Meeting Objectives

- Review project history and status
- Review draft SWMMEW update
  - Requirements/Guidance that has NOT changed
  - Key changes by chapter
- Answer any initial questions about the draft SWMMEW
- Discuss review process

Project Team

Ecology:
- Abbey Stockwell (Project Manager)
- Doug House
- Bill Moore
- Amanda Nye
- Vince McGowan

Consultant Team:
- Rebecca Dugopolski, Herrera (Project Manager)
- Robin Kirschbaum, RKI
- Erich Frappier, AHBL
- Jon Rudders, Geosigners
- Jay Shain, MCHW
- Christine Sophoc, CMS Writing & Editing Services

Eastern WA Steering Committee:
- Colleen Little, Spokane County (Chairperson)
- Danielle Mullen, City of West Richland
- Tom Wachholder, City of East Wenatchee
- Jon Morrow, City of Ellensburg
- Shilo Sprague, City of Pullman
- Mark Melton, City of Richland
- Adrienne Pearson, City of Spokane
- Heather Killgore, Grant Conservation District
- Brad Daly, City of Walla Walla
- Seth Walker, Walla Walla County
- David Haws, Yakima County
- Alex Nguyen, WSDOT
- Dean Smith, Department of Corrections
- Jennifer Lange, Douglas County
Project Overview

Mission Statement

“Complete a focused update of the Manual via an open and collaborative process to include the latest advances in stormwater management, needed clarifications, and improved ease of use.”

Project Objectives

• Complete a focused update of the Manual
• Open and transparent public process
• Work closely with the Eastern Washington Steering Committee
• Promote public participation to solicit feedback and help improve adoption and use of the Manual
• Provide a user-friendly on-line version of the Manual
Project Phasing

Phase 1 – 2015-17 Biennium (through 6/30/17)
- Task 1 – Entrance Conference
- Task 2 – Project Kickoff Meeting
- Task 3 – Major Project Workshop
- Task 5A – Quality Control
- Task 6A – Updates to the Stormwater Manual
  - Issue tracking log spreadsheet summarizing and organizing input received
- Task 7A – Public Involvement
  - Newsletter
  - Website
  - Webinar

Phase 2 – 2017-19 Biennium (7/1/17 through 10/31/18)
- Task 4 – Coordination Meetings with Ecology and the Steering Committee
- Task 5B – Quality Control
- Task 6B – Updates to the Stormwater Manual
  - Full Working Draft
  - Internal Public Review Draft
  - External Public Review Draft
  - Final Draft Manual
  - Final Manual
- Task 7B – Public Involvement
  - Newsletter (2)
  - Public meeting #1 – Spokane
  - Public meeting #2 – Richland
  - Webinar

Key Milestone Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Work Product or Meeting</th>
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<tr>
<td>11/22/17</td>
<td>Full Working Draft Manual to Steering Committee</td>
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<tr>
<td>12/5/17</td>
<td>Steering Committee conference (Chapter 1 and Glossary)</td>
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<tr>
<td>12/12/17</td>
<td>Steering Committee conference (Chapter 2)</td>
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<td>1/4/18</td>
<td>Steering Committee conference (Chapters 3 and 4)</td>
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<td>1/11/18</td>
<td>Steering Committee conference (Chapter 5)</td>
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<td>1/17/18</td>
<td>Steering Committee conference (Chapters 6 and 7)</td>
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<td>1/24/18</td>
<td>Steering Committee conference (Chapters 8 and 9)</td>
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<td>Steering Committee comments on the Full Working Draft Manual due</td>
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<td>3/2/18</td>
<td>Public Review Draft Manual (internal to Steering Committee)</td>
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<td>4/25 &amp; 4/26/18</td>
<td>Steering Committee meeting (Moses Lake)</td>
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<td>4/26/18</td>
<td>Steering Committee comments on the Updated Working Draft Manual due</td>
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<tr>
<td>6/12/18</td>
<td>Public Meeting (Spokane)</td>
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<td>6/26/18</td>
<td>Public Meeting (Richland)</td>
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<td>7/10/18</td>
<td>Public Meeting (webinar)</td>
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<tr>
<td>8/9/18</td>
<td>(proposed) Steering Committee meeting (Moses Lake)</td>
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<tr>
<td>10/31/18</td>
<td>Final Manual – online version posted on Ecology’s website</td>
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Legend
- Deliverable
- Meeting
- Surveys/Start

Opportunities for Public Input

- Project Webinar June 2017
- Public Review Comment Period May – July 2018
- Public Meetings/Webinar June – July 2018
### Comments Received to Date

<table>
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<tr>
<th>Meeting/Review Stage</th>
<th>Date</th>
<th>Number of Participants</th>
<th>Number of Comments</th>
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<td>Project Kickoff Meeting</td>
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<td>Project Webinar</td>
<td>6/27/17</td>
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<td>Revised Draft Manual Sections</td>
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<td>S.C. Meeting Follow-up</td>
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<td>S.C. Conference call follow-up</td>
<td>12/5/17 through 1/17/18</td>
<td>Various</td>
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<td>Working Draft Manual</td>
<td>2/2/18</td>
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<td>Various (consultant team, direct outreach, etc.)</td>
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546 total comments

### Manual Updates

[Image of a street scene with a curb cut and sidewalk]

**Manual Updates**

[Logos of Eastern Washington Stormwater Group]
Public Review Draft
Not changed

Core Elements
Thresholds for new and redevelopment
Design storms
Isopluvial maps

Public Review Draft
Key Changes

Chapter 1 – Introduction
- Clarified regulatory and permit requirements
- Added WSDOT link for latest available data on highway stormwater runoff

Public Review Draft
Key Changes

Chapter 2 – Core Elements for New Development and Redevelopment
- Shifted exemptions forward, clarified where needed
- Updated and shifted definitions
- Modified flow charts to clarify core element applicability
- Expanded list of responsibilities for local jurisdictions
- Incorporated errata
Chapter 3 – Preparation of Stormwater Site Plans
- Provided more direction on preparation of a Stormwater Site Plan
- Added guidelines for Small Project Construction Stormwater Pollution Prevention (formerly BMP C180 in Chapter 7)
- Incorporated the LID site planning guidelines from the Eastern WA LID Manual into Appendix 3D

Chapter 4 – Hydrologic Analysis and Design
- Added new tables summarizing the advantages, disadvantages, and applicability for:
  - Hydrologic analysis methods
  - Average annual precipitation
  - Design storm distributions
- Various streamlining edits
- Moved hyetographs to Appendix 4D

Chapter 5 – Runoff Treatment BMP Design
- Updated BMP Template
- Added tables summarizing BMP applicability
- Streamlined the stepwise procedure for BMP design in text and tables
- Added cold weather, arid, and semi-arid climate considerations
- Incorporated errata for oil control guidance
- Clarified metals treatment requirements
- Updated Site Suitability Criteria
- Added screening criteria for infiltration BMPs
- Added BMPs:
  - Bioswale
  - Permeable Pavement
  - Compost-Amended Vegetated Filter Strip (CAVFS)
  - Media Filter Drain
Chapter 5 – Runoff Treatment BMP Design (cont.)

- Updated BMP T5.100: API (baffle type) Separator Bay design criteria
- Incorporated updated UIC guidance
- Updated Emerging Technologies for alignment with the SWMM WW and TAPE
- Added new appendix with planting recommendations for vegetated BMPs

Chapter 6 – Flow Control BMP Design

- Updated BMP Template (same as Chapter 5)
- Added BMPs from the Eastern WA LID Manual
  - Rain Water Harvesting
  - Permeable Pavement
  - Amending Construction Site Soils
  - Trees
  - Vegetated Roofs
  - Minimal Excavation Foundations
- Updated dispersion BMP design guidance based on WSDOT HRM

Chapter 6 – Flow Control BMP Design (cont.)

- Updated guidance for determining design infiltration rates
- Updated Appendix 6B (Storm Drainage Design Guideline for Site Characterization) to add:
  - Small-Scale Pilot Infiltration Test (PIT)
  - Large-Scale PIT
  - Recommended laboratory procedures
Public Review Draft
Key Changes

Chapter 7 – Construction
Stormwater Pollution Prevention
- Added 13th element (Protect LID BMPs [Infiltration BMPs])
- Incorporated errata
- Edits to align with the SWMMWW (‘E’ flag for EWA specifics)
- Added BMPs:
  - Material Delivery, Storage, and Containment
  - Concrete Washout Area
  - Vegetative Filtration
  - Treating and Disposing of High pH Water
- Removed BMPs:
  - Stake and Wire Fence
  - Payment of Erosion Control Work
  - Straw Bale Barrier

Photo courtesy of Herrera

Chapter 8 – Source Control
- Added BMP numbering
- Edits to align with the SWMMWW (‘E’ flag for EWA specifics)
- Added BMPs for:
  - Formation of a Pollution Prevention Team
  - Good Housekeeping
  - Pools, Spas, Hot Tubs, and Fountains
  - Dock Washing
  - Color Events
  - In-Water Fueling
  - Temporary Fruit Storage
  - Potable Water Line Flushing, Water Tank Maintenance, and Hydrant Testing
  - Well, Utility, Directional and Geotechnical Drilling
  - Roof Vents
  - Nurseries and Greenhouses

Photo courtesy of Herrera

Glossary
- Deleted unused terms
- Updated definitions for consistency with the Eastern WA Phase II Permit
- Updated definitions based on errata
- Added applicable terms from the SWMMWW and the Eastern WA LID Manual

Bibliography
- Added applicable references from the SWMMWW, WSDOT HRM, and Eastern WA LID Manual
THANK YOU!

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