

# NORTHWEST ENVIRONMENTAL ADVOCATES



June 20, 2012

By Certified Mail

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Dear Messrs.:

**Re: Petition for Reconsideration of May 15, 2012 Letter Approving Coverage Under the NPDES General Permit 2300A for the Fairview Lake Property Owners Association**

On May 15, 2012 the Oregon Department of Environmental Quality (“DEQ”) authorized the Fairview Lake Property Owners Association (“FLPOA” or “applicant”) to discharge pesticides into Fairview Lake to kill the native plant known as Common or American Elodea (*Elodea canadensis*) under the NPDES General Permit 2300A by using the pesticide diquat. By this letter, Northwest Environmental Advocates (“NWEA”) hereby petitions DEQ to reconsider the issuance of the permit to FLPOA pursuant to the Oregon Administrative Procedure Act, ORS Chapter 183, and OAR 137-004-0080. In so doing, NWEA requests DEQ rescind the permit coverage to FLPOA. We further request that if DEQ processes another permit application from FLPOA to discharge into Fairview Lake that it make the written findings required by Oregon’s rules, as set out below.

NWEA is an Oregon nonprofit environmental organization established in 1969 and incorporated in 1981 whose mission is to work through advocacy and education to protect and restore water quality, wetlands, and wildlife habitat in the Pacific Northwest. NWEA regularly works with state and federal agencies and comments on pending government decisions affecting natural resources in the Pacific Northwest, and has litigated numerous claims pursuant to the federal Clean Water Act (“CWA”) to preserve and improve water quality in the region. Thus, NWEA has a strong interest in protecting the species and water quality in Fairview Lake and the Columbia Slough into which the applicant proposes to discharge toxic pesticides.

**I. DEQ’s Issuance of the 2300A Coverage to FLPOA is Arbitrary and Capricious as it is Based on Findings Not in the Record and Contrary to DEQ’s Initial Findings**

On March 7, 2012 DEQ denied permit coverage to FLPOA for discharge of pesticides to

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Fairview Lake because

DEQ determined that there is a high likelihood that the proposed activity would cause or contribute to violations of water quality standards downstream in the Columbia Slough. Specifically, the decay of aquatic plants would release nutrients into the water and consume oxygen from the water, which would exacerbate the nutrients levels and low oxygen levels of concern in the Columbia Slough.

Letter from Gregory L. Geist, Water Quality Manager, Northwest Region DEQ to Mike Johnson, FLPOA, re: Refund of Fees and Denial of 2300A Permit Application. FLPOA subsequently submitted a revised Pesticide Discharge Management Plan ("Plan") which was received by DEQ on May 10, 2012. A mere five days later the permit was issued on May 15, 2012. On June 13, 2012 NWEA inspected the file (having begun making the attempt to gain access to it on May 30). There is no copy of the original Plan in the files, and no notes made by DEQ staff, therefore there is no way for the public to evaluate what changes may or may not have been made in the Plan between its submission in February, which was denied, and the revision submitted in May, when the permit was granted. In addition, other than a lengthy letter submitted by NWEA on February 17, 2012 there is no information in the public file that describes how DEQ arrived at its initial denial of permit coverage to FLPOA. Neither is there any note, description, analysis, memoranda, email messages or any material whatsoever that describes how DEQ arrived at an entirely opposite position that the proposed activity would not cause or contribute to violations of water quality standards. Because the file contains no basis for DEQ's having changed its initial findings, the granting of permit coverage to FLPOA is arbitrary and capricious in the most literal of senses. There is only one set of findings, those set out in the DEQ letter of March 7<sup>th</sup> quoted above and there is, in fact, no basis for DEQ's having changed those findings in the file.

The only change in the application that we are able to perceive is that in the two "D. Location Information" documents that are in the file the first stated that "[o]nce full pool is achieved a low level (ppb) of herbicide may flow out of the lake into Fairview Creek" and the second replaced that with a statement that the pesticide is "not expected in the delayed outflow" and that the "water [will be] impounded for the expected life of the pesticide." As the basis for DEQ's original denial of permit coverage was not based on pesticides exiting the lake but, rather, nutrients and dissolved oxygen, this change cannot be relevant from the standpoint of DEQ's findings.

## **II. The Discharge will Harm the Designated Uses of Fish and Wildlife**

As we stated in our February 17 letter, DEQ is required to give full meaning to the legal requirements associated with not causing or contributing to violations of water quality standards. The legal definition of water quality standards includes the designated beneficial uses of aquatic life protection and protection of existing uses under the antidegradation policy, defined as those uses present at any time since November 28, 1975. *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 114 S.Ct. 1900, 1905 (1994); 40 C.F.R. §§ 131.12(a)(1), 131.3(e), 131.6(a), 131.3(f). Specifically, we noted that federal regulations instruct DEQ in how to weigh one set of designated uses against another because they require states "[f]or waters with multiple use designations, [to adopt] criteria [that] shall support the most sensitive use." 40 C.F.R. § 131.11(a). The analysis presented by FLPOA in its Plan, and presumably accepted wholesale by DEQ, fails to consider the potential impacts to fish and

wildlife by the proposed discharge. It also appears to suggest that DEQ can weigh recreational uses of boating as more worthy of protection than fish and wildlife. We disagree. In failing to evaluate the impacts of the discharge on the most sensitive designated uses of fish and wildlife, DEQ both failed to evaluate the harm to those uses as well as the benefits to wildlife from *not* allowing the discharge, thereby maintaining a more natural habitat that provides greater support to those species.

**A. The Discharge Will Harm Designated and Existing Uses of Fish and Wildlife**

The applicant's Plan is largely silent on the designated and existing uses of fish and wildlife, largely because it likely does not recognize that providing full support for designated uses is required to meet water quality standards. The growth of elodea in Fairview Lake has enhanced the lake's support of wildlife, specifically aquatic-dependent birds, as noted by area residents. (We would be happy to provide DEQ with a list of waterfowl that used Fairview Lake in 2011.) The applicant admits this itself in its Plan, stating that "[f]urthermore, this large of a food source [elodea] then attracts huge numbers of birds that foul the lake bottom with their droppings." Plan at 14. While the applicant finds huge numbers of waterfowl to be a problem, in fact such habitats have been in serious decline across the United States and therefore should be retained to provide support to this designated use rather than justify a discharge that seeks to eliminate or minimize it. Water quality standards are required for the "propagation of fish and wildlife" and DEQ has adopted fish and wildlife as designated uses for which full support is required. *See* OAR Division 41, Tables 101A-340A ("Fish & Aquatic Life," "Wildlife & Hunting," "Fishing"). Moreover, watching wildlife on a lake is a "recreational purpose" just as much as boating or swimming. DEQ cannot rely on the partial or complete elimination of the designated use of wildlife as the basis for issuing an NPDES permit that is required to be in compliance with those very designated uses.

The applicant alleges that there will be no impact on fish or wildlife from the discharge of the pesticide. However, its Plan also states that "[t]his project will follow manufacturer recommendations regarding 1/2 treatment in two separate applications for the benefit of fish and wildlife." Plan at 30. It is illogical to state that there is no effect and that there might be an effect, making DEQ's reliance on the applicant's statements without basis. In fact, the half-and-half approach is based on the fact that, directly or indirectly, an effect on aquatic life is fully expected from the discharge of diquat.

The applicant goes on to say that "[t]here is little research on the topic of diquat effect on turtles," *id.*, but presuming an effect, the applicant claims that it will not discharge within two meters of the shoreline. *Id.* The Plan does not state how maintaining the discharge at two meters from the shoreline will prevent the discharged material from flowing into the two-meter zone. Even in a lake, water does not stand still, yet its standing still – even with the running of a boat engine and the method of discharging the pesticide – is apparently the operating assumption and the basis of concluding the discharge will not harm turtles. Under the circumstances of natural circulation, boat motor, and discharge it is difficult to contemplate how the two-meter zone will be fully protected and the Plan does not say. The Plan further states that to protect turtles "Non-Treatment areas have been designated to allow some elodea food source to survive, to provide refuge and as monitoring control areas." *Id.* This statement suggests that eliminating elodea as a food source will reduce habitat for turtles in Fairview Lake and could make habitat a limiting factor for turtle populations in that area. If so, a discharge that will cause or contribute to dwindling populations of turtles is a violation of water quality standards. It is impermissible

to allow a discharge which will fail to maintain and protect existing instream water uses and the level of water quality necessary to protect them, existing uses being defined as those uses “actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.” 40 C.F.R. §§ 131.3(e); 131.12(a)(1).

The applicant states that “[k]nown turtle habitats are in two of the non-treatment areas. We will not treat near any observed egg masses.” Plan at 30. This is not a sufficient basis upon which DEQ can make the required findings that are discussed in this letter. Whether the applicant observes egg masses is not the determining factor as to whether turtle eggs are in fact present. The applicant is not sufficiently expert in identifying turtle egg masses and it has not proposed to hire a biologist to assure that its allegation will guide its actual discharge. Moreover, there should be no treatment where there are turtles, not just egg masses. Again, the applicant lacks the expertise to avoid turtle habitat altogether. Finally, neither the applicant nor DEQ has evaluated the extent to which *not* allowing the discharge will actually enlarge turtle habitat and prevent Oregon’s native turtles from becoming close to extinction. It has, however, strongly suggested that the presence of elodea is excellent turtle habitat.

In addition, where turtles have lived since November 28, 1975 DEQ is obligated to protect them as “existing uses” as well as “the level of water quality necessary to protect the existing uses.” 40 C.F.R. § 131.12(a)(1). In the past, but after 1975, turtles were far more abundant in Fairview Lake and the Upper Columbia Slough (just below the weir). For example, turtles were viewed by our members in the Northwest end of the lake which is slated for discharge. DEQ must condition this permit to ensure protection of turtles as existing uses, regardless of the fact that they have been locally extirpated in areas of the lake.

### **B. Monitoring of and Response to Impacts on Non-Target Organisms**

The applicant claims it will protect and monitor the effects of its discharge on non-target organisms. *See, e.g.*, Plan at 38 (“Diquat is not harmful to *most* fish at the application rates recommended by the herbicide manufacturer.”)(emphasis added). Its Plan lists “procedures for documenting any observed impacts to non-target organisms resulting from [the] pesticide discharge.” Plan at 8. It goes on to indicate that the applicant will conduct “[v]isual counts and/or photos collected by employees” and “[d]ocumentation of non-target impacts reported by the public or other entities.” *Id.* However the Plan does not define what the non-target organisms are, whether other native plants in the lake, fish, or wildlife. In this context, the applicant only states that its monitoring and documenting of impacts to non-target organisms includes taking of “[l]ake water samples,” “[s]urvey notes and photographs ... to track the control program,” *id.*, both of which are clear statements the applicant will evaluate the impacts on *target* organisms, not non-target organisms. In fact, non-target organisms are other plants, macroinvertebrates, birds, fish, and wildlife and there is no clear monitoring plan to ensure there are no impacts to non-target organisms.

Moreover, DEQ has issued the permit prematurely because the Plan states, with regard to the only species the Plan at least partially recognizes as requiring protection as a designated use, that

A turtle and amphibian survey of the lake is being conducted by City of Gresham and hosted by FLPOA. That has not been completed yet, but is scheduled to be complete before treatment begins. Results may affect the non-treatment area designations.

Plan at 42. The fact that the survey was not completed prior to DEQ's issuing the permit demonstrates that DEQ did not make the required findings that the discharge will not cause or contribute to violations of water quality standards because at the time the permit was issued, certain "non-treatment areas" were defined and the permit was issued on that basis. There is no condition in the permit that requires the permittee to change the non-treatment areas on the basis of this turtle and amphibian survey. Therefore, the permit is contrary to law. As of June 13 there was no survey in the DEQ permit file nor any indication that such a survey is underway. Moreover, it is unclear how complete this "survey" will be as there is no information in the permit file on how it is being conducted and the expertise of those conducting it. That is to say, DEQ has no idea how this survey is being conducted and whether it will be an adequate basis upon which to allow the discharge.

The Plan does not identify the species of turtle in Fairview Lake but according to the Oregon Department of Fish and Wildlife ("ODFW"), there are two native species of turtles in Oregon, the Western Pond Turtle and the Western Painted Turtle. Turtles in Oregon, ODFW, <http://www.dfw.state.or.us/conservationstrategy/turtles.asp>. ODFW states that "[b]oth are highlighted in the Oregon Conservation Strategy as species in need of help—that is, they have low or declining populations." *Id.* ODFW has designated both native turtles "Sensitive Species – Critical." 2008 ODFW Sensitive Species List, organized by category at 9, available at [http://www.dfw.state.or.us/wildlife/diversity/species/docs/SSL\\_by\\_category.pdf](http://www.dfw.state.or.us/wildlife/diversity/species/docs/SSL_by_category.pdf). This designation means that both native turtles are "naturally-reproducing fish and wildlife species, subspecies, or populations which are facing one or more threats to their populations and/or habitats." *Id.* at 1. The designation "critical" means that both of these species are "imperiled with extirpation from a specific geographic area of the state because of small population sizes, habitat loss or degradation, and/or immediate threats." *Id.* at 2. For DEQ, this information should translate into the fact that any loss of turtles or impairment of turtle habitat constitutes a violation of water quality standards.

Conducting the survey that is breezily discussed in the Plan is not as straightforward as it might appear: "Estimating the overall health of Western Pond Turtle populations is difficult due to both the turtles' long lifespans and the difficulties associated with locating and tracking individuals while they are nesting or hibernating." Western Pond Turtles: Habitat and History in Oregon, University of Oregon Environmental Leadership Program, <http://pages.uoregon.edu/ecostudy/elp/turtle/oregon.html>. Nothing in the application explains what limitations may exist in the "survey" that is underway given time constraints and the inherent difficulties associated with turtle surveys. The potential to harm any turtles is one that DEQ must ensure against both to ensure that the discharge does not violate water quality standards but also because the population of Western Pond Turtles "has declined dramatically." *Id.* Moreover,

The greatest danger facing Oregon's Western Pond Turtle population is low juvenile recruitment. The species requires accessible upland nesting habitat near their aquatic habitat. Fragmentation of properties and of land-use types renders this critical habitat requirement increasingly rare. While relatively large populations of mature turtles can be observed in their aquatic habitat, the rate of successful breeding and juvenile recruitment is largely unknown and believed to be too low to maintain population numbers at their current levels. In other words, existing populations in Oregon are likely getting older and few juveniles survive to replace their numbers.

*Id.* This is likely part of the reason why “[i]t is illegal to remove [native turtles] from the wild, possess, transport or sell them.” ODFW website, <http://www.dfw.state.or.us/conservationstrategy/docs/TurtleIDCardFRONT.pdf>. Apparently, however, killing turtles by discharging pesticides directly to their habitat can be allowed.

The potential for diquat to kill turtles is confirmed anecdotally, for example by the experience of using diquat in a Maryland pond:

[Mr.] Early hit a snag when he learned that diquat can be applied to only half the pond at one time, with the other half applied two weeks later, to preserve fish populations. So the staff had to apply for an exception to the permit so they could use the dose of diquat all at once. Once the herbicides hit the pond, biologists with nets will be on hand to catch the pond’s many turtles.

“The turtles will come out,” said DNR fisheries service director Eric Schwaab. “We’ll be washing off the turtles and taking them to another place.”

Snakehead poisoning mired in details: Coordination effort delays plan to eradicate fish, *The Baltimore Sun*, August 12, 2002, available at <http://www.baltimoresun.com/news/maryland/bal-md.snakehead12aug12,0,5752441.story>. There is, of course, no such plan to catch, clean, and protect Fairview Lake turtles.

While the FLPOA quality assurance plan alleges that sampling procedures, analytical methods, units of measurement, and reporting limits will be used “to meet the goal of data comparability,” Plan at 40, there is no evidence that sufficient monitoring will be done of non-target organisms prior to the discharge against which data can be compared. Therefore, the Plan misrepresents what the monitoring will accomplish and it will not ensure protection of the designated uses. The Plan states that it will conduct “visual observation [of] fish, wildlife, weeds,” *id.* at 44, but it does not: (1) establish how it will conduct the visual observation of fish, (2) how it will compare the status of wildlife before and after the discharge, including seasonality of use (i.e., use by birds in 2011 compared to use by birds in 2012), (3) include non-weed native plant species, and (4) compare the pre-discharge data allegedly being gathered on turtle and amphibian use with post-discharge populations since it has not asserted that it will be collecting any such information. In point of fact, it appears that the applicant is stating that it will keep its eye out for any dead fish or animals and short of that effect, it intends no further monitoring.

The Plan also includes an “Actionable Levels Table” which sets “trigger points” including “[d]ie off of fish and wildlife.” Plan at 45. The associated “action plan” for the killing of designated uses of fish and wildlife is “[i]dentify and enumerate species/Reconsider 2nd treatment.” *Id.* To the extent that the Plan is incorporated as permit conditions, this is an unacceptable permit condition. If there is observed death of fish or wildlife, DEQ should suspend the authorization of the permittee to discharge pursuant to the permit, not merely allow the permittee to “reconsider” whether to continue discharging toxic constituents in toxic amounts. Second, “die off” is undefined therefore it is unclear how many species or individuals of a species would have to die before the applicant would “reconsider” whether to keep discharging the pesticide. And, of course, if only acute lethal outcomes are considered, sublethal impacts will be ignored.

Diquat is non-selective and is expected to kill all plants with which it comes into contact. EXTTOXNET, available at <http://pmep.cce.cornell.edu/profiles/exttoxnet/dienochlor-glyphosate/>

diquat-ext.html. See also, Plan at 27 (“Diquat is non-selective affecting all plants it comes in contact with.”). The applicant has not identified native plants and what other aquatic species they support in Fairview Lake. Therefore DEQ has no basis upon which to determine whether this discharge will fully support the designated uses.

Moreover, the applicant has not discussed the potential for poisoning of aquatic birds, despite the fact that diquat can be “moderately toxic” to birds, including sublethal effects. *Id.* (“Signs of poisoning in these birds included instability, wing-drop and lack of movement.”). Diquat is also expected to have an effect on fish, for which reason the applicant is planning on treating on a half-and-half basis. *Id.* (“Diquat dibromide is slightly toxic to fish. Its toxicity to fish, and food organisms on which fish survive, has been reported in many studies. . . . Some species of fish may be harmed, but not actually killed, by sublethal levels of diquat dibromide. Oxygen can become depleted in diquat-treated water by decaying aquatic plants. This decreases the amount of oxygen available for fish survival.”).

Diquat is also “[t]oxic to aquatic invertebrates.” Pacific Northwest Weed Management Handbook, Aquatic Weed Control, Vanessa Howard Morgan, revised September 2011, available at <http://pnwhandbooks.org/weed/other-areas/aquatic-weed-control>. Invertebrates are, in turn, a food source for turtles (and other aquatic life).

### **III. The Action Threshold Inappropriately Includes Non-Clean Water Act Concerns and Fails to Include Fish and Wildlife Uses**

The applicant sets out an “Action Threshold” that is comprised of five elements: the effects of natural die-off, home value depreciation, recreational uses, toxic algal blooms, and aesthetics. Plan at 6. The analysis underlying the granting of an NPDES discharge permit does not involve weighing costs and benefits. It also does not allow for consideration of beneficial uses, whether designated or existing, that are not protected under the Clean Water Act (“CWA”), namely other than “the public health or welfare ... their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and ... navigation.” CWA 303(c)(2)(A). The possible depreciation of home values cannot be a consideration in evaluating whether a permit can be granted because home values are not a recognized use under the CWA. In addition, the potential impacts of natural die-off cannot be considered in determining whether a permit can be granted that will allow an activity that causes or contributes to violations of water quality standards. Finally, the Action Threshold makes reference to algal blooms, implying that discharge of the pesticide diquat in Fairview Lake will control algal blooms. Yet the Plan states elsewhere that “[w]hile some algaecidal properties have been attributed to diquat, even the manufacturer does not consider diquat to be an effective algaecide.” Plan at 38. The Action Threshold described in the application is both inconsistent with the CWA and misleading.

### **IV. The FLPOA Does Not Own the Lake to Which it Proposes to Discharge Pesticides**

The Plan sets out locations for the discharge of pesticides, in areas denoted as “Initial Treatment” and “Secondary Treatment,” along with areas of “No Treatment.” Plan at 11. The applicant does not own either the lake or the lake bottom. The City of Fairview owns the public waters of the lake and at least some property owners own the lake bottom 35 feet from the high water mark. The remainder of the lake bottom is held in common to the center of the lake by the littoral property owners. FLPOA has no ownership rights to the lake water or the lake bottom and, as

such, should not be allowed to discharge based on assertions of beneficial use protection that are not shared by all of the landowners.

**V. FLPOA Has Misrepresented Material Facts in its Application to DEQ for Coverage Under the 2300A Permit**

The Plan states that Integrated Pest Management (IPM) will be used including, by indication of an “X,” “[u]tiliz[ing] non pesticide control methods.” Plan at 7. This in turn directs the reader to use of “[n]on pesticide management and control measures used” in which the Plan indicates, by use of an “X,” that FLPOA has used and will continue to use “Nutrient management including erosion and fertilizer control.” *Id.* There is, however, no evidence provided in the application by FLPOA that it or any other entity has or will be engaging in nutrient management by addressing erosion problems or controlling the use of fertilizer in the immediate vicinity of Fairview Lake or waters flowing into the lake. In fact, the reverse is true: there are no restrictions on the use of fertilizers, the lake is ringed with lawns on which fertilizers are likely used, and there are many locations where erosion is highly likely due to exposed soils near the lake’s edge.

On the very last page of the Plan FLPOA includes the following statement with regard to “Long Term Planning/Prevention”:

FLPOA can also mitigate to some degree the existence of nutrients in the lake by undertaking an aggressive property owner education program about the fragility of the lake. Frequent notices, newsletters and presentations should discuss the impact of activities such as lawn fertilizing on the lake. FLPOA should partner with Columbia Slough Watershed Council, Multnomah County Soil & Water Conservation District and others to carry this message to lake property owners.

Plan at 51. This is not a statement about what the applicant is or will be doing, but rather a statement of what it could (“should” or “can”) do if it felt like it. As such, it is not consistent with the representation of the applicant that it is or will be using nutrient management as a form of IPM. DEQ should deny permit coverage on the basis that the applicant has made a false statement of material fact.

**VI. Additional Listings of Impaired Waters Require DEQ Analysis**

At the time NWEA wrote DEQ regarding this permit, EPA had not taken action on DEQ’s proposed 2010 §303(d) lists of impaired waters. However, on March 15, 2012 EPA partially approved and partially disapproved Oregon’s proposed list. Of relevance, EPA partially disapproved Oregon’s failure to list certain waters subject to the discharge of this permit. Specifically, EPA proposes to list the Columbia Slough, rivermiles 0 - 9.8, and Osburn Creek, rivermiles 0-5.8, as violating Oregon’s biological criteria which states that “[w]aters of the state must be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities.” OAR 340-041-0011. Osburn Creek is identified with Fairview Lake as the same segment for all other 303(d) listings. Therefore, it can be concluded that legally speaking Fairview Lake likewise is in violation of the biological criterion. DEQ has not evaluated the permit in light of these imminent listings. Because there is no TMDL in place for biocriteria, DEQ is prohibited from granting a permit that will cause or contribute to the violation of the biocriterion. 40 C.F.R. § 122.4(i)(a) “new source or new discharger [is prohibited], if the discharge from its construction or operation will cause or contribute to the

violation of water quality standards.”)

Additionally, DEQ recently listed the Fairview Lake/Osburn Creek segment for violating the Algae criterion based on a health advisory issued by the Oregon Harmful Bloom Surveillance program through October 2010. *See Oregon’s 2010 Integrated Report Assessment Database and 303(d) list*, available at <http://www.deq.state.or.us/wq/assessment/rpt2010/search.asp>. Blue-green algae blooms are caused by high nutrient levels, particularly in high temperatures. Because the discharge of the pesticide will increase nutrient levels in summer months, thereby increasing the incidence of algal blooms, the permit will cause or contribute to the violations of water quality standards. DEQ has not evaluated the permit for its contribution to violations of the algal criterion. Moreover, DEQ has not evaluated the combined effect of the discharge on dissolved oxygen with the effects of algal blooms on levels of dissolved oxygen. *See, e.g., Harmful Algal Blooms*, Centers for Disease Control and Prevention, available at <http://www.cdc.gov/nceh/hsb/hab/default.htm>.

## **VII. Impact on Fairview Lake and Downstream Water Quality**

The Plan alleges that “studies clearly show that no oxygen deprivation will occur” if the discharge takes place early in the season and using the half-and-half approach. There are no such “studies” upon which the applicant or DEQ can rely because nobody has studied what will happen to dissolved oxygen (“DO”) levels if the pesticide is discharged as proposed by the Plan. If there were studies, they would be cited in the Plan and available in the DEQ file. Moreover, it is illogical and inconsistent to allege that “no oxygen deprivation will occur” and in the next sentence state that in a “[w]orse case scenario [there would be] lowered oxygen levels to those lake areas that experience stagnation.” Is it ‘no effect’ or ‘some effect’? It cannot be both. And upon what basis can DEQ rely that this statement of “worst case” is accurate? In fact, there are no studies upon which DEQ can make findings that can support the decisions it seeks to make in issuing this permit. There are merely assertions from the applicant.

We discussed the impaired DO status of Fairview Lake, as well as downstream waters, in our February letter and neither the applicant nor DEQ has addressed those issues. Instead, the effects of the discharge are allegedly mitigated by the drop of outflow waters through the weir. Reoxygenation of waters discharged from Fairview Lake does not address DO impairment of the lake, nor does it necessarily address the impact of depressed DO levels in the receiving water of the Columbia Slough below the weir. There are no data demonstrating that the weir re-oxygenates the water such that an unlimited further impairment of upstream waters (the lake) can be allowed. Nor is there any indication there is assimilative capacity remaining in the lake. The Plan also includes the odd comment that “FLPOA will have a representative present with the necessary equipment to monitor DO at any time during the project timeline.” Plan at 46. Of what utility is having someone who can monitor at any time if there is no plan or rationale for doing so? What precisely will the effect of having someone on standby to measure DO levels? DEQ should ignore this kind of pointless advocacy for the permit.

With regard to nutrient loading caused by the discharge, it appears that DEQ has accepted the applicant’s argument that doing nothing would lead to greater plant growth than killing the elodea earlier in the year before it grows to full capacity. This is a specious argument. First, DEQ does not have the discretion to interpret the applicable state and federal rules that govern the issuance of NPDES permits by balancing natural conditions against those caused by a discharge. If that is what the Department desires to do, it must engage in rulemaking to authorize

it. In addition, the applicant states that by killing the elodea before it builds up its total biomass the discharge “will reduce the total phosphorous [sic] loading of the lake and outflow waters.” Plan at 31. There is certainly no basis for the assertion by applicant that this discharge will reduce “total phosphorous [sic] loading by nearly 75%.” Plan at 31. If the applicant has a basis for that very specific prediction of load reduction, it is not available in DEQ’s files or the Plan where, presumably, the applicant has set its grounds for permit issuance. While we agree that early killing of elodea will reduce the size of the biomass and therefore the amount of biomass that decomposes, it is nonsensical to say that by eliminating the plant growth the phosphorus loading is decreased. The phosphorus does not come from the elodea’s growth but, rather, from human nonpoint sources. While decreasing the biomass and decay in Fairview Lake may decrease the lake’s impact on the downstream waters in some seasons (the natural seasons for decay and release), it will have the effect of increasing the retention of phosphorus in the lake. Therefore, the discharge is associated with increasing levels of phosphorus in Fairview Lake, which is impaired for phosphorus according to the TMDL, as explained in our February letter.

Likewise, the promise of some limited monitoring is of little utility. The Columbia Slough TMDL called for one or more designated management agencies to “[i]dentify representative site in Fairview Lake (Reach 4) and Fairview Creek (Reach 5) to characterize water quality in these water bodies and determine effectiveness of control strategies. Water quality parameters will include DO, pH, temperature, chlorophyll *a*, dissolved ortho phosphate, total phosphate and bacteria.” TMDL at 26, available at <http://www.deq.state.or.us/WQ/TMDLs/docs/willamettebasin/columbiaslough/tmdl.pdf>. There is no indication – for example from looking at the proposed 2010 303(d) list – that this monitoring ever took place and that DEQ has been able to determine the effectiveness of control strategies, to the extent any were implemented. The best one could say is that DEQ is attempting to issue this permit in a vacuum of information. It is against this backdrop that the applicant can make statements of “belief” that apparently DEQ accepts as facts that overcome its own legal obligations. Instead, DEQ should require the applicant to gather the data needed to demonstrate the water quality of the receiving water would allow for the discharge. In light of the water quality limited status of these receiving waters, it cannot rely on the applicant’s assertions.

There are some aspects of the Plan that demonstrate that assertions of protections may or may not be provided in reality. For example, the Plan states that if there is a spill that exceeds the detection limit, the second treatment may be eliminated. But this is conditioned on “lab turnaround time.” Plan at 45. Likewise, the second treatment is scheduled to take place two to three weeks after the first, Plan at 30, and is supposed to be informed by the results of the lab tests. Yet the applicant notes that the laboratories need only report the analytical results within 30 days, Plan at 49, which is a little under four weeks, well beyond the timeframe in which the second application will be completed. The Plan establishes a DO level equal to or below 5 mg/L as a “trigger point” that may cause reconsideration of the second discharge, but this disregards the applicable DO criterion. Plan at 45. As explained in our February letter, the applicable DO criterion is 8.0 mg/L. Finally, the Plan does not call for marking off the non-treatment areas; failure to mark them prior to discharge will likely result in some accidental discharge to non-treatment areas.

### **VIII. DEQ Has Failed to Comply with Prohibition on Discharges to Lakes**

Because of the specific properties of lakes and reservoirs, DEQ has specific limitations on discharges to such waterbodies: “No discharges of wastes to lakes or reservoirs may be allowed

except as provided in section OAR 340-041-0004(9).” OAR 340-041-0007(4). The cited exceptions are contained in the state’s antidegradation policy rules. These allow the Department to make exceptions to the prohibition on lake discharges as long as the agency “make[s] the following findings.” OAR 340-041-0004(9)(a). Nothing in the permit file for this permit includes any findings made by Department staff other than the March 7 denial letter, rendering the permit inconsistent with Oregon’s Administrative Rules. The rules require DEQ to find that the new discharge will not cause water quality standards to be violated. OAR 340-041-0004(9)(a)(A). As explained in our February letter, given the effects of the discharge on currently limited parameters, the permit will perforce cause violations of standards. In addition, other matters discussed in this letter are additional examples of how the discharge will violate standards. Specifically, once a water is designated as impaired, DEQ’s own rules preclude issuance of a permit if the pollutant parameters are related directly or indirectly. OAR 340-041-0004(9)(a)(D)(i). Alternatively, where a TMDL is in place, a reserve capacity must have been established, compliance plans must be established and enforceable, and there must be sufficient reserve capacity at the time of the discharge. OAR 340-041-0004(9)(a)(D)(ii). Finally, there is an exception for an “existing, immediate, and critical environmental problem” in which a suite of conditions must be present, none of which have been demonstrated as applicable in issuing this permit. OAR 340-041-0004(9)(a)(D)(iv). Putting aside the details of these provisions, DEQ has made no findings whatsoever under its antidegradation policy as required to allow a discharge to a lake, rendering the permit inconsistent with its own regulations. Taking the details into account, we explained in our February letter and herein why DEQ is precluded from issuing this permit.

#### **IX. The Time Period of the Discharge Should Be Limited**

The applicant has stated that “[t]his treatment project should be considered short to intermediate time period response to the macrophyte problems on Fairview Lake.” Plan at 51. There is no indication, however, that this discharge will be limited in time. The applicant admits that “b]ecause it does not kill the plant roots, regrowth can be expected the next season,” Plan at 27, thereby necessitating or justifying discharges each year under this and any future permits. There is no requirement that the applicant or other entity engage in the mused-upon scenarios that could preclude the need for the discharge, hence there is no reason to believe that the circumstances that present themselves now will not be identical in the future. In fact, there is every reason to believe they will remain constant if not worse, as further development in the area leads to increased nutrient loads. If DEQ can make the findings and demonstrate compliance with applicable federal and state rules as discussed in this and our previous letter, it should limit the use of the discharged pesticide to one year, conditioned on implementing a specific IPM plan to preclude the need for chemical controls in the future.

#### **X. Incorporation of February 17, 2012 Letter**

We hereby incorporate by reference the full text of our February 17, 2012 letter.

#### **Conclusion**

In closing, we would like to point out that the Plan’s discussion of the pesticide 2,4-D provides an indication of the highly selective information provided by the applicant. All parties appear to agree that 2,4-D is not an appropriate pesticide with which to kill the target species in Fairview Lake. Nonetheless, the Plan states that 2,4-D “[a]s a selective herbicide, there is *reduced risk of*

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*unintentional damage to nontargeted species.*” Plan at 26-27 (emphasis added). This is a particularly bizarre and misleading statement in light of the fact that the National Marine Fisheries Service (“NMFS”) issued a biological opinion on June 30, 2011 for 2,4-D which found that the pesticide posed “jeopardy” to 18 different species of salmonids listed as either threatened or endangered under the Endangered Species Act (“ESA”), including species present in Oregon waters. See Biological Opinion for Captan, chlorothalonil, 2,4-D, diuron, linuron, and triclopyr BEE, available at [http://www.nmfs.noaa.gov/pr/pdfs/consultations/pesticide\\_opinion4.pdf](http://www.nmfs.noaa.gov/pr/pdfs/consultations/pesticide_opinion4.pdf). This comment alone should suggest that DEQ cannot rely on the assertions set forth in the FLPOA application and associated Plan.

For the reasons set out above, NWEA asks that DEQ rescind its May 15, 2012 issuance of the 2300A permit to FLPOA for discharges of pesticides to Fairview Lake.

Sincerely,

A handwritten signature in black ink, appearing to read "Nina Bell", with a stylized flourish at the end.

Nina Bell  
Executive Director

Attachment: Letter from Nina Bell, NWEA, to Greg Geist, DEQ, and Jim Graybill, FLPOA, February 17, 2012.