



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Washington Fish and Wildlife Office
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In Reply Please Refer To:
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DEC 23 2011

Kelly Susewind
Water Quality Program Manager
Washington State Department of Ecology
ATTN: Foroozan Labib
PO Box 47696
Olympia, Washington 98504-7696

Dear Mr. Susewind:

On November 18, 2011, our office received notification from the Washington State Department of Ecology (Ecology) of their intent to reissue a modified municipal stormwater permit to the Washington State Department of Transportation (WSDOT).

The WSDOT's National Pollutant Discharge Elimination System and State Waste Discharge Permit for Municipal Stormwater (Permit No. WAR043000A) was issued by Ecology on February 4, 2009, and expires on March 6, 2014. Ecology issued a minor permit modification on May 1, 2009, and a major permit modification on May 5, 2010. Ecology now proposes a second, major permit modification, and has requested public review and comment in advance of the reissuance scheduled for early 2012.

The stated reasons for modifying and reissuing the permit include the need for permit requirements related to Total Maximum Daily Loads; proper alignment with proposed new and refined permit requirements for Phase I and Phase II operators of municipal separate storm sewer systems (MS4s); and the WSDOT and Ecology intent to use a revised and updated 2011 Highway Runoff Manual (HRM).

Staff from our office reviewed all or portions of the following documents:

- Statement of Basis for WSDOT Permit Modification in 2011
- Public Review Draft of Permit No. WAR043000A with Changes (November 16, 2011)
- Draft Highway Runoff Manual M 31-16.03 (November 2011)
- WSDOT 2011 Annual Stormwater Report (October 2011)

During October of this year, Ecology announced their intent to reissue Phase I and Phase II stormwater permits for operators of MS4s. The public review and comment period for the draft Phase I and Phase II permits closes February 3, 2012. Staff from our office are reviewing the draft permits and supporting documentation, and we expect to offer comments in a separate letter prior to the close of the comment period.

BACKGROUND

Ecology has stated, “the focus of this permit is to prevent further water quality impairment due to new stormwater discharges and [to] make reasonable progress in addressing existing sources of water quality impairment.” (WSDOT Fact Sheet, p. 24; May 21, 2008) We are in fundamental agreement that protecting the beneficial uses of the State’s waters, especially aquatic life uses, requires a permit framework that addresses both new and existing sources of water quality impairment.

Ecology has reported that the U.S. Environmental Protection Agency is currently engaged in a review of Federal stormwater rules, and is considering “options for establishing and implementing a municipal program to reduce discharges from existing development.” (Phase I Fact Sheet, p. 19; November 4, 2011) We agree that source control requirements, requirements for proper inspection and maintenance of existing facilities, and minimum requirements for actions that would redevelop and/or replace existing infrastructure, are absolutely essential to achieving the primary goals established for Ecology’s MS4 permit program.

The Puget Sound Partnership has drafted a 2012 Puget Sound Action Agenda, and has specifically identified “Problems Caused By Existing Development” as a focus for managing stormwater runoff at the site and landscape scales (Draft Action Agenda, December 9, 2011; pp. 179, 186-188). The draft Action Agenda calls for stormwater retrofits, regular and enhanced maintenance to remove legacy pollutant loads, and new or revised policies addressing redevelopment:

- Retrofits – “an estimated \$3–15.6 billion is needed to upgrade existing stormwater systems within municipal permit areas”, “prioritization is necessary given the huge investment required”, and “new, adequate funding [is needed] to ensure significant progress is made”.
- Maintenance – part of the problem is due to “past underfunded maintenance of stormwater systems”, “acceleration of the maintenance, inspection, and pollutant source investigation elements ... is recommended”, “stormwater systems [must be] regularly inspected and maintained to [ensure] function to engineering design standards”, and there is a need to “assess ... and carry out removal of legacy loads from portions of systems”.
- Redevelopment – “ensure that redevelopment policies ... are fully implemented and bring about improvements to runoff from existing development”, and “revise policies as needed ... to upgrade stormwater controls on existing development”.

We agree that these draft Action Agenda priorities are important. Furthermore, since Ecology is now considering changes to each of the WSDOT, Phase I, and Phase II MS4 permits, we believe

the timing is right to ensure the best possible alignment with these long term Action Agenda priorities.

COMMENTS FOR PUBLIC REVIEW DRAFT PERMIT NO. WAR043000A

We agree that the permit modifications implemented during 2009 and 2010, and the permit modifications now pending, are appropriate and will meaningfully improve controls for discharges from the WSDOT's regulated stormwater systems. We support the new and revised permit requirements addressing Total Maximum Daily Loads, a WSDOT program for stormwater monitoring, source control, and maintenance and maintenance accountability.

- S5. Stormwater Management Program (p. 12). "WSDOT shall request adequate resources from the Legislature to maintain compliance with this permit ... WSDOT shall track the cost of development and implementation of the [Program] required by this section". COMMENT – We believe that the WSDOT and Ecology have a shared responsibility to communicate with the Legislature regarding funding needs in support of stormwater systems management and control. We believe that a joint effort to communicate the importance of adequate funding is more likely to succeed.
- S7. Monitoring (pp. 13-29). COMMENT – We believe that Ecology and the WSDOT have outlined an appropriately focused and scaled strategy for obtaining reliable program effectiveness data. We appreciate the attention to annual average daily traffic, quantification of toxics, and "first flush" and whole effluent toxicity. When consulting with the WSDOT on recent, large capital improvement projects (e.g., the State Route 520 Bridge Replacement), we have advocated for Best Management Practices (BMP) effectiveness monitoring. We hope and expect that the WSDOT will continue to seek and take the best available opportunities for obtaining performance data specific to the highway environment.
- G2. Proper Operation and Maintenance (p. 33). COMMENT – See comments below, for Appendix 7. Stormwater Management Program Plan. Maintenance and Maintenance Accountability.
- Appendix 7. Stormwater Management Program Plan. Stormwater Facilities Inventory and Documentation (pp. 2-8, 2-9). COMMENT – We believe that the WSDOT is making good progress where facilities inventory and documentation is concerned.
- Appendix 7. Stormwater Management Program Plan. Stormwater Management for New Facilities (pp. 5-1 thru 5-4). COMMENT – We support program elements directed at field-verification of the as-built condition, and digital documentation of new features and locations.
- Appendix 7. Stormwater Management Program Plan. Stormwater BMP Retrofit for Existing Facilities (pp. 6-1 thru 6-7). COMMENTS – This program element outlines a strategy for implementing "stand-alone", "project-triggered", and "opportunity-based" stormwater system retrofits. We believe that the strategy considers the correct factors when prioritizing "stand-alone" and "opportunity-based" retrofits. Furthermore, we appreciate the flexibility built-into the strategy for satisfying "project-triggered" retrofit obligations, and agree that retrofit dollars should be spent at high-priority locations where

they are likely to provide the greatest net benefit. However, given the context previously described (see BACKGROUND), we question the project thresholds currently in-use for applying Minimum Requirements 5 (runoff treatment) and 6 (flow control) to replaced impervious surfaces. We believe, that where capital improvement projects create more than 5,000 square ft of new pollution-generating impervious surface, the WSDOT should be held responsible for applying and meeting Minimum Requirements 5 and 6 for an area equivalent to all of the new, as well as all of the replaced impervious surfaces. We understand this would have the effect of increasing the size of WSDOT's "project-triggered" retrofit obligations for some capital improvement projects, but we doubt in most cases that this change would unreasonably increase associated costs. [Note: please see our additional, related comments for the HRM.]

- Appendix 7. Stormwater Management Program Plan. Maintenance and Maintenance Accountability. Regarding Street Sweeping Operations, and Catch Basin and Inlet Maintenance (pp. 7-3 thru 7-5). COMMENT – For the current reporting period, WSDOT reports successful meeting of funded levels of service (LOS) targets (WSDOT 2011 Annual Stormwater Report, pp. 44, 47). We acknowledge and support the WSDOT's maintenance efforts to implement source control. However, the current legislatively funded and mandated LOS target for catch basin maintenance is set at "D+" (WSDOT 2011 Annual Stormwater Report, p. 47). Ecology and the WSDOT should evaluate the stormwater control benefits that could be achieved with a higher-performing LOS, and should consider whether funding at a higher LOS target is warranted and feasible.
- Appendix 7. Stormwater Management Program Plan. Maintenance and Maintenance Accountability. Regarding Maintenance of Stormwater Treatment and Flow Control BMPs (pp. 7-5, 7-6). COMMENT – The permit requires WSDOT to annually inspect permanent stormwater treatment and flow control BMPs beginning March 2012. These inspections may trigger the need for follow-up maintenance and corrective work on schedules outlined by the permit. WSDOT reports that funds have been secured to implement the inspection program, and WSDOT will document inspections, follow-up maintenance activities, and any needed capital improvements (WSDOT 2011 Annual Stormwater Report, pp. 48, 49). The current legislatively funded and mandated LOS target for stormwater BMP maintenance is set at "C". We acknowledge and support the WSDOT's efforts to implement an effective stormwater BMP inspection and maintenance program. We hope and expect that Ecology and the WSDOT will use inspection and maintenance records to evaluate LOS targets for benefits and feasibility.
- Appendix 7. Stormwater Management Program Plan. Maintenance and Maintenance Accountability. Regarding the Maintenance Accountability Program and Maintenance Program Evaluation (pp. 7-13, 7-14, 7-19, 7-20). COMMENT – The WSDOT uses random condition surveys to evaluate and compare performance against LOS targets. Ecology and the WSDOT should ensure that random condition surveys accurately depict source control, inspection, and maintenance performance trends for the MS4 system(s) as a whole. The WSDOT should identify and report any persistent barriers to successfully meeting funded and mandated LOS targets.

- Other Comments for Public Review Draft Permit No. WAR043000A. Regarding Discharges to MS4s with Combined Sewer Overflows. COMMENT – We believe that the permit and HRM should speak to the applicable requirements where WSDOT infrastructure discharges to systems conveying Combined Sewer Overflows.

COMMENTS FOR DRAFT HIGHWAY RUNOFF MANUAL

- Chapter 2. Stormwater Planning and Design Integration. Regarding Maintenance Review (p. 2-8). “Overall maintenance costs must be considered when selecting BMPs ... including personnel, equipment, and long term costs through the BMP’s expected life cycle”. COMMENT – We agree that stormwater systems planning and design should consider long term, full life-cycle costs, beyond the initial costs of construction. We encourage Ecology and the WSDOT to further examine life-cycle costs and long term performance of BMPs widely employed in the highway environment, including media filter drain, compost-amended vegetated filter strips, and constructed stormwater treatment wetlands.
- Chapter 3. Minimum Requirements. Regarding Project Thresholds for Applicability (pp. 3-2 thru 3-7). Project thresholds currently in use for applying the Minimum Requirements state that for road-related projects, runoff from the replaced hard surfaces (including pavement, shoulders, curbs, and sidewalks) shall meet all the Minimum Requirements if the new hard surfaces total 5,000 square feet or more and total 50 percent or more of the existing hard surfaces within the project limits. COMMENTS – Given the context previously described (see BACKGROUND), we question the project thresholds currently in use for applying Minimum Requirements 5 (runoff treatment) and 6 (flow control) to replaced impervious surfaces. We believe that where capital improvement projects create more than 5,000 square ft of new pollution-generating impervious surface, the WSDOT should be held responsible for applying and meeting Minimum Requirements 5 and 6 for an area equivalent to all of the new, and all of the replaced impervious surfaces. We understand this would have the effect of increasing the size of WSDOT’s “project-triggered” retrofit obligations for some capital improvement projects, but we doubt in most cases that this change would unreasonably increase associated costs.
- Chapter 3. Minimum Requirements. Regarding Project Thresholds for Applicability (pp. 3-2 thru 3-7). COMMENTS – The same project thresholds for applying the Minimum Requirements can be found in Ecology’s new, draft Stormwater Management Manual for Western Washington (November 2011; Publication No. 05-10-029; pp. 2-10 thru 2-17). Here Ecology has explained, “Redevelopment projects have the same requirements as new development projects in order to minimize the impacts from new surfaces. To not discourage redevelopment projects, replaced surfaces aren’t required to be brought up to new stormwater standards unless the noted cost or space thresholds are exceeded ... This is consistent with other utility standards” (p. 2-15). We request a fuller explanation for how Ecology has decided on the “50 percent threshold” where existing, new, and replaced hard surfaces are concerned. Achieving the primary goals established for Ecology’s MS4 permit program will require a concerted effort to retrofit and upgrade existing stormwater systems within municipal permit areas. Road-related projects are generally planned and designed in response to known system safety or mobility

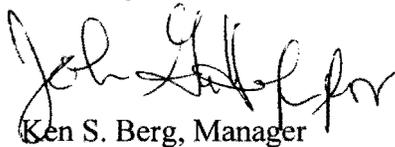
deficiencies, and we doubt that the costs associated with retrofitting replaced impervious surfaces act as a significant disincentive for redevelopment or system improvements. We appreciate the flexibility built-into the HRM for satisfying “project-triggered” retrofit obligations, and agree that retrofit dollars should be spent at high-priority locations where they are likely to provide the greatest net benefit.

- Chapter 3. Minimum Requirements. Operation and Maintenance (p. 3-30).
COMMENT – We agree that the WSDOT should develop and maintain individual operation and maintenance manuals (or plans) for constructed stormwater facilities and BMPs.
- Chapter 5. Stormwater BMPs. BMP Validation and Cost-Effectiveness (pp. 5-24, 5-25).
COMMENT – We agree that long term maintenance requirements must be a basic consideration in design and in determination of costs. We encourage Ecology and the WSDOT to further examine and refine life-cycle costs and long term performance of BMPs widely employed in the highway environment. Better, more complete cost-effectiveness data are needed to improve decision-making by project designers and program-level managers.

We appreciate the opportunity to review and offer comments for the WSDOT’s National Pollutant Discharge Elimination System and State Waste Discharge Permit for Municipal Stormwater (Permit No. WAR043000A), and the revised and updated 2011 HRM. Ecology and the WSDOT have made good progress refining and implementing the MS4 permit and program. We are encouraged by the renewed focus and attention on monitoring, source control, and maintenance and maintenance accountability, since we expect all of these elements are essential.

If you have any questions, if our comments require further explanation, or you would like to discuss the MS4 permit and program, please contact Ryan McReynolds at (360) 753-6047, or John Grettenberger at (360) 753-6044, of this office.

Sincerely,



Ken S. Berg, Manager
Washington Fish and Wildlife Office

cc:

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