Integrated Approach to Lake Whatcom Management

- Utilities and Waste Management
- Public Stormwater Facilities
- Transportation
- Land Preservation
- Urbanization & Land Development
- Data Management
- Community Outreach

COB-City of Bellingham
WC-Whatcom County
WAB-Watershed Advisory Board
LWWSD-Lake Whatcom Water & Sewer District
WWU-Western Washington University
SVCA-Sudden Valley Community Association
WSU-WSU Cooperative Extension
DOE-Department of Ecology
Questions for 6/18 Hearing

- Is there an exemption for Sudden Valley?
- Management of the Diversion
- Compliance with Stormwater Permit, TMDL loading goals, & Hearings Board
Stormwater Runoff Requirements

Thresholds
> 500 sqft – New Impervious
> 1,500 sqft - Replaced Impervious
> 5,000 sqft - Clearing

- Three Options for Phosphorus Neutral Systems
  - Full Infiltration
  - Full Dispersion
  - Water Quality Treatment
## Small & Steep Lots

<table>
<thead>
<tr>
<th>Lot</th>
<th>Size (sq. ft.)</th>
<th>Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3,709</td>
<td>15-30%</td>
</tr>
<tr>
<td>2</td>
<td>9,695</td>
<td>40-100%</td>
</tr>
<tr>
<td>3</td>
<td>5,434</td>
<td>30-40%</td>
</tr>
<tr>
<td>4</td>
<td>6,888</td>
<td>40-100%</td>
</tr>
</tbody>
</table>
## Cost Estimates Small Lot BMP’s

$7,000 – $20,000 more than existing system, or 5 – 8% Average Home in Sudden Valley

<table>
<thead>
<tr>
<th>No:</th>
<th>1</th>
<th>2A</th>
<th>2B</th>
<th>3</th>
<th>4</th>
<th>Landscaping, $/SF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Min</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>Current Standard&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Zero Runoff</td>
<td>Matched Runoff</td>
<td>Treated Runoff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorus Neutral:</td>
<td>NO</td>
<td></td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Cost:</strong></td>
<td>$9,220.00</td>
<td>$29,080.00</td>
<td>$20,040.00</td>
<td>$19,920.00</td>
<td>$17,300.00</td>
<td>$1.82</td>
</tr>
<tr>
<td><strong>System Cost as % of Sudden Valley average home Value&lt;sup&gt;2&lt;/sup&gt;:</strong></td>
<td>3%</td>
<td>8%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>Na</td>
</tr>
</tbody>
</table>
Community System Alternative

- Incorporated Homeowners Association
- Stormwater Program to Mitigate Phosphorus
- Individual lots meet current standard
Stormwater Rules affect on Property Values

Value of unbuilt Lots with Silver Beach Stormwater Regulations 2008 - 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Assessed Value</th>
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<tbody>
<tr>
<td>2008</td>
<td>$10,816,970</td>
</tr>
<tr>
<td>2010</td>
<td>$12,080,531</td>
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<tr>
<td>2012</td>
<td>$12,144,132</td>
</tr>
</tbody>
</table>

Silver Beach Ordinance Passed in Bellingham
Balanced Approach to meet Goals

- **Predictability**
  - Consolidate 4 separate sections of code that apply to Lake Whatcom Watershed
  - Worked w/engineers on out of the box solutions

- **Protects property value**
  - Removes limits on impervious, and tree retention, allows for community systems

- **Phosphorus Neutral**

- **Lasting Protection**
  - Site plan is recorded, PNGA, Seasonal clearing, Community Systems