

# Municipal Stormwater Permits

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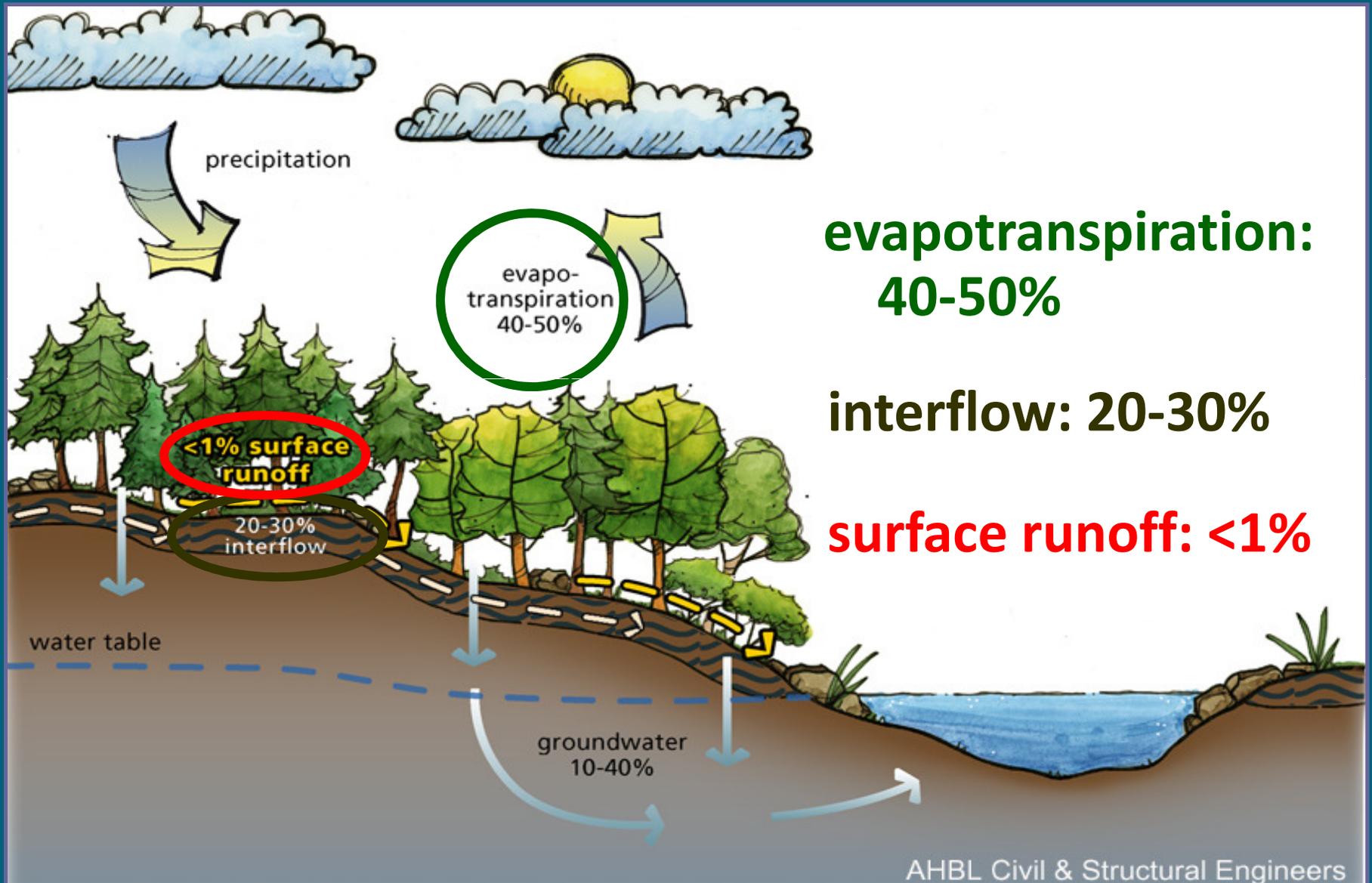
# The Stormwater Problem

Stormwater is the leading contributor to water quality pollution in our urban and suburban waters

- Dirt, soil and sediments
- Garbage, trash and litter
- Oils and road grime
- Bacteria and pathogens
- Nutrients
- Metals
- Toxics

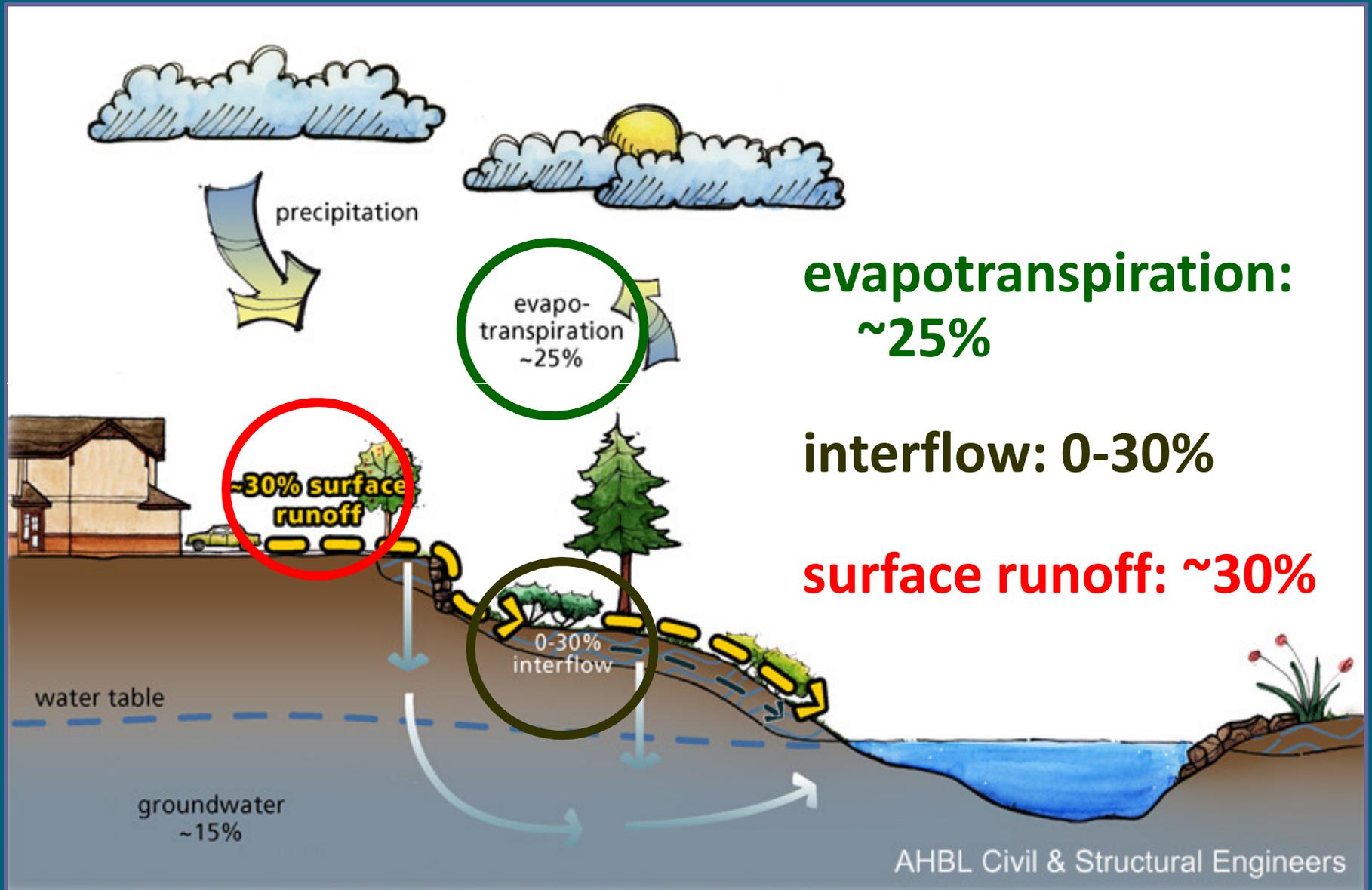


# Watershed Hydrology **BEFORE** Development



From: *Low Impact Development Technical Guidance Manual for Puget Sound, January 2005*

# Watershed Hydrology **AFTER** Development



From: *Low Impact Development Technical Guidance Manual for Puget Sound*, January 2005

# Outline

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- Background on Ecology permits
- What is a comprehensive stormwater program?
- Municipal stormwater permit requirements
- Reissuance timeline

# Regulations

## Federal Clean Water Act

- Reduce discharge of pollutants to the “*maximum extent practicable*” (MEP)



## State Water Pollution Control Act (90.48 RCW)

- Protect Water Quality & apply *All Known Available and Reasonable methods of prevention, control and Treatment* (AKART)

# Washington State's General Stormwater NPDES Permits

- Construction
- Industrial
- **Municipal**
  - WSDOT
  - Phase I
    - 1<sup>st</sup> Issued in 1995
    - Reissued in 2007
    - 6 cities/counties – 2 ports
  - Phase II
    - Issued in 2007
    - 98 cities and parts of 11 counties



# What do the permits regulate?

## Municipal Separate Storm Sewer Systems (MS4):

- Publicly owned
- Designed or used to collect or convey stormwater
- Not a combined sewer system or part of a publicly-owned sewer treatment plant
- Agricultural discharges are exempt

# What do the permits regulate?

## Municipal Separate Storm Sewer Systems (MS4):

- ✓ Roads with drainage systems
- ✓ Municipal streets
- ✓ Catch basins
- ✓ Curbs and gutters
- ✓ Ditches & other man-made channels
- ✓ Storm drains



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# Comprehensive Stormwater Management

(from Puget Sound Action Team, now Puget Sound Partnership)

1. Local land use planning under GMA
2. Stormwater controls for new development/redevelopment, including review of stormwater site plans
3. Periodic inspections of construction sites
4. Ongoing maintenance for permanent facilities
5. Source control (e.g., spill prevention/cleanup, employee training, covered storage areas)
6. Identification and elimination of illicit discharges and water quality response program
7. Identification and ranking of existing drainage problems
8. Public education and involvement activities
9. Use of low impact development practices (e.g., retaining native vegetation, reducing impervious surfaces, infiltrating using bio-retention “rain gardens”)
10. Participation in watershed or basin planning
11. Local funding capacity
12. Programmatic and environmental monitoring to evaluate program success
13. Schedule for implementing activities

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# Stormwater Management Program (Phase II)

1. Public education and outreach
2. Public involvement and participation
3. Illicit discharge detection and elimination
4. Runoff controls for new development, redevelopment, and construction sites
5. Post-construction stormwater management
6. Operation and maintenance



# Additional Requirements (Phase I)

7. Source Control
8. Structural Controls
9. Stormwater Monitoring



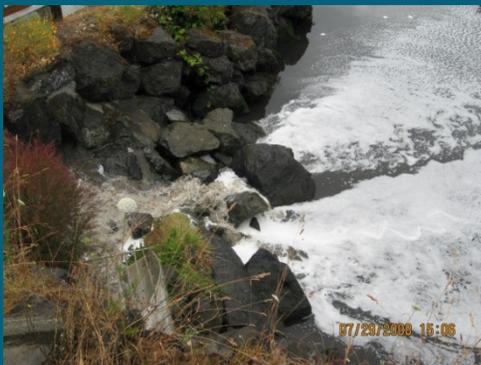
# Public education and outreach, public involvement and participation

- Target audiences and subject areas
- Measure understanding and adoption (behavior change)
- Involve public in decision-making
- Make program and annual report available for public comment



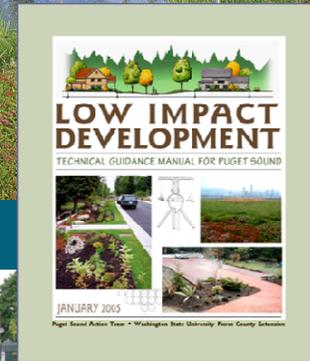
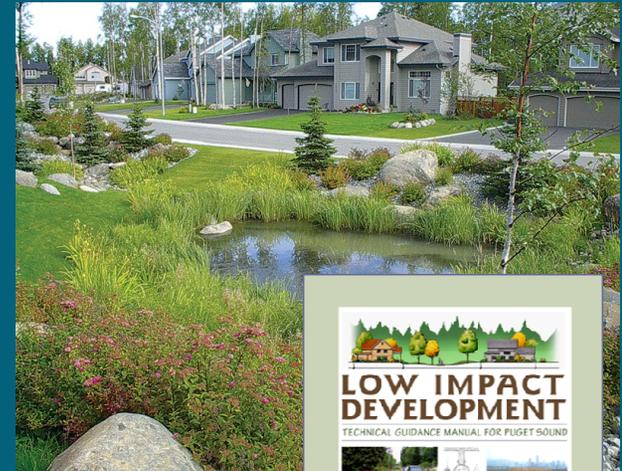
# Illicit discharge detection and elimination

- Map the stormwater system
- Prohibit non-stormwater discharges
- Publicize a reporting hotline
- Inspect outfalls
- Train staff
- Investigate and eliminate illicit connections



# Runoff controls for new development, redevelopment and construction sites (including post-construction)

- Adopt ordinances & *Appendix 1*
- Site plan review
- Inspection and enforcement
- Staff training
- Allow LID (in WWA)
- Require long-term maintenance



# Operation and Maintenance

- Maintenance standards
- Annual inspection of stormwater facilities
- Inspect and maintain catch basins once per term
- Pollution prevention procedures
- Staff training
- Facility plans (SWPPPs)



# Phase I Additional Requirements

- **Source control**
  - Inspect businesses and require source control
- **Structural stormwater controls**
  - Develop a program to construct structural stormwater controls to reduce impacts from MS4 discharges
- **Stormwater monitoring**
  - Stormwater characterization
  - Best management practice (BMP) monitoring
  - Effectiveness monitoring

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# Reissuance timeline

August 2010	Conducted early listening sessions
Spring 2011	Preliminary language on: <ul style="list-style-type: none"><li>• Low Impact Development (LID)</li><li>• Monitoring</li></ul> (30 day comment period)
Fall/Winter 2011	Draft permits and fact sheets issued (90 day comment period)
Summer 2012	Final permits and response to comments issued

<http://www.ecy.wa.gov/programs/wq/stormwater/municipal/2012Reissuance.html>

Questions?

