Today's Presentation

- Background
- Problem Statement
- Tacoma’s Revised Approach
- Existing and Planned Regional Facilities
- Next Steps

Background
Economy
- Incorporated in 1875
- Population 202,000 (2012)
  - 10 year growth 2.5% (2010)
  - Seattle area 13%
- Median income $48,000 (WA avg. $57,000)
- Unemployment 8.7%
- Typical commercial rental $20/sf
  - Vacancy 9.8% (13.1% before State Farm)

Hydrology
- 50 square miles
- 46% impervious
- 72% drains to flow control exempt receiving waters
- 500 miles of pipe

Foss Superfund Cleanup!!
### Current Requirements

- Current - SWM Manual and on-site development / redevelopment requirements for flow control and treatment
- **Need** -
  - Treatment at levels that positively impact water quality in Tacoma’s most sensitive receiving waters
  - Flow reduction in two systems that are flood prone
**Bigger will be “Better”**
(lower unit cost)

- The economy of scale
- Cost advantages due to size or scale of operation

**Regional Facilities can be Located and Sized to Create Positive Impact**

**Consider the Redevelopment Community**

- Generally more complex to develop in highly urbanized areas
- Limited space
- Demolition costs
- Aging infrastructure
- Rents are low in Tacoma compared to other urban areas
- Ease of development or more lucrative rents can drive development elsewhere
The Vision

- Using Economy of Scale to get best unit price
- Using regional locations to get best improvement to receiving waters
  - Location
  - Operation and maintenance
- Leverage development dollars by creating a credit system for MR #6 and #7 to sell to developers
  - Use $$ to build the next targeted BMP

TREATMENT MR#6

SWM Manual – On-site development / redevelopment requirements

Added – Build regional treatment for Tacoma’s most sensitive receiving waters
- Leverage regional treatment capacity to support development and redevelopment
- Collect developer “pay-in” to build subsequent regional facilities

FLOW CONTROL/REDUCTION MR#7

SWM Manual – On-site LID and detention ponds

Added – Reduce flows through retrofit projects
- Residential Rain Garden Program
- Converting to permeable surfaces
- Expand existing holding basin capacity
- Re-launch the “fee-in-lieu-of-detention” program to leverage development $$
Program Status
- Treatment Facilities are complete for projects tributary to Commencement Bay
- Flow Control and treatment projects are complete in Flett and another flow control project is under design.
- Identified opportunity for flow control in Leach Creek watershed.
- Awaiting Ecology comment prior to formal launch.

Future Project Prioritization
- Three “watersheds” (2 freshwater and 1 large saltwater).
- Urbanized – limited opportunities for facilities
  - Feasibility Analysis on potential sites
  - Project Prioritization of feasible sites

Feasibility Analysis
- Retrofit existing facilities (capacity, flow control, water quality)
- Site and Drainage Area Characteristics
- Size and Type of BMP feasible
- Social/Community Factors
- Other Factors:
  - Located in priority development area
  - Known capacity/source control issues
Project Prioritization

<table>
<thead>
<tr>
<th>Factors</th>
<th>Ranking</th>
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<tbody>
<tr>
<td>Economic/cost Factors</td>
<td></td>
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<tr>
<td>Capital Cost</td>
<td>High</td>
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<tr>
<td>Operation and maintenance costs</td>
<td>High</td>
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<td>Potential to replicate/leverage</td>
<td>Low</td>
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<tr>
<td>Hazards/risks to existing infrastructure</td>
<td>High</td>
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<tr>
<td>Potential to impact the City Center</td>
<td>Medium</td>
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<td>Risk to lives, plant and property</td>
<td>Low</td>
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<tr>
<td>Social Community Factors</td>
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<tr>
<td>Multiple benefits potential (walkways, parking, bike trails)</td>
<td>Low</td>
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<tr>
<td>Conflicting uses (parking in ROW, etc.)</td>
<td>High</td>
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<tr>
<td>Supports Community or other plans (e.g., First Creek, Wapato, other Neighborhood groups, Metro Parks, etc.)</td>
<td>Low</td>
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<tr>
<td>Visibility &amp; Education Value</td>
<td>Low</td>
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<tr>
<td>Supports Health and Safety</td>
<td>Low</td>
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<tr>
<td>Other Factors to consider</td>
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<tr>
<td>Fish bearing Stream</td>
<td>No</td>
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<tr>
<td>Tacoma Ground Water Protection District</td>
<td>No</td>
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<tr>
<td>Protection of cleanup sites (Thea Foss Waterway, Hylebos Waterway, ASARCO, South Tacoma Field)</td>
<td>No</td>
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<tr>
<td>303(d) listed waterbodies</td>
<td>No</td>
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<td>Locally identified capacity or pollution problems</td>
<td>No</td>
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<tr>
<td>Located in a priority area (redevelopment plans, mixed use centers, watershed where other public and private projects are or will be constructed)</td>
<td>No</td>
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Regional Projects in Tacoma
Cheney Stadium
- Total 10 acres treated and infiltrated
- Tacoma’s first Greenroad – Clay Huntington Way
- Includes 360 trees and bioinfiltration
- $2.8 million construction cost

Expansion of Regional Detention
- $3 million grant funding received
- Add 30 ac-ft detention capacity to Flett Watershed
- Capacity will be sold and provide funding for the next facility expansion

Treatment Vault – 23rd and Ferry Streets
- Treatment retrofit for 50 acres of Foss Watershed
  - 226 canisters
  - $800k construction cost
  - Completed 2010
Pacific Avenue Streetscape

- Treatment retrofit for 5 acres of busy arterial street
  - 14 Rain Gardens + Silva Cells
  - $2.4 million construction cost
  - Artist included in design team to enrich the rain garden appearance

Hood Street Regional Treatment

- Treatment retrofit for 42 acres of Foss Watershed
  - Filterra media basin
  - $1.5 million construction cost
  - Completed 2014