



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Washington State Habitat Office
510 Desmond Drive SE, Suite 103
Lacey, WA 98503

June 7, 2010

Mr. Michael A. Bussell
Director, Office of Water and Watersheds
U.S. Environmental Protection Agency, Region 10
(OWW130)
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Municipal Permit Comments
Washington State Department of Ecology
P.O. Box 47696
Olympia, WA 98504

Mr. Kelly Suswind
Department of Ecology
Water Quality Program Manager
P.O.Box 47600
Olympia, WA 98504

Dear Mr. Bussell, Mr. Suswind, and Ecology staff:

The State of Washington Department of Ecology (Ecology) has recently issued a Public Notice requesting review and comment on the Modification of the Phase I Municipal Stormwater General Permit. The National Marine Fisheries Service (NMFS) offers the following comments on the proposed permit modification pursuant to our role as providers of biological and technical assistance under the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*), as amended (ESA) and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*). We are sending these comments to the U.S. Environmental Protection Agency (EPA) because of EPA's acknowledged oversight role in the issuance of this permit under Section 402(d) of the Clean Water Act (CWA), and acknowledged responsibility to comply with Section 7(a)(2) of the Endangered Species Act (ESA). In addition, these comments are provided per the processes outlined in the Memorandum of Agreement between the EPA and the NMFS regarding enhanced coordination under the CWA and ESA (hereafter "MOA") (May 22, 2001, 66FR 11202-11217).

With the CWA authority delegated from the EPA, Ecology proposes to modify the Phase I Municipal Stormwater General Permit. This proposed modification incorporates Ecology's equivalency determination of Clark County's Alternative Flow Control

Program by updating Appendix 10 of the Phase I permit. The proposed modification also incorporates other minor updates, but the Clark County issues are the focus of our comment letter.

The geographic area covered by the Clark County permit modification overlaps the range of thirteen federally-listed threatened or endangered salmon and steelhead, (as well as threatened Columbia River smelt (*Thaleichthys pacificus*), and north American green sturgeon (*Acipenser medirostri*)), and designated critical habitat for twelve salmon and steelhead populations. The Clark County permit covers areas addressed by the Lower Columbia River Fish Recovery Board, the Middle Columbia Forum, the Snake River Salmon Recovery Board, the Upper Columbia Salmon Recovery Board, and the Governor's Salmon Plan. These plans have identified improving water quality and reducing stormwater runoff as significant factors in reaching salmon recovery.

The NMFS supports Ecology's objective to apply consistent standards for Phase I entities that reduce effects to listed salmon. With the potential for increased stormwater discharges from the large, rapidly developing Clark County area, we had hoped that this permit would significantly reduce the volumes of discharges of contaminated stormwater into receiving waters, thus reducing risk for listed salmon and steelhead. However the modified permit does not assure that water quality and water quantity conditions will be improved to meet the goals described in the permit or meet minimum conditions for protecting listed salmon and steelhead. The main issues that contribute to NMFS' concern are:

- 1) the proposed flow control standard is insufficient for salmon protection,
- 2) mitigation allowed to compensate for using the less protective flow control standard,
- 3) the same mitigation is already required under the retrofit program,
- 4) mitigation timing requirements, and
- 5) equivalency of this alternative approach.

Flow Control Using Existing Conditions

Ecology has allowed, and under this modification will continue to allow Clark County to permit development that matches discharge durations of flows from the developed site to durations of flows from the pre-developed site, based on existing conditions instead of the pre-developed, forested condition. In Ecology's 2002 review material provided to the Independent Science Panel, Ecology stated that the use of the pre-developed, forested conditions standard was "...the most appropriate assumption necessary to help achieve the federal and state water pollution statutory and regulatory requirements - to maintain beneficial uses". In addition, in 2009 Ecology issued a notice of violation to Clark County saying their use of this lesser flow control standard was inadequate, and stating that a flow control target is not defensible unless analyses of basin flows and stream geomorphology indicate it will produce a flow regime compatible with sustaining and restoring beneficial uses.

Also, in 2009 the Pollution Control Hearings Board (PCHB) found that even the flow control standard using the forested condition is not protective enough to constitute the maximum extent practicable (MEP) and all known, available, and reasonable methods to control runoff (AKART) standards necessary to meet Clean Water Act (CWA) requirements. The PCHB has therefore stated that more restrictions and/or requirements including Low Impact Development (LID) would be necessary to meet CWA requirements. Under this permit modification however, Clark County is under no requirement to include LID practices. NMFS fully agrees with the PCHB that flow control using pre-developed forested condition is not enough to achieve protection of beneficial uses, specifically for listed salmon and steelhead.

Another reason that the use of a protective flow control standard is so important to listed salmon is the influence of the volume of stormwater discharge on the quality of stormwater discharge. Recent science has shown that very low levels of dissolved copper and zinc in stormwater have adverse effects on salmon. Therefore, through Section 7 consultations under the ESA, NMFS has been requiring action agencies to provide stormwater treatment that meets protective biological effects thresholds for salmon (2.0 ppb for dissolved Cu and > 5.6 ppb for dissolved Zn). A recent example of this was for the Washington State Department of Transportation's Salmon Creek Interchange project in Clark County. Providing water quality treatment that is protective of listed salmon will continue to be a high priority stormwater issue, which can be more easily addressed if water quantity volumes are also protective of listed salmon. The use of this less protective flow control standard leads us to believe that more than minor detrimental effects to listed salmon and steelhead will not be avoided.

Mitigation for an Inadequate Flow Control Standard

Mitigation projects are intended to compensate for and offset additional degradation from development. However, many mitigation projects fail to deliver the intended benefits. Ecology's report, *Making Mitigation Work* (2008), highlights the spotty success record of aquatic mitigation projects in the State, and their common failure to achieve their intended goal of replacing lost or damaged aquatic resources adequately. The report also recognizes that land use planning and permit decisions are not adequately informed by an understanding of ecosystem processes or watershed conditions, and emphasizes the need for a watershed-wide approach to avoid impacts to resources that are difficult to replace and to assess mitigation opportunities and effectiveness. A final recommendation in the report was the need for a robust monitoring and adaptive management component of a mitigation program.

Findings contained in the *Making Mitigation Work* report are not included in the Clark County permit. The expectation that mitigation based solely on acreage and land use type will be effective to adequately reduce flow control effects is not supported by best available science. Listed salmon occur in specific stream reaches and systems. When development affects those reaches, the mitigation should address the same reach. Mitigation effectiveness will also be reduced or delayed by allowing the mitigation to be located in any stream basin throughout the Water Resource Inventory Area (WRIA),

whether listed salmon are present or not, and allowing the mitigation to occur up to two years later than the original effects. Allowing mitigation to occur anywhere in the same WRIA does not take into consideration differences in ecosystem processes and watershed conditions between the site where the development is occurring and the site where the mitigation occurs, and the resultant effects on listed salmon and steelhead near the development site. The combination of a lag time for implementation, and the opportunity to mitigate anywhere in the WRIA means that listed fish could be exposed to an accumulation of numerous unmitigated stormwater discharges for extended periods of time.

While the WRIA-wide mitigation area may appear to be making use of a watershed approach, effectiveness in addressing the needs of listed salmon will not be adequately considered. Instead mitigation opportunities will be selected based primarily on economic benefits. In addition, the Clark County program does not emphasize or even allow for the possibility of avoiding impacts via use of the stricter flow control standard in areas where effects to listed salmon are most problematic. Finally, the program does not include monitoring of project outcomes and the resultant effects on listed salmon, nor require applying an adaptive management approach if the program is not working as expected. For these reasons, we do not expect that more than minor detrimental effects to listed salmon and steelhead will be avoided with the use of this mitigation strategy.

Stormwater Mitigation used for two purposes

Clark County has an existing stormwater retrofit program which is required by the Phase I Permit and federal CWA requirements. NMFS is concerned that this permit modification would allow Clark County to use its existing retrofit program for flow control mitigation associated with new development as described above. In other words, the County would be allowed to use their required retrofit program, the purpose of which is to address effects from existing development, to fulfill a flow control requirement, the purpose of which is to address effects from new and redevelopment. This is proposed, despite federal rules that require the retrofit program to be separate from and in addition to the standards for new development and redevelopment.

While the federal rules are important to keep permittees from using one set of activities to meet two separate requirements with different purposes, the consequences of allowing this practice are more severe on the ground to listed salmon and steelhead. Clark County has a separate responsibility to reduce effects of existing development by constructing a certain number of retrofit projects. If this responsibility is combined with the flow control responsibility associated with new development and redevelopment, the number of actions or projects intended to reduce stormwater effects to listed species will be cut in half over the life of the permit. We believe allowing double credit for one set of mitigation actions will result in more than minor detrimental effects to listed salmon and steelhead.

Mitigation timing requirements

Clark County was required to be in compliance with their Phase I permit in August 2008. However, they are proposing to mitigate projects starting with those vested after April 2009, rather than projects vested starting in August 2008. It is likely the mitigation difference between these two starting dates is significant, both in the number of acres of required mitigation as well as the cost. However, no scientific justification or permit condition is provided for, or explains this delay. As such, adverse effects to listed salmon will be significantly increased.

Also, mitigation obligations will be triggered by the start of construction of a development project and the obligation must be met within two calendar years of project construction. It does not appear to us that mitigation requirements must take into consideration the lag time between when project stormwater effects start accruing to listed salmon and the completion date of the project. Nor will mitigation requirements take into consideration the time it will take for a mitigation project to become fully effective. This unmitigated lag time will become significant given the added lag time for mitigation sites to reach full function. For example, projects involving reforestation to help absorb stormwater runoff will not provide full function for several years post planting. Therefore, we expect that more than minor detrimental effects to listed salmon and steelhead will not be avoided using these mitigation timing requirements.

Equivalency of this alternative approach

The revised Appendix 10 of the Phase I Municipal Stormwater Permit describes Clark County's Stormwater Program (flow control/mitigation program) as achieving equivalency with Ecology's 2005 Stormwater Management Manual for Western Washington. This also has NMFS concerned because once jurisdictions' programs have been determined to be equivalent to the Manual, their programs can be adopted by other Municipal Stormwater permittees. In the worst case scenario, once incorporated into the revised permit, all of the 85 or so Phase II jurisdictions in Western Washington could adopt the same stormwater approach. Then, not only would the effects described above occur to listed species in the Clark County area, but could occur throughout Western Washington.

This could have dramatic effects on the listed salmon and steelhead populations as well as other ESA-listed species in Western Washington (expanding the number of listed salmon and steelhead populations affected to 16, and their critical habitat affected to 14, and adding effects to three threatened or endangered rockfish species, and the endangered southern resident Killer Whale). In addition, incorporating this approach across Western Washington would be contrary to the goals of numerous recovery plans for these species including those listed above as well as the Puget Sound Shared Strategy Recovery Plans. This approach also contradicts the stormwater goals and recommendations of the Puget Sound Partnership, who has put increased focus on this topic since stormwater was identified as the greatest contributor of the worst pollutants in Puget Sound (Hart

Crowser, Inc. et al. 2007). NMFS believes the result of this equivalency determination will be more than minor detrimental effects to listed salmon and steelhead.

In conclusion, based on the above factors, NMFS finds that the proposed modified Phase I permit will have more than minor detrimental effects to listed salmon and steelhead and designated critical habitat in the Clark County, and possibly, throughout the Western Washington permit area. It is our understanding that EPA can use their authority under Section 402(d) of the CWA to object to a State permit where that permit would not comply with CWA standards that are necessary to protect threatened and endangered species. As such, we strongly encourage the EPA to object to the issuance of this permit.

We thank you for the opportunity to provide these comments under the process identified in the MOA. We look forward to continued coordination with EPA and Ecology on stormwater permits in Washington State, in part to meet the needs of listed salmon. Please call me at (360) 753-6054 if you would like to discuss this issue further.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven W. Landino". The signature is fluid and cursive, with the first name "Steven" and last name "Landino" clearly distinguishable.

Steven W. Landino
Washington State Director
for Habitat Conservation

cc: Ken Berg, USFWS
David Dicks, Puget Sound Partnership

References:

Hart Crowser, Inc. 2007. Control of Toxic Chemicals in Puget Sound. Phase 1: Initial Estimate of Loadings. Prepared for Washington State Department of Ecology, U.S. Environmental Protection Agency, and Puget Sound Partnership. Publication No. 07-10-079.

Washington State Department of Ecology. 2008. Making Mitigation Work – the Report of the Mitigation that Works Forum. Prepared under Ecology contract #C0800201 by ESA and Ross & Associates Environmental Consulting, Ltd. Publication No. 08-06-018. 32 pgs.