AQUATIC PLANT AND ALGAE MANAGEMENT GENERAL PERMIT

Addendum to the Fact Sheet Appendix C: Response to Comments

March 2, 2016

SUMMARY OF MAJOR PERMIT CHANGES

In finalizing this permit, the Washington State Department of Ecology (Ecology) considered all of the public comments received during the public comment period, including comments received during oral testimony at the webinar and public hearing held in Lacey, Washington on December 7, 2015.

This is a summary of the changes made to the Aquatic Plant and Algae Management General Permit (permit) in response to the public comments received between November 4, 2015 and December 18, 2015.

Additional minor changes to permit wording and punctuation have been made to correct formatting, grammar and improve clarity. Special Condition S4.B.3 was changed to accurately reflect what is contained in table #5.

COMMENTS AND RESPONSES

Ecology published a draft Aquatic Plant and Algae Management General Permit on November 4, 2015 for public comment. The public comment period ended December 18, 2015 at 5PM. During the comment period, Ecology conducted one webinar, public workshop, and hearing in Lacey, Washington. Ecology also accepted public comments via comment form on the permit website, letter, and email.

Ecology considered all comments in preparing the final permit. The response to comments documents Ecology's response to each commenter and any changes to the permit that resulted from the comment. Ecology received 53 comments during the public comment period. Each comment is numbered. The comment number that corresponds to each commenter is given in Table 1. These numbers allow the commenter to find Ecology's response to their comments. Comments may be summarized; full text of all comments received by Ecology can be found at: http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/historical_html.

The response to comments is broken into four sections:

Section 1 Table of Commenters

Section 2 Comments on the Permit

Section 3 Comments on the Fact Sheet

Section 4 Comments on Notice of Intent

SECTION 1: TABLE OF COMMENTERS AND COMMENT NUMBERS

Table 1: Commenters

| Commenter Name | Affiliation | Comment Number(s) |
|---------------------------|------------------|-------------------|
| Becky Argyle | Interested Party | 1 |
| Mark Silberling | Interested Party | 2 |
| Terry McNabb | AquaTechnex | 1,3,4 |
| Joshua Cheshier | Interested Party | 1,5 |
| John Inselman | Interested Party | 1 |
| Thomas Moehlman | Interested Party | 6,22 |
| Steve Lewis | Interested Party | 7 |
| Paul Noges | Interested Party | 1,8,9 |
| Kyle Anderson | Interested Party | 1,8,9 |
| Larry Cline | Interested Party | 1,8,9 |
| Patrick Mahoney | Interested Party | 1,8,9 |
| Susan Holliday | Interested Party | 1, 3, 10, 11, 23 |
| Andrew Chang | Wilbur-Ellis | 12 |
| Jeff Brain | Interested Party | 1,8,9 |
| G.Lenore Faulk | Interested Party | 1,9 |
| Marvin Peterson | Interested Party | 1,8 |
| Wendy Schwartznau | Interested Party | 1,8,9 |
| Maryanne Zukowski | Interested Party | 13 |
| William Sternoff | Interested Party | 1,8,9 |
| Don and Betty Mastropaolo | Interested Party | 1,8,9 |
| Mark J Snell | Interested Party | 1,8,9 |
| Donald Masters | Interested Party | 1,8,9 |
| Anita Neil | Interested Party | 1,8,9 |

| Richard Seeger | Interested Party | 1,8,9 |
|--------------------------|---|----------|
| David Bingham | Interested Party | 1,8,9 |
| Mike Jiang | Interested Party | 1,8,9 |
| Richard Knight | Interested Party | 1,8,9 |
| Tom and Crystal Moehlman | Interested Party | 14 |
| Robert S. DeLaney | Lake Minterwood Beach Club Board of Trustees | 1,8,9 |
| John and Karen Culver | Interested Party | 1,8,9 |
| Craig Rice | Interested Party | 1,8,9 |
| Lake Serene Development | Lake Serene Development | 1,8,9 |
| Norm Fiess | Lake Killarney Improvement Association | 1,8,9 |
| Bruce Wilson | Interested Party | 1,8,9 |
| Stephanie Greer | Interested Party | 1,8,9 |
| Dennis Stroh | Interested Party | 1,8,9 |
| Robert Collett | Interested Party | 1,8 |
| Steve Heller | Interested Party | 1,8 |
| Christine Devine | Interested Party | 1,8,9 |
| Chris O'Conner | Interested Party | 1,8 |
| Patricia Flug | Interested Party | 1,8 |
| Michael Pearce | SEPRO | 3 |
| Lynn Georges | Brandt | 12 |
| Wen-Ling Tseng | Interested Party | 1,8,9 |
| Don Russell | Interested Party | 15 |
| Mike Ficker | Interested Party | 1,8,9 |
| Douglas Dorling | Northwest Aquatic Ecosystems | 1,8,9,15 |
| Marcie Steinmetz | Public Utility District No. 1 of Chelan County | 16, 25 |
| Peter Beaton | Department of Health | 17, 24 |
| Richard Sampson | Interested Party | 1 |

| Pat Berger | Interested Party | 1,9 |
|--------------|------------------|--------------------|
| Michael Felt | Interested Party | 1,8,9 |
| Monica Harle | Interested Party | 18, 19, 20, 21, 26 |

SECTION 2: COMMENTS ON THE PERMIT

Comment #1: Our concern is the new requirement that the applicator return to the lake and remove the signs Ecology requires be posted. The removal of posted application signs should be done by the land owner or sponsoring group, such as a home owners association as the additional cost could limit management of nuisance & noxious aquatic plants due to increased operational costs.

Response: The requirement to remove shoreline posting signs is not a new requirement. The permits issued in 2006 and 2011 required the removal of all shoreline posting signs prior to the start of a new treatment or by the end of the treatment season. This permit requires the removal of all signs when the period of water use restriction ends. Ecology does not feel that the language change will add costs to the treatment since shoreline sign removal was a requirement of the 2006 and 2011 permits as well as this permit.

The appropriate removal of shoreline posting signs may be done by individuals or groups other than the permittee, however, the duty to comply with the conditions of the permit remains with the permittee. If signs are not taken down, as required by the permit, the permittee will be out of compliance with the permit.

The following change will be made to include the option for denoting whole water body treatments on the shoreline posting map.

Change: Special Condition S5.E.3.d will be changed to read:

Signs must be a minimum size of two feet by three feet and constructed of durable weather-resistant material. The Permittee must attach an 8 ½ by 11 inch weather resistant map detailing the treatment areas for each chemical used. The map must identify the location(s) of the treatment site(s), identify addresses or parcels that represent the start and end points of the treatment area or provide gps coordinates that represents the corners of the treatment area polygon or identify a whole waterbody treatment and mark the reader's location. If the Permittee applies more than one chemical, it must mark each treated area and appropriate chemical on the map.

Comment #2: While I fully support a safe and standard method of treating lakes for noxious weeds, I am not in favor of any further regulation at this time that would incur further cost to the companies doing treatment. Those costs would be directly passed down to property owners, who are struggling to find ways to finance these treatments already.

Response: This is not the first issuance of this National Pollutant Discharge Elimination System (NPDES) General Permit. A discharge permit has been required in order to discharge pesticides for aquatic weed management since 2002.

An NPDES permit is required in order to discharge chemicals to waters of the state of Washington (RCW 90.48.080, WAC 173-226-020). Pesticides used to manage aquatic weeds are a pollutant and there use is only allowed under coverage of an NPDES permit.

Ecology developed an Economic Impact Analysis for the Draft Aquatic Plant and Algae Management General Permit as required by WAC 173-226-120. This analysis includes:

- A brief description of the compliance requirements of the draft general permit.
- The estimated costs for complying with the draft general permit, based on existing data for facilities to be covered under the draft general permit.
- A comparison, to the greatest extent possible, of the cost of compliance for small businesses, with the cost of compliance for the largest ten percent of businesses to be covered under the draft general permit.
- Discussion of what mitigation the draft general permit provides to reduce the effect on small businesses (if a disproportionate impact is expected), without compromising the mandated intent of the draft general permit.

The Economic Impact Analysis for the Draft Aquatic Plant and Algae Management General Permit can be found here:

https://fortress.wa.gov/ecy/publications/documents/1510040.pdf.

Comment #3: The draft permit keeps one of the primary tools we have to fight toxic algae blooms as experimental. This permit should add the phosphorous inactivation product Phoslock (Lanthanum Modified Clay) to the list of allowable phosphorous inactivation products.

Response: Ecology acknowledges that Phoslock should be considered for inclusion in the Aquatic Plant and Algae Management NPDES General Permit. However, in order to add a new chemical to the permit, Ecology must go through a State Environmental Policy Act (SEPA) review of the chemical, which means writing a supplement to the Environmental Impact Statement (EIS). Ecology did not have the resources available to conduct the necessary SEPA review of Phoslock prior to re-issuance of this permit.

Ecology is planning to write a supplemental EIS for this permit. When the EIS update occurs, Phoslock will be recommended for review. Based upon the EIS review of Phoslock; Ecology can consider adding the product to the permit.

Comment #4: Whole lake treatment practices would effectively be banned by this permit. The laws in Washington State prohibit actions that would impair the control of noxious aquatic weeds. In addition, there has been one infestation of Hydrilla in Washington State and that infestation was eradicated using whole lake treatment technology. If Hydrilla returns, and as a Class A noxious weed its eradication is mandated, this permit will limit the ability to attack this plant.

Response: Whole lake treatments are permitted for noxious weeds under this permit so long as the sponsor has authority to treat the entire water body and one of the following conditions is met (Special Condition S1.A.1). The Permittee may intentionally apply herbicides to:

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

- •100 percent of any submersed noxious or quarantine-list weeds not covered under (1) if the Permittee conducts weed control using a selective herbicide.
- •100 percent of any emergent or floating-leaved noxious weeds and quarantine listed weeds.

These permit conditions are not changed from the 2011 version of this permit. Littoral zone limitations do not apply to noxious weed control as specified in Special Condition S1.A.1.a. However, the sponsor must have the authority to have the area treated.

Ecology did remove the 2011 permit section titled "Eradication". The only treatment scenario that Ecology identified as permitted under the eradication section of the 2011 permit that would not be covered under the draft permit is the treatment of 100% of a submersed class C noxious weed, not selected by a county weed board for control, using a non-selective herbicide.

Ecology will make the following changes.

Change:

S1.A.1. Will now be titled: Aquatic noxious weed *management*

S1.A.1.b will be changed to the following:

b. 100 percent of any submersed noxious or quarantine-list weeds not covered under (a) if the Permittee conducts weed control using a selective herbicide. If a selective herbicide is not available for the noxious weed being controlled then 100% of submersed noxious or quarantine-list weeds may be treated with a non-selective herbicide.

Appendix A will be changed to include the following definitions.

Eradication: The permanent removal of all individuals of a plant species from a water body or along a shoreline.

Management: The *control* or *eradication* of aquatic plants.

Comment #5: Fluridone treatments need to remain a viable option for managers & agencies. Limiting its use could prove detrimental in terms of stopping the spread of aquatic weeds. There are a limited number of effective management tools that systemically attack noxious aquatic vegetation and contribute to long term control, it would severely hinder managers by eliminating the use of Fluridone as it is currently allowed.

Response: Ecology did not intend to further limit the use of fluridone. The requirement to have an integrated aquatic plant management plan for noxious weed eradication when conducting whole lake treatments using fluridone was removed because the permit does not require development, review or approval of that plan. Without requiring development, review or approval of the plan the condition is not an enforceable one.

Ecology will require the permittee to develop a Fluridone Vegetation Management Plan for use of Fluridone in excess of the littoral zone limitations given in table #3. Ecology will make the following changes.

Change: Table #3. Fluridone/Treatment Limitations will be changed to the following: Unless operating under an Fluridone Vegetation Management Plan (Appendix C), Ecology further limits fluridone application to no more than 50 percent of the littoral zone in lakes up to 50 acres and no more than 40 percent of the littoral zone in lakes from 50 - 500 acres.

Special Condition S2.B.1 will be changed to include subsection a. as follows:

- a. The Permittee must submit a signed and dated Fluridone Vegetation Management Plan (Appendix C) to Ecology when applying for or updating a permit coverage that includes fluridone treatment of more than:
 - 50 percent of the littoral zone in lakes up to 50 acres or
 - 40 percent of the littoral zone in lakes from 50 500 acres.

Appendix C will be added as follows:

APPENDIX C - Fluridone Vegetation Management Plan

The following elements are minimum requirements for a Fluridone Vegetation Management Plan.

The applicant must prepare a Fluridone Vegetation Management Plan and submit it to Ecology for review and approval prior to conducting fluridone treatments of more than:

- 50 percent of the littoral zone in lakes up to 50 acres or
- 40 percent of the littoral zone in lakes from 50 500 acres.

Elements from other documents such as Integrated Aquatic Vegetation Management Plans may substitute for equivalent elements of the Fluridone Vegetation Management Plan.

The Permittee must submit a signed and dated plan to Ecology when applying for or updating a permit coverage (Special Condition S2.B.1.a).

The applicant/Permittee must develop its Fluridone Vegetation Management Plan jointly with the sponsor.

I. WATERBODY INFORMATION

- 1. Names and locations of any inlets and outlets and impacts of those inlets and outlets on fluridone treatment:
- 2. List the aquatic plant species (species or common names) in the water body (submersed, floating, and floating-leaved plants) and along the shorelines (emergent plants):

Ecology's aquatic plant database:

www.ecy.wa.gov/programs/eap/lakes/aquaticplants/index.html#annualsurvey Ecology's freshwater plant identification manual:

www.ecy.wa.gov/programs/wq/plants/plantid2/index.html

3. List any sensitive, threatened, or endangered aquatic plant species in the water body or along the shoreline:

Attach a recent map of their locations.

Washington Department of Natural Resources (DNR) rare plant information www1.dnr.wa.gov/nhp/refdesk/plants.html or contact Ecology's permit manager for this information.

4. List any sensitive habitats or wetlands associated with the water body. Attach a recent map of these areas.

DNR's information about high quality/rare ecological communities: www1.dnr.wa.gov/nhp/refdesk/communities.html

- 5. Are any of the fish species using the water body and associated tributaries sensitive, threatened, or endangered?

 If present, at what time of year are they in the water body?
- 6. List any sensitive, threatened, or endangered aquatic animals (excluding fish) using the water body:

 WDFW Priority Habitats and Species www.wdfw.wa.gov/conservation/phs/list/
- 7. Are there any sensitive waterfowl and bird species (common names) or important nesting areas or rookeries associated with the water body?

 If so, attach a map of these areas.

 WDFW Priority Habitats and Species www.wdfw.wa.gov/conservation/phs/list/
 See also WDFW species timing windows

 www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/
 permitdocs/rectreatwind090110.pdf

II. PROBLEM DESCRIPTION AND STATEMENT

- 1. Describe the target noxious weed species, growth types (e.g. emergent, submersed, etc.), locations, and density in the water body:
- 2. Describe any unique characteristics about the noxious weed species that may help determine the most appropriate management methods and timing.
- 3. Attach a map that includes the approximate location and species of the target noxious weed species in the water body:

 Ecology's survey methods for aquatic plant mapping

 www.ecy.wa.gov/programs/wq/plants/management/survey.html

- 4. Identify and discuss possible factors that are causing or contributing to noxious weed growth (e.g., nutrients, invasive species, etc.).
- 5. Describe why whole lake Fluridone treatment(s) is the appropriate method for eradicating the target noxious weed species from this water body.
- 6. If a sensitive, threatened, or endangered species or habitat is present (identified in section I. WATERBODY INFORMATION of this plan), describe in detail how will its presence be taken into account during planning and treatment to prevent take?

III. SURVEILLANCE

- 1. Describe your surveillance plan for evaluating the treatment areas to determine when treatment or re-treatment is appropriate:
- 2. Describe how you will evaluate (monitor) treatment effectiveness and explain your criteria for determining treatment efficacy.
- 3. Describe how you will monitor for any adverse impacts caused by treatment.

IV. OUTCOMES AND RESPONSES

- 1. Describe how you will respond, including specific actions you will take, to any detection of non-target impacts from whole lake treatment with Fluridone.
- 2. If non-target impacts to sensitive, threatened, or endangered species or habitat are detected, describe how your will respond and the specific actions you will take.
- 3. Describe the desired outcome of whole lake noxious weed treatment with Fluridone

V. SIGNATURE REQUIREMENTS

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of those persons directly responsible for gathering information, the information in the Fluridone Vegetation Management Plan is, to the best of my knowledge and belief, true, accurate, and complete and will be updated as necessary. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.

| Signature of Permittee | Date | |
|------------------------|------|--|

I certify under penalty of law, that I have reviewed this document and all attachments, and that the sponsor concurs with the information contained in the Fluridone Vegetation Management Plan. The information in the Fluridone Vegetation Management Plan is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.

| Signature of Sponsor's Representative | Date |
|---------------------------------------|------|

Comment #6: I support the increased requirement of the permit process.

Response: Thank you for your comment.

Comment #7: The Draft Permit states that WDFW may periodically update the timing windows as new information presents itself, and yet there is no process for initiating this update. The current timing windows are very salmon and steelhead centric and scientific literature is replete with information to modify the current timing windows. For example, current information points to conducting in-water work in the Columbia River once bull trout have migrated to their spawning grounds, but not after they return to the Columbia River. Secondly, there appears to be no consideration for Pacific lamprey timing windows. Depending on the scope and location of a proposed in-water project in the Columbia River, please consider truncating the timing windows to minimize effects to all applicable life history stages of Pacific lamprey. Lastly, please delineate the process for updating the timing windows in subsequent drafts of the permit.

Response: Ecology depends upon the Washington Department of Fish and Wildlife (WDFW) for development of timing windows as the agency responsible for wildlife management. The timing windows are meant to protect sensitive, threatened and endangered species as well as species of concern for WDFW. The decision whether to develop a timing window for a specific a species or waterbody is ultimately WDFW's to make. Requests to update the timing windows, for specific locations or species, can come from state and federal agencies as well as the permittee or applicant. If a Permittee or applicant wants to initiate a timing window update they should work with Ecology to request the update.

Ecology has requested an update to the timing windows to include Oregon Spotted Frog critical habitat at the request of the US Fish and Wildlife Service (USFWS). It is Ecology's understanding that WDFW is looking at whether any additional updates need to be made to the timing window document while they are addressing the Oregon Spotted Frog request. An updated WDFW timing window document is expected to be available concurrent with permit issuance.

Comment #8: Page 27. Special Condition S5.C.6 Notification

The Permittee must email to Ecology, at apampreposttreat@ecy.wa.gov, a copy of the notice, the date of distribution, and **a list of addresses that the notice was delivered to**, no later than one business day following public distribution.

I find this to be an intrusion of my personal space. By demanding the Permittee submit this list to your agency, you are allowing this information to be available to any person or environmental group, locally and nationally, for their own agenda, through the Freedom of Information Act. Perhaps such personal information should only be submitted after a complaint of not receiving such notice has been documented to be true.

Response: Permit condition S5.C.6 includes a new requirement for a list of the addresses of where the business and residential notice was provided. It does not require the permittee to provide names or any other personal information. Ecology understands addresses to be publicly available information commonly available through mapping programs such as Google Maps.

Ecology asks for the list of addresses so that we can respond to complaints or inquiries around whether or not an individual or business received the proper notice prior to treatment under the permit.

Comment #9: Page 39. General Condition G2: Right of Entry and Inspection Representatives of Ecology must have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state.

I am against Ecology entering my property without first contacting me and receiving permission. Ecology already has such access through public boat launches. Since the treatment activity typically takes place in the water and not on my property I am not in favor of allowing any access without first contacting me for approval.

Response: Comment #9 misinterprets General Condition G2: Right of Entry and Inspection. This condition applies to the permittee, who in this case is the applicator. An example of how this condition could be acted upon would be if an Ecology inspector went out to the boat launch or on the lake to observe the treatment. Additionally, this condition would allow an Ecology inspector to visit the business office of a commercial applicator.

General Condition G2: Right of Entry and Inspection is based upon WAC 173-226-250 (2).

Comment #10: RE: percentage of littoral zone for nuisance plant control: apply the herbicide to the same area each year. I just want to clarify something: What if I apply diquat (or something)

to the 50% of littoral zone extending from the shoreline out. But I also have a permit to apply a systemic herbicide to treat for Brazilian elodea and Eurasian water milfoil. These plants grow in the other 50% of the littoral zone (starting in the middle of the littoral zone and extending out to where the water increases in depth.) How does your revised permit deal with this issue of nuisance and invasive weed control?

Response: The permit does not necessarily exclude the hypothetical scenario described, however, there is an additional requirement in the permit that would affect whether the described treatment could occur. Special Condition S1.A.2.b states: *All untreated littoral areas must include native vegetation from the shore to the edge of the littoral zone where the plants stop growing in deeper water.* In order to conduct the treatment described there would need to be native vegetation mixed in with the Eurasian milfoil and the Brazilian elodea for it to qualify as untreated littoral zone for native nuisance plants. Additionally the permittee would need to use a selective herbicide on the Brazilian elodea and the Eurasian milfoil so that native vegetation would remain in the treatment area. If the noxious weed treatment removed all plants from the treatment area then that area would not be counted as littoral zone for the native nuisance plant treatment.

Comment #11: P 36 first sentence: "Permittees must submit a renewal 180 days before the current permit ends or will be considered a new applicant." This seems like a long time to me-6 months ahead or else you have to go through the whole application process again??

Response: Modification of this general condition is not at the discretion of Ecology. Washington Administrative Code (WAC) 173-226-220 requires that: *All permittees covered under a general permit shall submit a new application for coverage under a general permit or an application for an individual permit at least one hundred eighty days prior to the expiration date of the general permit under which the permittee is covered.*

Comment #12: Wilbur-Ellis Company is requesting that Ecology add the recently registered adjuvant product named Denali EATM to the list of approved adjuvants in table #2 of the Aquatic Plant and Algae Management NPDES General Permit.

Please add Brandt Magnify to the list of adjuvants in Table 2. It was registered by WSDA on December 9 for aquatic use.

Response: Ecology receives a list of adjuvants from the Washington State Department of Agriculture (WSDA) that are approved for aquatic use. The adjuvants approved for use by WSDA on aquatic sites are added to table #2 of the permit as adjuvants allowed for use under permit coverage. The WSDA has provided approval of two (2) additional adjuvants for use on aquatic sites since the draft permit was provided for public review. Ecology will add both of the recently approved adjuvants to table #2 of the permit.

Change: Table #2: Listed Adjuvants will be modified to include Denali-EATM and Brandt Magnify.

Comment #13: I was forwarded a request to comment on the new NPDES permit requirements Statewide.

I completely disagree with the responses forwarded to me to concur. As a licensed PE in the State of Washington I support NPDES requirements for the hired contractor to remove the notices upon a the notification postings. The non-response of this in the past leaves the safety of the public at risk and prohibits knowledge of the restrictions.

I also know you need the addresses of the affected. I agree the contractor hired shall submit those to ecology.

Right of entry is granted to my property at all times to inspect as part of the permit requirements with a notice ahead for entry as required by law, the blanket right of entry does not follow the RCWs and requires advanced notice to the property owner to inspect and the proper legal agreements on record. This requirement I agree with those conditions since the contractor should have a QA QC check on issues.

Response: Thank you for your comments. Please see responses to comments #1, #8 and #9 for Ecology's response to the concerns brought up in the form letter referenced in your comments.

Comment #14: We received an email document from NWAE regarding making comments about the new NPDES requirements. We strongly disagree with NWAE and believe these changes should be included. Our concern is that many private companies do not comply with the permit once it is issued. We live on Lake Lorene, a private lake and a designated wetland in the City of Federal Way. This lake is part of the Joe's Creek watershed and feeds directly into the Puget Sound. What happens on this lake directly affects the ecosystem of Puget Sound. Department of Ecology should have the right to access lakes, public or private, for the purpose of protecting the environment. Without this change private lake owners could violate the provisions of a permit and the Department of Ecology could be denied access to time critical measurements associated with treatment monitoring.

Response: Thank you for your comments. Please see responses to comments #8 and #9 for Ecology's response to the concerns brought up in the form letter referenced in your comments.

Comment #15: Zero valent iron (elemental iron) should be included as an Ecology approved phosphorus inactivation chemical. Zero valent iron is compatible with and augments natural lake chemistry, is environmentally friendly, and relatively simple and inexpensive to apply.

Response: Ecology acknowledges that zero valent iron should be considered for inclusion in the Aquatic Plant and Algae Management NPDES General Permit. However, in order to add a new chemical to the permit, Ecology must go through a State Environmental Policy Act (SEPA) review of the chemical, which would mean writing a supplement to the Environmental Impact Statement (EIS). Ecology did not have the

resources available to conduct the necessary SEPA review of zero valent iron prior to reissuance of this permit.

Ecology is planning to write a supplemental EIS for this permit. When the EIS update occurs, zero valent iron will be recommended for review. Based upon the EIS review of zero valent iron; Ecology can consider adding the product to the permit.

Comment #16: Please consider adding animals, both aquatic and terrestrial, to Section S.3.F.

Response: The protection of animals, both aquatic and terrestrial, is achieved through the implementation of the WDFW timing windows. Special condition S4.D.7 requires implementation of WDFW timing windows. The WDFW timing window document can be found here:

http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/permitdocs/wdfwtiming.pdf

Ecology relies upon the Washington Department of Fish and Wildlife (WDFW) for development of timing windows as the agency responsible for wildlife management in the state. The timing windows are meant to protect sensitive, threatened and endangered species as well as species of concern for WDFW.

Comment #17: Text submitted for consideration in permit

Disallow treatment of algae once it blooms

Chemical treatment of active cyanobacterial blooms may cause release of toxins into the waterbody and endanger people, pets, livestock and wildlife. Chemical treatment to control blooms in the early stages, when cyanobacterial species are at low concentrations, is less likely to significantly increase toxins in the water and may mitigate or prevent a cyanobacterial bloom from proliferating as the season progresses.

The Permittee may apply algaecides to cyanobacteria when early signs indicate that a bloom is forming in a water body with a history of toxic blooms.

Once a cyanobacterial bloom is present, test for toxins before treatment. If toxins are present above recreational standards, do not treat with a chemical algaecide.

Response: Both algicide and phosphorous inactivation treatments are allowable discharges under this permit. This NPDES general permit only addresses the discharge of pollutants into waters of the state, not whether or how the algae bloom should be managed. Toxins produced by cyanobacterial blooms are not considered a discharge of pollutants under this permit. Human health issues and waterbody closures related to toxic algae blooms are managed by state and local health departments.

Treatment of cyanobacteria blooms, by algicide or phosphorous inactivation treatments, is relatively rare and usually requires whole lake treatments, which are expensive. Most of these treatments are conducted by local government, special use districts, or large homeowners associations. For treatments with potable water use restrictions occurring on

waterbodies with community or municipal drinking water intakes the applicant must provide a letter of consent from the municipality or community (S2.B.2).

Comment #18: The Factsheet and Draft permit allowances for notifications are completely insufficient, in my opinion. Although Ecology is suggesting mailed notification for residents within ¼ mile of chemical application, I believe all property owners on a water body (smaller than Lake Washington) deserve to know at the time a NOI is submitted that someone has submitted environmental information to the Department of Ecology (so we can check it for accuracy) and because as you can read in this draft permit Ecology allows for what I call 'drift' but what Ecology refers to as 'dispersion'. So chemical applications affect a much wider area then where the chemicals are expected to normally flow to. (acknowledged in the documents)

Response: The permit requires that applicants have the public notice published Twice, one week apart, in a local newspaper as well as providing the public notice to any potentially affected residents within ¼ mile along the shoreline or across the water from the proposed treatment area. Ecology maintains a webpage of <u>Current and Pending Permit Coverages by County</u> for any interested party to view.

Ecology acknowledges that application of pesticides into water has the potential to disperse beyond the area of direct application. The requirement to provide notice to shoreline residents within a quarter mile of the treatment location informs those residents who have the potential to be impacted by dispersion of the pesticide.

Comment #19: Also, the newspaper notices do not inform the majority of this type of lake property owner with mainly vacation homes and land, as most reside out of county, or are snowbirds.

I cannot understand why the Department of Ecology, a public agency is introducing the new process of applying for a NOI online and it's all a secret process. Why? It seems, according to the information in the list of documents including the Factsheet and Draft permit that an applicant can actually put the notice in the newspaper prior to completing the NOI fully. How, then, can citizens comment on an incomplete permit application.....also how can this be tracked by public disclosure?

Response: Application for permit coverage through submition of a Notice of Intent (NOI) online has been in place for the past two permit issuances (since 2006). Ecology still requires a signed hardcopy of the NOI.

A complete NOI is required prior to publishing the public notice. The permit states" After the applicant has submitted the completed NOI to Ecology, they must fill out the Public Notice Template provided in the NOI. Publish the public notice twice, one week apart, in a local newspaper of general circulation (or a regional newspaper if a local newspaper is not available) that an application for permit coverage has been made." If the applicant publishes the public notice after they submit the NOI, but prior to the review of the NOI by Ecology, they may need to re-publish the public notice based upon any required corrections to the NOI.

On The Aquatic Plant and Algae Management General Permit webpage there is a link to *Current and Pending Permit Coverages by County* (https://fortress.wa.gov/ecy/wqapnoidisplay/). Public disclosure requests regarding permit applications can be made at any time.

Comment #20: What benefit is it to the State of Washington (owners of the water and stewards of the aquatic plant and wild life which use those waters), to streamline the environmental information related to an entire ecosystem?

Response: This NPDES general permit only addresses the discharge of pollutants into waters of the state, not whether the plant or algae should be managed. If an application meets permit requirements then Ecology will provide permit coverage for the proposed treatment.

Under the 2012 permit, neither the Discharge Management Plan (DMP) or the SEPA checklist required Ecology approval, only that they were submitted as part of the application. The factsheet for the draft permit states: *Ecology is proposing a procedural change in how it handles the project level SEPA determination for each permit coverage.* A programmatic SEPA review of the proposed action has been conducted and has been adopted through the Determination of Significance with Adoption of Existing Environmental Documents and Addendum for activities covered by this draft permit. The programmatic SEPA review assesses all of the pesticides allowed for use under the permit and applies to all fresh waters of the state. Ecology will rely upon the programmatic SEPA determination to issue permit coverage rather than issuing a SEPA determination for each separate coverage.

Ecology feels that streamlining the environmental information required by the applicant will benefit Ecology, the public and the permittee through savings of time and money as well as improving the clarity of what information is expected and relied upon when issuing permit coverage.

Comment #21: Ecology needs to put a 'caveat' on the amount of plants an individual property owner can remove which is that WDFW requires leaving 50% of habitat on a lakebed property for salmon migration or other.....and so it should be stated. Also, the amount of individual property allowed to be treated should be necessarily based on the amount of waterfront footage. If your waterfront is 50' and Ecology is saying go ahead and treat all 50', you know it is going to 'dispurse' onto a neighbor's lakebed, unless barriers are used. (and I recommend it). Too bad if it's expensive. There should be a 10' buffer at the property lines.

Response: Washington Department of Fish and Wildlife (WDFW) issues Hydraulic Project Approval (HPA) Permits for physical and mechanical removal of aquatic vegetation from aquatic sites. The HPA permitting is a separate process from this NPDES general permit for discharge of potential pollutants into waters of the state.

The factsheet for the draft permit discusses chemical dispersion on page 29 and states: "Requiring installation of barriers around treated (or untreated areas) is extremely expensive, can be dangerous, and time consuming." Ecology is directed by RCW 90.48.445 not to use permits to burden noxious weed control efforts. Based on RCW 90.48.445 Ecology must consider the impact that the permit conditions will have on a permittees ability to manage noxious weeds. This permit covers treatments of both noxious weeds and native plants using a variety of different chemicals in many different waterbody types, with treatment goals ranging from control to eradication. Implementation of a 10 foot buffer along property lines would impact noxious weed control efforts.

The Aquatic Plant and Algae Management General Permit in Special Condition S4.B.2 states: 2. This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights.

SECTION 3. COMMENTS ON THE FACT SHEET

Comment #22: Permitting chemical discharge into to waters feeding into the Puget Sound can effect its entire ecosystem. I feel the discharge of lawn chemicals should also be regulated.

Response: Thank you for your comment. Pesticides entering the water as a result of runoff from the use of lawn chemicals is considered non-point pollution. This NPDES general permit is specific to the regulation of point source discharges resulting from the direct application of pesticides into and around water for management of aquatic plants and algae.

Non-point pollution refers to a source from which pollutants may enter waters of the State of Washington that is not readily discernible, such as any dispersed land-based activities including runoff from urbanized areas where lawn care chemicals may be applied.

Point source pollution refers to any discernible, confined, and discrete conveyance from which pollutants are or may be discharged to surface waters of the State of Washington, including, direct discharge of pesticides in and around water from backpack sprayers, vessel, or other floating craft.

The discharge of lawn care pesticides is regulated by the Federal Insecticide Fungicide and Rodenticide (FIFRA) product label. Lawn care pesticides are generally registered and labelled for terrestrial use and discharge of those pesticides in situations where they enter the water through direct application, drift or overspray would likely be a FIFRA label violation.

Comment #23:

Page 23, middle of the page in paragraph "When the Permittee proposes to use a chemical that persists in the water for longer than days...."

My comments: Doesn't fluridone persist longer than days? If it is safe enough to use that no timing window is required; why must other documentation and public involvement be involved? This is public involvement above and beyond what is already required in 1. Permit application and 2. Public notification of treatments. I don't understand.

Response: See response to comment #5. This permit relies on Special Condition S3.B: Temporary Exceedance of Water Quality Standards to allow for short term exceedances of water quality standards caused by the discharge of aquatic pesticides.

Exceedance of water quality standards that last longer than hours or days are allowed under this permit provided the Permittee complies with the provisions of WAC 173-201A-410.

When the Permittee proposes to use a chemical that persists in the water for longer than days, such as fluridone, they must satisfy the requirements of WAC 173-201A-410. Ecology identified that permit coverage, the permit, fact sheet, SEPA documents, the NOI and other supporting documents represent fulfillment of the plan requirement and development through a public process as required by WAC 173-201A-410 for long term exceedances.

Comment #24: Text for consideration in fact sheet:

Long-term prevention of cyanobacterial blooms

Long-term prevention of cyanobacterial blooms likely requires reductions in nutrient pollution. Excess nitrogen and phosphorus in aquatic systems can stimulate blooms and create conditions under which harmful cyanobacteria thrive. Thus, managing nutrient pollution sources within a watershed in addition to waterbody-specific physical controls tend to be the most effective strategies to prevent algae blooms. Nutrient pollution can be from urban, agricultural, and atmospheric sources, and therefore, reductions can be achieved through a variety of source control technologies and best management practices.

Algae control before blooms develop

Chemical treatment of active cyanobacterial blooms may cause release of toxins into the waterbody and endanger people, pets, livestock and wildlife. Chemical treatment to control blooms in the early stages, when cyanobacterial species are at low concentrations, is a preferred approach and is less likely to significantly increase toxins in the water. Treatment in early stages may mitigate or prevent a cyanobacterial bloom from proliferating as the season progresses.

Response: Ecology generally agrees with the above language. The following language is incorporated by reference into the Draft Aquatic Plant and Algae Management NPDES and State Waste Discharge General Permit Fact Sheet on page #16 under the heading **Algae**.

Long-term prevention of cyanobacterial blooms

Long-term prevention of cyanobacterial blooms likely requires reductions in nutrient inputs to a waterbody. Excess nitrogen and phosphorus in aquatic systems can stimulate algae blooms and create conditions under which harmful cyanobacteria thrive. Managing nutrient loading within a watershed in addition to waterbody-specific physical controls tend to be the most effective strategies to prevent algae blooms.

Algae control before blooms develop

Chemical treatment of active cyanobacterial blooms may cause release of toxins into the waterbody. Chemical treatment to control blooms in the early stages of an algae bloom, when cyanobacterial species are at low concentrations, is a preferred approach and is less likely to significantly increase toxins in the water. Treatment in early stages may mitigate or prevent a cyanobacterial bloom from proliferating as the season progresses.

SECTION 4. COMMENTS ON THE NOTICE OF INTENT

Comment #25: Please consider adding Rare and/or Threatened and Endangered Animals to Section V., with Rare Plants. Please update the Washington Department of Fish and Wildlife timing window to include the Columbia River in appropriate Counties (Benton, Chelan, Clark, Cowlitz, Douglas, Ferry, Franklin, Grant, Kittitas, Okanogan, Pacific, Stevens, Walla Walla, and Yakima). Within the County listings, please include the priority fish species for the Columbia River.

Response: Please see the response to comments #7 and #16.

The WDFW timing window document does not list every waterbody in each county. If a waterbody is not listed then it falls under the default timing window of July 15th through October 31st. Asking WDFW to develop timing windows requires them to allocate personnel and resources to the task. Ecology does not normally request development of a timing window unless there is a permit coverage or pending permit coverage for the waterbody and the permittee/applicant has requested a timing window outside of the default timing window.

Comment # 26: Pg. 2 of the NOI section V, VI are completely inadequate in my opinion. Water body type should not be several boxes and choose one. At the very least add instructions to include all that apply. In section VI the problem statement, Action Thresholds, and Plant removal impact statement are really questions for plant specialists and limnologists and really, really matter. This is not appropriate for someone to fill out 'to the best of their knowledge. When applicants fail to do research, why should they be responsible for information in an NOI?

Response: Section V of the Notice of Intent (NOI), Waterbody Type, is used by Ecology to determine the setting where the treatment is proposed to take place; Stillwater, flowing water, wetlands or roadside/ditch bank. Additionally, Ecology collects GPS coordinates for the waterbody and the proposed treatment area so that the waterbody type can be

verified. Ecology feels that section V is adequate to determine the setting that is being proposed for treatment.

Section VI of the NOI includes a number of questions, taken from the previously required Discharge Management Plan, designed to assist the applicant with planning their aquatic plant management project. Questions about problem statements, action thresholds and impact statements are examples of these planning related questions. This NPDES general permit only addresses the discharge of pollutants into waters of the state, not how or whether the plant or algae should be managed. Ecology does not make value judgements on what treatments are most appropriate for a permittee and their situation. If an application is legal under the permit then Ecology will provide permit coverage for the proposed treatment.