

**FACT SHEET**

**UPLAND FIN-FISH HATCHING AND  
REARING NPDES GENERAL PERMIT**

June 28, 2010

**PURPOSE of this Fact Sheet**

The Department of Ecology (Ecology) is proposing to reissue the Upland Fin-fish Hatching and Rearing National Pollutant Discharge Elimination System (NPDES) General Permit. The permit will replace the permit that Ecology reissued on April 22, 2005, and that expires on June 1, 2010. This fact sheet explains the nature of the discharges covered by the general permit, Ecology's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

This proposed general permit limits the discharge of pollutants to surface waters under the authority of the Federal Water Pollution Control Act (U.S.C.S. 1251) and limits the discharge of pollutants to surface and ground water under the authority of Chapter 90.48 RCW.

The general permit provides coverage for discharges from upland fin-fish hatching and rearing operations, and conditions the discharge of wastewater to waters of the state of Washington by the facilities covered under this permit. This permit authorizes operations covered under this permit to discharge wastewater to waters of the state of Washington subject to the conditions contained in the general permit.

**PUBLIC ROLE in the Permit**

Ecology makes the draft permit and fact sheet available for public review and comment at least thirty (30) days before issuing the final general permit. Copies of the fact sheet and draft permit were available for public review and comment from April 1, 2010, until the close of business June 14, 2010. For more details on preparing and filing comments about these documents, please see *Appendix A - Public Involvement Information*.

After the public comment period closes, Ecology will summarize substantive comments and its responses to them. Ecology will include its summary and responses to comments to this fact sheet as *Appendix D - Response to Comments*, and publish it when issuing the final NPDES permit. The full document will become part of the legal history contained in the facility's permit file.

The significant changes proposed for this reissuance of the permit include:

1. Incorporation of new water quality standards language.
2. Additional emphasis on the facility's obligation to notify Ecology when it changes or increases production and when it needs to submit an engineering report.
3. Removal of the sampling exemption when facilities fall below 20,000 pounds of fish on station.

This fact sheet and permit were prepared by Lori LeVander.

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## I. INTRODUCTION

The Federal Clean Water Act (FWPCA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW which defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

Ecology adopted rules describing how it exercises its authority:

- Procedures Ecology follows for issuing NPDES permits (Chapter 173-220 WAC).
- Water quality criteria for surface waters (Chapter 173-201A WAC) and for ground waters (Chapter 173-200 WAC).
- Sediment management standards (Chapter 173-204 WAC).
- Submission of Plans and Reports for Construction of Wastewater Facilities (Chapter 173-240 WAC).

These rules require any industrial facility operator to obtain an NPDES permit before discharging wastewater to state waters. They also help define the basis for limits on each discharge and for performance requirements imposed by the permit.

Under the NPDES permit program and in response to a complete and accepted permit application, Ecology must prepare a draft permit and accompanying fact sheet, and make them available for public review before final issuance. Ecology must also publish an announcement (public notice) telling people where they can read the draft permit, and where to send their comments, during a period of thirty (30) days (WAC 173-226-130). (See *Appendix A – Public Involvement Information* for more detail about the public notice and comment procedures).

*Appendix D – Response to Comments* includes a summary of any substantive public comments to Ecology on the proposed permit and fact sheet during the public comment period and Ecology's response to each comment, including the revisions of the permit in response to comment. The summary and response to comments will become part of the legal history contained in the permit file and parties submitting comments will receive a copy of Ecology's response.

## PERMIT COVERAGE

Upland fin-fish hatching and rearing facilities are defined in Chapter 173-221A WAC as facilities in which fin-fish are hatched, fed, nurtured, held, maintained, or reared to reach the size of release or for market sale and are not located within waters of the state. This includes fish hatcheries, rearing ponds, spawning channels, and other similarly constructed or fabricated public, tribal, or private facilities.

This permit includes technology-based effluent limits and other permit conditions that Ecology has determined meet both the state requirement for "all known, available, and reasonable treatment" (AKART) (RCW 90.48.010 and RCW 90.54.020) and the federal requirement for best conventional pollutant control technology (BCT).

Ecology will evaluate all applications for coverage under this general permit to ensure compliance with state water quality standards for surface water and ground water (Chapter 173-201A and 173-200 WAC) and state wastewater discharge standards and effluent limitations for these facilities (Chapter 173-221A). Facilities that require more stringent effluent limits or special conditions other than those contained in this general permit in order to meet state water quality standards may need to obtain coverage under an individual permit.

Ecology conditions general permits to provide coverage for a group of related facilities or operations of a specific industry type or group of industries. Ecology issues general permits when the discharge characteristics are similar and a standard set of permit requirements can effectively provide environmental protection and comply with water quality standards for discharges to surface water or ground water. Coverage under this general permit for discharges to surface water or discharges to ground water will be appropriate for most facilities with activities designated by the following NAICS (SIC) codes and which are subject to coverage:

112511 (0921) Fish Hatcheries and Preserves

## II. BACKGROUND INFORMATION

### DESCRIPTION OF THE INDUSTRY

The number of facilities covered by this general permit has remained relatively constant over the past twenty years, with 10 applications for coverage received from private facilities and 70 applications for coverage received for WDFW operated facilities this year (2009). The mission of these facilities can range from public or tribal enhancement facilities to private enterprises running grow-out operations.

Ecology issued the first general permit to facilities rearing fin-fish in upland areas in 1990. This is the fifth issuance of the Upland Fin-fish Hatching and Rearing General Permit. Since 1990, these permits covered facilities that discharged at least 30 days a calendar year and produced more than 20,000 pounds of fish per year, or fed more than 5,000 pounds of fish food during any calendar month. Ecology also covered any fish rearing facility it deemed a significant contributor to waters of the state. This permit does not cover fish rearing and hatching operations on federal or tribal lands.

#### Industrial Process

Upland fin-fish hatching and rearing facilities can have a wide variety of rearing pond configurations including lined or unlined ponds, raceways, and circular ponds in which fish are held for culturing purposes. On a daily basis, facility operators give the fish a predetermined ration of pelletized fish food by hand feeding and/or mechanical means to promote growth. Once the fish attain the targeted size, they are released, harvested, or kept as brood stock.

Washington State Department of Fish and Wildlife (WDFW), private aquaculture enterprises, and some tribal facilities raise and release fish for enhancement purposes. The facilities mainly use fish pumps, dip nets, and volitional release to remove the fish from the ponds. The hatching and rearing facilities initiate the volitional release method by removing the pond screen at the outfall of a rearing pond so the bulk of the fish can leave on their own. At the end of a volitional release, the operators use moveable screens or nets to move the remaining fish into the receiving water.

The most common method of moving the fish to a release site is by trucking them in fish holding tanks or by allowing them access into piping which directs them to the adjacent receiving water.

Private facilities, in addition to raising fish for enhancement purposes, produce and sell eggs, fry, and/or market-sized fish. These facilities move the fish out of the rearing ponds by the use of fish pumps or dip nets for harvest or for live transport to other rearing facilities.

Ecology has classified the wastewater treatment processes for these facilities into three types: off-line settling basins, flow-through settling systems, and rearing pond culture (facilities with a minimum of two hours of hydraulic retention time). Sixty percent of the facilities requesting coverage under this draft permit use off-line settling basins. Thirty percent of the facilities use in-line flow through settling systems. A few of the facilities reported in their application that they provide no treatment or dispose of effluent and pond solids in unlined pits or dispose of the waste solids at an upland site. During the last permit cycle, 20% of the facilities covered reported no off-line or in-line settling of solids. A number of facilities have added off-line settling basins during the past permit cycle.

Most facilities use suction (trash) water pumps or venturi pumps to convey the accumulated pond solids to an off-line settling basin. The least common method for removing the solids from the ponds is by sweeping the wastes off the pond bottom and letting the current carry the resuspended material into a bottom-drain system connected to the off-line settling basin.

Facilities that lack an off-line settling basin remove the accumulated solids for disposal onto adjacent fields or at a landfill by using pumps, front end loaders, and/or shovels.

### Discharge

Fish hatching and rearing facilities generate the following wastes: fish fecal matter, uneaten fish food, fish mortalities, fish carcasses resulting from spawning operations, and medications and disease control chemicals used in the hatching and rearing of fish. Other wastes include sand, silt, and debris, which have settled out of the facilities source waters.

## **PREVIOUS PERMIT LIMITS AND CONDITIONS**

Ecology issued the previous general permit for these facilities on April 22, 2005, with an effective date of June 1, 2005. The permit placed effluent limits on settleable solids and total suspended solids from general hatchery and rearing pond discharges, off-line settling basin discharges, and pond drawdown for fish release discharges. The following tables depict those limits and the monitoring frequencies.

<b>Table 1. Raceways and Rearing Ponds</b>			
	<b>Monthly Average</b>	<b>Maximum Daily</b>	<b>Monitoring Frequency</b>
Total Suspended Solids TSS (net mg/L)	5.0	15.0	1/month
Total Settleable Solids SS (net ml/L)	0.1	--	1/week

<b>Table 2. Off-line Settling Basins</b>			
	<b>Monthly Average</b>	<b>Instantaneous Maximum</b>	<b>Monitoring Frequency</b>
Total Suspended Solids (mg/L)	---	100	1/month
Total Settleable Solids (ml/L)	---	1.0	1/month

<b>Table 3. Pond Drawdown for Fish Release Discharges</b>		
	<b>Instantaneous Maximum</b>	<b>Monitoring Frequency</b>
Total Suspended Solids (mg/L)	100	1/drawdown
Total Settleable Solids (ml/L)	1.0	1/drawdown

The permit limited the use of drugs, medications, and chemicals (disease control chemicals) to those approved for aquaculture use by the United States Food and Drug Administration (FDA) or the US Environmental Protection Agency (EPA). The permit required the facilities to report their use of drugs, medications, or chemicals annually on a form provided by Ecology. The facilities were also required to record the disposal of all spent chemical dip treatment solutions in the Operational Log maintained on-site.

### **SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT**

Ecology assessed compliance with the previous general permit based on review of the Discharge Monitoring Reports (DMRs) received and on the results of site inspections. Most facilities complied with their permit conditions.

The most common permit violation by the hatching and rearing facilities were total suspended solids limit exceedances from the off-line settling basin. During extremely high water events, facilities exceeded effluent solids permit limits usually because high flow volumes flushed influent solids through the system without allowing them to settle.

A compliance report covering the period from January 2006 to January 2010 (16 quarterly reporting periods) showed 129 permit violations for the 82 active reporting facilities. Of the 129 violations, 6 were for Settleable Solids exceedances, 31 were for non-reporting or non-sampling events, and 92 were for TSS exceedances. Fifty-three Warning Letters were issued over the past permit cycle, and numerous technical assistance calls for permit compliance issues.

Ecology has inspected nearly all of the facilities covered under this general permit at least once during the permit term and provided technical assistance to help them comply with the permit terms and conditions.

## **WASTEWATER CHARACTERIZATION**

Two related but separate sources at these facilities generate the wastewater discharge: the rearing portion of the facility (rearing ponds and raceways) and the off-line settling basin.

### Rearing Pond and Raceway Discharges

Rearing pond and raceway wastewater contains some organic solid wastes consisting of uneaten food and fecal material. The quantity of these wastes depends upon the volume of fish food added, the pounds of fish produced, pond design, and the amount of waste that settles out of the water prior to its discharge.

### Off-line Settling Basin Discharges

The off-line settling basin wastewater contains resuspended organic solids generated when facilities clean the bottom of the rearing ponds using a vacuum system or by sweeping to a bottom-drain system. The organic solids consist of fish food, fecal material, and other debris settled out from the facility's water source.

### Pollutants of Concern

Pollutants of concern in hatchery and rearing pond wastewater are the waste food and feces. The chemical constituents of concern in the waste food and feces are primarily nitrogen and phosphorus. The pollutant loading in the effluent is characterized with monthly total suspended solids (TSS) and weekly settleable solids (SS) monitoring.

The above-mentioned pollutants are present in the discharge from the raceways and rearing ponds at hatcheries and acclimation ponds in low concentrations, but in higher concentrations in the smaller volume discharges from the waste settling basins. Ecology determined that when facilities adequately remove solids, hatchery discharges pose a low risk of causing water quality violations.

Ecology also considers the disease control chemicals used at these facilities as pollutants of concern. Fish hatching and rearing facilities use these chemicals to treat both internal and external fish diseases and to prevent the spread of disease at or between facilities. The draft permit limits the use of these chemicals to only those approved for hatchery use and to usage in accordance with label instructions. The draft permit also prohibits the discharge of these chemicals in concentrations that would exceed federal or state water quality standards and requires facilities to use BMPs to minimize the concentration of these chemicals in the discharge. These chemicals include the following:

<b>Internal Control</b>	<b>External Control</b>	<b>Disinfectants/Other</b>
Amoxicillin	Acetic Acid	Chlorine
Terramycin (OTC)	Buffered Iodophor	Iodophor
Epsom Salts	Chloramine-T	MS-222
Erythromycin	Formalin	Quaternary Ammonia
Romet 30	Hydrogen Peroxide	Sodium Thiosulfate
Florfenicol	Potassium Permanganate	Aquashade
Penicillin	Sodium Chloride (Salt)	LLMO
Lincomycin	Diquat	Chlorhexidine
Albuterol	Citric Acid	Lime Type-S
Clindamycin	Copper Sulfate	Carbon Dioxide (gas)
Vibrio Vaccine		Ozone (gas)
Trimethoprim-sulfadiazine		
Chlortetracycline		
Tylosin		
Fumagillin		
Cephalexin		
Benzocaine		
Sulfamethoxazole (Albon)		
GnRH=gonadotropin releasing hormone		
Isoeugenol (Aqui-S)		
Calcein		
BKD Vaccine		
Flavobacterium Columnare B Vaccine		

Fish hatching and rearing facilities administer all of these disease control chemicals at known concentrations for their therapeutic or disease prevention effect.

### **SEPA COMPLIANCE**

The coverage of existing facilities under this proposed general permit is exempt from the procedures mandated under the State Environmental Policy Act (WAC 197-11-855). The exemption does not apply to any *new source* or *new discharger*. A new source or new discharger must complete the SEPA process prior to application for coverage under the proposed general permit.

Any existing facility planning a significant change or increase in production must submit a new application for coverage to modify their site-specific fact sheet and demonstrate that the proposed change has complied with SEPA review.

Facilities must notify their Ecology permit manager of any planned change and the potential to impact their wastewater discharge.

### **PROPOSED PERMIT LIMITS AND CONDITIONS**

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

- Technology-based limits are based upon the treatment methods available to treat specific pollutants. Technology-based limits are set by the 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 most stringent of these limits to each parameter of concern. These limits are described below.

Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation.

Nor does Ecology usually develop permit limits for pollutants not reported in the permit application but that may be present in the discharge. The permit does not authorize discharge of the non-reported pollutants. During the five-year permit term, a facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology, as described in 40 CFR 122.42(a), if significant changes occur in any constituent.

### Background

In 1974, EPA released a "Draft Development Document for Effluent Limitations Guidelines for Fish Hatcheries and Farms," for public review. In 1984, EPA Region 10 contracted with JRB Associates for a study of Idaho trout facilities. The study recommended effluent limits, which would represent best conventional pollutant control technology (BCT).

Ecology based individual NPDES permits for upland fin-fish hatching and rearing facilities issued in Washington before 1984 primarily on the EPA draft development document released in 1974. Permits issued after 1984 in Washington generally followed the effluent recommendations in the 1984 EPA/JRB Idaho fish hatchery study.

### **TECHNOLOGY-BASED EFFLUENT LIMITATIONS**

In 1990, Ecology established all known, available, and reasonable methods of treatment (AKART) for upland fin-fish facilities when it adopted Chapter 173-221A WAC, Wastewater Discharge Standards and Effluent Limitations. Ecology amended the regulation in October 1995 primarily to acknowledge the widespread and commonly accepted extra-label use of drugs and chemicals.

This regulation contains both wastewater discharge standards and design criteria for wastewater treatment systems. This permit contains the effluent limits identified in Chapter 173-221A WAC. Design criteria for wastewater treatment systems are not in the permit but are contained in the regulation covering this industry. Listed below are the wastewater discharge performance standards:

<u>Rearing Pond Discharges</u>	<u>Limit</u>
Instantaneous Maximum Total Suspended Solids	15 mg/L
Average Monthly Total Suspended Solids Concentration	5 mg/L
Average Monthly Settleable Solids Concentration	0.1 ml/L

<u>Off-line Settling Basin and Rearing Pond Drawdown for Fish Release Discharges</u>	
Instantaneous Maximum Total Suspended Solids	100 mg/L
Instantaneous Maximum Settleable Solids	1.0 ml/L

The implementation of the Pollution Prevention Plan and the Solid Waste Management Plan during the past permit cycle provided further reductions in the amount of solids discharged, protected groundwater quality, prevented spills, and required facilities to develop procedures for spill response. The site-specific Facility Sampling Plan required each facility to identify influent and effluent sampling points and outline procedures for composite sampling. This permit requirement has resulted in more representative sampling of the discharges from the fish hatching and rearing facilities.

The draft permit continues the prohibition on the discharge of Atlantic salmon into freshwater surface waters of the state, without written permission from WDFW. Ecology based this prohibition in part on the May 1997 Pollution Control Hearings Board ruling declaring Atlantic salmon a biological pollutant. Additionally, the WDFW has trapped juvenile Atlantic salmon in both Scatter Creek and the Chehalis River downstream from permitted upland fin-fish hatching and rearing facilities raising Atlantic salmon. The WDFW has expressed concerns that Atlantic salmon fry and juvenile fish may cause ecological disruption if released to fresh water. The technology available to eliminate the inadvertent release of Atlantic salmon is facility effluent screening. Screening is relatively inexpensive and commercially available.

Ecology believes that a precautionary stance in regards to the inadvertent release of Atlantic salmon is a reasonable step to prevent the establishment of this exotic species in our state waters. This requirement only affects a few permitted facilities statewide. WAC 232-12-271 also prohibits the release of exotic species into the state without a permit from the Washington State Department of Fish and Wildlife.

Facilities that Ecology determines do not need to apply for and receive an Upland Fin-Fish Hatching and Rearing NPDES General Permit must still meet the practices and effluent standards of WAC 173-221A-100.

#### Disease Control Chemicals

Fish hatching and rearing facilities use disease control chemicals:

- For the internal and external control of fish diseases.
- To disinfect facility tools, rearing ponds, or source waters to prevent the spread of these diseases.

The discharge concentration of these chemicals should not cause receiving water toxicity if the use is consistent with product labels, FDA regulations, and the permit requirement mandating BMPs. Ecology has determined that the use of BMPs will meet AKART for this pollutant.

#### Designated Uses and Surface Water Quality

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). When drafting a general permit Ecology must consider the typical discharge conditions and cannot readily accommodate site-specific variables. Ecology may base water quality-based effluent limits on an individual waste load allocation or on a waste load allocation developed during a basin wide total maximum daily loading study (TMDL). Ecology determined that surface water discharges for this industry group are most likely to freshwater (WAC 173-201A-200).

#### Numerical Criteria for the Protection of Aquatic

Numerical 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 numerical criteria along with chemical and physical data for the wastewater and receiving water to derive the 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.

#### Numerical Criteria for the Protection of Human Health

The U.S. 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). These criteria are designed to protect humans from exposure to pollutants linked to cancer and other diseases, based on consuming fish and shellfish and drinking contaminated surface waters.

#### Narrative Criteria

Narrative water quality criteria (e.g., WAC 173-201A-240(1); 2006) limit the toxic, radioactive, or other deleterious material concentrations that the facility may discharge 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 health.

Narrative criteria are also established to condition the application of the numeric criteria and to provide regulatory responsibility to protect the specific designated uses of all fresh waters (WAC 173-201A-200, 2006) and of all marine waters (WAC 173-201A-210; 2006) in the state of Washington.

### Antidegradation

The purpose of Washington's Antidegradation Policy (WAC 173-201A-300-330) 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 all known, available, and reasonable methods of prevention, control, and treatment (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 Tiers I and II antidegradation in general permits. All Permittees covered under the general permit must comply with the provisions of Tier I. Ecology determined that the permit does not cover discharges to Tier III waters.

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

- Use the information collected, from implementation of the permit, to revise permit or program requirements.
- Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance.
- 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.

Ecology has an internal technical workgroup that meets regularly to discuss and evaluate data received from general hatchery permittees, emerging wastewater treatment technology, and evaluate the efficacy of the general hatchery permit in protecting water quality. To comply with the antidegradation requirements, Ecology has reviewed the requirements of the general permit and evaluated its effectiveness in protecting water quality.

Ecology is not aware of any new control technologies that have been developed or generally implemented during the past 5 years that reduce pollution from hatcheries. Inspections at each facility with emphasis on BMPs and compliance with existing permit limits meets water quality standards. The draft permit has been revised to include pollution abatement pond sampling regardless of poundage of fish on-hand. The sampling exemption for permitted hatcheries that fall below 20,000 pounds of fish on-site has been removed.

During the next permit cycle, Ecology will continue to review influent and effluent data and conduct comparative analysis on those facilities with the highest raw values. The goal is to determine if the net values reported are representative of the actual effluent impacts.

To date, facilities that have submitted application for coverage under this general permit are all existing facilities that have previously been public noticed, giving the general public an opportunity to question or comment on individual actions.

Although the antidegradation regulations for general permits state that individual actions covered under a general permit do not need to go through independent Tier II reviews, Ecology considers it important that the public have the opportunity to weigh in on whether individual actions are in the overriding public interest. The antidegradation rule establishes a refutable presumption that they do, but only through a public notice of intent to provide coverage and expected compliance with antidegradation does the general public have an opportunity to question individual actions. Thus, Ecology will solicit public comments for new requests for coverage under this permit, through public notification in a local paper and on Ecology's webpage.

This fact sheet describes how the permit and control program meets the antidegradation requirement.

## **EVALUATION OF SURFACE WATER QUALITY-BASED EFFLUENT LIMITS FOR NUMERIC CRITERIA**

### Temperature and Dissolved Oxygen

The pollutants of potential concern in the first version of this permit were temperature and dissolved oxygen. The concern was raised in a 1988 study by Ecology on the "Quality and Fate of Fish Hatchery Effluents During the Summer Low Flow Season." The facilities monitored these parameters during their first year of permit coverage. The results of this monitoring showed that these facilities do not have a reasonable potential to exceed these parameters. Based upon this information, Ecology determined that it would not require further monitoring of temperature and dissolved oxygen in subsequent permits.

### Toxic Pollutants

Federal regulations (40 CFR 122.44) require NPDES permits to contain effluent limits for toxic chemicals in an effluent whenever there is a reasonable potential for those chemicals to exceed the water quality criteria. Ecology does not exempt facilities with technology-based effluent limits from meeting the water quality standards.

Some of the disease control chemicals used at these facilities classify as toxic pollutants. Washington has not adopted numeric water quality standards for most of these compounds. Ecology has determined that when facilities use these chemicals according to FDA requirements, follow product label requirements, and follow BMPs to dilute the treatment concentrations with other hatchery flows, these chemicals pose no reasonable potential to violate federal or state water quality standards.

### Emergency Extra-Label Drug and Chemical Use

The document entitled, “Approval of Disease Control Chemical Use Under the Department of Ecology’s General Permit for Upland Fin-fish Hatching and Rearing Facilities” (1990) authorized the use of non-emergency and emergency extra-label drug and chemical use without the prior approval of Ecology. In October 1995, Ecology amended Chapter 173-221A WAC to specifically allow the extra-label use of disease control drugs and chemicals if the drugs and chemicals are administered by or under the supervision of a licensed veterinarian and approved in advance by Ecology.

The previous permits adopted the document conditions and incorporated them into S6.B. Ecology recognizes that there are many situations where extra-label disease control drug and chemical use could occur with little reasonable potential to impact water quality. Ecology also recognizes that an epizootic disease outbreak may require extraordinary measures to save the fish. Epizootic disease outbreaks may require the extra-label use of a drug or chemical or the use of a drug or chemical that is not approved by the United States Food and Drug Administration or United States Environmental Protection Agency. Ecology requires 24-hour prior notification for emergency drug and chemical use and a detailed account of quantity of disposed disease control drugs and chemicals, in the facility’s operational log.

### Discharges to 303(d) Listed Impaired Waterbodies

The current permit stipulates that facilities discharging a pollutant named as a pollutant causing a water quality standards violation at a location identified on the current EPA-approved 303(d) list for Washington State are not authorized to discharge that pollutant at a concentration above the surface water quality standards (Chapter 173-201A WAC). Considering the pollutants associated with fish hatching and rearing facilities, Ecology has determined that facilities discharging to waterbodies listed for turbidity, fine sediment, or temperature must comply with:

- TMDLs, including applicable wasteload allocations, completed prior to the date Ecology issues permit coverage.

- An effluent limit that is equal to the applicable surface water quality standard (WAC173-201A) at the point of discharge if it discharges to an impaired water body that does not have a completed TMDL.

The proposed permit continues this requirement.

The current permit specifies that Permittees that exceed the effluent limit for a discharge to a 303(d)-listed waterbody constitute a violation of the general permit. Condition S1.B.1 of the current permit states that Ecology will not provide coverage under the general permit to facilities that discharge to a waterbody listed pursuant to Section 303(d) of the Clean Water Act unless it is not causing or contributing to the impairment of the receiving water. The proposed permit contains this same condition.

### Human Health

Washington's water quality standards include 91 numeric human health-based criteria that Ecology must consider when writing NPDES permits. These criteria were established in 1992 by EPA in its National Toxics Rule (40 CFR 131.36). Ecology has determined that the discharge from this industry group is unlikely to contain chemicals regulated for human health.

### Whole Effluent Toxicity

The water quality standards for surface waters forbid discharge of effluent that causes toxic effects in the receiving waters. Many toxic pollutants cannot be measured by commonly available detection methods. However, laboratory tests can measure toxicity directly by exposing living organisms to the wastewater and measuring their responses. These tests measure the aggregate toxicity of the whole effluent, so this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

Using the screening criteria in WAC 173-205-040, Ecology determined that toxic effects caused by unidentified pollutants in the effluent are unlikely. Therefore, this permit does not require WET testing. Ecology may require WET testing in the future, if it receives information indicating that toxicity may be present in this effluent.

### Sediment Quality

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

Ecology has determined through a review of fish hatching and rearing facility wastewater characteristics that this discharge has no reasonable potential to violate the sediment management standards.

### Ground Water Quality

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 (WAC 173-200-100). Ecology has determined that a properly operated upland fin-fish hatching and rearing facility poses little potential to impact state ground water standards. This permit does not authorize a violation of these standards. Ecology may require facilities with the potential to violate these standards to obtain coverage under an individual permit and/or require additional sampling and groundwater monitoring, and/or require these facilities to line rearing and pollution abatement ponds if necessary.

### **COMPARISON OF EFFLUENT LIMITS WITH THE PREVIOUS PERMIT**

The effluent limits for total suspended solids and settleable solids in the draft permit are the same as those in the permit issued in 2005. WAC 173-221A-100(4)(a)(iv) states “Effluent limitations shall apply as net values provided the criteria contained in 40 CFR 122.45 (net gross allowance) are met.” The 2005 permit required fish hatching and rearing facilities to report influent and effluent values on the DMR form along with their net value calculations. Ecology evaluated this data to assess whether additional sampling was necessary to prove substantial similarity between influent and effluent solids. The majority of sampling data indicate that only a few facilities reported high influent and effluent solids values. Ecology will work with these facilities during this permit cycle to improve solids handling and removal from the discharge and will review comparability of solids again during the upcoming permit cycle.

### **MONITORING AND REPORTING**

Ecology requires monitoring, recording, and reporting (WAC 173-226-090 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and that the discharge complies with the permit’s effluent limits.

Since facilities designed the off-line settling basins to meet the removal efficiency and hydraulic retention standards, Ecology believes it is more important to monitor the quality of the effluent leaving the settling basins than percent removal. The previous permit required sampling of the off-line settling basin every month the settling basin discharged, regardless of pounds of fish on hand or food fed per month. Monthly sampling for total suspended solids remains in this permit. Ecology feels this sampling frequency is justified because the solids entering the receiving water from the off-line settling basins is the most important indicator of a hatchery’s environmental performance.

The previous permit allowed facilities to use the DPD colorimetric field test for chlorine as an acceptable alternative to constant bioassay. It also required facilities to neutralize residual chlorine prior to discharge to less than 19 µg/L, which is the acute toxicity criterion promulgated in the Washington State surface water quality standards (Chapter 173-201A WAC). The draft permit contains the same requirements.

## **CALCULATING NET VALUES**

The draft permit continues the use of net values when submitting results for TSS and settleable solids. If the facility chooses to calculate net discharge values for solids, it must report both the influent and effluent values on the DMR form. It must take a sample of the “raw” water which represents the influent sample. The net calculation is applicable when the material (solids) in the influent is substantially similar in character as the solids in the effluent. Ecology may require additional sampling for Total Volatile Suspended Solids (TVSS) or BOD<sub>5</sub>, to determine the organic proportion of solids in the influent and effluent, if it has concerns.

The monitoring and testing schedule is detailed in the permit under Conditions S4 and S5. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

## **OTHER PERMIT CONDITIONS**

### Reporting and Record Keeping

Ecology based Special Condition S5, Reporting and Record Keeping Requirements, on its authority to specify any appropriate reporting and record keeping requirements to prevent and control waste discharges (WAC 173-226-090).

Various permit conditions require facilities to notify Ecology in writing (for example, notification of change in permit status). The permit does not specify any special mailing instructions. It is the facility’s responsibility to assure that Ecology receives notification in a timely fashion as required by the permit. It may be in the facility’s best interest to use certified mail or other documented delivery service whenever notifying Ecology is required by the permit.

### Facility Sampling Plan

A Facility Sampling Plan is required under Condition S5.B to delineate the sampling locations and procedures for each facility. The facility must sample in accordance with this plan along with any revisions directed by Ecology.

### Solid Waste Management Plan

Ecology has determined that these facilities can prevent groundwater contamination and minimize the release of pollutants through the development and use of a Solid Waste Management Plan. The plan must address floating, suspended, and settled solids and describe how it plans to remove collected solids. Facilities must operate in accordance with this plan along with any revisions directed by Ecology to prevent pollution.

### Pollution Prevention Plan

Ecology has determined that fish hatching and rearing facilities can prevent or minimize the release of pollutants through the development and use of a Pollution Prevention Plan. Facilities must operate in accordance with this plan along with any revisions directed by Ecology to prevent an

accidental release of pollutants under the authority of 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080. Facilities must review the Pollution Prevention Plan each permit cycle and update it as necessary.

### Engineering Documents

Facilities must notify Ecology and submit an engineering report for review and approval prior to constructing or modifying any wastewater control facilities (including any pollution abatement structures) in accordance with Chapter 173-240 WAC. An engineering report and detailed plans and specifications must be submitted to Ecology for approval. Engineering reports, plans, and specifications must be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by Ecology. Fish hatching and rearing facilities must construct and operate wastewater control units in accordance with the approved plans.

Facilities must give notice to Ecology of planned physical alterations or additions, production increases, or process modifications.

### **GENERAL CONDITIONS**

Ecology bases the General Conditions on state and federal law and regulations. They are included in all discharge permits issued by Ecology.

### **SMALL BUSINESS ECONOMIC IMPACT STATEMENT**

A Small Business Economic Impact Statement (SBEIS) was prepared for this industry to meet the Upland Fin-fish Facility Rule (WAC 173-221A-100) adoption requirements. The first version of this general permit was in effect prior to the adoption of the rule. The rule adopted the substantive requirements of the first version of the general permit. Ecology determined that the SBEIS prepared for the rule (WAC 173-221A-100) also met the general permit SBEIS requirements (WAC 173-226-120) for the subsequent versions of this permit. The draft permit has few substantial differences with the previous version of the permit.

### **PERMIT MODIFICATIONS**

Ecology may modify this permit to impose numerical limits, if necessary, to comply with water quality standards for surface waters, with sediment quality standards, or with water quality standards for ground waters, after obtaining new information from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

Ecology may also modify this permit to comply with new or amended state or federal regulations.

### **RECOMMENDATION FOR PERMIT ISSUANCE**

The draft permit meets all statutory requirements for authorizing a wastewater discharge. It includes those limits 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 a term of five (5) years.

## REFERENCES FOR TEXT

Environmental Protection Agency (EPA)

1974. Development document for proposed effluent limitations, guidelines, and new source performance standards for the fish hatcheries and farms point source category. Internal draft report. National Field Investigations Center, Denver, CO. 237 pp.

1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.

1988. Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling. USEPA Office of Water, Washington, D.C.

1991. Technical Support Document for Water Quality-based Toxics Control  
EPA/505/2-90-001.

JRB Associates.

1984. Development of effluent limitations for Idaho fish hatcheries. Report to U.S. Environmental Agency. JBL Associates, Bellevue, WA. 119+ pp.

Washington State Department of Ecology. 1994. *Permit Writer's Manual*. Publication Number 92-109. 2008 revision.

Center for Veterinary Medicine. Program Policy and Procedures Manual 1240.4200  
Enforcement Priorities for Drug Use in Aquaculture. 08/09/02; 04/26/07 minor revisions  
<http://www.fda.gov/downloads/AnimalVeterinary/GuidanceComplianceEnforcement/PoliciesProceduresManual/UCM046931.pdf>

## APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to reissue the Upland Fin-fish Hatching and Rearing General Permit. The permit prescribes operating conditions and wastewater discharge limits. The fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

In writing this permit, Ecology evaluated past permit compliance and any comments received. The draft permit contains the same effluent limits included in the previous permits. Ecology only made minor changes to the permit.

On October 20, 2009, Ecology filed a public notice with the Code Revisers Office to announce its intention to update and reissue the Upland Fin-fish Hatching and Rearing General Permit. Ecology published the announcement in the *Washington State Register* (WSR 09-22-015) on October 22, 2009.

On March 23, 2010, Ecology filed a Public Notice of Draft (PNOD) with the Code Revisers Office to inform the public that the revised draft permit and fact sheet are available for review and comment; and specify the date and location of the public workshop and hearing on the proposed permit. Ecology published the announcement in the *Washington State Register* (WSR 10-07-140) on April 7, 2010. It also published the public notice in five major newspapers throughout Washington State and on Ecology's website to inform the public that a draft of the proposed permit and fact sheet was available for review. These newspapers included the *Vancouver Columbian*, the *Daily Journal of Commerce*, the *Bellingham Herald*, the *Yakima Herald Republic*, and the *Spokane Spokesman Review*. Ecology also notified interested parties by direct mailings.

Ecology invites you to submit written comments regarding the draft permit and fact sheet. The draft permit and fact sheet are available on-line at [www.ecy.wa.gov/programs/wq/permits/](http://www.ecy.wa.gov/programs/wq/permits/)

The draft permit, fact sheet, and related documents are also available for inspection and copying between the hours of 8:00 am and 4:30 pm weekdays, by appointment, at any of the following Ecology Regional Offices:

**Northwest Regional Office**  
(425) 649-7000  
Department of Ecology  
3190 - 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452  
*For: King, Whatcom, Skagit, Snohomish,  
San Juan, Kitsap, and Island Counties*

**Southwest Regional Office**  
(360) 407-6300  
Department of Ecology  
P.O. Box 47775  
Olympia, WA 98504-7775  
*For: Thurston, Clallam, Jefferson, Grays  
Harbor, Mason, Pierce, Lewis, Skamania,  
Wahkiakum, Cowlitz, Clark, and Pacific Counties.*

**Central Regional Office**

(509) 575-2490  
Department of Ecology  
106 South 6<sup>th</sup> Avenue  
Yakima, WA 98902-3387  
*For: Yakima, Benton, Klickitat, Chelan,  
Douglas, Kittitas, and Okanogan  
Counties*

**Eastern Regional Office**

(509) 329-3400  
Department of Ecology  
North 4601 Monroe, Suite 100  
Spokane, WA 99205-1295  
*For: Spokane, Grant, Adams, Whitman,  
Ferry, Franklin, Stevens, Pend Oreille,  
Garfield, Columbia, Asotin, Lincoln, and  
Walla Walla Counties.*

Any interested party may comment on the draft permit and attend the public workshop and hearing. You should mail written comments to:

Lori LeVander, Water Quality Program  
Department of Ecology  
3190 – 160<sup>th</sup> Ave SE  
Bellevue, WA 98008-5452  
The email address for comments is:  
[llev461@ecy.wa.gov](mailto:llev461@ecy.wa.gov)

**Public Workshop/Hearing:** The public workshop and hearing on the proposed permit will be held on **Thursday, May 13, 2010, beginning at 2:00 pm. The purpose of the workshop is to explain** the general permit, answer questions, and facilitate meaningful testimony during the hearing. The purpose of the hearing is to provide interested parties an opportunity to give formal oral testimony and comments on the proposed general permit. Ecology will hold the workshop and hearing at the following location:

Washington State Department of Ecology  
Main Auditorium  
300 Desmond Drive  
Lacey, WA 98503

The public workshop and hearing will begin at 2:00 p.m. and conclude as soon as public testimony is completed.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

Ecology will consider all comments in formulating a final determination to issue, revise, or reconsider the proposed permit. Ecology's responses to all significant comments will be available upon request and it will mail a copy directly to people expressing an interest in this permit.

You may obtain further information from Ecology by telephone at (425) 649-7039, by writing to the address listed above, or by visiting Ecology's General Hatchery Permit web page:  
[http://www.ecy.wa.gov/programs/wq/permits/fin\\_fish/index.html](http://www.ecy.wa.gov/programs/wq/permits/fin_fish/index.html)

**Small Business Economic Impact Statement:** Ecology has made a determination that the Small Business Economic Impact Statement (SBEIS) prepared to meet the Upland Fin-fish Facility Rule (WAC 173-221A-100), adopted in July 1990, satisfies the SBEIS requirements for this general permit. The proposed permit does not differ substantively from the expiring permit or the standards established for this industry in state regulation (WAC 173-221A-100 Upland Fin-fish Facilities).

**How to Request Copies of the Proposed Permit:** You can request a copy of the proposed permit, fact sheet, and SBEIS by contacting Lori LeVander through the address noted below or by telephoning her at (425) 649-7039.

**Where to Submit Written Comments:** If you wish to comment on the proposed permit you may send your written comments to:

Lori LeVander  
Water Quality Program  
Washington Department of Ecology  
Northwest Regional Office  
3190 – 160<sup>th</sup> Ave SE  
Bellevue, WA 98008-5452  
E-mail: [llev461@ecy.wa.gov](mailto:llev461@ecy.wa.gov)

Written comments must be postmarked by June 14, 2010, to be considered.

**Final Determination:** Ecology will not make a final determination to issue this permit until it evaluates all public testimony and written comments received pursuant to this notice. If Ecology issues the general permit, it will send a copy of the final determination and the responsiveness summary to all persons who submitted written comment or gave public testimony.

Ecology is an equal opportunity agency. If you have special accommodation needs or require this document in an alternative format, please contact Lori LeVander at (425) 649-7039. If you are a person with a speech or hearing impairment, call 711 or 1-800-833-6388 for TTY.

## APPENDIX B – DEFINITIONS

**Acute Toxicity**--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

**Ambient Water Quality**--The existing environmental condition of the water in a receiving water body.

**Ammonia**--Ammonia is produced by the breakdown of nitrogenous materials in waste water. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect waste water.

**BOD<sub>5</sub>**--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD<sub>5</sub> is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

**Bypass**--The intentional diversion of waste streams from any portion of a treatment facility.

**Chlorine**--Chlorine is used to disinfect waste waters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

**Chronic Toxicity**--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction, or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

**Composite Sample**--A flow-proportioned mixture of not less than six discrete aliquots. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

**Critical Condition**--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low; thus, its ability to dilute effluent is reduced.

**Department**--Department of Ecology

**Director**--The Director of the Department of Ecology or his/her authorized representative.

**Epizootic**--means the occurrence of a specific disease which can be detected in fifty percent of the mortality or moribund individual fish in an affected container or within an affected population, and which results in an average daily mortality of at least one-half of one percent of the affected individual fish for five or more days in any thirty-day period.

**FWPCA**--stands for the Federal Water Pollution Control Act (The Clean Water Act), Title 33 United States Code, Section 1251 et seq.

**40 CFR**--Title 40 of the Code of Federal Regulations. The Code of Federal Regulations is the codification of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the federal government.

**Grab Sample**--An individual discrete water sample.

**Lined Pond**--Asphalt, concrete, plastic membrane, or similarly lined ponds. Ponds lined with gravel or soil are considered unlined.

**Maximum Daily**--The highest allowable sample value from a daily discharge taken during a calendar month.

**Mgd**--Million gallons per day

**mg/L**--Milligrams per liter ("Net mg/L" = mg/L in Hatchery Effluent minus mg/L in Hatchery Influent)

**ml/L**--Milliliters per liter ("Net ml/L" = ml/L in Hatchery Effluent minus ml/L in Hatchery Influent)

**Monthly Average**--Calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**National Pollutant Discharge Elimination System (NPDES)**--The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/state permits issued under both state and federal laws.

**Off-line Settling Basin**--shall mean those pond cleaning waste treatment systems which have a hydraulic detention time of 24 hours and a designed removal efficiency of at least 85% for total suspended solids and 90% for settleable solids.

**Production**--means net gain in weight of fish at the facility.

**Rearing Ponds or Raceways**--means ponds, raceways, circular ponds, or any other method used to keep fin-fish captive for culture purposes at an upland fin-fish rearing facility.

**Rearing Vessel**--means all rearing ponds, raceways, and fish hauling tanks.

**Representative Sample**--means multiple outfalls with similar waste streams can be sampled and combined into one sample for one analysis. The sample volume from each outfall shall be apportioned according to the volume of flow at the time of sampling. These apportioned samples can then be combined into one representative sample for analysis.

**Settleable Solids**--means those solids in surface waters or waste waters which are measured volumetrically in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

**Section 303(d) List**--is a part of the federal Clean Water Act that requires states to identify waterbodies that are water quality limited (i.e. waterbodies that do not meet, or are not expected to meet, applicable water quality standards after sources have undergone technology-based controls).

**Surface Waters**--include lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington. For the purposes of this permit, surface waters do not include hatchery ponds, raceways, pollution abatement ponds, and wetlands constructed solely for wastewater treatment.

**Total Maximum Daily Load (TMDL)**--is the sum of all waste load allocations (WLAs) and load allocations (LAs) (non-point source and background) and a safety margin. The TMDL is a mechanism for establishing water quality-based controls on all point and nonpoint sources of pollutants within a water quality-limited basin, sub-basin, or hydrographic segment.

**Waters of the State**--include those waters defined as "waters of the United States" in 40 CFR 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter RCW 90.48 RCW which include lakes, rivers, ponds, streams, waters, underground waters, salt waters, and all other surface water and water courses including wetlands within the jurisdiction of the state of Washington.

**Water Quality Standards**--means the water quality standards for ground waters of the state of Washington (Chapter 173-200 WAC), the water quality standards for surface waters of the state of Washington (Chapter 173-201A WAC), and the sediment management standards of the state of Washington (Chapter 173-204 WAC).

**APPENDIX C – 2009 APPLICANTS**

PERMIT #	FACILITY	TYPE OF SETTLING	FISH POUNDAGE	FOOD #
WAG133009	ARLINGTON HATCHERY	in-line/dischg to wetland	3321-46,382	1366-8130
WAG133003	BARNABY SLOUGH	none	11400-40384	1000-12000
WAG13-1058	BEAR SPRINGS POND	in-line	2666-20000	500-3600
WAG131027	BEAVER CREEK HATCHERY	in-line/dischg to wetland	2000-18300	500-7000
WAG131022	BINGHAM CREEK HATCHERY	off-line	8617-38,733	1595-6090
WAG131051	BOGACHIEL HATCHERY	in-line	2300-50,700	1100-9100
WAG135013	CARLTON ACCLIMATION POND	in-line	29000 - 34000	4050-7500
WAG131029	CASCADE AQUA FARMS-Cinebar	in-line	40,000-60,000	7000-20,000
WAG131050	CASCADE AQUA TILTON RIVER	off-line	210,000-250,000	30,000-80,000
WAG131055	CHAMBERS CREEK HATCHERY	constructed wetland	1000-12,000	300-1700
WAG135006	CHELAN HATCHERY	off-line	9944-41,906	3502-15,198
WAG135015	CHIWAWA PONDS	in-line	26,000-42,000	1200-2800
WAG133017	BOXLEY SPRINGS HATCHERY	off-line	8,000	9,600
WAG135016	CLE ELUM RESEARCH & SUPPLEMENTATION	off-line	1023-25,729	740-8172
WAG137010	COLUMBIA BASIN HATCHERY	off-line settling	5738-30896	2560-8645
WAG137005	COTTONWOOD ACCLIMATION POND	in-line	28,742-38,252	1650-5850
WAG131012	COULTER CREEK HATCHERY	in-line	1600-37,500	3400-9500
WAG131021	COWLITZ SALMON HATCHERY	off-line	76,547-356,110	17,102-70,322
WAG131034	COWLITZ TROUT HATCHERY	off-line	5880-227,528	3524-38,215
WAG13-7018	CURL LAKE ACCLIMATION POND	in-line	18,882-24,597	806-3739
WAG135014	DRYDEN PONDS	in-line	72,000-86,400	8000-12,240
WAG131037	DUNGENESS HATCHERY	off-line	8,000-35,000	2000-10,000
WAG135011	EASTBANK HATCHERY	off-line	18,000-95,000	3,000-18,500
WAG131047	EELLS SPRINGS HATCHERY	in-line	25,268-97,056	7851-22,576
WAG131008	ELOCHOMAN HATCHERY	off-line	11,000-47,000	1800-10,200
WAG131043	ELWHA CHANNEL	in-line	10,000-36,000	1100-6700
WAG13-1053	FALLERT CK (Lower Kalama)	nothing	4100-29,000	1800-6,000
WAG131049	FORKS CREEK HATCHERY	off-line	10,000-50,000	2,000-9,000
WAG131018	GARRISON SPRINGS HATCHERY	?????	5100-19,500	1300-7,700
WAG131019	GEORGE ADAMS HATCHERY	off-line	9,156-48,245	2103-11,154
WAG135001	GOLDENDALE HATCHERY	in-line	25,657-45,038	4470-11,850
WAG131015	GRAYS RIVER HATCHERY	off-line	9500-28,700	1700-7000
WAG131011	HOODSPORT HATCHERY	off-line	1786-50,265	822-16,234
WAG131048	HUMPTULIPS HATCHERY	off-line	10500-28,133	4002-9669
WAG133013	ICY CREEK	in-line	2616-49,875	274-3491
WAG133010	ISSAQUAH HATCHERY	off-line	15,000-55,000	2500-12,000
WAG131039	KALAMA FALLS HATCHERY	off-line	16,600-47,900	4100-22,600
WAG133007	KENDALL CREEK HATCHERY	off-line	5800-55,200	4330-41,640
WAG135002	KLICKITAT HATCHERY	off-line	22,517-86,536	4917-19,625
WAG131033	LAKE ABERDEEN HATCHERY	off-line	5878-32,292	1114-5553
WAG131040	LEWIS RIVER HATCHERY	off-line	36,000-256,000	6000-31,000
WAG137006	LYONS FERRY HATCHERY	off-line	25,372-175,150	6991-40,176
WAG133015	MARBLEMOUNT HATCHERY	in-line	7288-94,600	1654-16,000
WAG131036	MCKERNAN STATE HATCHERY	in-line/dischg to woods	1681-12,346	165-5485
WAG131052	MERWIN TROUT HATCHERY	in-line	3285-62,827	1709-9240
WAG135000	METHOW HATCHERY	off-line	5500-40,334	1222-7028

PERMIT #	FACILITY	TYPE OF SETTLING	FISH POUNDAGE	FOOD #
WAG131024	MINTER CREEK HATCHERY	off-line	25,000-46,900	7300-21,300
WAG13-1057	MORSE CREEK ACCLIMATION PONDS	off-line	12,800-25,000	1197-3800
WAG131013	MOSSYROCK HATCHERY	off-line	7800-33,000	2300-8200
WAG135003	NACHES HATCHERY	off-line	4500-27,000	1200-7000
WAG131020	NASELLE HATCHERY	off-line	10,879-59,117	1800-13,500
WAG131025	NEMAH HATCHERY	off-line	10,985-34,351	1913-10,403
WAG131002	NISQUALLY TROUT FARM #2	in-line	15,600-40,000	7000-18,000
WAG131010	NORTH TOUTLE HATCHERY	off-line	5000-40,000	2000-12,000
WAG133002	PALMER PONDS-inactive 6/2009	in-line	14,500-82,860	4833-14,730
WAG137013	PRIEST RAPIDS HATCHERY (Grant Co/WDFW)	in-line	7000-144,700	1603-42,200
WAG135017	PROSSER HATCHERY	in-line	7430-23,620	1156-4723
WAG133005	REITER PONDS	in-line	3000-50,500	2800-10,200
WAG137009	RINGOLD SPRINGS HATCHERY	in-line	2953-67,804	1275-11,346
WAG133011	SAMISH HATCHERY	off-line	4700-35,000	200-1600
WAG131023	SATSOP SPRINGS HATCHERY	off-line	5000-44,000	4000-7000
WAG131007	SCATTER CREEK	off-line	50,000-309,400	13,100-85,600
WAG135007	SIMILKAMEEN RIVER REARING	off-line	20,879-39,461	88-7,300
WAG131026	SKAMANIA HATCHERY	off-line	3069-92,290	1167-13,333
WAG131042	SKOOKUMCHUCK REARING PONDS	off-line	4708-75,689	833-8423
WAG131045	SOLDUC HATCHERY	off-line	14,200-72,050	4200-13,550
WAG133014	SOOS CREEK HATCHERY	off-line	21,740-45,500	2300-16,000
WAG131030	SOUTH TACOMA HATCHERY (LAKEWOOD)	in-line	2100-36,000	600-6500
WAG131041	SPEELYAI HATCHERY	off-line	9250-46,320	3574-12,436
WAG137007	SPOKANE HATCHERY	off-line	26,133-65,968	4166-11,466
WAG133004	TOKUL CREEK HATCHERY	off-line	3000-30,000	1000-7000
WAG137001	TROUTLODGE #1	off-line	159,600-226,400	44,150-64,300
WAG137002	TROUTLODGE #2	off-line	105,180-222,260	25,250-52,750
WAG131003	TROUTLODGE HOODSPORT	off-line	76,250-103,500	1200-14,700
WAG137017	TUCANNON HATCHERY	in-line	3012-44,741	1012-13,620
WAG135004	TURTLE ROCK HATCHERY	off-line	10,000-75,000	1,000-12,000
WAG131032	VANCOUVER HATCHERY	in-line	3600-38,000	1023-7200
WAG133006	WALLACE RIVER HATCHERY	off-line	16,800-57,900	3600-14,200
WAG131044	WASHOUGAL HATCHERY	off-line	23,300-160,500	8188-31,565
WAG135009	WELLS HATCHERY AND SPAWNING	off-line	3000-148,600	2259-17,900
WAG133008	WHITEHORSE PONDS	in-line	1500-50,000	500-8000

## **APPENDIX D – RESPONSE TO COMMENTS**

The purpose of the public comment period and formal hearing was to give the public an opportunity to comment on Ecology's draft of the renewed hatchery permit. The purpose of this Responsiveness Summary is to provide Ecology's formal response to those comments. Appendix D contains a copy of all written comments.

Ecology has attempted to clearly and directly respond to the written comments received on the draft permit. If a response is not clear, or if more information is desired, please contact Lori LeVander, at 425-649-7039 or llev461@ecy.wa.gov.

### **Oral Commentors (Public Hearing May 13, 2010)**

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1. Mark Hersh, Wild Fish Conservancy

### **Written Commentors**

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1. Sharon L. Wilson, Permit Writer, US Environmental Protection Agency, Region 10
2. Heather Bartlett, Hatcheries Division Mgr, WA Department of Fish and Wildlife
3. Kurt Beardsee, Executive Director, Wild Fish Conservancy
4. Heather Trim, Urban Bays and Toxics Program Mgr, People For Puget Sound

## Comments and Responses

Comments from the Public Hearing held May 13, 2010, in Lacey, Washington.

Mark Hersh, Wild Fish Conservancy  
PO Box 402  
Duvall, WA 98019

1. *Comment: Regarding permit coverage: We are concerned that State regulations may exempt facilities that do, in fact, require a permit. We urge Ecology to at least require permit coverage of all WDFW facilities regardless of production and feeding thresholds, if those facilities discharge pollutants to waters of the state through a point source.*

**Response:** Washington State regulation WAC 173-221A lists specific permitting thresholds that Ecology is adhering to. Ecology may require permit coverage for any fish rearing facility on a case-by-case basis in order to protect waters of the state. There are hundreds of fish rearing and hatching operations statewide that are as small as an egg box in a stream or a small acclimation site with very few fish. Additionally, Ecology does not single out one entity or owner when implementing a general permit.

2. *Comment: WDFW facilities that block wild fish passage, either through deliberate operations or through structures with inadequate fishways, should not be covered under this general permit, but instead, the issue of individual permits that include compliance schedules for obtaining fish passage in order to meet water quality standards and other provisions of state law that require functioning fish ways to be present on all in-stream structures.*

**Response:** An NPDES permit addresses wastewater discharges and activities associated with wastewater discharges. This permit authorizes and conditions fish hatching and rearing discharges. The NPDES permit is not the vehicle for addressing fish passage issues.

3. *Comment: Disease concerns: We understand that regulating the discharge of pathogens through the NPDES program is problematic, but Ecology has a duty nonetheless to protect wild fish and receiving waters from biological pollutants. We urge Ecology to examine this issue and, in cooperation with WDFW and other hatchery managers, take measures to protect wild fish ecosystems from biological pollutants discharged from hatcheries, through effluent limitations and increased and coordinated monitoring efforts.*

**Response:** Ecology relies on WDFW as the statewide experts in fish health issues. WDFW is charged with protecting all fish stocks and has extensive knowledge and experience in habitat management, fish culture, and fish health.

WRITTEN COMMENTS:

Sharon L. Wilson, Permit Writer  
NPDES Permits Unit  
US EPA, Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

1. *Comment: There is no explicit incorporation of the requirements of the federal effluent guidelines (40 CFR §451) that apply to this category of facilities that produce at least 100,000 pounds of aquatic animals per year in flow-through or recirculating systems, which were effective September 23, 2004. Ecology has not included any exclusion in the draft permit for facilities of this size, so we infer that the permit intends to cover them. There is no discussion of the effluent guidelines in the fact sheet and no specific inclusion of their provisions in the draft permit.*

**Response:** Your inference is correct. The Ecology draft general hatchery permit covers all upland finfish rearing and hatching facilities that;

- a. Produce **more than** 20,000 pounds of fish a year; or
- b. Feed more than 5,000 pounds of feed in any calendar month; or
- c. Are deemed by Ecology to be a significant contributor of pollution to waters of the state.

Since 100,000 pounds is greater than 20,000 pounds, facilities that produce at least 100,000 pounds of aquatic animals per year, regardless of the type of system, are required to apply for a permit.

2. *Comment: The requirements of the effluent guidelines are narrative and include reporting of specific drug usage, structural failures, and spills of feed, drugs, or pesticides. In addition, the permittee has specific obligations with regard to materials storage, structural maintenance, recordkeeping, and training of personnel. Some of the requirements in the federal effluent guidelines may overlap with provisions in the draft permit, but they are not captured in their entirety, as they must be. The provisions that we believe need to be included for the facilities that produce at least 100,000 pounds of aquatic animals per year in flow through or recirculating systems are detailed in the enclosure.*
  - a. *Permittee must notify Ecology of the use of any INAD.*
  - b. *Permittee must submit written report within 7 days of and must identify the INAD to be used.*
  - c. *Permittee must report to Ecology an reportable failure in or damage to, the structure of an aquatic animal containment system resulting in an unanticipated material discharge of pollutants to waters of the U.S.*
  - d. *Permittee must report any spill of drugs, pesticides, or feed that results in discharge to waters of the U.S.*

- e. *Permittee must ensure proper storage of drugs, pesticides and feed and have procedures for properly containing, cleaning and disposing of any spilled material.*
- f. *Permittee must inspect production and wastewater treatment systems and repair any damage, maintain and ensure proper functioning of production and wastewater treatment systems.*
- g. *Recordkeeping: Permittee must maintain records of feed amounts, number and weight of aquatic animals and calculate food conversion ratios. Permittee must document cleaning, inspections, maintenance and repairs.*
- h. *Permittee must ensure proper clean-up and disposal of spilled material, train all relevant facility personnel in spill prevention and response, proper operation and cleaning of production and wastewater treatment systems including feeding procedures and proper use of equipment.*

**Response:** The federal effluent guidelines were in place prior to the last permit issuance. The guidelines were included in the last permit and are included in this draft permit for all facilities that produce greater than 20,000 pounds of fish per year or feed more than 5,000 pounds of feed in a calendar month. All of these comments are included in the draft permit in various sections, as noted below.

- a) See S6.B and S5.C.
- b) An INAD is a contractual agreement between WDFW and USFWS. There is an extensive process with the use of an INAD. The permittee must adhere to their INAD agreement. Ecology relies on WDFW, the fish health experts, for fish health issues. Section S6.B and S5.C requires the reporting of all disease control chemicals.
- c) See S5.G, S8, G1, G3. The permit requires reporting of any permit violations or unplanned discharges of oil and hazardous materials.
- d) See S4.G, S5.H, S8, G1, G3.
- e) See S7, S8.G, S8.H.
- f) See S6 and G2. The permittee is required to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) . . .
- g) Record Keeping - See S5.A.4. The Pollution Prevention Plan required in S8 requires documenting frequency of pond and raceway cleaning.
- h) See S5.G, S6, S8, G2, G3, S7.C.2.

Ecology added in Section S6.A, #11 – Ensure proper storage, containment, and disposing of drugs, pesticides, and feed to prevent such materials from entering waters of the state.

3. *Comment: Correction is needed on the public comment period on page 23 of the Fact Sheet.*

**Response:** Comment noted, page 23 of the Fact Sheet has been changed to read June 14, 2010.

4. *Comment: In §S2.A.1 (p.5) of the draft permit, it is unclear whether all of the conditions or thresholds must be met or if only one of them needs to be met in order for a facility to be covered under the permit. We recommend that the conjunction “or” be added at the end of §§S1.A.1.a and b.*

**Response:** Comment noted. “or” has been added at page 5 of the permit.

5. *Comment: In §S2.A.1.a, notification (application) must be submitted to Ecology by February 1, 2015, while §S2.A.1.b says that “unless Ecology responds in writing to the notification, coverage of a discharger under this permit will commence on the effective date of the permit.” The reference to “the notification” appears to be to the application due by February 1, 2010, while “the effective date of the permit” appears to reference to the permit effective from August 1, 2010 – July 31, 2015, since no other permit has been mentioned. Do you mean that coverage will begin on the effective date of the subsequent permit that would be issued in 2015? If you mean the 2010 permit, I believe you need to include a similar notification (application) requirement for obtaining coverage under the 2010 permit. . . If you mean the 2015 permit, that should be made clear. Also, in such a case, there does not appear to be a provision for permittees under the 2005 permit to apply for coverage under the 2010 permit. This should be included.*

**Response:** There is no reference or indication that the “notification” is for the application due by February 1, 2010. This is a draft permit that is proposed for issuance July 2010. Any dates or references listed are for the final permit of this draft. This is a draft permit. When the final permit is issued, the dates listed are for those facilities covered under the final permit or applying for coverage under that permit.

Your comment quotes from S.2.A.1. For Permitted Facilities. If a facility is permitted, they have coverage under the 2010 final permit. They are therefore required to reapply for permit coverage to continue their coverage under the general permit, at least 180 days before permit expiration, which will be February 1, 2015. Coverage will continue on the final permit (set to expire August 1, 2015) and until the next permit is issued. There cannot be a provision for permittees under the 2005 permit to apply for coverage under the 2010 permit. Once the permit is issued, and if they were permitted in 2005, they will have already applied for coverage, per the requirements in their previous permit (2005). The provisions for 2005 permit holders to reapply for the 2010 permit was included in the 2005 permit.

As for including an application requirement for obtaining coverage under the 2010 permit for Permitted Facilities, that provision was covered under the 2005 permit. All facilities covered under the 2005 permit were required to reapply for coverage under the 2010 permit at least 180 days prior to permit expiration (June 1, 2010). All 2005 permitted facilities did that. S2.A.2 clearly outlines how facilities that have not previously been covered can apply and obtain coverage under the 2010 general permit.

6. *Comment: In §S3.B, the limits for TSS are monthly average and instantaneous maximum limits. However, in §S4.A, the sample type for TSS samples is composite; the footnote specifies “at least 6 representative grab samples of effluent throughout the normal working day to measure the effluent total suspended solids . . .The Permittee may use the same TSS composite sample to determine compliance with monthly average and the maximum daily limits.”*

*Since the short-term TSS limit is an instantaneous max limit, it is not possible to assess compliance with it with a composite sample, it must be a grab sample. The reference in the footnote to the max daily limit is inaccurate, since the limit is an instantaneous max limit rather than a max daily limit (which could be monitored with a composite sample). The type of limit or sample type should be changed to make the sample type appropriate for the type of limit.*

**Response:** This definition was taken from EPA’s Glossary for NPDES Terms (<http://www.assurecontrols.com/info-glossary-npdes.htm>) and has been incorporated into Ecology’s Upland General Hatchery Permit since the January 26, 1990 permit: Instantaneous Maximum Limit

The maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

No change to the permit.

7. *Comment: In §S6.B (p.19) of the draft permit, the reference to Section S5.D (line 6) appears to be in error; it looks like it should be Section S5.C.*

**Response:** Comment noted. The reference has been corrected.

8. *Comment: There is a reference to a disease control chemical use form but no mention of the form in S5.C or D.*

**Response:** Comment noted. Specific discussion of the form has been added to S5.C.

9. *Comment: In S6.C.3, last line, the reference to “limited waterbodies” is vague and should be clarified.*

**Response:** Comment noted. That sentence has been changed to read “This section may not apply for discharges to waterbodies listed on the 303(d) list for a parameter known to be present in the hatchery discharge.” The definition of 303(d) list is included in the glossary.

10. *Comment: In G8.B, the acronym “FWPCA” is used and is not defined in this section nor in the definitions. It should be defined clearly.*

**Response:** General Conditions are standard for all NPDES permits and cannot be changed or added to. FWPCA first appears in the permit on the cover page, where it is spelled out. I have added (FWPCA) in parenthesis to clarify and also a definition in Appendix B - Definitions.

Heather Bartlett, Hatcheries Division Manager  
WA Department of Fish and Wildlife  
600 Capitol Way N  
Olympia, WA 98501-1091

1. *Comment: Production Changes: Please clarify the definition of “increases or changes in the nature of the discharge which substantially deviates from the information submitted in the permit application“. WDFW facilities are required to report monthly pounds of fish on hand and food fed on monthly DMRs. WDFW notifies Ecology of planned changes and will notify Ecology as soon as possible for unplanned changes. WDFW offers +/-20% for application of the language.*

**Response:** The permit requirement was intended to apply to increases. Ecology is reluctant to put a hard percentage on this requirement because it is dependent on the size of the facility and quality and size of the receiving water. Normally Ecology uses 15% for municipal facilities. Since facilities are required to notify us of increases and structural additions, and since we can track increases from the application through the DMR forms, this is just an added layer of notification.

Production increase is defined in WAC 173-221A-100(6) as facilities which begin construction after September 1, 1990, or expand production by fifty percent over the production on October 31, 1995. They must conduct a receiving water quality study. Dilution shall be evaluated using total facility effluent a maximum production at the lowest seven-day average receiving stream flow with a 10-year recurrence interval (7Q10).

This reference has been added to S9.

2. *Comment: A new provision under the draft permit raises a concern regarding the costs of increased monitoring to permittees. The permittee must continue monitoring and submitting DMRs to Ecology even if the fish on hand and monthly pounds of food fed is less than 5,000 pounds. Some facilities are remote and require a special trip to the facility and some are unable to shut off discharge and continue to discharge year-round, but may only have fish on station for part of the year.*

*Currently there is no provision to eliminate the requirement for sampling when a facility is not rearing fish. We request that if a facility has no fish on station for the entire month, they be exempt from monitoring. This would also be noted on the DMR.*

**Response:** Comment noted. Section S6.C.2 has been modified to suspend discharge sampling from facilities that have no fish, after 30 days.

- 3. Comment: Engineering Documents: WDFW will notify Ecology of planned physical alterations wherever practical and reasonable.*

**Response:** Comment noted. No changes to the permit.

- 4. Comment: Plans: WDFW submitted complete sets of plans for each facility with application filed in November 2009. We believe this should satisfy the requirement to submit: 1) Facility Sampling Plan Update by Oct. 1, 2010, 2) Pollution Prevention Plan by January 1, 2011, and 3) Solid Waste Mgmt Plan Update by January 2011.*

**Response:** Comment noted. WDFW should review the existing plans and if there are no updates or changes, submit a letter stating “no changes to the current plans dated November 2009.” This can be a single letter out of Olympia listing all the applicable facilities, sent to Northwest Regional Office, attention Lori LeVander.  
No change to the permit.

- 5. Comment: WDFW requests that the permit be administered consistently throughout the state of Washington.*

**Response:** Comment noted. Staffing and priorities vary between regions depending on funding and regional environmental issues. The Upland Hatchery permit managers are all members of a work group who periodically discuss permit issues and compliance actions they are working on. No changes to the permit.

Kurt Beardslee, Executive Director  
Wild Fish Conservancy  
Via e-mail

- 1. Comment: **Permit Coverage:** WFC urges Ecology to require a permit of all facilities regardless of production and feeding thresholds if those facilities discharge pollutants to waters of the state through a point source.*

**Response:** Ecology defines point source for all sorts of activities. Thresholds are set for permit coverage (point source definitions) in federal law and state regulation. Washington State regulation WAC 173-221A lists specific permitting thresholds that Ecology is adhering to.

Ecology may require permit coverage for any fish rearing facility on a case-by-case basis in order to protect waters of the state.

As you outlined in your comment letter, regulation defined concentrated aquatic animal production facility (CAAPF), and 40 CFR §122.3 does not exclude CAAPFs from the NPDES program. Appendix C provides that a facility that produces less than 20,000 pounds of aquatic animals per year, or feeds less than 5,000 pounds of food during the calendar month of maximum feeding are excluded. They are not defined as a point source. EPA may designate any aquatic animal production facility a CAAPF upon a determination that it is a “significant contributor of pollution to waters of the US.”

The facilities that fall below the threshold listed in 40CFR are not considered point sources and do not require discharge permits (WAC 173-221A-100). EPA must conduct an on-site inspection and determine that the facility should be regulated under the NPDES permit program before requiring a permit application.

EPA recently issued their general NPDES permit for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the boundaries of the state of Washington. They list the same factors in determining what facilities should be covered, and support their determinations with federal law.

No change to the permit.

- 2. Comment: **Compliance with water quality standards:** In January 2010, Ecology issued a final Clean Water Act Section 401 certification for the Leavenworth National Fish Hatchery. Ecology required them to explore ways to increase fish passage and implement the fish passage plan once approved. We submit that facilities that block wild fish passage should not be covered under this general permit, and instead be issued individual permits that include compliance schedules for attaining fish passage in order to meet water quality standards and other provisions of state law that require functioning fishways to be present on all instream structures.*

*WDFW needs to make fish passage improvements at its facilities a higher priority. Ecology should inspect all other facilities that it is considering for this general permit and ensure that they are not impairing designated uses by blocking fish passage.*

**Response:** The NPDES permit is a wastewater discharge permit. Ecology has authority to authorize and condition the effluent discharge and operations associated with the discharge. Ecology imposes conditions and limitations at the outfall that ensure compliance with technology-based and other requirements necessary to meet state water quality standards. This NPDES permit is not the vehicle to address fish passage issues, unless the discharge itself is blocking fish passage.

RCW 77.57.060 explicitly gives authority for fishways to WDFW. WAC 220-110-070 specifically gives authority to WDFW for structures relating to fish passage.

The issuance of the Section 401 certification for the Leavenworth National Fish Hatchery, discussing fish passage, is not relevant to the general NPDES permit for discharges from fish hatching and rearing operations. The 401 certification has to look beyond just NPDES issues and address all aspects of a project. Ecology is authorizing and conditioning wastewater discharges with this general permit.

No change to the permit.

- 3. Comment: **Disease concerns:** Fish hatchery operators are generally not concerned about fish diseases and pathogens discharged the receiving waters. Ecology has a duty to protect wild fish and receiving waters from biological pollutants. We urge Ecology to examine this issue and in cooperation with WDFW and other hatchery managers, take measures to protect wild fish ecosystems from biological pollutants discharged from hatcheries, be that through effluent limitations or increased and coordinated monitoring efforts.*

**Response:** Ecology relies on the fish health experts at WDFW for pathogen and fish disease control issues. WDFW's mission is to serve Washington's citizens by protecting, restoring, and enhancing fish and wildlife and their habitats, while providing sustainable and wildlife-related recreational and commercial opportunities. One of their goals is to achieve healthy, diverse, and sustainable fish and wildlife populations. They are concerned about the health of the fish in their hatcheries and the health of wild fish in the receiving waters.

Ecology works with WDFW on fish health issues as they relate to hatchery operations, receiving waters and discharges from their facilities. The general permit requires reporting of all disease and drug usage in the permitted facilities.

No change to the permit.

Heather Trim, Urban Bays and Toxics Program Mgr.  
People For Puget Sound  
Via e-mail

- 1. Comment: **Nutrient loading:** The nutrient load to waterbodies is not well quantified. The violations that are described in the Fact Sheet were settleable solids that were passed through during storms and total suspended solids. Only minimal solids sampling is required in this permit. Periodic monitoring of nutrient loading should be required.*

**Response:** Comment noted. Fish rearing facilities (hatchery) that discharge to receiving waters that have gone through the TMDL process usually have a waste load allocation assigned to the hatchery. If the study determined that the receiving water was nutrient limited, and the hatchery is assigned specific limits, then that facility is written an individual permit with specific nutrient limits.

Most receiving waters are not nutrient limited. WDFW has a specific program for nutrient enhancement that included putting fish carcasses back into the water, or fish pellets to increase nutrients in the receiving water. If a waterbody is nutrient limited and the monitoring of nutrients from a specific facility is needed to determine a TMDL, then an Administrative Order can be written to require nutrient monitoring for a specific facility.

This is a general permit. It is not the intent to require all facilities to monitor for something that is maybe needed by only a select few facilities.

- 2. Toxic chemicals and Pharmaceuticals. Chemicals used to prevent disease are not monitored in the water column or in the receiving waterbodies sediment. Pharmaceuticals and other chemicals such as vaccines, fungicides, disinfectants, etc. should be monitored so that the potential impacts of these facilities are understood.*

**Response:** Chemical and pharmaceutical usage are monitored and reported by the permittee. Very few fish rearing facilities have sediment buildup at their outfalls. Receiving waters are for the most part moving streams and rivers. Water column monitoring is unreasonable in the Upland Fin-fish Hatching and Rearing General permit. Ecology and WDFW require monitoring and reporting of pharmaceuticals and also require the permittee to use disease control chemicals approved for hatchery use by the USFDA or the USEPA. A very rigorous registration and reporting program is required if the permittee chooses to use Investigational New Animal Drugs (INADs).

Ecology has determined that when facilities use these chemicals according to FDA requirements, follow product label requirements, and follow BMPs to dilute the treatment concentrations with other hatchery flows, these chemicals pose no reasonable potential to violate federal or state water quality standards.

- 3. Comment: Enforcement: Follow-up enforcement for the violations of permit conditions is not clearly explained in the Fact Sheet. We would appreciate Ecology staff including a narrative that describes the follow-up actions, including text describing the facilities that have completed structural changes to reduce the violation potential.*

**Response:** Comment noted. Fact Sheet page 7 lists all of the violations from the Ecology database and a summary of the follow-up actions. All violations are followed up with a contact with the facility or agency to determine how the violation can be prevented. As indicated in the Fact Sheet, the numeric TSS and SS violations usually occurred during extreme weather conditions. These violations are often unavoidable, and the solids that are passing through the facility to the outfall include the silt and sand that the high water event brought into the facility through the intake. Structural changes to keep silt and sediment from entering a facility usually include in-water work and barriers, which WDFW is in the process of prioritizing and removing. Pass through violations will continue to occur during extreme high water and flooding events.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

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DEPT OF ECOLOGY

Reply To: OWW-130

Ms. Lori LeVander  
Water Quality Program  
Washington Department of Ecology  
Northwest Regional Office  
3190 -160<sup>th</sup> Ave NE  
Bellevue, WA 98008-5452

Re: Comments on Draft Upland Fin-Fish Hatching and Rearing General Permit  
WAG13-xxxxx

Dear Ms. LeVander:

It has come to our attention that the Washington Department of Ecology (Ecology) has provided a public comment period between April 1 and June 14, 2010, on its draft NPDES permit for discharges associated with upland fin-fish hatching and rearing activities.

We have noted in our review of the draft permit and fact sheet that there is no explicit incorporation of the requirements of the federal effluent guidelines (40 CFR §451) that apply to this category for facilities that produce at least 100,000 pounds of aquatic animals per year in flow-through or recirculating systems, which were effective September 23, 2004. These requirements apply nationwide including in Washington State. Ecology has not included any exclusion in the draft permit for facilities of this size, so we infer that the permit intends to cover them. There is no discussion of the effluent guidelines in the fact sheet and no specific inclusion of their provisions in the draft permit.

The requirements of the effluent guidelines are narrative and include reporting of specific drug usage, structural failures, and spills of feed, drugs, or pesticides. In addition, the permittee has specific obligations with regard to materials storage, structural maintenance, recordkeeping, and training of personnel. Some of the requirements in the federal effluent guidelines may overlap with provisions in the draft permit, but they are not captured in their entirety, as they must be. The provisions that we believe need to be included for the facilities that produce at least 100,000 pounds of aquatic animals per year in flow-through or recirculating systems are detailed in the enclosure.

Additional comments are below.

1. The public comment period was described as ending on June 14, 2010, on Ecology's website and on page 1 of the Fact Sheet, while it was described as ending on May 14, 2010, on page 23 of the Fact Sheet. We believe that a correction is needed on page 23.
2. In §S1.A.1 (p. 5) of the draft permit, it is unclear whether all of the conditions or thresholds must be met or if only one of them needs to be met in order for a facility to be covered under the permit. The Washington Administrative Code (WAC) 173-221A-100 (1)(a) lists these as alternative factors, each of which is sufficient to trigger coverage. Therefore, we recommend that the conjunction "or" be added at the end of §§S1.A.1.a and b.
3. In §S2.A.1.a, a notification (application) must be submitted to Ecology by February 1, 2015, while §S2.A.1.b says that "unless Ecology responds in writing to the notification, coverage of a discharger under this permit will commence on the effective date of the permit." The reference to "the notification" appears to be to the application due by February 1, 2015, while "the effective date of the permit" appears to refer to the permit effective from August 1, 2010 – July 31, 2015, since no other permit has been mentioned. Do you mean that coverage will begin on the effective date of the subsequent permit that would be issued in 2015? If you mean the 2010 permit, I believe you need to include a similar notification (application) requirement for obtaining coverage under the 2010 permit, to which Ecology would or would not respond in writing. If you mean the 2015 permit, that should be made clear. Also, in such a case, there does not appear to be a provision for permittees under the 2005 permit to apply for coverage under the 2010 permit. This should be included.
4. In §S3.B, the limits for Total Suspended Solids (TSS) are monthly average and instantaneous maximum limits. However, in §S4.A, the sample type for TSS samples is composite; the footnote specifies "*at least six representative grab samples of effluent throughout the normal working day to measure the effluent total suspended solids. . . The Permittee may use the same total suspended solids composite sample to determine compliance with monthly average and the maximum daily limits.*"

Since the short-term TSS limit is an instantaneous maximum limit, it is not possible to assess compliance with it with a composite sample; it must be a grab sample. The reference in the footnote to the maximum daily limit is inaccurate, since the limit is an instantaneous maximum limit rather than a maximum daily limit (which could be monitored with a composite sample). The type of limit or the sample type should be changed to make the sample type appropriate for the type of limit.

5. In §S6.B (p.19) of the draft permit, the reference to Section S5.D (on line 6) appears to be in error; it looks like it should be Section S5.C.

3

6. Also, in the same line as the reference above (line 6), there is a reference to a disease control chemical use form in the referenced section; in neither S5.C or D do we find any mention of such a form.
7. In §S6.C.3, last line, the reference to “limited waterbodies” is vague and should be clarified.
8. In §G8.B, the acronym “FWPCA” is used and is not defined in this section nor in the definitions. It should be defined clearly.

If you have technical questions regarding these comments, please contact me at [wilson.sharon@epa.gov](mailto:wilson.sharon@epa.gov) or 206-553-0325.

Sincerely,



Sharon L. Wilson, Permit Writer  
NPDES Permits Unit

Enclosure

**Enclosure**

**Provisions of the Federal Effluent Guideline at 40 CFR §451  
Concentrated Aquatic Animal Production Point Source Category**

1. The permittee must notify Ecology of the use of any investigational new animal drug (INAD) or any extralabel drug use where such a use may lead to a discharge of the drug to waters of the U.S., unless the INAD or extralabel drug use has been previously approved by FDA for a different species or disease at the same or a higher dosage and if the current use is under similar conditions of use. [40 C.F.R. §451.3(a)]
2. When agreeing or signing up to participate in an INAD study, the permittee must submit a written report within 7 days of and must identify the INAD to be used, method of use, the dosage, and the disease or condition the INAD is intended to treat. [40 C.F.R. §451.3(a)(1)]
  - a. For INADs and extralabel drug uses:
    - i. The permittee must provide an oral report to Ecology as soon as possible, preferably in advance of use, but no later than 7 days after initiating use of that drug, including the name of the drug, the method of application, and the reason for using that drug. [40 C.F.R. §451.3(a)(2)]
    - ii. The permittee must submit a written report to Ecology within 30 days after initiating use of the drug, including the name of the drug, reason for treatment, date and time of use (including duration), method of application, and the amount used. [40 C.F.R. §451.3(a)(3)]
3. The permittee must report to Ecology any reportable failure in, or damage to, the structure of an aquatic animal containment system resulting in an unanticipated material discharge of pollutants to waters of the U.S. [note: the permitting authority may define what failures are reportable failures or material discharge of pollutants] [40 C.F.R. §451.3(b)]
  - a. The permittee must report orally within 24 hours of discovery of a reportable failure or material discharge of pollutants, including the cause of the release and the materials released. [40 C.F.R. §451.3(b)(2)]
  - b. The permittee must submit a written report to Ecology within 7 days of discovery of the failure or damage including the cause, the estimated time elapsed until the failure or damage is repaired, an estimate of the quantity of material release, and steps taken to prevent a recurrence. [40 C.F.R. §451.3(b)(3)]
4. In the event of any spill of drugs, pesticides, or feed that results in discharge to waters of the U.S.:

- a. The permittee must report to Ecology orally within 24 hours including the identity and quantity of the material spilled.
  - b. The permittee must report to Ecology in writing within 7 days including the identity and quantity of the material spilled. [40 C.F.R. §451.3(c)]
5. Materials storage: The permittee must:
- a. Ensure proper storage of drugs, pesticides, and feed in a manner designed to prevent spills that may result in the discharge of these materials to waters of the U.S. [40 C.F.R. §451.11(b)(1)]
  - b. Implement procedures for properly containing, cleaning, and disposing of any spilled material. [40 C.F.R. §451.11(b)(2)]
6. Structural maintenance: The permittee must:
- a. Inspect the production system and the wastewater treatment system on a routine basis in order to identify and promptly repair any damage. [40 C.F.R. §451.11(c)(1)]
  - b. Conduct regular maintenance of the production system and the wastewater treatment system in order to ensure that they are properly functioning. [40 C.F.R. §451.11(c)(2)]
7. Recordkeeping: The permittee must:
- a. In order to calculate representative feed conversion ratios, maintain records for aquatic animal rearing units, documenting the feed amounts and estimates of the number and weight of aquatic animals. [40 C.F.R. §451.11(d)(1)]
  - b. Keep records documenting the frequency of cleaning, inspections, maintenance, and repairs. [40 C.F.R. §451.11(d)(2)]
8. Training: The permittee must:
- a. In order to ensure the proper clean-up and disposal of spilled material, adequately train all relevant facility personnel in spill prevention and how to respond in the event of a spill. [40 C.F.R. §451.11(e)(1)]
  - b. Train staff on the proper operation and cleaning of production and wastewater treatment systems including training in feeding procedures and proper use of equipment. [40 C.F.R. §451.11(e)(2)]



State of Washington  
**DEPARTMENT OF FISH AND WILDLIFE**

Mailing Address: 600 Capitol Way N · Olympia, WA 98501-1091 · (360) 902-2200, TDD (360) 902-2207  
Main Office Location: Natural Resources Building · 1111 Washington Street SE · Olympia, WA

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JUN 16 2010  
DEPT OF ECOLOGY

June 14, 2010

Lori LeVander, Water Quality Program  
Department of Ecology  
3190 – 160th Ave SE  
Bellevue, WA 98008-5452

RE: National Pollutant Discharge Elimination System General Permit  
Draft Provision Comments

Dear Ms. LeVander:

Thank you for the opportunity to comment on the draft Upland Fin-Fish Hatching and Rearing National Pollutant Discharge Elimination System (NPDES) General Permit. This is the fifth issuance of the General Permit and throughout that history we appreciate that the process and administration has been fair, constructive and collaborative so as to meet our shared interests for protection of the state's natural resources.

Washington Department of Fish and Wildlife (WDFW) applied for coverage for seventy-two facilities. While this issuance does not contain substantial differences, there are some requirements under the proposed permit that we seek clarification to ensure appropriate implementation. The inclusion of the notification obligation for changes or increases in production, removal of sampling exemption, submission of engineering documents, and dates for submittal of plans are the specific items we seek clarification.

**Production Changes**

*"The Permittee must notify Ecology of any proposed production increases or changes in the nature of the discharge which substantially deviates from the information submitted in the permit application".*

WDFW facilities are required to report monthly pounds of fish on hand and food fed on monthly Discharge Monitoring Reports (DMRs) which is an indication of production. While we may be able to contact Ecology on planned production changes, there are cases where unplanned production changes may be necessary. For example, a facility impacted by a flood event may

Ms. Lori LeVander  
June 14, 2010  
Page 2

need to transfer fish or eggs to another facility until the impacts are under control. Or in the case of an outbreak of disease epidemic, fish or eggs may be destroyed which would decrease production temporarily. In these cases WDFW will notify Ecology as soon as possible. WDFW would like to clarify what a "substantial deviation" means and offer +/- 20 percent for application of the language.

A new provision under the draft permit raises a concern regarding the costs of increased monitoring to permittees.

*"If the pounds of fish on hand for a facility drops below 20,000 pounds and the monthly pounds of food fed for a month is less than 5,000 pounds, the Permittee must continue monitoring and submitting DMRs to Ecology."*

Some small facilities are remotely located and the collection of samples may require a special trip to the facility. In addition, some facilities are unable to shut off discharge and continue to discharge year-round, but may only have fish on station for part of the year.

Currently there is no provision to eliminate the requirement for sampling when a facility is not rearing fish. We would request that if a facility has no fish on station for the entire month, they be exempt from monitoring. As is current practice when there is no discharge associated with fish production, there will be no monitoring. This would also be noted on the DMR.

### **Engineering Documents**

*"Prior to constructing or modifying any wastewater control facilities (including Pollution Abatement structures), the Permittee must submit:*

- A. An engineering report and detailed plans and specifications to Ecology for approval in accordance with Chapter 173-240 WAC.*
- B. Engineering reports, plans, and specifications at least 180 days prior to the planned start of construction unless Ecology approves a shorter time.*

*Permittees must construct and operate facilities in accordance with the approved plans.*

*The Permittee must give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:*

- A. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).*
- B. A significant change in the nature or an increase in quantity of pollutants discharged.*
- C. A significant change in the Permittee's sludge use or disposal practices.*

Ms. Lori LeVander  
June 14, 2010  
Page 3

*Ecology may require the Permittee to submit a new application or supplement to the existing application, along with required engineering plans and reports for review and approval."*

Given this clarifying language in the draft permit, WDFW will contact Ecology well in advance of wastewater control facility projects that require engineering documentation. Although the notification requirements for other plans and reports are less clear in the draft permit, WDFW will notify Ecology of planned physical alterations wherever practical and reasonable.

### Plans

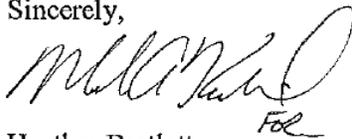
WDFW submitted completed sets of plans for each facility with applications filed in November 2009. We believe this should satisfy the requirement to submit:

1. Facility Sampling Plan Update by October 1, 2010
2. Pollution Prevention Plan by January 1, 2011, and
3. Solid Waste Management Plan Update by January 2011

WDFW has applied for renewal of coverage for seventy-two facilities under this permit. Eight facilities are within the Eastern Region of Ecology, twelve in the Central Region, fourteen in the Northwest Region, and thirty-eight in the Southwest Region. WDFW requests that the permit be administered consistently throughout the state of Washington.

If you have any questions regarding these comments, please contact Catie Mains at (360) 902-2503 or by email at [Catie.Mains@dfw.wa.gov](mailto:Catie.Mains@dfw.wa.gov)

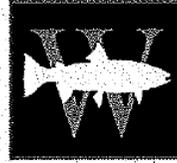
Sincerely,



Heather Bartlett  
Hatcheries Division Manager

CM:jl

cc: Jim Scott  
Jo Wadsworth  
Regional Fish Program Managers  
Hatchery Complex Managers  
Regional Hatchery Operations Managers  
Catie Mains



## Wild Fish Conservancy

N O R T H W E S T  
S C I E N C E   E D U C A T I O N   A D V O C A C Y

June 14, 2010

Lori LeVander  
Water Quality Program  
Washington Department of Ecology  
Northwest Regional Office  
3190 – 160th Ave SE  
Bellevue, WA 98008-5452

Transmitted via e-mail to [llev461@ecy.wa.gov](mailto:llev461@ecy.wa.gov)

Re: Upland Fin-Fish Hatching and Rearing NPDES General Permit.

Dear Ms. LeVander:

Wild Fish Conservancy has the following comments on the subject permit. Wild Fish Conservancy is a non-profit conservation organization dedicated to the recovery and conservation of the region's wild-fish ecosystems. Through science, education, and advocacy, WFC promotes technically- and socially-responsible habitat, hatchery, and harvest management to better sustain the region's wild-fish heritage. We are concerned that the subject permit 1) may not extend coverage to all facilities that should be permitted in the NPDES program, 2) may not include sufficient provisions to ensure that the facilities do not impair designated uses, and 3) is silent regarding hatcheries as incubators and dischargers of pathogens that may adversely affect wild fish. Our detailed comments follow.

**Permit coverage:** The Clean Water Act and its implementing regulations require a permit from any entity discharging pollutants from a point source into waters of the United States. We understand that that state regulations spell out which upland finfish rearing facilities require a permit, but are concerned that those regulations may be interpreted in a way to exempt facilities that do in fact require a permit. In 2008, Wild Fish Conservancy filed a lawsuit regarding NPDES permitting of federal facilities that has brought to light EPA's misapplication of the regulation defining "concentrated aquatic animal feeding operations."

WAC 173-221A-100 limits permit coverage to facilities over specific production or feeding amounts. We understand that the controlling state regulation is not at issue here, but we urge Ecology to require a permit of all facilities regardless of production and feeding thresholds if those facilities discharge pollutants to waters of the state through a point source.

The CWA declared a national goal of eliminating all discharges of pollutants to navigable waters by 1985 (33 U.S.C. § 1251(a)(1)). To achieve this goal, section 301(a) of the CWA prohibits “the discharge of any pollutant by any person” except as in compliance with certain provisions of the CWA, including the NPDES permitting provisions established by Section 402. The CWA defines “discharge of a pollutant” to mean “any addition of any pollutant to navigable waters from any point source” (33 U.S.C. § 1362(12)(A)). Thus, a “cornerstone of the [CWA] is that the ‘discharge of any pollutant’ from a ‘point source’ into navigable waters of the United States is unlawful unless the discharge is made according to the terms of an NPDES permit obtained from either the [EPA] or from an authorized state agency” (*Ass’n to Protect Hammersley, Eld, and Totten Inlets v. Taylor Res., Inc.*, 299 F.3d 1007 (9th Cir. 2002); *see also Comm. to Save Mokelumne River v. E. Bay Mun. Util. Dist.*, 13 F.3d 305, 309 (9th Cir. 1993) (“the [CWA] categorically prohibits any discharge of a pollutant from a point source without a permit”). The CWA defines “point source” to include “any...discrete conveyance” (33 U.S.C. § 1362(14)).

NPDES permits are the “primary means” for achieving the CWA’s goals and are a “critical” part, or “cornerstone,” of the CWA regulatory scheme (*Arkansas v. Oklahoma*, 503 U.S. 91, 101-02 (1992); *Natural Res. Def. Council v. Envtl. Prot. Agency*, 822 F.2d 104, 108 (D.C. Cir. 1987); *see also Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369, 1374 (D.C. Cir. 1977)). NPDES permits may include two general types of effluent limitations—technology-based standards established based on a consideration of current technologies, or, if necessary to prevent violations of water-quality standards, more stringent water-quality based standards (40 C.F.R. §§ 122.44(a)(1) and 122.44(d); *and see Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York*, 451 F.3d 77, 85 (2nd Cir. 2006)).

The “concentrated aquatic animal production facility” (“CAAPF”) regulation provides that “[c]oncentrated aquatic animal production facilities, as defined in this section, are point sources subject to the NPDES permit program” (40 C.F.R. § 122.24(a) (2009)). The regulation defines these facilities as “a hatchery, fish farm, or other facility which meets the criteria in appendix C of this part, or which the [EPA Regional Administrator] designates under paragraph (c) of this section” (40 C.F.R. § 122.24(b) (2009)). Appendix C of the regulation provides that a facility that produces cold water species is a CAAPF if it discharges at least thirty days a year, unless it produces less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year, or feeds less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding (40 C.F.R. § 122 Appendix C (2009)).

The regulation provides that the EPA Regional Administrator may, on a case-by-case basis, designate any aquatic animal production facility a CAAPF upon a determination that it is a “significant contributor of pollution to waters of the United States” (40 C.F.R. § 122.24(c)(1) (2009)). EPA is required to conduct an on-site inspection and determine that the facility should and could be regulated under the NPDES permit program before requiring a permit application from a facility designated under this provision (40 C.F.R. § 122.24(c)(2) (2009)).

It is important to realize just what this regulation does, and what it does not do. A search of the relevant regulations (40 C.F.R. Part 122 (2009)) reveals that besides the definition of “concentrated aquatic animal production facility” (the definition of CAAPF found in 40 C.F.R. 122.2 (2009) simply refers to 40 C.F.R. § 122.24 and Appendix C (2009)), the only mention of “concentrated aquatic animal production facility” is found in 40 C.F.R. 122.3 (2009), where EPA outlines what activities are

not subject to the NPDES program. Subsection (e) describes which agricultural operations do not require an NPDES permit:

(e) Any introduction of pollutants from *non point-source* agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but *not* discharges from concentrated animal feeding operations as defined in § 122.23, discharges from concentrated aquatic animal production facilities as defined in § 122.24, discharges to aquaculture projects as defined in §122.25, and discharges from silvicultural point sources as defined in § 122.27 (emphasis added).

The “exemptions” section (40 C.F.R. 122.3(e) 2009) clearly does not exempt any aquatic animal feeding operation that does not meet the definition of a CAAPF from the NPDES program. Instead, the regulation subjects certain aquatic animal production facilities (those exceeding particular production and feeding thresholds) to the NPDES program even if they do not meet the definition of a point source. The plain language of the CAAPF regulation *includes* certain sources of pollution within the definition of “point source,” but does not *exclude* anything. The exclusion, as 40 C.F.R. 122 3(e) (2009) clearly states, is only for certain nonpoint sources.

The history of the EPA’s CWA regulations demonstrates that the CAAPF regulation was never intended to exclude smaller fish production facilities that discharge from pipes or other statutory point sources. Such operations were initially excluded from the NPDES permit requirements under an EPA regulation that generally excluded agricultural activities from the NPDES permit requirements, and the CAAPF regulation provided that CAAPFs were an exception to the general exclusion. The Circuit Court of Appeals for the District of Columbia held over thirty years ago in *Costle*, 568 F.2d 1369, that EPA’s exclusion of certain point sources—including its agricultural exclusion—was illegal. EPA subsequently amended its regulation to exclude only certain *nonpoint* source agricultural activities.

State law is analogous to the CWA. RCW 90.48.160 requires a permit from “any person who conducts a commercial or industrial operation of any type which results in the disposal of solid or liquid waste material into the waters of the state,” although those “discharging domestic sewage only into a sewerage system” are exempt. Also exempt are “upland finfish rearing facilities unless a permit is required under the federal clean water act’s national pollutant discharge elimination system.” State regulations reflect this statutory requirement. WAC 173-220-020 says that “no pollutants shall be discharged to any surface water of the state from a point source, except as authorized by an individual permit issued pursuant to this chapter or as authorized by a general permit issued pursuant to chapter 173-226 WAC.” “Point source” is defined in WAC 173-220-030(18) and, for the purposes of this discussion, the state and federal definitions are identical<sup>1</sup>.

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<sup>1</sup> Federal definition (40 C.F.R. 122.2 (2009)): “Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (See § 122.3).”

State definition (WAC 173-220-030(18)): “‘Point source’ means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.”

The CWA categorically prohibits any discharge of pollutants from a point source without a NPDES permit, and EPA cannot legally exclude point sources from this requirement. The state similarly cannot legally exclude point sources from the NPDES program, and therefore, Ecology should interpret the production and feeding thresholds found in WAC 173-221A-100(1) as only applying to facilities that do not clearly fall under the CWA and state definition of "point source" as any facility that discharges pollutants into waters of the state from a point source clearly require permits under the CWA and EPA's regulations.

**Compliance with water quality standards:** In January 2010, Ecology issued a final Clean Water Act Section 401 certification for the Leavenworth National Fish Hatchery in Chelan County. The certification was in response to the draft NPDES permit issued by EPA for this federal facility and appears to be the first Section 401 certification issued by Ecology to a fish hatchery. In it, Ecology has required the Leavenworth facility to explore ways to increase fish passage at the various structures the Hatchery operates in Icicle Creek. The Hatchery will be required to implement the fish passage plan once it is approved by Ecology.

Fish passage blockages are not unique to federal facilities. In 1997, WDFW issued a report that indicated that thirty-two WDFW fish hatcheries or rearing facilities were blocking passage of wild fish<sup>2</sup>. We recently submitted a Public Records Disclosure request to WDFW for follow-up information regarding fish passage at its production facilities. Information received through that request, combined with information found in Appendix C of the fact sheet, reveals that a majority of WDFW facilities have one or more structures that are partial or total blockages to wild fish passage (Table 1).

Of sixty-five WDFW facilities listed in Appendix C of the fact sheet, thirty-four WDFW facilities currently have at least one structure (dam, rack, culvert, or bridge) that is at least a partial barrier to fish passage. Almost every facility that was identified as blocking fish passage in the 1997 WDFW report was still blocking passage as of the latest inspections, and most of those were conducted in 2008 or 2009. It is unacceptable that so little progress has been made in upgrading structures at state-owned facilities, in spite of the fact that the problem has been well-known inside WDFW.

The fact sheet for the proposed permit at issue here says that "facilities that require more stringent effluent limits or special conditions other than those contained in this general permit in order to meet state water quality standards may need to obtain coverage under an individual permit." We submit that facilities that block wild fish passage, either through deliberate operations or through structures with inadequate fishways should not be covered under this general permit, and instead be issued individual permits that include compliance schedules for attaining fish passage in order to meet water quality standards and other provisions of state law that require functioning fishways to be present on all instream structures.

Government has an obligation to lead by example, and the Department of Ecology has a duty to ensure that permitted facilities are at least on a path to attain water quality standards. WDFW, for its part, needs to make fish passage improvements at its facilities a higher priority. Ecology should inspect all other facilities that it is considering for this general permit and ensure that they are not impairing designated uses by blocking fish passage. Those that are must be given individual permits with a compliance schedule to ensure that water quality standards are met by the end of the permit term.

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<sup>2</sup> Inventory of Fish Passage Barriers at WDFW Fish Hatcheries. WDFW Lands and Restoration Services Program, Salmonid Screening, Habitat Enhancement and Restoration (SSHEAR) Division. July, 1997. 8 pp. plus photographs.

If fish culture or disease experts claim that upstream fish passage may endanger the water supply of the hatchery, then alternate methods to ensure “disease-free” water for the hatchery must be considered and implemented. We have to stop treating these watersheds as little more than a water supply for hatcheries.

**Disease concerns:** Operators of fish hatcheries are correctly concerned with fish diseases as the unnatural and crowded conditions of fish hatcheries do not leave much margin of error. Unfortunately, that concern generally does not extend to the receiving waters and how wild fish may be affected by a discharge of pathogens. This year Infectious Hematopoietic Necrosis Virus (IHNV) has been reported on the west coast of Washington in areas where it has not been seen. We understand that regulating the discharge of pathogens through the NPDES program is problematic, but Ecology has a duty nonetheless to protect wild fish and receiving waters from biological pollutants. We urge Ecology to examine this issue and in cooperation with WDFW and other hatchery managers, take measures to protect wild fish ecosystems from biological pollutants discharged from hatcheries, be that through effluent limitations or increased and coordinated monitoring efforts.

We appreciate the opportunity to comment. Please contact Mark Hersh of my staff if you have any questions ([mark@wildfishconservancy.org](mailto:mark@wildfishconservancy.org); 425-788-1167).

Sincerely,



Kurt Beardslee  
Executive Director

Table 1. WDFW Fish rearing facilities likely subject to NPDES permitting and associated fish passage barriers.

Facility	Barrier in 1997?	Latest information from PRD
ARLINGTON HATCHERY		4 dams, 1 culvert, all partial 2008
BARNABY SLOUGH		
BEAVER CREEK HATCHERY	yes	1 dam total barrier; fishway in total disrepair and non-functional 2009
BINGHAM CREEK HATCHERY		1 dam, passage is maintenance problem; 1 dam on EF Satsop River is OK 2008
BOGACHIEL HATCHERY	yes	3 dams, 1 screen all total, 2008; 2 culverts total, 2 partial (1999 and 2008)
CHAMBERS CREEK HATCHERY		non barrier (bridge) 2008
CHELAN HATCHERY		3 dams, 1 non, 2 total; 2 culverts total, 1 flume partial all 2009;
COLUMBLA BASIN HATCHERY		2 dams but non fish bearing water courses 2009
COTTONWOOD ACCLIMATION POND		
COULTER CREEK HATCHERY	yes	1 dam partial, 1 dam total if grates in place; 1 rack partial 2008
COWLITZ SALMON HATCHERY	yes	1 dam total barrier no survey date
COWLITZ TROUT HATCHERY		
DUNGENESS HATCHERY	yes	1 dam total barrier 2008
EASTBANK HATCHERY		
EELLS SPRINGS HATCHERY		1 one partial (Hunter Ck)
ELOCHOMAN HATCHERY	yes	1 dam total (1997Clear Ck); 1 dam partial, 1 unknown (2001 Elochoman R.)
ELWA CHANNEL		
FALLERT CK (Lower Kalama)	yes	1 dam total 2001
FORKS CREEK HATCHERY	yes	1 dam total, 1 partial; 1 culvert total, 1 partial 2008
GARRISON SPRINGS HATCHERY		fishway at dam seems to be working OK 2003; unknown 2008
GEORGE ADAMS HATCHERY	yes	2 dams total 1 partial barrier 2008
GOLDENDALE HATCHERY		
GRAYS RIVER HATCHERY		
HOODSPORT HATCHERY	yes	dam, flume, rack: all partial barriers 2008
HUMPTULIPS HATCHERY	yes	1 dam total barrier, 1 partial; 1 culvert partial 2008
ICY CREEK		
ISSAQUAH HATCHERY	yes	1 dam total 1 dam partial barrier 2008
KALAMA FALLS HATCHERY		
KENDALL CREEK HATCHERY	yes	1 dam total, 1 dam partial, 1 bridge non-barrier 2008
KLICKITAT HATCHERY		
LAKE ABERDEEN HATCHERY		rack is intentional barrier (partial) 2008
LEWIS RIVER HATCHERY		1 dam total barrier 2002

7

LYONS FERRY HATCHERY			
MARBLEMOUNT HATCHERY	yes	2 culverts partial barriers; 3 dams total, 1 dam partial, 2008 1 culvert total; 1 dam total 2008	
MCKERNAN STATE HATCHERY			
MERWIN TROUT HATCHERY			
METHOW HATCHERY	yes	1 culvert total, 1 partial; 1 dam total, 1 partial, 2008	
MINTER CREEK HATCHERY			
MOSSYROCK HATCHERY			
NACHES HATCHERY	yes	1 dam total barrier 2009 1 dam partial barrier 2003 1 non barrier dam	
NASELLE HATCHERY			
NEMAH HATCHERY	yes		
NORTH TOUTLE HATCHERY			
PALMER PONDS	yes	2 dams total barriers; 1 culvert total barrier 2008	
PRIEST RAPIDS HATCHERY (Grant Co/WDFW)			
REITER PONDS	yes	1 dam partial barrier 2008; 1 culvert total barrier	
RINGOLD SPRINGS HATCHERY			
SAMISH HATCHERY			
SATSOP SPRINGS HATCHERY	yes	1 dam non barrier 2001 1 culvert total barrier 2008	
SIMLKAMEEN RIVER REARING	yes	1 dam total, 2 dams partial; 1 culvert partial, 1 trash rack partial 2008	
SKAMANIA HATCHERY	yes	1 dam total, 1 dam partial 2008	
SKOOKUMCHUCK REARING PONDS			
SOLDUC HATCHERY			
SOOS CREEK HATCHERY	yes	unknown status	
SOUTH TACOMA HATCHERY (LAKEWOOD)	yes	1 dam total, 2 dams partial; 1 culvert total, 1 partial 2009	
SPEELYAI HATCHERY			
SPOKANE HATCHERY	yes	1 dam total 2008	
TOKUL CREEK HATCHERY	yes		
TUCANNON HATCHERY			
TURTLE ROCK HATCHERY			
VANCOUVER HATCHERY	yes	1 dam partial; 2 racks partial 2008	
WALLACE RIVER HATCHERY	yes	1 dam partial 2001	
WASHOUGAL HATCHERY			
WELLS HATCHERY AND SPAWNING	yes	1 dam total 1996; 1 rack total 2008	
WHITEHORSE PONDS			



June 14, 2010

Lori LeVander  
WA Department of Ecology  
Northwest Regional Office  
Via E-mail: llev461@ecy.wa.gov

**RE: Comments on draft Upland Fin-Fish Hatching or Rearing Facility NPDES General Permit**

Dear Lori,

We are writing to comment on the *Upland Fin-Fish Hatching or Rearing Facility NPDES General Permit*.

People For Puget Sound is a nonprofit, citizens' organization whose mission is to protect and restore Puget Sound and the Northwest Straits.

We have the following comments on the draft permit:

- **Nutrient loading.** For the 80 facilities regulated by the Dept of Ecology, the nutrient load to waterbodies is not well quantified. Furthermore, the violations that are described in the Fact Sheet were settleable solids that were passed through during storms and total suspended solids. Only minimal sampling of solids is required in this permit. Periodic monitoring of nutrient loading should be required.
- **Toxic chemicals and Pharmaceuticals.** Chemicals used to prevent disease are not monitored in the water column or in sediment in the receiving waterbodies. Pharmaceuticals and other chemicals such as vaccines, fungicides, disinfectants, etc. should be monitored so that the potential impacts of these facilities are understood.
- **Enforcement.** Follow-up enforcement for the violations of permit conditions is not clearly explained in the Fact Sheet. We would appreciate Ecology staff including a narrative that describes the follow-up actions, including text describing the facilities that have completed structural changes to reduce the violation potential.

Thank you for your consideration. You can reach me at (206) 382-7007 X172 if you have any questions or concerns.

Sincerely,



Heather Trim  
Urban Bays and Toxics Program Manager

MAIN OFFICE	NORTH SOUND	SOUTH SOUND
911 Western Avenue, Suite 580 Seattle, WA 98104 tel • 206.382.7007 fax • 206.382.7006 email • people@pugetsound.org	407 Main Street, Suite 201 Mount Vernon, WA 98273 tel • 360.336.1931 fax • 360.336.5422 email • northsound@pugetsound.org	120 East Union Avenue, Suite 204 Olympia, WA 98501 tel • 360.754.9177 fax • 360.534.9371 email • southsound@pugetsound.org