



# Focus on Highway Runoff Manual

from Ecology's Water Quality Program

## Ecology statement concerning use by local governments of the updated (2004) WSDOT Highway Runoff Manual

The Department of Ecology has given a conditional approval to the Washington State Department of Transportation's (WSDOT) 2004 *Highway Runoff Manual* (HRM). Local governments may use the HRM to identify stormwater management strategies for their road systems – particularly arterials and highways, provided:

1. All the conditions listed below are considered;
2. The HRM is used only for road and other linear transportation projects;
3. The exemption in Section 2-2.2 for upgrades from bituminous surface treatment (BST) to other surfaces is not allowed for non-WSDOT projects (at the request of county engineers, Ecology exempted the conversion of gravel roads to BST in the 2001 *Stormwater Management Manual for Western Washington*. The upgrade of BST roads to other surfaces is specifically not exempt); and
4. All of the HRM requirements, including maintenance, post-construction requirements, and requirements from other WSDOT guidance documents are followed.

We encourage local governments to consider the Department of Ecology's 2001 *Stormwater Management Manual for Western Washington* as more appropriate guidance for other types of land development – residential, commercial, and industrial – including the collector and distributor roads serving those developments.

Ecology's approval of the HRM was "conditional" for the reasons listed below. In deciding how to proceed, local governments must make a policy decision involving legal and cost implications and risks to natural resources within their jurisdiction.

1. **Use of the existing project site condition as the target for flow control**  
WSDOT proposes to use the existing site condition as the pre-development condition to be matched when complying with the minimum requirement for flow control. Ecology's manual cites the historic land cover condition as the pre-development condition to be matched.

In the absence of basin-specific studies, Ecology continues to recommend use of the historic land cover condition as the best choice to provide adequate protection of stream channels from accelerated erosion. Local governments may develop a basin-specific flow control strategy that identifies a level of control that will protect stream channel geomorphology and that is consistent with protecting the beneficial uses of the stream. Establishing such a strategy involves hydrogeologic stream channel assessments, and use of continuous runoff modeling to estimate the success of alternative flow control standards and strategies. In many cases, using the existing land cover condition as the

target for flow control will perpetuate runoff conditions that are continuing to degrade the stream channel and put natural resources, including salmonids, at ongoing risk of survival.

Ecology intends to seek public input on a proposal to amend the 2001 manual recommendation for use of the historic land cover condition as the pre-development condition to be matched. The amendment will involve identification of certain basin conditions under which it may be reasonably assumed that use of the existing land cover condition will likely provide sufficient channel protection from accelerated erosion due to high flows.

In the interim, Ecology has informed WSDOT that it will provide a case-by-case assessment of the appropriate flow control standard for any project that: 1) requires a permit or a concurrence from the Department of Ecology, and 2) does not assume the historic land cover condition for flow control.

**2. Use of 30,000 Average Daily Traffic (ADT) as the threshold for applying enhanced treatment**

The HRM proposes to use basic treatment BMPs for all roads that do not exceed 30,000 Average Daily Traffic. The 2001 Ecology manual recommends use of enhanced treatment (a higher level of treatment) for all arterials and highways that discharge to surface waters that are not listed in Appendix 1-C: Basic Treatment Receiving Waters, unless the receiving water is not fish-bearing and not tributary to fish-bearing waters.

Ecology considers use of road ADT as a legitimate basis for determining whether to use Basic or Enhanced Treatment requirements. The amount of metals loading from a road is correlated with ADT. Upon review of available information, WSDOT proposed to set the threshold for applying Enhanced Treatment at 30,000 ADT. Ecology did not concur that 30,000 ADT was the appropriate threshold to use, but has allowed WSDOT to apply that threshold for projects going to advertisement for bids in the '05 – '07 biennium. Meanwhile, Ecology will search for additional data upon which to base a decision. We ask that anyone who has data regarding dissolved metals concentrations in stormwater runoff from roads consider sharing that information with Ecology. Ecology will seek public input concerning establishment of an ADT threshold for applying enhanced treatment.

**3. Exemption from flow control requirements for discharges to certain waters**

WSDOT does not apply flow control on stormwater discharges to certain waters. A list of those waters has been used by WSDOT for nearly a decade. The Ecology 2001 manual does not exempt discharges to those waters from flow control. Ecology took that position because the list was not supported by a science-based justification.

Ecology has allowed WSDOT to continue to use its existing exempt rivers list until ongoing studies are completed that will propose an updated list of waters. Ecology will distribute and ask for public input on the updated list and its basis. After considering input, Ecology will decide whether to amend its manual by publishing a list of waters for which flow control of stormwater discharges is not necessary provided other criteria are also met.

Final note: For municipalities subject to future Phase I or II municipal stormwater permits, this guidance will be superseded by the requirements of those permits.

For more information, contact Ed O'Brien at 360-407-6438, or [eobr461@ecy.wa.gov](mailto:eobr461@ecy.wa.gov).

*If you need this information in an alternate format, please contact us at 360-407-6401. If you are a person with a speech or hearing impairment, call 711 or 800-833-6388 for TTY.*