MCLANE CREEK & BLACK LAKE BASINS

WATER QUALITY WORKSHOP

Thurston County Long-Range Planning & TRPC
April 9, 2014
Tonight’s Agenda

- Welcome

- Presentation: Guiding Growth – Healthy Watersheds Project
  - Allison Osterberg
    Thurston County Long-Range Planning
  - McLane Creek Basin
  - Black Lake Basin

- Table Displays
Guiding Growth – Healthy Watersheds

Project Background

- Thurston County is one of the fastest growing in Western Washington – How do we best protect water resources as our region grows?

- 2009: Thurston County and TRPC received a grant from EPA to conduct watershed-based planning
Guiding Growth – Healthy Watersheds
Project Background

- Assessed current conditions for 69 basins

- April 2013: Selected 3 basins for focus
  - McLane Creek
  - Black Lake
  - Woodard Creek (March 12 workshop)

- Currently gathering information and conducting analyses on each basin
Where are the McLane Creek and Black Lake Basins?
Where is the McLane Creek Basin?
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Where is the McLane Creek Basin?

- ~ 7,000 acres
- McLane, Swift, Cedar Flats, Beatty creeks discharge into Eld Inlet
- Jurisdiction
  - Rural Thurston County
  - Capitol Forest & McLane Creek Nature Trail
- Mix of forestry, agriculture, and residential land uses
What is the current condition of McLane Creek Basin?

73% Tree Canopy

2% Total Impervious Surfaces

Habitat & Species
chum, coho, cutthroat, winter steelhead, Olympic mudminnow

Water Quality Ranking: Fair
Fails fecal coliform standard
Elevated phosphorus levels
What are the water resource concerns in McLane Creek Basin?

- Loss of tree cover
- Water flow and quality
- Riparian corridors & tree cover
- Population growth & development
Public Opinion Survey: McLane Results

- Summer 2013: Public survey sent by mail
- Received over 100 responses
- High level of concern about water quality

**Important:**
- Clean drinking water
- Puget Sound WQ
- Healthy salmon runs
- Private property rights
- Preserving working forests and farms

How concerned are you about water quality in McLane Creek Basin?

- Very concerned: 32%
- Concerned: 30%
- Neutral: 18%
- Not very concerned: 14%
- Not at all concerned: 6%
What do you value most about living in the McLane Creek Basin?

Natural environment and scenery: 76%
Rural lifestyle: 68%
Privacy: 52%
Wildlife: 47%
Parks, trails, or other recreation: 23%
Close to stores and businesses: 19%
Living on or near waterfront: 8%
Sense of community: 6%
Other: 5%
What are the greatest risks to water quality in McLane Creek Basin?

- Urban development: 63%
- Loss of forest cover: 52%
- Pollution from stormwater runoff: 40%
- Pollution from septic systems: 38%
- Disposal of hazardous waste: 27%
- Agricultural practices: 19%
- Climate change: 13%
- Other: 8%
- Pet waste: 5%
What should be addressed in a watershed plan for McLane Creek Basin? (Top 5)

- Protect wildlife and fish habitat: 64%
- Protect water quality: 57%
- Preserve undeveloped land: 47%
- Preserve farmland and agriculture: 38%
- Preserve working forests: 31%
Where is the Black Lake Basin?
Where is the Black Lake Basin?
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Where is the Black Lake Basin?

- ~ 5,000 acres (additional area occasionally drains to Black Lake)

- Jurisdiction
  - Rural Thurston County
  - Tumwater City and UGA

- Low density residential land use, open space and parks
What is the current condition of Black Lake Basin?

- **Water Quality Ranking:** Fair
  - Elevated nutrient levels; blue-green algae blooms in lake
  - Fish Pond Creek fails fecal coliform standard

- **Habitat & Species:** Oregon spotted frog

- **Canopy:** 44% Tree Canopy

- **Impervious Surfaces:** 8% Total Impervious Surfaces
What are the water resource concerns in Black Lake Basin?

- Population growth & development
- Water quality and algal blooms
- Nuisance aquatic species
- Shoreline vegetation & tree cover
How will future development affect Black Lake Basin?

**SOURCE:** (GUIDANCE SPECIFYING MANAGEMENT MEASURES FOR SOURCES OF NONPOINT SOURCE POLLUTION IN COASTAL WATERS, 1993) AS SHOWN IN (ARNOLD, 1996).
Public Opinion Survey: Black Lake

- Summer 2013: Public survey sent by mail
- Received 340 responses
- High level of concern about water quality
- **Important:**
  - Clean drinking water
  - Puget Sound WQ
  - Swimmable lakes and streams
  - Private property rights
  - Healthy salmon runs

**How concerned are you about water quality in Black Lake Basin?**

- **Very concerned:** 42%
- **Concerned:** 27%
- **Neutral:** 18%
- **Not very concerned:** 7%
- **Not at all concerned:** 6%
What do you value most about living in the Black Lake Basin?

- Natural environment and scenery: 64%
- Rural lifestyle: 49%
- Parks, trails, or other recreation: 35%
- Wildlife: 32%
- Living on or near the water: 31%
- Privacy: 31%
- Close to stores and businesses: 29%
- Sense of community: 11%
- Affordable housing costs: 10%
- Other: 4%
What are the greatest risks to water quality in Black Lake Basin?

- Urban development: 57%
- Pollution from stormwater runoff: 52%
- Pollution from septic systems: 47%
- Loss of forest cover: 38%
- Disposal of hazardous waste: 24%
- Agricultural practices: 16%
- Other: 11%
- Climate change: 8%
- Pet waste: 7%
### Public Opinion Survey: Black Lake

**What should be addressed in a watershed plan for Black Lake Basin? (Top 5)**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Protect water quality</td>
<td>58%</td>
</tr>
<tr>
<td>Protect wildlife and fish habitat</td>
<td>44%</td>
</tr>
<tr>
<td>Preserve undeveloped land</td>
<td>37%</td>
</tr>
<tr>
<td>Preserve farmland and agriculture</td>
<td>28%</td>
</tr>
<tr>
<td>Low impact development</td>
<td>27%</td>
</tr>
</tbody>
</table>
Alternative Land Use Scenarios

1. **Historic Conditions**
   - Forested, with some prairie and wetlands

2. **Current Conditions**
   - Current development, impervious surfaces, and stormwater

3. **Planned Future Trend**
   - Current regulations carried out into the future

4. **Alternative Futures**
   - Changes to land use and development regulations
   - Restoration of riparian areas and wetlands
   - Stormwater retrofits in older neighborhoods
Guiding Growth – Healthy Watersheds
Potential Management Options

- Changes to zoning and Urban Growth Area (UGA) boundary
Guiding Growth – Healthy Watersheds

Potential Management Options

- Changes to development regulations (including low impact design standards)
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Potential Management Options

- Restoration of wetlands and vegetation along waterbodies
- Long-term preservation of sensitive lands
- Stormwater retrofits
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Next Steps

- Tonight
  
  Gather feedback on water resource concerns and potential management options

- Develop recommended policy changes
  
  Spring/Summer 2014
Guiding Growth – Healthy Watersheds

Questions? Comments?

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