oxygen level must not be lower than 0.2 mg/L below the mandatory single pre-treatment measurement or the average of multiple pre-treatment measurements.

e) If water quality or algae conditions are such that a Project proponent believes a full-waterbody treatment may cause a lethal drop in dissolved oxygen, or the Project proponent is unable to conduct pre-treatment dissolved oxygen monitoring, the Project proponent may use the following alternative treatment methods:

- 1) The Project proponent may use only phosphorous sequestration products in the algae treatment.
- 2) The Project proponent may treat up to one third of the lake each week with algaecide.
 - **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
 - **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, RCW 77.04.012, RCW 77.04.020, RCW 77.12.047, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-320, WAC 173-201A-240, WAC 173-201A-300, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, and WAC 173-226-070.

8. Conditions for Aquatic Noxious Weed Control

a) The following applies to control of shoreline and emergent noxious weeds in both freshwater and marine locations where pesticides are not directly discharged to water. Project proponents are authorized to make herbicide applications only for the control of state listed noxious weeds and weeds on the WSDA quarantine list that are found in aquatic environments. Noxious weed means those species of plants listed as noxious class A, B, and C weeds by the Washington State Noxious Weed Control Board in accordance with Chapter 17.10 RCW. WSDA maintains the quarantine list in accordance with Chapter 17.24 RCW. The following pesticides are approved for use on state listed noxious weeds:

- i. Aminopyralid
- ii. Bispyribac-sodium
- iii. Carfentrazone-ethyl

- iv. 2,4-D, Amine Formulation
- v. Florpyrauxifen-benzyl
- vi. Flumioxazin
- vii. Glyphosate
- viii. Imazamox
- ix. Imazapyr
- x. Penoxsulam
- xi. Topramezone
- xii. Triclopyr TEA
- xiii. Adjuvants – Contact the Washington State Department of Agriculture (WSDA) Pesticide Registration program at pestreg@agr.wa.gov or (360) 902-2030 to determine which adjuvants are currently approved for aquatic use in Washington.
- xiv. Marker Dyes
 - **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
 - **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.48.445, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, and WAC 173-201A-320.

9. Conditions for *Zostera Japonica* Management

- a) Treatments of the non-native eelgrass *Zostera japonica* are limited to commercial clam beds in Willapa Bay and one application per year of imazamox with a treatment window of April 15 to June 30th. The Project proponent must maintain a 10-meter buffer inside the parcel boundary where imazamox will not be applied, unless owners of adjacent commercial shellfish beds where treatment is conducted agree that a buffer is not required on the connecting parcel boundary. Project proponents must not apply treatments on geoduck clam beds, or directly apply imazamox into

any drainage that contains *Z. marina* and is moving water off the treatment site. The Project proponent must not use adjuvants for *Zostera japonica* treatments.

- **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
- **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, and WAC 173-201A-320.

10. Conditions for Irrigation System Aquatic Weed Control

- a) The following conditions on irrigation system aquatic weed control treatments are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State. Please refer to the Washington State Irrigation System Aquatic Weed Control General Permit and Fact Sheet for more information (<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Irrigation-system-aquatic-weed-control>). The following pesticides are approved for use:
- i. Copper (dissolved)
 - ii. Acrolein
 - iii. Endothall, Dipotassium salt (*e.g.*, Aquathol)
 - iv. Endothall, Monopotassium salt (*e.g.*, Hydrothol)
 - v. Xylene
 - vi. Sodium Carbonate Peroxyhydrate
 - vii. Fluridone
 - viii. Imazapyr
 - ix. Adjuvants – Contact the WSDA Pesticide Registration program at pestreg@agr.wa.gov or (360) 902-2030 to determine which adjuvants are currently approved for aquatic use in Washington.

- b) Wherever treated water from a pesticide application eventually flows to a point of compliance, the Project proponent must ensure that the pesticide concentrations do not exceed the following limits at the point of compliance:

Parameter Maximum instantaneous concentration:

- i. Copper (dissolved) 25 µg/l
 - ii. Acrolein 21 µg/l
 - iii. Dipotassium Salt of Endothall (such as Cascade) 5.0 mg/l (acid equivalent)
 - iv. Mono (N,N-Dimethyl Alkylamine) Salt of Endothall (such as Teton) 0.050 mg/l (equal to 50 ug/l) (acid equivalent) at any time and 0.2 mg/l (equal to 200 ug/l) (acid equivalent), subject to timing windows (Condition 7).
 - v. Xylene 5.1 mg/l
- c) The maximum instantaneous concentration means the highest allowable discharge at any time. The point of compliance means the location where water treated with pesticides enters surface water bodies that existed prior to the creation of reclamation and irrigation projects.
- **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
 - **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, RCW 77.04.012, RCW 77.04.020, RCW 77.12.047, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-320, WAC 173-201A-240, WAC 173-201A-300, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, and WAC 173-226-070.

11. Conditions for Aquatic Invasive Species

- a) The following conditions apply to control of Aquatic Invasive Species as defined in the references below.

- b) Marine projects may occur in marine or estuarine waters and target non-native invasive animals and non-native invasive algal species. This permit only authorizes marine projects for:
- 1) Prohibited or unlisted animals as identified in the Washington Administrative Code, WAC 220-640-030, 220-640-040, and 220-640-050.
 - 2) Animals or marine algae listed on the Washington Invasive Species Council (WISC) management priority list.
 - 3) Animals listed by the United States Fish and Wildlife Service (USFWS) as injurious wildlife under the Lacey Act (18 U.S.C. 42; 50 CFR 16).
 - 4) Insects identified in Chapter 16-470 WAC: Quarantine-Agricultural Pests.
 - 5) Non-native potentially invasive marine animals and algae not listed on the above lists, as determined in consultation with the WDFW, the Washington Department of Natural Resources (WDNR), the WSDA, the WISC, or applicable federal agencies such as the USFWS.

The following are approved for use in Aquatic Invasive Species Control.

Marine or freshwater applications:

- i. Sodium chloride
- ii. Potassium chloride
- iii. Chlorine compounds including chlorine dioxide, sodium chlorite, sodium hypochlorite, and calcium hypochlorite
- iv. Acetic acid
- v. Calcium hydroxide/oxide (lime) and carbon dioxide

Freshwater applications only:

- i. Endothall (e.g., Hydrothol 191™): mono(N,N-dimethylalkylamine) salt of 7-oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
- ii. Sodium carbonate peroxyhydrate
- iii. Methoprene
- iv. Chelated copper compounds

v. *Pseudomonas fluorescens* strain CL 145A

Project proponents must consult with WDFW Aquatic Invasive Species Program staff prior to conducting treatments, at ais@dfw.wa.gov, 1-888-WDFW-AIS or their website <https://wdfw.wa.gov/species-habitats/invasive>.

12. Conditions for Fish management

- a) The following conditions on fish management treatments using rotenone are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State. Please refer to the Washington State Aquatic and Invasive Species Control General Permit and Fact Sheet for more information.

<https://ecology.wa.gov/regulations-permits/permits-certifications/aquatic-pesticide-permits/aquatic-invasive-species-control-general-permit>

The following are approved for use in fish management treatments:

- 1) Rotenone products registered in Washington State.
- 2) Potassium Permanganate (KMnO₄) is the only chemical authorized to deactivate rotenone treated waters when necessary to prevent damage to non-targeted organisms and maintain water quality outside of the area intended for rotenone treatment.

Additional conditions

- b) Project proponents must consult with WDFW Fish Program staff prior to conducting rotenone treatments, via email at FISHPGM@dfw.wa.gov.

All treatments conducted for fish management must follow the most recent version of: *Planning and Standard Operating Procedures for Use of Rotenone in Fish Management – Rotenone SOP Manual*; Finlayson, B., D. Skaar, J. Anderson, J. Carter, D. Duffield, M. Flammang, C. Jackson, J. Overlock, J. Steinkjer, and R. Wilson. American Fisheries Society, Bethesda, MD.

See section 8 below for information about determining water rights and requirements to provide replacement water.

- **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state

requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.

- **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-240, WAC 173-201A-410(4)(c)(i and ii), Chapter 173-226 WAC, WAC 173-226-070, and WAC 173-201A-320.

13. Conditions for Invasive Insect Control

- a) The following conditions on invasive insect control treatments are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State. Please refer to the Invasive Moth Control Permit and Fact Sheet for more information (<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Invasive-moth-control>).

The following pesticides are approved for use:

- Bacillus thuringiensis var. kurstaki based pesticides
- Pheromone based pesticides (*e.g.*, disparlure)
- Chlorantraniliprole: 3-Bromo-N-[4-chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide
- Cyfluthrin: cyano(4-fluoro-3-phenoxyphenyl)methyl 3(2,2-dichloroethenyl)-2, 2-dimethylcyclopropane-carboxylate
- Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine
- Japanese beetle nematode
- Adjuvants: Contact WSDA Registration Services at pestreg@agr.wa.gov or (360) 902-2030 to ensure any adjuvants intended for use are registered in Washington and approved for aquatic sites.

Additional restrictions

- b) A period of three days between treatments is required prior to re-treating the previously treated area. The Project proponent must notify WDFW with regard to state listed threatened, endangered, and candidate species, on a site specific basis, 60 days prior to treatment. WDFW habitat biologist contact information can be found here:

<https://wdfw.maps.arcgis.com/apps/MapJournal/index.html?appid=48699252565749d1b7e16b3e34422271>.

- **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
- **Citation:** Chapter 90.48 RCW, RCW 90.48.010, RCW 90.48.520, RCW 90.52.040, RCW 90.54.020, RCW 90.48.080, RCW 90.48.260, Chapter 173-201A WAC, WAC 173-201A-020, WAC 173-201A-300, WAC 173-201A-410(4)(c)(i and ii), WAC 173-201A-240, Chapter 173-226 WAC, WAC 173-226-070, and WAC 173-201A-320.

14. Conditions for Forest Canopy Pest Control

- a) The following conditions on forest canopy pest control treatments are in place to protect aquatic life, sensitive or threatened species, and water quality standards in Washington State.

Project proponents performing forest canopy pest control must follow the requirements in Title 76 RCW (Forests and Forest Products).

- **Justification:** Restrictions on the active ingredients allowed, as well as when and how pesticide products may be applied are technology-based requirements which Ecology has determined are necessary to meet the state requirement for the use of all known, available and reasonable methods of prevention, control and treatment (AKART) and water quality standards.
- **Citation:** Title 76 RCW.

15. Conditions for Public Notice

- a) Ecology includes public notification and treatment area postings in the pesticide permits it issues. These requirements are intended to protect the public health, welfare, and enjoyment of waters of the state by reducing the public's exposure to pesticides.

The Project proponent must publish a public notice in a newspaper of general circulation in the area where treatment will occur, prior to the first application of the season. The newspaper notice must contain:

- 1) Proposed schedule of treatments for the season.
- 2) Common name of the water body to be treated.
- 3) Pesticides and other chemicals to be used.
- 4) Any water use restrictions or precautions
- 5) Contact information of the Project proponent and any agency staff involved.
- 6) Ecology's regional twenty-four (24) hour Emergency number.
- 7) Notification shall explain the project and explain that any treated areas will be posted no more than 48 hours before treatment begins.

16. Conditions for Shoreline Signs

- a) The Project proponent must use Ecology posting templates contained in each pesticide permit to post the treated areas, where feasible, to 400 feet beyond the boundary of the treatment area. Sign postings must occur at all reasonable points of public access to the treatment area. Signs posting of treatment areas must be posted before treatment commences, but no more than 48 hours before the start of treatment. Signs must also be posted in the commonly spoken languages of the area where treatment is occurring. Remove all old signs at the end of the water use restriction.

Shoreline posting templates can be found on these permit websites:

Aquatic Invasive Species Control:

<https://ecology.wa.gov/regulations-permits/permits-certifications/aquatic-pesticide-permits/aquatic-invasive-species-control-general-permit>

Aquatic Mosquito Control:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-mosquito-control>

Aquatic Noxious Weed Control:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-noxious-weed-control>

Aquatic Plant and Algae Management:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-plant-algae-management>

- **Justification:** The public must be notified of chemical treatments in order to be aware of possible dangers of exposure. The public must be given the opportunity to comment on proposed projects or permits which may impact the beneficial uses of waterbodies, the environment, and aquatic life.
- **Citation:** RCW 90.48.010, and WAC 173-226-130.

17. Conditions for Water Rights and Providing Replacement Water

- a) Ecology includes notification of treatments and requirements for replacement water for individuals who withdraw potable water or that have a valid water right or claim for irrigation water or livestock in the pesticide permits it issues.

Project proponents are required to provide, as detailed below, an alternative or replacement water source when treatment will affect potable water, irrigation water, or livestock watering, uses in order to comply with water rights laws and regulations.

- 1) Information about existing water rights is available using the database linked on the following webpage. Project proponents may also contact Ecology regional staff listed on the webpage for assistance
<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-rights-search>.
- 2) The Project proponents must notify individuals who withdraw potable water, or that have a valid water right or claim for irrigation water or livestock watering prior to treatment with any chemical that restricts the use of the water for these purposes.

- 3) Notification must be made to all those with a valid water claim or right in the treatment area, as well as in any applicable setback distances on the product label from the edge of the treatment area whose water use may be affected by the pending treatment.
 - i. Initial notification must occur prior any chemical treatment occurring during the year, and must occur each year treatment takes place.
- b) If requested by an affected water user, the Project proponents must provide at least two weeks advance notice of pending treatments with potable water, irrigation water, or livestock watering, restrictions. If requested by an affected water user(s), the Project proponents, at their own expense, must provide a replacement/alternative water supply until the water at the point of withdrawal tests at or below the concentration specified for the active ingredient(s) on the product label for the restricted water use. The replacement/alternative water supply must allow the requestor to use water as they are accustomed to (e.g. be able to run their kitchen faucet and obtain potable water), however the requestor may agree to lesser water provision (e.g. bottled water for a vacation house) if they choose.
 - 1) Project proponents are responsible for reaching an agreement with the requestor (affected water user) to determine how the replacement/alternative water supply will be provided.
 - **Justification:** These requirements are intended to protect the public health, welfare, and enjoyment of waters of the state by reducing the public's exposure to pesticides and preventing the improper discharge of pesticides.
 - **Citations:** RCW 90.48.010, and WAC 173-201A-200(3).

18. Conditions for Treatment Timing Windows

- a) Project proponents must consult the WDFW timing windows prior to conducting any aquatic treatments under this permit. The Project proponents must comply with WDFW timing windows to protect sensitive, threatened, or endangered species, and priority habitats and species such as salmon, steelhead, and bulltrout.

Timing windows may apply to fish or non-fish species. Information about waterbody-specific treatment timing windows is provided by WDFW on the map linked below: <https://wdfw.maps.arcgis.com/apps/MapSeries/index.html?appid=34533b2dd4f84932b5fd1a46e494bde6>.

Project proponents can also contact the WDFW Habitat Program at habitatprogram@dfw.wa.gov or (360) 902-2534.

Some treatment timing windows require consultation with WDFW prior to beginning any treatment. Project proponents must follow WDFW guidance and treatment limits on waterbodies where the treatment timing window requires consultation.

Timing windows do not apply to:

- 1) Treatments conducted for emergent and shoreline plants.
- 2) Treatments conducted for roadside, ditch bank and flood control structure plant control.
- 3) Nonnative fish such as bass, walleye, sunfish, perch, carp, or catfish. At their discretion, Project proponents may choose to comply with the nonnative fish timing windows noted in the WDFW timing table.

Modified Timing Window Requests

Contact the regional WDFW biologist to develop a new timing window if the default window will not provide for adequate treatment. WDFW biologist contact information may be found through the Areas of Responsibilities Map Tool: <https://www.arcgis.com/apps/MapJournal/index.html?appid=48699252565749d1b7e16b3e34422271>.

Pesticides subject to WDFW Timing Windows for Salmon, steelhead, bull trout and other priority species:

- i. 2,4-D Amine
- ii. 2,4-D Ester
- iii. Carfentrazone-ethyl
- iv. Approved chelated copper compounds
- v. Chlorine
- vi. Diquat
- vii. Endothall Dipotassium Salt

- viii. Endothall Mono Salt
- ix. Flumioxazin
- x. Potassium Permanganate
- xi. Rotenone

For all other chemicals allowed for use under Aquatic Plant and Algae Management and Aquatic Invasive Species Control check the WDFW Timing Window map tool for other priority species (non-fish) work windows.

For irrigation canal systems the WDFW timing windows only apply to endothall mono salt.

- **Justification:** Ecology must condition its permits to follow WDFW mandates to protect sensitive species and habitats.
- **Citations:** RCW 77.15.120, RCW 77.15.130(1), RCW 77.04.012, WDFW's Priority Habitat and Species Program is a science-based agency initiative used as part of AKART (WAC 173-201A-020).

19. Conditions for Rare Plants

- a) For treatments using herbicides or algaecides the Project proponent must consult with the WDNR Natural Heritage Program to determine if sensitive, threatened, or endangered (rare) plants are present in the proposed treatment area in order to protect rare plants. A map of known rare plants is available here:
https://experience.arcgis.com/experience/174566100f2a47bebe56db3f0f78b5d9/page/Rare-Plant-and-Ecosystem-Locations/?data_id=dataSource_1-1860f1593ba-layer-47%3A2497&views=P%26E-View---Legend.

If a rare plant is reported in or around the waterbody, the Project proponent must survey for the rare plant and mitigate for impacts. If a rare plant is found in the treatment area the Project proponent must consult with WDNR Natural Heritage Program staff, and implement appropriate mitigations prior to beginning application of pesticides. Contact them at (360) 902-1667, natural_heritage_program@dnr.wa.gov, or via their website <https://www.dnr.wa.gov/natural-heritage-program>.

- **Justification:** Ecology must condition its permits to follow WDFW mandates to protect sensitive species and habitats.
- **Citations:** Chapter 79.70 RCW, RCW 79.70.010, RCW 79.70.020, and RCW 79.70.030.

C. Timing Requirements

1. This Certification is valid until the expiration date including any administrative extension or termination date of the Pesticide General NPDES Permit.

D. Notification Requirements

1. The Federal Agency shall enforce and the Project Proponent must comply with all the reporting and notification conditions of the Pesticide General NPDES permit, including conditions of the permit requiring the Project Proponent to report to Ecology.

Your right to appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do all of the following within 30 days of the date of receipt of this Order:

- File your notice of appeal and a copy of this Order with the PCHB (see filing information below). "Filing" means actual receipt by the PCHB during regular business hours as defined in WAC 371-08-305 and -335. "Notice of appeal" is defined in WAC 371-08-340.
- Serve a copy of your notice of appeal and this Order on the Department of Ecology mail, in person, or by email (see addresses below).

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Filing an appeal

Filing with the PCHB

For the most current information regarding filing with the PCHB, visit: <https://elaho.wa.gov/> or call: (360) 664-9160.

Service on Ecology

Street Addresses:

Department of Ecology
Attn: Appeals Processing Desk
300 Desmond Drive SE
Lacey, WA 98503

Mailing Addresses:

Department of Ecology
Attn: Appeals Processing Desk
PO Box 47608
Olympia, WA 98504-7608

E-Mail Address:

ecologyappeals@ecy.wa.gov

Contact Information

Please direct all questions about this Order to:

Danielle Edelman
Department of Ecology
P.O. Box 47600
Olympia, WA 98503-7600
(360) 407-7118
danielle.edelman@ecy.wa.gov

More Information

- **Pollution Control Hearings Board Website**
<https://eluh0.wa.gov>
- **Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice And Procedure**
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW – Administrative Procedure Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>
- **Chapter 90.48 RCW – Water Pollution Control**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>
- **Chapter 173.204 Washington Administrative Code (WAC) Sediment Management Standards**
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-204>
- **Chapter 173-200 WAC Water Quality Standards for Ground Waters of the State of Washington**
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-200>
- **Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington**
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A>

SIGNATURE

Dated this 30th day of January 2024 at the Department of Ecology, Lacey, Washington.



Jeff Killelea, Manager
Permit and Technical Services Section
Water Quality Program