



Surfacewater Groundwater Protections

Stormwater Update Workshop
Vancouver City Council ▪ Jan. 5, 2009



Stormwater Ordinance

City Council Workshop ▪ Jan. 5, 2009

- Workshop Outline
 - Update to Workshop on Nov. 24, 2008
 - Recap of timing, proposed ordinance revisions
 - Comments received to date
 - County status
 - Stormwater Ordinance Revisions
 - Flow controls
 - Applicability ▪ Stormwater management regions
 - Issues and examples
 - Procedural/Legal Issues
 - Council Discussion & Next Steps



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Recap of Proposed Revisions and Timing

- Stormwater Ordinance Revisions and Timing
 - Changes are required to meet the Phase II Municipal Stormwater Permit for Western Washington, issued by the state Department of Ecology in early 2007.
 - An August 2009 adoption deadline is mandatory for state and federal compliance of Phase II permits.
 - Earlier adoption is in accord with the settlement agreement, approved by the Council in May 2006, with Clark County Natural Resources Council (CCNRC) and Rosemere Neighborhood Association (RNA).



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Proposed Revisions and Comments

- Summary of Comments Received to Date
 - Development/Business community
 - Environmental/Other community



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Clark County ▪ Phase I ▪ Status

- County Commissioners' Dec. 30 Meeting:
 - Delayed decision on County stormwater ordinance adoption until 2009, after new Board is seated.
 - Based on commissioners' comments, Clark County appears poised to adopt a lesser standard than required by Washington Department of Ecology.



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Proposed Revisions and Impacts

- Three Sections of Vancouver Municipal Code:
 - **VMC 14.24 – Erosion Prevention**
 - Minor changes, primarily to codify current policy.
 - **VMC 14.25 – Stormwater Control**
 - Major changes, including reference to 2005 Western Washington Stormwater Manual and flow control.
 - **VMC 14.26 – Water Resources Protection**
 - Minor changes, primarily for enforcement measures already used in erosion prevention and to provide guidance on discharges to meet permit requirements.



Stormwater Manual

Factors Minimizing Potential Impacts

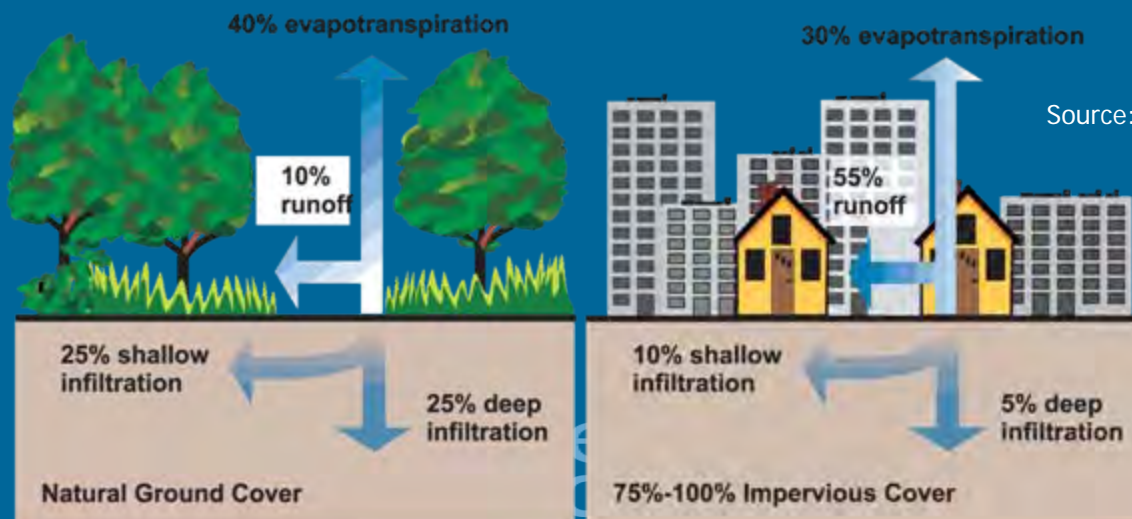
- City has already adopted and is using large portions of the 2005 Western Washington manual.
- Low impact development elements have already been used for many City projects.
- Proposed ordinance will allow for automatic updates that result from potential legislative changes.
- Flow control is the primary issue of controversy and concern, though within the City there are: 1) many areas with soils suitable for infiltration and 2) a large area that qualifies for the large water bodies exemption.



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The Major Issue: Flow Control

- What Flow Control Is:
 - Pre-development natural conditions allow rain to soak into the ground, reducing stormwater runoff quantity.
 - Post-development surfaces – roofs, pavement, etc. – cause more runoff, resulting in potential impacts.





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The Major Issue: Flow Control

- What Flow Control Means in the Ecology Manual:
 - Ecology manual treats developed/developing areas as if natural and unaltered, dating back to time of pre-European settlement.
 - Manual requires flows be controlled to levels that would have occurred naturally way back then.

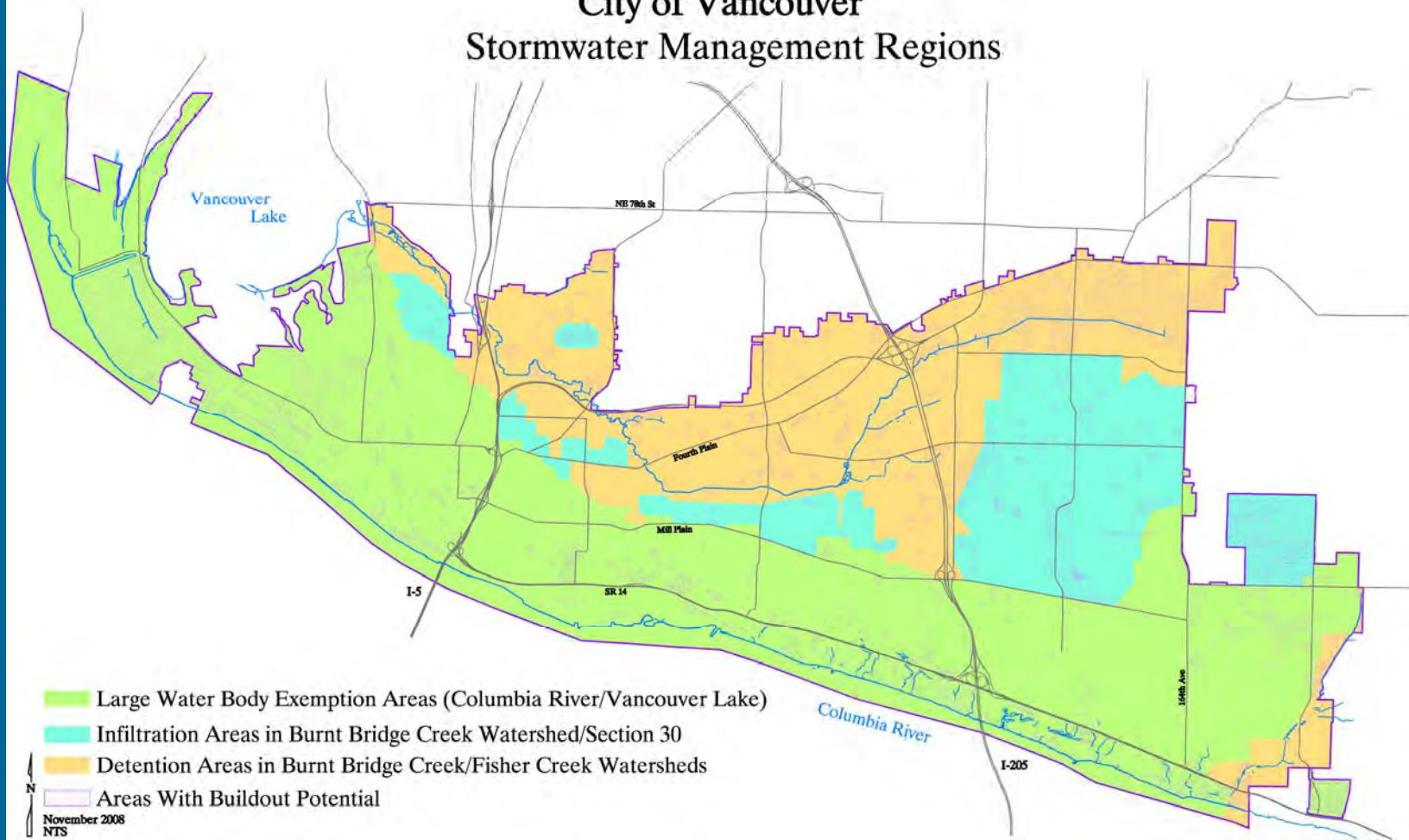




Stormwater Ordinance

Vancouver Watersheds and Manual Issues

City of Vancouver
Stormwater Management Regions





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Vancouver Watersheds and Manual Issues

- Examples of Options for Meeting Added Detention and Release Requirements:
 - Low impact development such as permeable pavement, rain gardens, etc.
 - Larger ponds and underground detention
 - Regional facilities
 - Basin plans
 - Exception/Variance



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Vancouver Watersheds and Manual Issues

- Examples of Existing Low Impact Development:
 - Rain gardens at the WA Crime Lab, Highland Park Apartments, Firstenburg Community Center and the Northeast 127th Avenue Business Park
 - Permeable pavement/Permeable pavers at Winco on Northeast Andresen, Firstenburg Community Center, Northeast 127th Avenue Business Park, Grand Central, City of Vancouver East Precinct, Vancouver Toyota and The Angelo Building



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Waterfront and Manual Applicability

- Impact to Boise property?
 - Boise property has large stormwater pipes that discharge to the Columbia River after runoff is treated.
 - Based on that, the large water bodies exemption granted by Ecology is expected to apply to the Boise site.



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Manual Applicability Continued

- Worst Case Examples ▪ Business-as-Usual Approach
 - 1) Commercial car lot on 2.24 acres, with 1.84 acres of impervious surface after development, discharging to Burnt Bridge Creek:
 - Pond volume under current ordinance = 8,042 cubic feet.
 - Pond volume under proposed ordinance = 61,071 cubic feet.
 - Percent change = 759%*
 - 2) A 33-unit attached row house subdivision on 3.47 acres, with 2.23 acres of impervious surface after development, discharging to a perennial creek that flows into the Columbia River:
 - Pond volume under current ordinance = 23,136 cubic feet.
 - Pond volume under proposed ordinance = 103,498 cubic feet.
 - Percent change = 447%*

**Note: Assumes no low impact development measures, variance, etc.*



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Manual Applicability Continued

- Worst Case Examples ▪ Business-as-Usual Approach
 - 3) Commercial re-development downtown on 1.87 acres, with 1.00 acres of impervious surface after re-development, discharging into public stormwater system that flows into the Columbia River:
 - Volume detained under current ordinance = 0 cubic feet.
 - Volume detained under proposed ordinance = 0 cubic feet.
 - Percent change = 0%*

**Note: Assumes no low impact development measures, variance, etc.*



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Potential Ecology Manual Impact

- Impact on an Existing Home or Business?
 - No changes, no impact expected.
- Impact on Future Construction of New or Remodeling of an Existing Home or Business?
 - Depends on size, type and location of the project. Typically, city standards relating to erosion control and stormwater management on a single residential lot remain largely the same under proposed stormwater ordinance revisions as exist now.



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Procedural/Legal Issues

- Procedural/Legal Questions:
 - Validity of Rosemere Agreement
 - SEPA
 - Public Participation
 - Vesting



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- Council Discussion & Questions
- Next Steps