

# LTAP

Local Technical  
Assistance  
Program

WSDOT And WSDOT Local Programs LTAP Center present:

## 2014 Highway Runoff Manual Training

Wed & Thur, June 22-23, 2016 (#2605CN)  
Tacoma

Scottish Rites Masons Building, West Room  
817 South Vassault Street, Tacoma, WA 98465  
Ph. 253-565-0272\*

(\*The phone number above may be used in case of emergency to contact a student in the class.)

**Time: 8:00 a.m. to 4:30 p.m.**  
**Cost: \$200 Consultants**  
**Free to WSDOT and Local Agencies**

**Two-Day Course**  
**Class Size: 60**

**Cancellation Policy:** We anticipate full classes. Initial registration for each consulting firm and local agency will be limited to three employees per class. Should additional openings exist, those on the waiting list will be registered and notified via email three weeks prior to the class. Please notify the LTAP office **at least** one week prior to your class date if you will be unable to attend. For consultants, if you do not notify us, and don't show up to class, we will bill your firm for the full price. You are always welcome to send someone in your place. Phone number: 360-705-7355 or [NoahL@wsdot.wa.gov](mailto:NoahL@wsdot.wa.gov). We want to give everyone an opportunity to attend. Please contact Alex Nguyen at [Nguyeal@wsdot.wa.gov](mailto:Nguyeal@wsdot.wa.gov) for details.

### Target Audience

This training is for WSDOT, local agencies, and consultants. It is targeted toward engineers, designers, environmental professionals, project managers, and planners whose work on transportation-related stormwater issues requires use of Washington State Department of Transportation's (WSDOT) *Highway Runoff Manual* (HRM). As an obligation of WSDOT's NPDES municipal stormwater permit, this training is required for WSDOT staff involved in stormwater facility design on WSDOT projects. Similarly, consultants involved in stormwater facility design are required to have this training prior to working on WSDOT projects.

### Description

Since 2008, the Washington State Department of Transportation made substantial changes to the *Highway Runoff Manual* (HRM), which is the primary source of stormwater planning and design requirements for highway-related work in the state of Washington. This HRM training covers updates from the 2008 HRM to the 2014 HRM. The HRM updates, combined with a high volume of transportation work occurring in the state, has led WSDOT to develop an internal agency training program for their employees on the revised HRM. WSDOT is now offering this same training to consultants and local agency representatives whose responsibilities require them to use WSDOT's HRM.

#### First Day

The focus of the first day is on the HRM's Threshold Discharge Area (TDA) concept and delineation and Chapter 3 (Minimum Requirements). Participants will go through several examples, as well as perform a project's TDA delineation. This course covers: the purpose, organization, and use of the HRM; WSDOT's approach to stormwater management and planning; TDA use and delineation; key terms used in the HRM; and the thresholds and minimum requirements employed during a site's predesign analysis.

#### Second Day

The focus of the second day is on the HRM's Chapter 2 (Stormwater Planning and Design Integration), the Chapter 3 retrofit requirements for WSDOT projects in the Puget Sound Basin, and Chapter 5 (Best Management Practices), performing site assessments and specifically selecting the best management practices (BMPs) that best suit a designer's application. Chapter 5 also includes the Low Impact Development (LID) BMP feasibility and selection process. Participants will go through several exercises to help familiarize



Washington State  
Department of Transportation

them with the HRM's BMP selection process. Participants will also learn about new stormwater analysis tools required for use on WSDOT projects. This course covers: site assessment; the types of BMPs and their functions; the BMP selection process including LID BMPs; stormwater retrofitting requirements, application of the *Engineering and Economic Feasibility (EEF) evaluation*, stormwater analysis tools, and WSDOT stormwater BMP inventory efforts.

WSDOT maintains a database of all professionals who have successfully completed the training. This database may be referred to by WSDOT when making future work assignments, when reviewing future requests for proposals, and it may be used in the proposal ranking criteria for future projects. This training is mandatory for engineers and professionals who work on WSDOT projects involving stormwater planning, designs, and for those interested in working on WSDOT projects in the future.

## ***Certificate of Completion***

Participants are required to attend the entire two days to receive a Certificate of Completion number that covers stormwater design to the 2014 HRM. This number is required on submitted WSDOT hydraulic reports.

## ***Class Materials Needed***

- **2014 Highway Runoff Manual.** It is nice to have but not required to have an electronic copy of the 2014 manual. It is available on-line and may be downloaded at this link: <http://www.wsdot.wa.gov/Environment/WaterQuality/Runoff/HighwayRunoffManual.htm>  
The instructors will not provide a copy of the 2014 *Highway Runoff Manual* for use in class.
- **Please bring a scale or ruler and calculator.**

## ***Instructors***

The instructors consist of WSDOT staff specialists who support the 2014 Highway Runoff Manual.

**Note to WSDOT Employees:** Sign up for these classes are in LMS. You will receive credit on your WSDOT training matrix if you attend class and sign the roster. You will also be issued a certificate upon successful completion of the course.

## ***Registration- Non-WSDOT***

Please register on-line using this link: [Online Registration Form](#), or key this web address into your browser: <http://fmapps.wsdot.wa.gov/fmi/xsl/LTAPTraining/registration.xsl?-db=Web%20Registration&-lay=Web%20Layout&-view>

You will receive an email notification with driving directions to the training site when we process your registration request. If you do not receive this email notification within a day or two, you may not be registered and should contact us by email or phone. If you are unable to attend, someone else from your agency may attend in your place.

**Consultants: Please do not prepay**, an invoice will be mailed to you after the class for the \$200 registration fee.

## ***Questions***

For information on course content, contact Alex Nguyen 206-440-4537 or [Nguyeal@wsdot.wa.gov](mailto:Nguyeal@wsdot.wa.gov)

For all other information on this training, registration assistance or cancellations, contact the LTAP Center at Ph. 360-705-7355 or [LTAPTraining@wsdot.wa.gov](mailto:LTAPTraining@wsdot.wa.gov)

**Disability accommodations provided upon request.**

Visit the

**Washington State LTAP Center's Web Page:**

<http://www.wsdot.wa.gov/LocalPrograms/Training/default.htm>