



MUCKLESHOOT INDIAN TRIBE
Fisheries Division

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October 14, 2010

Kathy Hamel
Water Quality Program
Department of Ecology
PO Box 47600
Olympia, WA 98504

RE: Draft Aquatic Plant and Algae Management State Waste Discharge General Permit (2010)

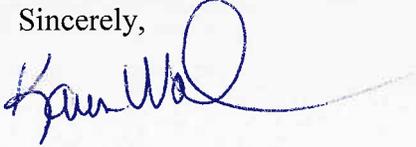
Dear Ms. Hamel:

The Muckleshoot-Indian-Tribe Fisheries Division (MITFD) has reviewed the Draft Aquatic Plant and Algae Management State Waste Discharge General Permit. The attached comments are in the interest of protecting and/or restoring the Muckleshoot Indian Tribe's fisheries resources.

This permit will allow the application of herbicides and other products in surface waters that affect the Tribe's fisheries resources. We request that the permit be modified to avoid herbicide and other chemical application to road ditches and surface water with the potential to adversely affect fish hatchery water supplies. The permit and fact sheet currently lack the appropriate consideration of herbicide applications that may adversely affect hatchery water supplies and sensitive salmon eggs and other life stages held in hatcheries that are highly vulnerable to toxic contaminants. Unlike some municipal water supplies, many hatchery facilities may not have readily available back up water sources and may be unable to shut off their intakes in response to upstream herbicide applications. Furthermore, it may not be possible to use the existing WDFW fish work windows to avoid impacts to salmon hatcheries as these work windows are generally intended to protect juvenile salmon, not returning adults.

Additional detailed technical comments are attached to this letter. We request a follow-up meeting by phone or in person between MITFD staff and WDOE staff to discuss these comments prior to the completion of the permit. This meeting would help clarify our permit recommendations and to discuss ways to address our concerns. Please call me at (253) 876-3116 to arrange such a meeting. We appreciate the opportunity to comment on this draft general permit.

Sincerely,



Karen Walter
Watersheds and Land Use Team Leader

Enclosures:

Attachment 1.

Example of a shoreline planting plan as a part of a permit from the US Army Corps of Engineers for a project on Lake Washington in Meydenbauer Bay.

Attachment 2.

Second Example of a shoreline planting plan as a part of a permit from the US Army Corps of Engineers for a project on Lake Washington in Meydenbauer Bay.

cc: Tom Hooper, NOAA Fisheries
Kitty Nelson, NOAA Fisheries
Theresa Blaine, EPA Region X
Larry Fisher, WDFW, Region 4
Ginger Holser, WDFW, Region 4
Stewart Reinbold, WDFW, Region 4

Specific Permit Comments (by section)

S1.A. Permit Coverage

The permit needs additional conditions in the permit to minimize potential impacts to newly planted native plant species required as mitigation on sites near on-site herbicide treatments. The U.S. Army Corps of Engineers (as part of its Regional General Permit 3) and other agencies issuing permits for in-water and shoreline activities sometimes require that applicants revegetate the affected shoreline areas with native upland and emergent plants as a standard mitigation measure

(<http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=mainpage> RGP; see Attachments 1 and 2). If the draft aquatic pesticide permit is approved without modification, then it is possible that entities seeking coverage under this permit may apply herbicides that harm these newly planted species since there can be spatial and temporal overlap between the planting and herbicide applications. For example, attached are two recent Corps permits where private landowners will be planting native species as mitigation. Both sites are near a public park that may also seek a 100% littoral zone aquatic plant permit that may kill the newly planted plants.

S1.A.2.a Permit Coverage- Control

The draft permit language in S1.A.2.a is ambiguous and should be more precise and/or detailed. One example concerns the term 'littoral habitat'. This should be defined as a certain distance from shore, not a certain water depth, since some areas have water shallow enough to contain aquatic vegetation a quarter mile or more from shore. Another potentially confusing factor is the lake level at the time of the application. Since Lake Washington is regulated within a two foot range, care should be given to document all decisions and controls with regard to a fixed reference point and the lake elevation at the time of the decision.

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

- a. There are potential impacts to Muckleshoot Indian Tribal fishing activities in freshwater areas of WRIA 8 where there are several existing permittees. The proposed application timing overlaps with the time of year when the Tribe is likely to conduct its fisheries (i.e. July-December), which may result in unnecessary exposure to Tribal fishers. Additional timing restrictions will likely be needed to avoid this impact depending on the location of the herbicide application, the proposed timeframe for spraying and the Tribal fishing opportunities in that particular year. We request a coordinated effort between WDOE and MIT Fisheries Division staff to develop the appropriate permit language.
- b. In the Ship Canal, the boundary on the east end may not be protective of the UW's College of Ocean and Fisheries Science water intake for their salmon hatchery. Juvenile salmonids and

salmonid eggs are present at this facility at least from October through May. DOE should confirm the location of the pipeline in Portage Bay before prescribing endpoints that may unduly allow herbicides into the hatchery's water supply. DOE should speak with staff at the UW Hatchery (phone: (206) 543-4267). To a lesser extent, the Seward Park Hatchery in Lake Washington has some of the same issues.

- c. If the herbicides in Table 2 pose risks to adult salmonids, then these work windows are inadequate. Since fish timing windows developed by WDFW are for juvenile salmonids and not for the protection of adult salmonids, WDOE must provide an analysis on the cumulative impacts that may occur on adult salmonids, which could be present during herbicide treatments. These cumulative impacts may be due but limited to the following: high water temperatures; low dissolved oxygen levels (<http://dnr.metrokc.gov/wlr/waterres/lakes/union.htm>); degraded habitat from native plant die-offs; herbicide runoff from land uses; and slower chemical degradation times due to anaerobic aquatic conditions.
- d. Fish timing windows need to be applied for herbicide treatments to roadside areas and "ditches" that may discharge to surface waters where salmonids are present.
- e. Should salmonids be found alive or dead in the immediate vicinity of the site during the herbicide application, all activity must stop.
- f. The restrictions in Table 3 do not protect invertebrates, which provide food for salmon, from adverse impacts due to herbicide treatments. Freshwater macroinvertebrates, such as mussels and crayfish also represent shellfish resource interests of the Tribe.

S4.D.1 General Application Restrictions

The permit requires permittees to avoid herbicide treatments during the opening week of fishing season, presumably the opening of the State's fishing season. Please note that the Muckleshoot Indian Tribe typically schedules its fisheries to occur on days separate from the non-tribal fishing community and as result these fisheries would not be protected in this permit as written. We request coordination with WDOE to address the protection of MIT fisheries in regard to herbicide treatments.

S5. Notification, Inspection, and Posting Requirements

The permit lacks any discussion about notification procedures for affected Indian Tribes. Recommendations for notice to the Muckleshoot Indian Tribe (MIT) include a-c, as listed below:

- a. DOE needs to notify affected Indian Tribes directly when applications apply for coverage under this permit. In the case of the MIT, any applications within WRIAs 8, 9, and 10 should be sent to the Tribe with a full 30 days to comment on the proposal prior to approval by WDOE.
- b. The MIT should be notified of any fish kills that occur after chemical application.

- c. The MIT should also be notified if any experimental use permits are issued within WRIAs 8, 9 and 10.

S6.A Monitoring Requirements

In waters where salmonids are present (not just 303d listed waters), the following monitoring requirements should exist in the permit:

- a. Pre- and post-treatment monitoring of dissolved oxygen and pH should be conducted near the surface and the bottom of the water column at the center and the outer perimeter of the treatment area, and
- b. Post-treatment monitoring of any herbicide or algaecide in Table 2 of the permit that may have an adverse effect on salmonids; monitoring should be conducted within 48 hours of completed treatments and should represent the water within the perimeter of the treatment area.

S7. Analytical Procedures

- a. The permit should require a Quality Assurance Project Plan (QAPP) for monitoring activities listed in Section 7. Without a QAPP, one will not be able to determine whether a permittee followed standard protocols and if data are credible. A QAPP should be required and filed with the application.
- b. As S7.C states, the draft permit does not require a state accredited entity to conduct dissolved oxygen and pH monitoring, which further highlights the need for a QAPP prior to monitoring in order to ensure that credible data will be collected.

S.10 Mitigation Measures

The permit lacks mitigation measures for impacts to native plants and salmon habitat. Specific comments are as follows:

- a. Submerged, floating, and emergent native plants can provide habitat for salmonids. Controlling or removing these plants may adversely affect salmonids. Exotic plants with less benefit or detrimental effects by providing salmon predator habitat are common in many areas of Portage Bay, Lake Washington and Lake Sammamish. There should be mitigation for herbicide applications that adversely affect native plants that should include restoring native vegetation.
- b. The removal of dead plants, after the implementation of management activities related to this permit, should be required to ensure that dissolved oxygen sags are not induced from these activities. Even selective herbicides may not provide sufficient protection to prevent DO sags at sites with predominant milfoil cover.
- c. All chemical treatments to control milfoil should use selective herbicides in order to preserve any vestiges of native plants that remain.
- d. Chemical and mechanical plant management activities must be discontinued in the event that live

or dead salmonids are observed near the application site.

Appendix A-Definitions

The permit needs to define ditches. The Muckleshoot Indian Tribe has found that many "ditches" in WRIA 8, 9 and 10 that are actually streams with salmonids in them.