FACT SHEET FOR THE DRAFT AQUATIC NOXIOUS WEED MANAGEMENT NPDES GENERAL PERMIT

DEPARTMENT OF ECOLOGY

SUMMARY

This fact sheet is a companion document to the National Pollutant Discharge Elimination System (NPDES) *General permit* for management of aquatic *noxious weeds* and *quarantine list plants*. It explains the nature of the proposed *discharge*, the Washington State Department of Ecology's (Ecology) decisions on limiting *pollutants* in the receiving water, and the regulatory and technical basis for these decisions.

The Aquatic Noxious Weed Management General Permit (permit) regulates the use of *pesticides* and other products applied to manage Washington state listed noxious weeds and Washington state quarantine-listed weeds where pesticides or other products may *indirectly* enter the *surface waters of the state* of Washington. The permit covers all marine and freshwater activities that result in a discharge of *herbicides*, *adjuvants*, and *marker dyes* (collectively chemicals) indirectly into streams, rivers, estuaries, marine areas, *wetlands*, along lake shorelines, and other wet areas. The permit also covers the treatment of noxious and quarantine-listed vegetation for roadside/ditch bank management activities where chemicals may indirectly enter the water. The permit covers only the chemical management of plants. Project proponents may need other permits if they conduct weed management activities using manual, mechanical, or biological methods.

Since the *Headwaters, Inc. v. Talent Irrigation District* Ninth Circuit Court decision, Ecology has maintained that to discharge chemicals to waters of the state, coverage under an NPDES permit is required. Ecology has issued general and individual NPDES permits for discharges of aquatic pesticides and other chemicals since 2002. The Sixth Circuit Court recently ruled in *National Cotton Council et al. v. The Environmental Protection Agency (EPA)* that the discharge of pesticides and their residues to waters of the state requires NPDES coverage. This decision means that NPDES permitting is now required for all aquatic pesticide applications throughout the United States. EPA has developed a general NPDES permit for this purpose. In Washington, the EPA permit will cover aquatic pesticide applications on federal and Tribal Lands.

Ecology may change the proposed terms, limits, and conditions contained in the draft permit, subsequent to written public comments it receives and testimony provided at public hearings. The draft permit does not authorize a violation of surface water quality standards or the violation of any other applicable local, state, or federal laws or regulations. Ecology may require any person seeking coverage under this permit to obtain coverage under an *individual permit* instead.

Ecology will consider any person who applies chemicals to surface waters of the state without coverage under this general permit, another applicable general permit, an applicable individual permit, or a *state experimental use permit* to be operating without a discharge permit and subject to potential enforcement action.

Ecology proposes to issue this general permit so that dischargers operating under coverage of this permit will comply with the *Federal Clean Water Act* and with the Washington Water Pollution Act chapter 90.48.080 Revised Code of Washington (RCW). The *Permittee* must monitor (depending on the type of chemical application), notify the public and affected residents and businesses, post signs at treatment sites with *public access*, and provide annual treatment and monitoring reports to Ecology.

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INTRODUCTION

This fact sheet is a companion document to the draft revised Aquatic Noxious Weed Management General Permit (permit) and provides the legal and technical basis for permit reissuance (required in Washington Administrative Code (WAC 173-226-110). Since 2001, and based on *Headwaters v. Talent Irrigation District*, the Washington State Department of Ecology (Ecology) has maintained that the discharge of pesticides to waters of the state requires coverage under a National Pollutant Discharge Elimination System (NPDES) permit.

The current permit, which expires February 17, 2017, has covered discharges of herbicides, adjuvants, and marker dyes to surface waters of the state of Washington since 2012. Ecology proposes to issue an updated permit to continue to allow the use of these products for controlling aquatic noxious and quarantine listed weeds.

Ecology determined it was appropriate to issue a general permit for aquatic noxious weed management because:

- Noxious weed management activities have a statewide scope.
- These activities are similar at different sites.

Ecology may still require individual permits where a proposed activity requires additional guidance, or when an individual Permittee requests an individual permit and Ecology agrees to develop and issue one.

This permit helps Ecology:

- Mitigate and condition the use of chemicals that may enter the aquatic environment.
- Track pesticide rates and use locations.
- Ensure that notifications and postings occur in areas where the public or local residents may access the treated areas.

This fact sheet explains the nature of the proposed discharges, Ecology's decisions on limiting the pollutants in the receiving water, and the regulatory and technical basis for these decisions. WAC 173-226-130 specifies public notice of the draft permit, public hearings, comment periods, and public notice of issuance before Ecology can issue the general permit. This fact sheet, Notice of Intent (application for coverage), and draft permit are available for review (see Appendix B - Public Involvement - for more detail on public notice procedures).

After the public comment period closes, Ecology will summarize and respond to substantive comments. These comments may cause Ecology to revise some of the permit language and requirements. The summary and response to comments will become part of the file for this permit and parties submitting comments will receive a copy of Ecology's response. Ecology will **not** revise the original fact sheet after it publishes the public notice. Appendix D (Response to Comments) will summarize comments and the resultant changes to the permit.

The text of this Fact Sheet contains words or phrases, formatted in *bold and italics* when first used in the document. These words or phrases are defined in Appendix A.

AQUATIC PESTICIDE LEGAL HISTORY

The Federal Clean Water Act (CWA)

The Federal Clean Water Act (CWA), 33 U.S.C. §§1251 et seq.,(1972, with major amendments enacted in 1977 and 1987), established water quality goals for navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the NPDES system of permits, which the EPA administers. The EPA has delegated responsibility for administering the NPDES permit program to the State of Washington. EPA delegated authority to Ecology based on chapter 90.48 RCW that defines Ecology's authority and obligations in administering the NPDES permit program. Ecology does not have the authority to issue NPDES permits to federal facilities or to facilities on Tribal Lands.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. §§136 et seq. (1979) The following excerpt is from the EPA 2010 NPDES Pesticides General Permit Fact Sheet, Sec. I.3. History of Pesticide Application Regulation:

EPA regulates the sale, distribution, and use of pesticides in the U.S. under the statutory framework of the Federal Insecticide, Fungicide, and Rodenticide Act of 1979, to ensure that when used in conformance with the label, pesticides will not pose unreasonable risks to human health and the environment. All new pesticides must undergo a registration procedure under FIFRA during which EPA assesses a variety of potential human health and environmental effects associated with use of the product. Under FIFRA, EPA is required to consider the effects of pesticides on the environment by determining, among other things, whether a pesticide will perform its intended function without unreasonable adverse effects on the environment, and whether when used in accordance with widespread and commonly recognized practice [the pesticide] will not generally cause unreasonable adverse effects on the environment. 7 U.S.C. 136a(c)(5). In performing this analysis, EPA examines the ingredients of a pesticide, the intended type of application site and directions for use, and supporting scientific studies for human health and environmental effects and exposures. The applicant for registration of the pesticide must provide specific data from tests done according to EPA guidelines.

When EPA approves a pesticide for a particular use, the Agency imposes restrictions through labeling requirements governing such use. The restrictions are intended to ensure that the pesticide serves an intended purpose and avoids unreasonable adverse effects. It is illegal under Section 12(a)(2)(G) of FIFRA to use a registered pesticide in a manner inconsistent with its labeling. States have primary authority under FIFRA to enforce "use" violations, but both the States and EPA have ample authority to prosecute pesticide misuse when it occurs. EPA 2010 NPDES Permit Fact Sheet, Sec. I.3, pg. 5.

After a pesticide has been registered, changes in science, public policy, and pesticide use practices will occur over time. FIFRA, as amended by the Food Quality Protection Act of 1996, mandates a registration review program, under which [EPA] periodically reevaluates pesticides to make sure that as the ability to assess risk evolves and as policies and practices change, all registered pesticides continue to meet the statutory standard of no unreasonable adverse effects to human health or the environment. [EPA] is implementing the registration review program pursuant to Section 3(g) of FIFRA and will review each registered pesticide every 15 years to determine whether it continues to meet the FIFRA standard for registration. EPA 2010 NPDES Permit Fact Sheet, Sec. III.3, pg. 95.

FIFRA, as administered by the EPA and the Washington State Department of Agriculture (WSDA), requires that all persons that apply pesticides classified as restricted use be certified according to the provisions of the act, or that they work under the direct supervision of a certified *applicator*. Commercial and public applicators must demonstrate a practical knowledge of the principles and practices of pest control and safe use of pesticides, which they accomplish by means of a "core" examination. In addition, applicators using or supervising the use of any restricted use pesticides purposefully applied to standing or running water (excluding applicators engaged in public health related activities) must pass an additional exam to demonstrate competency as described in the code of federal regulations as follows:

"Applicators shall demonstrate practical knowledge of the secondary effects which can be caused by improper application rates, incorrect formulations, and faulty application of restricted pesticides used in this category. They shall demonstrate practical knowledge of various water use situations and the potential of downstream effects. Further, they must have practical knowledge concerning potential pesticide effects on plants, fish, birds, beneficial insects, and other organisms which may be present in aquatic environments. These applicators shall demonstrate practical knowledge of the principals of limited area application (40 CFR 171.4)."

Any person wishing to apply pesticides to waters of the state must obtain an aquatic pesticide applicator license from the Washington State Department of Agriculture, or operate under the supervision of a licensed applicator. See http://agr.wa.gov/pestfert/licensinged/ for information on Washington State licensing requirements and testing.

Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526 (9th Cir. 2001)

In May 1996, as part of routine vegetation management, the Talent Irrigation District (TID) in southern Oregon applied the pesticide acrolein to a system of irrigation canals. Acrolein-treated water discharged into a fish-bearing creek causing a fish kill. Subsequently, Headwaters, Inc. and Oregon Natural Resources Council Action filed a Clean Water Act citizen suit against the TID for applying a pesticide into a system of irrigation canals without an NPDES permit.

The Ninth Circuit in *Headwaters* held that the applicator should have obtained coverage under an NPDES permit prior to application of aquatic pesticides to an irrigation canal, because the residual acrolein remaining in the waters was a pollutant, and because the pollutant had leaked

into waters not intended to be treated. The Ninth Circuit also held that application of the pesticide in compliance with the FIFRA labeling requirements did not exempt TID from having to obtain an NPDES permit.

Based on the TID court decision, Ecology determined that all pesticide applications to state surface waters required coverage under NPDES permits. Ecology issued its first NPDES general permits for pesticide applications to Washington's surface waters in 2002. Prior to 2001, Ecology regulated the application of aquatic pesticides to most surface waters by issuing administrative orders (called Short-Term Modifications of Water Quality Standards) to Washington-state licensed applicators. Since the *Talent* decision, there have been further court challenges about the applicability of NPDES permits to aquatic pesticide application as discussed below in this section of the Fact Sheet.

League of Wilderness Defenders et al. v. Forsgren, 309 F.3d 1181 (9th Cir. 2002) In the 1970's, the Douglas fir tussock moth defoliated approximately 700,000 acres of Douglas fir in Idaho, Oregon, and Washington. In response to this outbreak, the United States Forest Service (USFS) developed a system to predict tussock moth outbreaks and control them via aerial spraying of insecticides. Based on its warning system, the USFS predicted an outbreak in 2000-2002 and designed a spraying program.

In 2002, the League of Wilderness Defenders et al. filed suit against the USFS for failing to obtain a NPDES permit under the Clean Water Act for the application of insecticides directly above surface waters. The USFS argued that spray application of insecticides by an airplane was nonpoint pollution and that the discharges fell under federal exemptions (40 CFR 122.3) for silviculture activities.

The Ninth Circuit held that aerial spraying (from an aircraft fitted with tanks) directly to, and over, surface water is a point source of pollution and requires an NPDES permit.

Fairhurst v. Hagener, 422 F.3d 1146 (9th Cir. 2005)

The Montana Department of Fish, Wildlife, and Parks (Department) began a ten-year program to reintroduce threatened native westslope cutthroat trout into Cherry Creek. The Department used antimycin A, a *piscicide*, to remove nonnative trout from Cherry Creek over several years, after which they planned to reintroduce native trout.

The Department was sued under the citizen suit provision of the CWA for failing to obtain an NPDES permit before applying antimycin-A to surface waters. On appeal, the Ninth Circuit concluded that:

"A chemical pesticide applied intentionally, in accordance with a FIFRA label, and with no residue or unintended effect is not 'waste,' and thus not a 'pollutant' for the purposes of the Clean Water Act. Because [the Department's] application of antimycin-A to Cherry Creek was intentional, FIFRA compliant, and without residue or unintended effect, the discharged chemical was not a pollutant and [the

Department] was not required to obtain a NPDES permit." *Fairhurst*, 422 F.3d at 1152.

Neither the Court nor the EPA offered any guidance regarding which pesticide applications would result in no residue or unintended effect.

Northwest Aquatic Ecosystems v. Ecology, PCHB 05-101 (Feb. 15, 2006)

In February 2006, the Pollution Control Hearings Board (PCHB) issued a final order in PCHB05-101. This case focused on a number of issues, one of which was whether an NPDES permit is required for the use of federally registered pesticides. The PCHB ruled on summary judgment that the *Fairhurst* decision did not provide a blanket exemption from permit coverage for the application of aquatic pesticides. A pesticide application must meet the conditions identified by the *Fairhurst* court before Ecology can consider it outside the category of a pollutant under the CWA. The pesticide must:

- (1) Be applied for a beneficial purpose,
- (2) Be applied in compliance with FIFRA,
- (3) Produce no pesticide residue, and
- (4) Produce no unintended effects.

At hearing, Northwest Aquatic Ecosystems failed to provide any evidence specifically addressing how the use of the aquatic herbicides diquat and endothall on the proposed sites would meet the four conditions identified in *Fairhurst*. In the absence of such evidence, *Fairhurst* provided no basis for the PCHB to conclude that an NPDES permit is not required for the proposed pesticide applications.

EPA Final Rule

In November 2006, EPA issued a final rule under the CWA entitled *Application of Pesticides to Waters of the United States in Accordance with FIFRA*. This rule replaced a draft interpretive statement EPA issued in 2003 concerning the use of pesticides in or around waters of the United States. The rule stated that any pesticide meant for use in or near water, applied in accordance with the FIFRA label, is not a pollutant under the CWA. Therefore, such applications are not subject to NPDES permitting.

After EPA issued the rule, Ecology met with stakeholders to seek input on how it should regulate the use of aquatic pesticides. Ecology also provided the public with a three-week comment period. Stakeholders affiliated with each of the seven affected permits (Mosquito, Noxious Weeds, Aquatic Plant and Algae, Irrigation, Oyster Growers, Fish Management, and Invasive Moth) commented. The consensus of these stakeholders was that Ecology should continue to issue joint NPDES/state waste permits to regulate aquatic pesticide applications.

Because of stakeholder consensus and the need for a permit to implement short-term modifications, Ecology decided that Washington would continue to use NPDES permits as the legal vehicle to regulate the use of aquatic pesticides in and around Washington state waters. Ecology believes that these permits provide the best protection of water quality, human health, and the environment.

National Cotton Council, et al. v. EPA, 553 F.3d 927 (6th Cir. 2009)

EPA's final rule (described above) was challenged in 11 of the 12 federal circuit courts that are able to hear regulatory arguments. The federal courts combined the petitions into one case at the Sixth Circuit.

The Sixth Circuit vacated the EPA rule, finding that EPA had exempted discharges from the requirement to have a permit that the CWA clearly included within the permit requirement. First, it agreed with the Ninth Circuit's *Fairhurst* decision that if a chemical pesticide is intentionally applied to water for a beneficial purpose, and leaves no waste or residue after performing its intended purpose, the discharge would not require an NPDES permit. Second, the court found excess pesticides and residues that make their way into waters during and after any pesticide application constitute wastes under the CWA and must have NPDES permit coverage before discharge occurs.

The Sixth Circuit granted EPA a stay on the effective date of this ruling for 24 months to allow the agency to develop an NPDES permit for aquatic pesticide discharges. EPA issued its general permit on October 31, 2011, for the discharge of pesticides to manage aquatic plants and algae, aquatic animals, mosquitoes and flying insects, and forest canopy pests. In Washington, EPA's general permit covers aquatic pesticide activities conducted on federal facilities, on federal lands when federal entities conduct or authorize the treatment, and on tribal facilities and lands. The state regulates aquatic pesticide application to all other lands/waters.

LEGAL BASIS FOR MANAGING AQUATIC NOXIOUS WEEDS IN WASHINGTON

RCW 90.48.445 Aquatic Noxious Weed Control - Water Quality Permits

In 1991, the Washington State Legislature directed Ecology to issue or approve water quality permits for use by federal, state, and local government agencies and licensed applicators for the purpose of using, for aquatic noxious weed control, herbicides and surfactants registered under state or federal pesticide control laws. The legislature also specified that the issuance of these permits were subject only to compliance with federal and state pesticide label requirements, FIFRA requirements, the *Washington Pesticide Control Act*, the Washington Pesticide Application Act, and the State Environmental Policy Act (SEPA) (with some exceptions for *Spartina* projects).

The Legislature further stated that Ecology may not use this permit authority to otherwise condition or burden weed control efforts and that permits are effective for five years, unless the applicant requests a shorter duration.

RCW 90.48.447 Aquatic Plant Management Program

Excerpts from the notes, findings, and purpose of this 1999 statute state:

The legislature finds that the environmental, recreational, and aesthetic values of many of the state's lakes are threatened by the invasion of nuisance and noxious aquatic weeds. Once established, these nuisance and noxious aquatic weeds can colonize the shallow shorelines and other areas of lakes with dense surface vegetation mats that degrade water quality, pose a threat to swimmers, and restrict use of lakes. Algae can generate health and safety conditions dangerous to fish, wildlife, and humans. The current environmental impact statement is causing difficulty in responding to environmentally damaging weed and algae problems. Many commercially available herbicides have been demonstrated to be effective in controlling nuisance and noxious aquatic weeds and algae and do not pose a risk to the environment or public health. The purpose of this act is to allow the use of commercially available herbicides that have been approved by the environmental protection agency and the department of agriculture and subject to rigorous evaluation by the department of ecology through an environmental impact statement for the aquatic plant management program. [1999 c 255 § 1.]

RCW 17.10 Noxious Weeds – Control Boards

RCW 17.10 is Washington's primary noxious weed law and it holds landowners responsible for controlling noxious weeds on their property. Its purpose is to *limit economic loss and adverse effects to Washington's agricultural, natural, and human resources due to the presence and spread of noxious weeds on all terrestrial and aquatic areas of the state.*

Chapter 16.750 WAC State Noxious Weed List and Schedule of Monetary Penalties

This rule sets out Washington's Noxious Weed List, which the State Noxious Weed Control Board updates each year. It organizes noxious weeds by classification. Class A noxious weeds are *non-native* species that are limited in distribution in Washington. State law requires that landowners eradicate these weeds. Class B noxious weeds are non-native species that are either absent from or limited in distribution in some portions of the state, but very abundant in other areas. The goal is to contain the plants where they are already widespread and prevent their spread into new areas. The law requires control and prevention of all reproductive propagules (cuttings, seeds, tuber, etc.) in areas where Class B weeds are designated for control. Class C noxious weeds are non-native plants that are already widespread in Washington. Counties can choose to enforce control or they can educate residents about controlling Class C noxious weeds.

There are many species of aquatic and wetland plants on the state noxious weed list (e.g., purple loosestrife, yellow flag iris, *Spartina*, *Phragmites*, etc.). Sometimes, terrestrial noxious weeds can grow in wet areas or along riparian corridors where herbicide treatments may also enter the water (e.g. knotweeds, some species of thistle, blackberry, butterfly bush, etc.). Species listed as noxious weeds on the state list are or were present in Washington.

Chapter 16.752 WAC Noxious Weed Control

This rule establishes a wetland and aquatic weed quarantine. It prohibits the transport, sale, or distribution of specific plant species within the state of Washington. Many plants on the quarantine list are present in Washington, while others pose a threat to Washington, but are not currently in the state (e.g., water chestnut - *Trapa natans*).

BIOLOGICAL BACKGROUND - AQUATIC NOXIOUS WEEDS

Noxious weeds are not native to Washington and are not desirable plants for Washington ecosystems. Many noxious weeds originate from other continents although some aquatic noxious weeds in Washington are native to the east coast of North America. Introduction pathways include the aquarium and nursery industry, internet trading, boats, and boat trailers. Because noxious weeds are often introduced without the diseases and insects that keep them in control in their new habitat, they can spread rapidly, destroying native plant and animal habitat, reducing species diversity, damaging recreational opportunities, lowering property values, and clogging waterways. In recognition of the economic and ecological threats caused by noxious weeds, Washington State has enacted laws to control their introduction and spread (chapter 17.10 RCW – Noxious Weeds – Control Boards, chapter 16-750 WAC – State Noxious Weed List and Schedule of Monetary Penalties, chapter 16-752 WAC – Noxious Weed Control (Quarantine). Landowners may be legally obligated to eradicate or control noxious weeds, depending on their classification and distribution within the state.

Aquatic herbicide application is often needed to manage freshwater noxious weeds. The impacts of these species are significant and pervasive and they have profound impacts on species diversity, habitat, water quality, recreation, water supply, drinking water, flood control, safety, and health. Aquatic herbicides are often the most effective tools to remove these plants and restore the ecosystem.

Additional Information Sources about Aquatic Plants and Noxious Weeds

- An Aquatic Plant Identification Manual for Washington's Aquatic Plants: www.ecy.wa.gov/programs/wq/plants/plantid2/index.html
- Advantages and Disadvantages of Aquatic Plant Management Techniques: http://aquatics.org/pubs/madsen2.html
- Nonnative, Invasive Freshwater Plants: www.ecy.wa.gov/programs/wq/plants/weeds/index.html
- Washington State Noxious Weed Control Board: www.nwcb.wa.gov/
- Washington Invasive Species Council: http://www.invasivespecies.wa.gov/.
- United States Department of Agriculture's National Invasive Species Information Center: https://www.invasivespeciesinfo.gov/index.shtml.
- *USGS NAS Nonindigenous Aquatic Species Information Resource*: http://nas.er.usgs.gov/.

REGULATORY INFORMATION

Regulatory Pollution Reduction Requirements

Federal and state regulations require that effluent limits in an NPDES permit must be either technology-or-water-quality-based.

- Technology-based limitations are based upon the methods available to treat specific pollutants. Technology-based limits are set by EPA and published as a regulation or Ecology develops the limit on a case-by-case basis (40 CFR 125.3, and chapter 173-220 WAC).
- Water quality-based limits are calculated so that the effluent will comply with the Surface Water Quality Standards (chapter 173-201A WAC), Ground Water Standards (chapter 173-200 WAC), Sediment Quality Standards (chapter 173-204 WAC) or the National Toxics Rule (40 CFR 131.36).
- Ecology must apply the more stringent of these limits to each parameter of concern. These limits are described below.

Technology-Based Water Quality Protection Requirements

Sections 301, 302, 306, and 307 of the CWA establish discharge standards, prohibitions, and limits based on pollution control technologies. These technology-based limits are *best practical control technology* (BPT), *best available technology economically achievable* (BAT), and *best conventional pollutant control technology economically achievable* (BCT). Permit writers may also determine compliance with BPT/BAT/BCT using their *best professional judgment* (BPJ). EPA has stated that for pesticide application to water (in its draft aquatic pesticide NPDES general permit factsheet 2016) that technology-based requirements are Best Management Practices (BMPs); not numeric limits.

Washington has similar technology-based limits that are described as *all known*, *available*, *and reasonable methods of pollution control*, *prevention*, *and treatment* (*AKART*) methods. State law refers to AKART under RCW 90.48.010, 90.48.520, 90.52.040, and 90.54.020. The federal technology-based limits and AKART are similar but not equivalent. Ecology may establish AKART:

- For an industrial category or for an individual permit on a case-by-case basis.
- That is more stringent than federal regulations.
- That includes BMP's such as prevention and control methods (e.g., waste minimization, waste/source reduction, or reduction in total contaminant releases to the environment).

Ecology and EPA concur that AKART may be equivalent to BPJ determinations.

Historically, EPA has regulated the pesticide application industry under FIFRA. EPA developed label use requirements to regulate the use of pesticides. EPA also requires the pesticide manufacturer to register each pesticide, provide evidence that the pesticide will work as promised, and minimize unacceptable environmental harm.

The Pesticide Management Division of the Washington State Department of Agriculture (WSDA) ensures that applicators use pesticides legally and safely in Washington. WSDA registers pesticides for use in Washington (in addition to EPA registration); licenses pesticide applicators, dealers and consultants; investigates complaints; maintains a registry of pesticide sensitive individuals; and administers a waste pesticide collection program. These duties are performed under the authority of the Washington Pesticide Control Act (chapter 15.58 RCW), the Washington Pesticide Application Act (chapter 17.21 RCW), the General Pesticide Rules (chapter 16-228 WAC), the Worker Protection Standard (chapter 16-233 WAC) and a number of

pesticide and/or county specific regulations (http://agr.wa.gov/PestFert/Pesticides/LawsRules.aspx).

The standards for environmental protection are different between the CWA and FIFRA. Because of the *National Cotton Council, et al. v. EPA* court decision, in 2011, EPA regulates the application of aquatic pesticides under a general NPDES permit. EPA has developed a general NPDES permit for non-delegated states, federal lands, and Tribal lands. EPA expects all delegated states to develop their own NPDES permits for aquatic pesticide application to comply with the federal court decision. To comply with the *National Cotton Council, et al. v. EPA* court decision, after October 2011, all aquatic pesticide applications in the United States must occur under NPDES permits.

Because of the *Headwaters Inc. v. Talent Irrigation District* decision, Ecology has regulated aquatic pesticide application under NPDES permits since 2002. It is Ecology's intent that reissuing the permit will authorize aquatic noxious weed management in a manner that complies with all federal and state requirements.

All wastewater discharge permits issued by Ecology must incorporate requirements to implement reasonable prevention, treatment, and control of pollutants. Ecology acknowledges that applicators could treat the pollutants addressed in this permit only with great difficulty due to the diffuse nature and low concentrations that exist after the pesticides have become waste. The *Headwater, Inc. v. Talent* ruling established that aquatic pesticides become waste in the water after the pesticide has performed its intended action and the target organisms are controlled or if excess pesticide is present during treatment.

Integrated Pest Management (IPM)

After the *National Cotton Council et al. v. EPA* decision, the Sixth Circuit Court allowed EPA 24 months to develop a general NPDES permit for aquatic pesticide use and later granted an extension of a further six months to finalize the permit. In its draft permit, EPA regards IPM as meeting technology-based-effluent-limits for aquatic pesticide application.

For freshwater noxious weeds, WSDA has developed a plan prepared for the noxious weed permit - *Integrated Pest Management Plan for Freshwater Emergent Noxious and Quarantine Listed Weeds*. The Permittee must update the plan and any addendums to the plan, as needed, to keep the document current.

Experimental Use Permits

Entities operating under WSDA-issued experimental use permits (WSEUP) do not need coverage under this permit. WSDA requires WSEUP for all research experiments involving pesticides that are not federally registered or for uses not allowed on the pesticide label. WSDA experimental use permits limit the amount of an experimental use pesticide that a Permittee can use for testing purposes. WSDA grants experimental use permits for gathering data in support of registration under FIFRA Section (3) or Section 24(c). In many situations, only a state WSEUP is required for the use of an experimental pesticide.

When a proponent conducts a small-scale test on more than one surface acre of water per pest, it must obtain a federal experimental use permit in addition to a state experimental use permit. Any person may apply to the EPA for a federal experimental use permit for pesticides and these permits are usually valid for only one year. Applicants holding a federal experimental use permit must also apply for and obtain a state experimental use permit before initiating any shipment of the pesticide to Washington. Ecology requires coverage under the Aquatic Noxious Weed Management Permit for applicants operating under a federal experimental use permit.

Water Quality-Based Requirements

Surface Water Quality-Based Effluent Limits

The Washington State Surface Water Quality Standards (chapter 173-201A WAC) were designed to protect existing water quality and preserve the *beneficial uses* of Washington's surface waters. Waste discharge permits must include conditions that ensure the discharge will meet established surface water quality standards (WAC 173-201A-510). Water quality-based effluent limits may be based on an individual waste load allocation or on a waste load allocation developed during a basin-wide total maximum daily loading study (TMDL).

Ecology conditions NPDES and waste discharge permits in such a manner that authorized discharges meet water quality standards. The characteristic beneficial uses of surface waters include, but are not limited to, the following: domestic, industrial and agricultural water supply; stock watering; the spawning, rearing, migration and harvesting of fish; the spawning, rearing and harvesting of shellfish; wildlife habitat; recreation (primary contact, sport fishing, boating, and aesthetic enjoyment of nature); commerce; aesthetics and navigation.

Numeric Criteria for the Protection of Aquatic Life and Recreation

Numeric water quality criteria are published in the Water Quality Standards for Surface Waters (chapter 173-201A WAC). They specify the levels of pollutants allowed in receiving water to protect aquatic life and recreation in and on the water. Ecology uses numeric criteria along with chemical and physical data for the wastewater and receiving water to derive effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limits, the discharge must meet the water quality-based limits.

The EPA has published 91 numeric water quality criteria for the protection of human health that are applicable to dischargers in Washington State (40 CFR 131.36). EPA designed these criteria to protect humans from exposure to pollutants linked to cancer and other diseases, based on consuming fish and shellfish and drinking contaminated surface waters. The Water Quality Standards also include radionuclide criteria to protect humans from the effects of radioactive substances.

Narrative Criteria

Narrative water quality criteria (e.g. WAC 173-201A-240(1); 2006) limit the toxic, radioactive, or other deleterious material concentrations that may be discharged to levels below those which have the potential to:

- Adversely affect designated water uses.
- Cause acute or chronic toxicity to biota.

- Impair aesthetic values
- Adversely affect human heath

Narrative criteria are statements that describe the desired water quality goal, such as waters being "free from" pollutants such as oil and scum, color and odor, and other substances that can harm people and fish. These criteria are used for pollutants for which numeric criteria are difficult to specify, such as those that offend the senses (e.g., color and odor). Narrative criteria protect the specific designated uses of all freshwaters (WAC 173-201-A-200, 2006) and of all marine waters (WAC 173-201A-210; 2006) in the State of Washington.

Antidegradation Analysis and Antidegradation Plan

The following narrative represents Ecology's antidegradation analysis and antidegradation plan for the Aquatic Noxious Weed Management General Permit. The purpose of Washington's Antidegradation Policy (WAC 173-201A-300-330; 2006) is to:

- Restore and maintain the highest possible quality of the surface waters of Washington.
- Describe situations under which water quality may be lowered from its current condition.
- Apply to human activities that are likely to have an impact on the water quality of surface water.
- Ensure that all human activities likely to contribute to a lowering of water quality, at a minimum, apply AKART.
- Apply three Tiers of protection (described below) for surface waters of the state.

Tier I ensures existing and designated uses are maintained and protected and applies to all waters and all sources of pollution. Tier II ensures that dischargers do not degrade waters of a higher quality than the criteria assigned unless such lowering of water quality is necessary and in the overriding public interest. Tier II applies only to a specific list of polluting activities. Tier III prevents the degradation of waters formally listed as "outstanding resource waters" and applies to all sources of pollution.

WAC 173-201A-320(6) describes how Ecology implements Tier I and II antidegradation in general permits. All Permittees covered under the general permit must comply with the provisions of Tier 1. Ecology determined that the permit does not cover discharges to Tier III waters.

Under state law, the use of herbicides is in the public interest.

Many commercially available herbicides have been demonstrated to be effective in controlling nuisance and noxious aquatic weeds and algae and do not pose a risk to the environment or public health. The purpose of this act is to allow the use of commercially available herbicides that have been approved by the environmental protection agency and the department of agriculture and subject to rigorous evaluation by the department of ecology through an environmental impact statement for the aquatic plant management program (RCW 90.48.447).

See also the Biological Background Section for information about how noxious weeds affect beneficial uses of water bodies.

The water quality standards at WAC 173-201A-320(6) describe how Ecology should conduct an antidegradation Tier II analysis when it issues NPDES general permits. This section of the rule requires Ecology to:

Use the information collected, from implementation of the permit, to revise the permit or program requirements.

- Ecology revised the proposed permit based on feedback from Permittees, parties affected by the permit, internal staff, and government agencies. Ecology will further revise the draft permit based on a formal public comment period and testimony received at the public hearing.
- Ecology used herbicide residue monitoring information from its aquatic pesticide permits.
 Ecology has made monitoring information available at
 www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/monitoring_data/monitoring_index.html
- Ecology may modify the permit if monitoring data show significant adverse impacts to water
 quality through the continued use of a specific pesticide or application method or if EPA fails
 to reregister a pesticide for aquatic use. In addition, the permit requires immediate reporting
 of any adverse impacts from treatment to fauna or humans. Ecology investigates these reports
 and determines if the treatment caused or contributed to the problem.
- Based on permitting needs to protect salmon and amphibians from direct and indirect (sublethal) effects of aquatic herbicides, Ecology funded several research projects at the University of Washington (2009), (Yahnke et. al. 2013) to study sub-lethal impacts on these organisms from the use of 2,4-D, diquat, fluridone, and triclopyr under Ecology's permit program. Sub-lethal impacts include interference with smoltification, olfaction changes, and avoidance behaviors that could for example lead to increased predation. To meet permitting needs and to determine herbicide efficacies on the eradication of state-listed noxious weeds, Ecology has funded and published several research studies that include evaluating the impacts of aquatic herbicides on non-target native plant species. See http://www.ecy.wa.gov/programs/eap/lakes/aquaticplants/index.html for an overview of the Ecology's special research projects.

Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance.

- The current Aquatic Noxious Weed Management permit was issued in 2012 and expires in 2017. Ecology plans to reissue the Aquatic Noxious Weed Management Permit in 2017. The 2017 permit will expire in 2022. Permit reissuance includes a public involvement process as described below.
- Ecology spends about a year prior to permit expiration soliciting input from users and
 affected parties, rewriting and revising permit conditions, and reviewing relevant data before
 soliciting public comment on the permit and accompanying documents and finalizing the
 proposed new version of the permit.

Include a plan that describes how Ecology will obtain and use information to ensure full compliance with water quality standards. Ecology must develop and document the plan in advance of permit or program approval.

- The information in the Fact Sheet and in the antidegradation section of this Fact Sheet constitute Ecology's antidegradation plan for the Aquatic Noxious Weed Management General Permit. This is despite language in Ecology's guidance document implementing Tier II antidegradation requirements that indicates such a plan may not be required. Ecology Supplementary Guidance Implementing the Tier II Antidegradation Rules (https://fortress.wa.gov/ecy/publications/documents/1110073.pdf).
- None of the chemicals allowed for use in the permit are chemicals of concern or listed on the 303(d) list of impaired water bodies as a cause of impairment. Although copper sulfate and chelated coppers are registered algaecides and herbicides (and there are water bodies on the 303(d) list for copper impairment), Ecology discontinued the use of copper compounds for these uses in Washington lakes in 2002. Never the less, Ecology understands that the use of chemicals in 303(d)-listed water bodies for dissolved oxygen and phosphorus has the potential to cause further impairment to these water bodies. Ecology addresses this in the proposed permit by prohibiting further impairment of any 303(d)-listed water body. In addition, this permit only allows the indirect treatment of water. This means that any herbicide application to water is through spray drift or by herbicide dripping off sprayed foliage into the water. Monitoring from previous permit shows that only small amounts of herbicide enter the water from indirect application. These amounts are too small to affect submersed vegetation and create problems with dissolved oxygen or phosphorus.
- Ecology requires WSDA to keep their *Integrated Pest Management Plan for Freshwater Emergent Noxious and Quarantine Listed Weeds* updated.

Sediment Quality Standards

The aquatic sediment standards (chapter 173-204 WAC) protect aquatic biota and human health. Under these standards, Ecology may require a Permittee to evaluate the potential for the discharge to cause a violation of sediment standards (WAC 173-204-400). Obtain additional information about sediments at the Aquatic Lands Cleanup Unit website www.ecy.wa.gov/programs/tcp/smu/sediment.html

Ecology has determined through a review of the discharger characteristics and effluent characteristics that this discharge has no reasonable potential to violate the Sediment Management Standards.

Ground Water Quality Standards

The Ground Water Quality Standards, (chapter 173-200 WAC), protect beneficial uses of ground water. Permits issued by Ecology must not allow violations of those standards. This permit does not allow the use of any pesticides expected to contaminate groundwater. In the event there are additional concerns, Ecology can issue orders requiring groundwater monitoring for different pesticides under this permit.

SEPA Compliance

In 1980, Ecology completed an Environmental Impact Statement (EIS) for statewide program guidance in the issuance of administrative orders called *short-term modifications of water quality standards* for herbicides and algaecides used in aquatic plant and algae control. In 1992, Ecology updated and supplemented the EIS with the *Final Supplemental Environmental Impact Statement* (SEIS) *for the Aquatic Plant Management Program*.

In 1993, the Washington State Departments of Agriculture, Ecology, Fisheries, Natural Resources, Wildlife, and the Noxious Weed Control Board collaborated to develop an environmental impact statement for noxious emergent plant species in Washington. This EIS focused on cordgrass (*Spartina* spp.), purple loosestrife (*Lythrum salicaria*), garden loosestrife (*Lysimachia vulgaris*), giant hogweed (*Heracleum mantegazzianum*), and indigobush (*Amorpha fruticosa*). The agencies chose these species to represent the variety of noxious emergent plants in Washington. The agencies felt that any management plan for their control would also apply to most other emergent species not directly addressed in the plan.

In 2001, Ecology updated its SEIS to evaluate new aquatic herbicides. In 2002, Ecology added a *Final SEIS for Diquat Dibromide* as a supplement to the 1980 EIS. In 2003, WSDA issued an ecological risk assessment for imazapyr to control *Spartina* spp. in Washington estuaries. In 2004, Ecology added a *Final SEIS for Triclopyr*. In 2009, WSDA issued a human health and freshwater ecological risk assessment for imazapyr. In 2012, Ecology issued an addendum to the *2001 Final SEIS for Freshwater Aquatic Plant Management* to include the *active ingredients* penoxsulam, bispyribac-sodium, carfentrazone-ethyl, flumioxazin, and imazamox.

Endangered and Sensitive Species

EPA has implemented an Endangered Species Protection Program (ESPP) to identify all pesticides that may cause adverse impacts on threatened/endangered species and to implement measures that will mitigate these impacts. When the ESPP identifies an adverse impact, it requires use restrictions to protect these species at the county level. EPA will specify these use restrictions on the product label or by distributing a county-specific Endangered Species Protection Bulletin. Bulletins are enforceable under FIFRA. General Condition G6 of the Aquatic Noxious Weed Management Permit requires the Permittee to comply with all applicable federal regulations. See www.epa.gov/espp/frequent-ques.htm for more information.

The Fish and Wildlife Service and National Marine Fisheries Service are involved in EPA's processes to protect listed species and designated critical habitat in several ways: by consulting with EPA on specific endangered species concerns; by issuing Biological Opinions on certain species; or other ways, as necessary. For details on how EPA evaluates the potential risks from pesticides to listed species and consults with the Services, see their risk assessment process web page at www.epa.gov/espp/litstatus/riskasses.htm.

Responsibility to Comply with Other Requirements

Ecology has established, and will enforce, limits and conditions in the permit for the discharge of aquatic herbicides registered for use by the EPA and the WSDA. EPA and WSDA will enforce the use, storage, and disposal requirements expressed on pesticide labels. The Permittee must

comply with the pesticide label requirements (FIFRA) and all of the conditions of this general permit. The permit does not supersede or preempt federal or state label requirements or any other applicable laws and regulations.

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

This permit is a reissuance of the Aquatic Noxious Weed Control Permit that expires February 17, 2017. The proposed permit will replace the current permit.

Activities Covered under This Permit

All entities that participate in aquatic noxious weed control activities that result in a discharge of pollutants to waters of the state must obtain coverage under a permit as required by Washington laws and regulations (chapters 90.48.080, 90.48.160, 90.48.260 RCW and chapter 173-201A WAC). Herbicides, adjuvants, and marker dyes are pollutants, and therefore require a discharge permit before application to Washington State surface waters.

This permit regulates the use of the above products for indirect application of herbicides for the management of noxious weeds and quarantine-listed weeds and other non-native, invasive plants as specified by Ecology, WSDA, the Invasive Species Council, or the State Noxious Weed Control Board. Applicants with projects targeting submersed and *floating-leaved* noxious weeds or quarantine-listed weeds in lakes or rivers must obtain coverage under the Aquatic Plant and Algae Management Permit and **may not** obtain coverage under this permit for these *in-water treatments*. Permittees with in-water projects may also include the indirect treatment of noxious and quarantine-listed weeds along any lake or river shoreline in their Aquatic Plant and Algae Management permit coverage if they wish. This eliminates the need to have coverage under two permits for chemical treatment in and along the shorelines of a single water body for noxious weeds. Other types of noxious weed treatments can occur under the Noxious Aquatic Weed Management permit (shoreline treatments, riparian corridors, wetland treatments, treatments in wet areas, and *Spartina* treatment on tidelands).

Geographic Area Covered

The permit applies to the indirect application of chemicals for noxious weeds where chemicals may enter surface waters anywhere in the state of Washington where Ecology has regulatory authority. Surface waters include lakes, rivers, ponds, streams, inland waters, wetlands, brackish waters, estuaries, tidelands, and all other surface waters and watercourses within the jurisdiction of the state of Washington (RCW 90.48.020, WAC 173-201A-020, and WAC 173-226-030). Noxious weeds have the potential to occur in or near virtually any aquatic or semi-aquatic site in Washington State.

EPA has not delegated regulatory authority to Ecology to issue NPDES permits for federal projects and Tribal lands. Ecology does not have jurisdiction over federal lands where a federal agency provided funding, made the decision to apply chemicals, or is the entity applying chemicals. Ecology does not have jurisdiction to issue permits for Tribal lands.

Activities Excluded From Coverage Under This Permit

Ecology considers some limited pesticide treatments to have very low potential for impact (such as herbicide treatments around small constructed water bodies that do not drain for two weeks following treatment). Requiring permit coverage from these dischargers would be a burden that would result in little environmental protection.

Ecology has determined not to issue coverage for detention and retention ponds if:

- Ecology regulates the discharge under another permit (such as industrial or municipal stormwater permits) and the permit allows chemical treatment.
- There is no discharge to surface waters during and within two weeks of treatment.

Ecology has determined not to issue coverage for *constructed water bodies* or *upland farm ponds* if:

- The water bodies are five acres or less in surface area, and
- There is no discharge to surface waters during and within two weeks of treatment.

Ecology has determined not issue coverage for any *constructed water body* ten acres or less in surface area if:

- The water body is under single ownership with no public access, and
- There is no discharge to surface waters during and within two weeks of treatment.

Ecology has determined not to issue coverage for seasonally dry wetlands if:

- The wetland is dry at the time of treatment and for two weeks following treatment, and
- The chemical will not be biologically available when water inundates the treated area.

Ecology believes that a two-week no discharge time provides sufficient time to prevent possible discharge to surface waters when outflow begins after treatment. Ecology believes that if dischargers met these conditions, the treatment poses no potential to violate the Water Quality Standards for Surface Waters of the State of Washington (chapter 173-201A WAC).

S2. APPLICATION FOR COVERAGE

Who May Obtain Permit Coverage

A definition of "Permittee" is not provided in chapter 90.48 RCW, chapters 173-216, 173-220, or 173-226 WAC, nor is one provided in 40 CFR 122 (EPA NPDES Permit Program) or State NPDES Permit Programs. Based upon the usage of Permittee in federal and Washington State law, Ecology takes the term "Permittee" to mean the person or entity that discharges or controls the discharge of pollutants to waters of the state (surface or ground) and holds permit coverage allowing that specific discharge.

For the Aquatic Noxious Weed Management Permit, Ecology has established that the Permittee is the Washington State Department of Agriculture (WSDA). WSDA contracts with individuals, governments, and non-governmental organizations to perform most of the actual noxious weed control work. These contractors are known as "*limited agents*". The limited agents operate under WSDA's permit coverage and must follow all permit terms and conditions except those related to applying for a new permit coverage (special conditions S2.B through S2.D)

Limiting the permittee to WSDA is a change from the previous issuance of this permit. This change was made because WSDA is the only permittee to obtain coverage under this permit. All other work performed under this permit has been conducted by limited agents. If an entity is not able to obtain a limited agent contract from WSDA they can apply to Ecology for coverage under the Aquatic Plant and Algae Management NPDES General permit.

How to Obtain Coverage

Permittees that plan to continue coverage under the revised permit must apply to Ecology to extend their coverage at least 180 days before the current permit expires ("Limited agents" operating under WSDA coverage are not Permittees and reapply for a new contract with WSDA each year). WSDA is the Permittee. Ecology will consider a Permittee that does not reapply as a new applicant. *New applicants* must submit a complete application for permit coverage a minimum of 38 days before applying pesticides that result in discharge to waters of the state.

The new permit applicant must submit a complete application including a *Notice of Intent* (NOI). An official who has signature authority (WAC 173-226-200) for the entity applying for permit coverage must sign all documents. Ecology must receive the complete application for permit coverage on or before the publication date of the public notice the permit applicant posted in a newspaper of general circulation (WAC 173-226-130). Ecology considers a newspaper of general circulation as a major newspaper publication for a region.

When Ecology receives the new applicant's complete application before public notice it can review the application and communicate necessary changes on application documents. Communication (prior to publishing public notice) about document changes can save the applicant money by identifying any necessary changes before the applicant publishes and sends out the public notice.

Ecology is proposing a procedural change in how it handles the project level SEPA determination for each permit coverage. A non-project SEPA review of the proposed action has been conducted for activities covered by this draft permit. The non-project SEPA review assesses all of the pesticides allowed for use under the permit and applies to all fresh waters of the state. Ecology will rely upon the non-project SEPA determination to issue permit coverage rather than issuing a SEPA determination for each separate coverage. In a change from the 2012 Permit, applicants no longer fill out a separate SEPA checklist.

The public has the opportunity to comment on the permit application and the proposed coverage during the 30 days after publication of the second public notice (public comment period). Ecology will consider comments about the applicability of the permit to the proposed activity received during this period. If Ecology receives no substantive comments, it can issue permit coverage on the 38th day following receipt of a complete application. The public has the right to appeal any coverage decision.

How to Terminate Permit Coverage

Ecology plans to issue the permit for a period of five years, starting on the effective date of the permit (WAC 173-226-330). Coverage will last from the date of coverage to the date of permit expiration, which will be up to five years, unless the Permittee terminates coverage by

submitting a notice of termination. If the Permittee does not terminate coverage, the Permittee will continue to incur an annual permit fee. "Limited agents" do not pay annual permit fees because they are not Permittees. The limited agent contracts expire on at the end of each calendar year.

S3. DISCHARGE LIMITS

Compliance with Standards

See also the section "Technology-Based Water Quality Protection Requirements" for a discussion about AKART. Ecology also believes that implementing WSDA's *Integrated Pest Management Plan for Freshwater Emergent Noxious and Quarantine Listed Weeds* will help meet AKART.

Temporary Exceedance of Water Quality Standards

This condition of the permit has been removed due to the fact that activities authorized by this general permit do not have a reasonable potential to cause an exceedance of state Water Quality Criteria (chapter 173-201A WAC). This permit does not allow for the direct discharge of pesticides to waters of the state. The only pesticides entering the water from treatments conducted under coverage of this permit are from incidental drift, drips and overspray from the treatment of shoreline and emergent noxious weeds.

Application Requirements

Under state laws, only Washington-licensed applicators with an aquatic endorsement or applicators under direct supervision of a licensed applicator may apply pesticides to water. The permit requires that all applicators use appropriate application methods, have training in application techniques, and that trained personnel calibrate the application equipment.

Impaired Water bodies

Ecology periodically reviews water quality data to determine if water bodies meet criteria. Section 303(d) of the CWA requires that waters not meeting criteria undergo an evaluation of the cause and amount of the contaminant. Ecology publishes Total Maximum Daily Load (TMDL) reports, which may establish limits on the amounts of pollutants contributors may discharge. The permit does not allow any further impairment to water bodies listed on the 303(d) list. However, Ecology believes that further impairment of listed water bodies is unlikely under this permit, because the management activities conducted do not occur in the water. Noxious weeds dying from treatment along the shoreline are unlikely to cause low oxygen conditions or the release of phosphorus directly to the water.

Sensitive, Threatened, or Endangered Plants and Priority Habitats and Species

Currently, no state law protects *sensitive, threatened, or endangered plant* species (rare plants) in Washington. However, many federal and state land-management agencies have policies to protect rare plants. In 1982, the state legislature recognized the need for a systematic and objective approach to protect those features of natural ecosystems most at risk and created the Natural Heritage Program within the Department of Natural Resources to assume this task (RCW 79.70.060). In addition, local jurisdictions may provide protection for rare species and high quality ecosystems through ordinances, regulations, and permitting requirements. This permit does not authorize Permittees to cause permanent harm to these plant populations and priority

species. It requires the Permittee to take every care to minimize harm to native plant species while treating noxious weeds. In many instances, removing noxious weeds will restore habitat and enhance species diversity and that activity by itself will tend to protect rare populations of plants and animals.

Wetland Treatments

When treating noxious weeds in identified wetlands, the permit requires the applicator to make reasonable efforts to minimize impacts to the native wetland plants when using aquatic herbicides. Reasonable efforts many include:

- Using a selective herbicide.
- Minimizing overspray by using application techniques such as wicking or injection.
- Temporarily covering non-target vegetation.

Integrated Pest Management Plan

The WSDA Integrated Pest Management Plan for Freshwater Emergent Noxious and Quarantine Listed Weeds covers the discharge of chemicals to manage freshwater noxious weeds and incorporates the principles of *integrated pest management* (IPM). Integrated pest management is AKART for this permit.

S4. The APPLICATION OF PRODUCTS

Prohibited Discharges

RCW 90.48.080 states that

It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep, or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the department.

Ecology prohibits treatment that causes oxygen depletion to the point of stress or lethality to aquatic biota from plant die-off, unintended impacts to water quality or biota, or the mortality of aquatic vertebrates. This permit does not allow any *direct application of pesticides to water*. Inwater treatments (algae, floating and submersed plants) occur under the Aquatic Plant and Algae Management Permit. Ecology believes that any indirect treatments allowed by the Aquatic Noxious Weed Management permit would be very unlikely to cause any of the above impacts to aquatic biota from shoreline or wetland treatments.

Authorized Discharges

This permit allows the use of the chemicals identified in the permit. Ecology authorizes these discharges in accordance with WAC 173-201A-410 and chapter 90.48 RCW. EPA regulates these active ingredients under FIFRA.

The Permittee must comply with pesticide label requirements and all applicable permit conditions. Coverage under this general permit does not supersede or preempt federal or state label requirements or any other applicable laws and regulations. It is the responsibility of the Permittee to determine if there are other applicable requirements pertaining to their

activity and to comply with these requirements. General permit condition G6 informs the Permittee of this fact. The 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. People treating under this permit must obtain proper permissions to access and treat on private land (see chapter 17.10.160 right of entry).

Active Ingredients: The permit allows for and conditions the use of nine federally registered active ingredients.

The active ingredients have undergone review by Ecology or WSDA prior to approval (see www.ecy.wa.gov/programs/wq/pesticides/seis/risk_assess.html). Ecology determined that, if used according to the EPA label and in compliance with the conditions of this general permit, these active ingredients would not violate water quality standards. By approving active ingredients rather than trademarked products, Ecology will not need to conduct additional review for each new brand or product released onto the market.

Adjuvants: The permit provides for the use of specific adjuvants listed in Table 2 in the Aquatic Noxious Weed Management permit. Applicators use adjuvants to increase the effectiveness of a pesticide (e.g., extenders, penetrants, spreaders, stickers, surfactants) or to modify the characteristics of a tank mix (e.g., acidifiers, defoaming agents, drift control agents).

WSDA registers all adjuvants prior to distribution in Washington State. WSDA only registers adjuvants for aquatic use if the registrant can demonstrate that the proposed use will not adversely affect desirable aquatic species. WSDA requires data on aquatic acute toxicity of the adjuvant to fish and aquatic invertebrates (WAC 16-228-1400(3)(e)).

An adjuvant must meet the following criteria before WSDA will register it for aquatic use in Washington. The adjuvant or adjuvant formulation must:

- Meet all requirements for the registration of a food/feed use spray adjuvant in Washington.
- Be either slightly toxic or practically non-toxic to freshwater fish.
- Be moderately toxic, slightly toxic, or practically non-toxic to aquatic invertebrates.
- Contain less than 10 percent alkylphenol ethoxylates (including alkylphenol ethoxylate phosphate esters).
- Not contain any alkyl amine ethoxylates (including tallow amine ethoxylates).

WSDA may register spray adjuvants for aquatic use that do not meet one or more of the above criteria if the registrant provides data which demonstrates that the proposed use will not adversely affect desirable aquatic species, or limits aquatic use to non-fish-bearing waters only. These criteria do not apply to adjuvants permitted for use under an experimental use permit issued by WSDA.

Marker Dyes: The permit allows the use of marker dyes. Applicators use marker dyes to distinguish treated areas from untreated areas when applying herbicide to manage *emergent vegetation*. Marker dyes help keep applicators from over applying herbicides. Marker dyes do not have any herbicidal activity by themselves and EPA does not label them as pesticides.

Experimental Use

EPA regulates federal EUP's under section 5(f) of FIFRA and WSDA regulates both state and federal EUP's under RCW 15.58.405(3). Entities operating under a state EUP do not need coverage under the Aquatic Noxious Weed Management Permit because state EUP's are limited in acreage. However, entities operating under a federal EUP must obtain permit coverage. Federal EUP's typically allow treatment of up to several hundred acres. The permit allows entities operating under a federal EUP to use chemicals/products not listed in the permit so long as their use is solely for research and monitoring.

General Application Restrictions

Ecology requires the Permittee to avoid treating in a highly populated or residential area on weekends and Memorial Day, the 4th of July, and Labor Day unless it has the prior consent of the property owners (WAC 173-201A-410(4)(c)). This condition limits any re-entry restrictions that may occur to the property owner through an herbicide treatment during a period of higher use, unless the property owner consents to the treatment.

S5. NOTIFICATION AND POSTING REQUIREMENTS

Ecology Notification Requirements for *Adverse Incidents* **or Chemical Spills**

WAC 173-226-080 (1)(d) states that a discharge of any pollutant more frequently or at a level in excess of that authorized is a permit violation. Ecology requires that if a Permittee violates permit conditions, it must take steps to stop the activity, minimize any violations, and report those violations to Ecology. For pesticide applications authorized in the permit, applicators must report violations to the Aquatic Pesticide Permit Manager and the Regional Spills Hotline (ERTS Hotline) within 24 hours. This allows Ecology to determine if more action is necessary to mitigate the permit violation.

Notification and Posting Requirements

The requirement of public posting and business and residential notification in the proposed permit is consistent with the posting and notification requirements in the previous Aquatic Noxious Weed Management permits, the Aquatic Plant and Algae Management permits, and (prior to the NPDES permitting program), requirements in aquatic pesticide administrative orders. Other aquatic pesticide NPDES permits issued by Ecology require various levels of public notification. Ecology considered input from interested parties and Permittees when developing posting and notification requirements. In some cases, Ecology based the public notification requirements on FIFRA label requirements. In all other cases, Ecology based the requirements on its BPJ and the public's right-to-know.

The intent of notification is to make people aware of those activities taking place that have the possibility of affecting them. The public has the right to know about possible chemical exposure so they can make informed decisions about limiting their exposure. Notification and posting alerts them to areas where treatment has occurred and allows them to make those choices. For indirect treatments that may occur along public shorelines or in wetlands, signage delineates treated sites and provides the public with re-entry times into the treated areas. Where noxious weeds occur sporadically, applicators may consider flagging the treated plant(s). Some companies make flagging material that says "noxious weed". Flagging may better delineate

treated plants than signs only. This is important when treating in parks or other areas with high human usage.

S5.B. Spartina Notification and Posting Requirements

The requirement to use the *Washington Public Shore Guide –Marine Waters* to identify public access areas when treating for *Spartina* has been removed from the permit. The book, *Washington Public Shore Guide –Marine Waters*, is out of print and is not easily obtained by the public. The Permittee or limited agent is still required to post public access areas when conducting aerial treatments for *Spartina*. The Permittee or Limited Agent will be responsible for identifying and posting public access areas, as defined in Appendix A of the permit, within two miles of the treatment area when conducting aerial treatments and under certain circumstances, land based treatments.

The Permittee or Limited Agent may use the public access areas identified in the Ecology Coastal Atlas to help identify locations to post notices. The Ecology Coastal Atlas can be found at: https://fortress.wa.gov/ecy/coastalatlas/. One limitation of the Coastal Atlas public beaches tool is that not all identified beaches are accessible from the shore, some are only accessible by boat. Additionally, some of the public access points identified by the Coastal Atlas tool are not true beach access points but are overlooks and other shoreline access points that wouldn't allow the public to access tidelands.

S6. MONITORING REQUIREMENTS

RCW 90.48.260 gives Ecology the authority to establish inspection, monitoring, entry, and reporting requirements. WAC 173-220-210 gives Ecology the authority to require monitoring of treated waters to determine the effects of discharges on surface waters of the state. Permittees must record the amount of pesticides they use at each site, report the pounds used of each active ingredient applied, and the amount of acreage treated to Ecology in an annual report. WSDA requires that their "limited agents" prepare an annual report with this same information.

Because the acreage of *Spartina* in Washington is now less than ten acres, Ecology no longer requires monitoring after *Spartina* treatments. See the *Spartina* monitoring plans and monitoring results from earlier permits at:

www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/noxious_index.html.

Freshwater Emergent Plant Monitoring

No monitoring is required for freshwater emergent projects using the herbicides glyphosate, imazamox, imazapyr, 2,4-D, or triclopyr. Monitoring conducted under previous permits shows that little to none of these herbicides enters and persists in waters adjacent to indirect applications of these chemicals. See the freshwater treatment monitoring plans and monitoring results at:

www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/noxious_index.html.

The Permittee must monitor a subset of treatments when using, bispyribac-sodium, penoxsulam, flumioxazin, or carfentrazone-ethyl for emergent plant treatment. The Permittee may request reduced or no monitoring if this monitoring shows little to no adverse environmental impacts

from the treatments. Based upon monitoring results submitted by WSDA, Ecology has determined to remove the required monitoring for imazamox. Monitoring data showed that during three years of monitoring, little to no imazamox residue was being detected in the surface water, adjacent to the treatment, 1 hour after treatment. These monitoring results can be accessed using the above link.

S7. REPORTING AND RECORDKEEPING

Section S7 of the permit contains specific conditions based on Ecology's authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-226-090).

Annual Treatment/Monitoring Reports

Permittees meet part of their reporting requirements through annual treatment reporting. Permittees must submit their annual treatment report to Ecology by February 1 of each year. The annual report summarizes the amount of each chemical (gallons or pounds of each active ingredient) used during the course of each treatment season per coverage. Reporting allows Ecology to track how much pesticide Permittees use in Washington for a specific use. Annual reporting also allows Ecology to determine if aquatic pesticide use in Washington lakes is increasing or decreasing and summarizes the results of herbicide residue monitoring and efficacy monitoring. WSDA sets the reporting times for its "limited agents".

Records Retention

Ecology based this permit condition on its authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-226-090). Applicators must keep all records and documents required by this permit for five years. If there is any unresolved litigation regarding the discharge of pollutants by the Permittee, they must extend the period of record retention through the course of the litigation (WAC 173-226-090).

S8. SPILL PREVENTION AND CONTROL

WAC 173-226-070 allows Ecology to place permit conditions to prevent or control pollutant discharges from runoff, spillage or leaks, sludge or waste disposal, or materials handling or storage. It also allows Ecology to require the use of BMPs that includes schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of the waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The Permittee must be prepared to mitigate for any potential spills and, in the event of a spill, perform the necessary cleanup, and notify the appropriate Ecology regional office (see RCW 90.48.080, and WAC 173-226-070).

S9. APPENDICES

GENERAL CONDITIONS

Ecology bases the General Conditions on state and federal law and regulations.

Duty to Reapply

All NPDES permits require the Permittee to reapply for coverage 180 days prior to the expiration date of the general permit in accordance with 40 CFR 122.21 (d), 40 CFR 122.41(b), and WAC 183-226-220(2).

Permit Issuance Procedures

Permit Modifications

Ecology may modify this permit to impose new or modified numerical limits, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters. Ecology would base any modifications on new information obtained from sources such as inspections, effluent monitoring, or Ecology-approved engineering reports. Ecology may also modify this permit because of new or amended state or federal regulations.

Recommendation for Permit Issuance

The general permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. Ecology proposes to issue this general permit for five (5) years.

BIBLIOGRAPHY

Documents prepared after June 12, 2014 also identify information sources by the following 11 categories:

- 1. Peer review is overseen by an independent third party.
- 2. Review is by staff internal to Department of Ecology.
- 3. Review is by persons that are external to and selected by the Department of Ecology.
- 4. Documented open public review process that is not limited to invited organizations or individuals.
- 5. Federal and state statutes.
- 6. Court and hearings board decisions.
- 7. Federal and state administrative rules and regulations.
- 8. Policy and regulatory documents adopted by local governments.
- 9. Data from primary research, monitoring activities, or other sources, but that has not been incorporated as part of documents reviewed under other processes.
- 10. Records of best professional judgment of Department of Ecology employees or other individuals.
- 11. Sources of information that do not fit into one of the other categories listed.

References

Ebasco Final Noxious Emergent Plant Management Environmental Impact Statement. 1993 http://agr.wa.gov/PlantsInsects/Weeds/NPDESPermits/docs/1993FinalNoxiousEmergentPlantManagementEIS.pdf. [4]

Final Supplemental Environmental Impact Statement For Freshwater Aquatic Plant Management. 2001. https://fortress.wa.gov/ecy/publications/summarypages/0010040.html. [4]

Final Supplemental Environmental Impact Statement for Diquat Dibromide. 2002 https://fortress.wa.gov/ecy/publications/summarypages/0210052.html. [4]

Entrix Ecological Risk Assessment of the Proposed Use of the Herbicide Imazapyr to Control Invasive Smooth Cordgrass (*Spartina spp.*) in Estuarine Habitat of Washington State. 2003 http://agr.wa.gov/PlantsInsects/Weeds/NPDESPermits/docs/2003EntrixEcologicalRiskAssessmentImazapyrSmoothCordgrass.pdf. [11]

Environmental Impact Statement (EIS) for Permitted Use of Triclopyr. 2004 https://fortress.wa.gov/ecy/publications/summarypages/0410018.html. [4]

AMEC Human Health and Ecological Effects Risk Assessment - Imazapyr Risk Assessment. 2009

 $\underline{http://agr.wa.gov/PlantsInsects/Weeds/NPDESPermits/docs/2009AMECHumanHealthEcological} \label{eq:logical} EffectsRiskAssessmentImazapyr.pdf . [11]$

2012 Environmental Impact Statement for Penoxsulam, Imazamox, Bispyribac-sodium, Flumioxazin, & Carfentrazone-ethyl: Addendum to the Final Supplemental Environmental

Impact Statement for Freshwater Aquatic Plant Management. https://fortress.wa.gov/ecy/publications/summarypages/0010040Addendum1.html. [4]

University of Washington. Dr. Christian Grue et. al. 2009. Assessing the Hazards Aquatic Herbicides Pose to Salmonids within Lowland Lakes in Washington State. Unpublished data. [9, 11]

Yahnke, A., Grue, C., Hayes, M., Troiano, A. 2013. EFFECTS OF THE HERBICIDE IMAZAPYR ON JUVENILE OREGON SPOTTED FROGS. Environmental Toxicology and Chemistry. Vol. 32, No. 1, pp. 228–235. [1]

Court Cases

Headwaters et al., v. Talent Irrigation District. U.S. Ct. of Appeals for the Ninth Cir. Ct. Case No. 99-35373, D.C. No.CV-98-06004-ALA. March 12, 2001. Cases not available online at www.ca9.uscourts.gov before 2005. [6]

Fairhurst v. Hagener, Director, Montana Department of Fish, Wildlife & Parks. U.S. Ct. of Appeals for the Ninth Cir. Ct. Case No. 04-35366, D.C. No.CV-03-00067-SEH OPINION. September 8, 2005. http://www.ca9.uscourts.gov/datastore/opinions/2005/09/07/0435366.pdf. [6]

League of Wilderness Defenders et al., v. Harv Forsgren, Regional Forester, Pacific Northwest Region United States Forest Service. U.S. Ct. of Appeals for the Ninth Cir. Ct. Case No. 01-35729, D.C No.CV-00-01383-RE OPINION. November 4, 2002. Cases not available online at www.ca9.uscourts.gov before 2005. [6]

The National Cotton Council of America et al., v. United States Environmental Protection Agency. U. S. Ct. of Appeals for the Sixth Cir. Ct. Case Nos. 06-4630;07-3180/3181/3182/3183/3184/3185/3186/3187/3191/3236. January 7, 2009. http://www.ca6.uscourts.gov/opinions.pdf/09a0004p-06.pdf. [6]

State Department of Ecology v Northwest Aquatic Ecosystems, et al., Thurston County Superior Court, Washington, Case No. 07-2-01447-8, November 26, 2008. http://www.ecy.wa.gov/programs/wq/pesticides/permit_documents/112608Order.pdf. [6]

Federal Publications

40 CFR 171.4: Standards for certification of commercial applicators. [7]

40 CFR 121.36: National Toxics Rule [7]

40 CFR 122.3: Exclusions. [7]

40 CFR 122.21: Application for a permit. [7]

40 CFR 122.41: Conditions applicable to all permits. [7]

40 CFR 125.3: Technology-based treatment requirements in permits. [7]

40 CFR 131.36: Toxics criteria for those states not complying with Clean Water Act section 303(c)(2)(B). [7]

40 CFR 122: EPA Administered Permit Programs: the National Pollutant Discharge Elimination System. [7]

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA): http://www.epa.gov/agriculture/lfra.html. [7]

Federal Water Pollution Control Act. 33 USC 1251 et seq.: http://www2.epa.gov/laws-regulations/summary-clean-water-act. [7]

Food Quality Protection Act: http://www.epa.gov/pesticides/regulating/laws/fqpa/. [7]

National Toxics Rule: http://water.epa.gov/lawsregs/rulesregs/ntr/. [7]

Revised Code of Washington (RCW)

Chapter 15.58 RCW: WASHINGTON PESTICIDE CONTROL ACT [7]

Chapter 17.10 RCW: NOXIOUS WEEDS—CONTROL BOARDS [7]

Chapter 17.21 RCW: WASHINGTON PESTICIDE APPLICATION ACT [7]

Chapter 43.21 RCW: STATE ENVIRONMENTAL POLICY [7]

Chapter 90.48 RCW: WATER POLLUTION CONTROL [7]

Chapter 90.52 RCW: POLLUTION DISCLOSURE ACT OF 1971 [7]

Chapter 90.54 RCW: WATER RESOURCES ACT OF 1971 [7]

Chapter 79.70 RCW: NATURAL AREA PRESERVES [7]

Washington Administrative Code (WAC)

Chapter 16-228 WAC: GENERAL PESTICIDE RULES [5]

Chapter 16-750 WAC: STATE NOXIOUS WEED LIST AND SCHEDULE OF MONETARY PENALTIES [5]

Chapter 16-752 WAC: NOXIOUS WEED SEED AND PLANT QUARANTINE [5]

Chapter 173-200 WAC: WATER QUALITY STANDARDS FOR GROUNDWATERS OF THE STATE OF WASHINGTON [5]

Chapter 173-201A WAC: WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF WASHINGTON [5]

Chapter 173-204 WAC: SEDIMENT MANAGEMENT STANDARDS [5]

Chapter 173-216 WAC: STATE WASTE DISCHARGE PERMIT PROGRAM [5]

Chapter 173-220 WAC: NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PROGRAM [5]

Chapter 173-226 WAC: WASTE DISCHARGE GENERAL PERMIT PROGRAM [5]

Chapter 371-08 WAC: PRACTICE AND PROCEDURE [5]

APPENDIX A: GLOSSARY

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.

Active ingredient: The ingredient(s) in a pesticide product that provides the pesticidal effects.

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

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.

Applicator: The person that discharges the chemical to a water body. Applicators are required to be licensed to apply registered pesticides.

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

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

Date of receipt (for the purposes of a permit appeal): Five business days after the date of mailing; or the date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the agency, shall constitute sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing (RCW 43.21B.001(2)).

Detention and 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 application of pesticides to water: The purposeful application of chemicals into surface waters of the state to manage the growth of submersed plants such as Eurasian watermilfoil where the intent is to add herbicides to the water to kill the plant. Herbicide application for plants such as fragrant water lily that grows in shallow water requires coverage under the Aquatic Plant and Algae Management permit rather than the Noxious Aquatic Weed Management permit because significant amounts of herbicide may directly enter the water through its treatment.

Discharge: The addition of any pollutant to a water of the state.

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).

Federal Clean Water Act: EPA regulations that establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

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

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

General Permit: A permit that covers multiple discharges of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

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).

Indirectly: The purposeful application of a chemical to a weed where there may be inadvertent and incidental overspray or dripping of chemical from the plant into waters of the state. The applicator does not intentionally add the chemical to the water to treat the plant (as occurs during in-water treatments for submersed plants such as Eurasian watermilfoil). Indirect application to water may occur into adjacent water bodies or wetlands, particularly when treating plants where the roots may be submerged and the foliage is above water. An example is the control of knotweeds along riparian corridors – the applicator applies herbicide to the plant, but there may be some inadvertent overspray into the water or the herbicide can drip from the plant into the stream.

Individual permit: A discharge permit specific to a single point source or facility.

Integrated Pest Management Plan: An ecologically based strategy for pest control that incorporates monitoring, biological, physical, and chemical controls in order to manage pests with the least possible hazard to humans, environment, and property. IPM considers all available control actions, including no action. Pesticide use is only one control action.

Invasive: Tending to spread and then dominate the area by out competing other plants. Some non-native species can become invasive when introduced outside of their native range.

In-water treatments: The application of an aquatic herbicide to the water to control the growth of mainly submersed plants. In-water treatment also includes controlling plants, like fragrant water lily that grows in shallow water where treatment can result in significant quantities of herbicide directly entering the water.

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.

Limited Agent: When the weed being controlled is covered under the authority of a program at WSDA, individuals, governments, and non-governmental organizations may contract with WSDA and operate under the WSDA coverage. These entities are known as "limited agents" and must follow all permit conditions and provisions.

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.

New applicants: An entity that proposes to discharge pesticide into waters of the state, but does not already have coverage under the Aquatic Noxious Weed Management permit for the proposed treatment.

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

Permittee: An entity that has obtained coverage under the permit from Ecology.

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.

Pollutant: Means any substance discharged that would alter the chemical, physical, thermal, biological, or radiological integrity of the waters of the state or would be likely to create and nuisance or renders such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to any legitimate beneficial use, or to any animal life, either terrestrial or aquatic. Pollutants include, but are not limited to the following: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, pH, temperature, total suspended solids, turbidity, color, biological oxygen demand, total dissolved solids, toxicity, odor, and industrial, municipal, and agricultural waste.

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 or other 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.

Qualified toxicologist: A person with a Ph.D in toxicology or in a health or ecological science with an emphasis in toxicology, or a person with a Master's degree in toxicology or a related science with an emphasis in toxicology, who is working in the field of toxicology.

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

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.

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: 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 watercourses within the jurisdiction of the state of Washington. Also includes drainages to surface waters.

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.

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 INVOLVEMENT INFORMATION

To be considered, all comments about the proposed permit must be received or postmarked by 5 p.m. on November 4, 2016.

Ecology has tentatively determined to issue the Aquatic Noxious Weed Management General permit for aquatic plant control activities as identified in Special Condition S1 Permit Coverage.

Ecology will publish a Public Notice of Draft (PNOD) on September 21, 2016 in the Washington State Register. The PNOD informs the public that the draft permit and fact sheet are available for review and comment.

Ecology will also email the notice to those identified as interested parties.

Copies of the draft general permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the Ecology offices listed below, may be obtained from Ecology's website, or by contacting Ecology by mail, phone, fax, or email.

Permit website:

www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/noxious_index.html

Ecology Headquarters Building Address:

300 Desmond Drive Lacey, WA 98503

Contact Ecology:

Department of Ecology Nathan Lubliner

Water Quality Program Email: nathan.lubliner@ecy.wa.gov

Attn: Aquatic Noxious Weed Permit Writer Phone: 360-407-6563 P.O. Box 47600 Fax: 360-407-6426

Olympia, WA 98504-7600

Submitting Written and Oral Comments

Ecology will accept written comments on the draft Aquatic Noxious Weed Management General permit, Fact Sheet, and Notice of Intent (NOI). Ecology will also accept oral comments at the public hearing on October 27, 2016 at the Lacey Ecology Headquarters building, 300 Desmond Dr., Lacey, WA starting at 1:00 p.m.

Comments should reference specific text when possible. Comments may address the following:

- Technical issues
- Accuracy and completeness of information
- Adequacy of environmental protection and permit conditions
- Any other concern that would result from the issuance of this permit

Ecology prefers comments be submitted through the comment form at:

http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide permits/noxious/noxious index.html

Ecology must receive written comments (via email or postmarked November 4, 2016) no later than 5:00 p.m. on November 4, 2016.

Submit written, hard copy comments to:

Nathan Lubliner Department of Ecology P.O. Box 47600 Olympia, WA 98504-7600

You may also provide oral comments by testifying at the public hearing.

Public Hearing and Workshop

Ecology will hold a public hearing and workshop on the draft general permit at the location below. The hearing provides an opportunity for people to give formal oral testimony and comments on the draft permit. The workshop held immediately prior to the public hearing will explain the special conditions of the Aquatic Noxious Weed Management General permit.

Hearing and Workshop

October 27, 2016 Ecology Headquarters Building, 1:00 pm 300 Desmond Dr. Lacey, WA 98503-1274

The workshop and hearing may also be attended as a webinar where individuals may view the presentation and provide testimony via computer or mobile device. To register for the webinar go to: http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/noxious_index.html. Once the host approves your request, you will receive a confirmation email with instructions for joining the meeting.

Issuing the Final Permit

Ecology will issue the final permit after it receives and considers all public comments. Ecology expects to issue the new general permit by February 2017. It will be effective one month after the issuance date.

For further information, contact Permit Writer, Nathan Lubliner, at Ecology, by phone at 360-407-6563, by email at nathan.lubliner@ecy.wa.gov, or by writing to Ecology at the Olympia address listed above.

APPENDIX C: YOUR RIGHT TO APPEAL

You have a right to appeal this permit to the Pollution Control Hearings Board (PCHB) within 30 days of the *date of receipt* of the final permit. 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) (also see glossary).

To appeal you must do the following within 30 days of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form by mail or in person (see addresses below). E-mail is *not* accepted.

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

Address and Location Information

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

APPENDIX D: RESPONSE TO COMMENTS

Look for the Response to Comments document on the Noxious Aquatic Weed Management general permit web page.

 $\underline{http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/noxious_index.}\\ \underline{html}$