Overview of Recommendations for Stream Restoration in Draft Long Creek Watershed Management Plan

1/22/09 Presentation

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Watershed Restoration Recommendations Overview

I. Recommendations for Structural Retrofit Restoration Practices

II. Recommendations for Non-structural Restoration Practices

III. Recommendations for In-stream, Floodplain & Riparian (Streamside) Habitat Restoration Practices
I. Structural Retrofit Recommendations

A. Identify Opportunities

B. Prioritize Catchment Areas

C. Develop Tiered Recommendations

D. Catchment Retrofit Example
A. Identify Opportunities

- Evaluate specific areas with minimal SW treatment infrastructure and DCIA
- ID opportunities that minimize impact on existing infrastructure, enhance greenspace, attenuate untreated SW
- Evaluate cost-benefit, ease of implementation, and treatment benefit
B. Prioritize Catchment Areas

- Watershed contains 165 DEP-defined catchments
- Catchment prioritization based on individual retrofit opportunities, location and probable impact of catchment on pollutant loads, and proximity to in-stream WQ violations
- Nine priority catchments represent close to 150 acres of impervious area in watershed
C. Develop Tiered Recommendations

- **Tier 1**: Very good cost-benefit ratios for individual retrofits; minimal impact on existing infrastructure, maximum WQ benefit
- **Tier 2**: Average cost-benefit ratios, minimize impact on existing infrastructure, enhances Tier 1
- **Tier 3**: Generally addresses remaining impervious area. More costly per unit area treated and may impact existing infrastructure.

– Note: Not all retrofits included in each Tier.
D. Catchment Retrofit Example

CATCHMENT E-34

Catchment Characteristics

<table>
<thead>
<tr>
<th>DEP ID</th>
<th>E-34</th>
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<table>
<thead>
<tr>
<th>Size</th>
<th>11 acres</th>
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<tr>
<th>Impervious Cover Breakdown</th>
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<tbody>
<tr>
<td>Rooftop</td>
<td>24% (2.4 acres)</td>
</tr>
<tr>
<td>Parking</td>
<td>57% (6.7 acres)</td>
</tr>
<tr>
<td>Roadway</td>
<td>9% (0.9 acres)</td>
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Existing Stormwater Management System - Yes
Stormwater Infrastructure Ownership - Private

Opportunity Overview –

Tier 1: Expand and enhance the Harmaford Shopping Plaza’s existing stormwater detention basin to provide improved water quality treatment.

Tier 2: Locate water quality filters in greenspace portions of the parking lot and loading dock area for additional levels of water quality treatment.

Tier 3: If necessary, install above or below grade filters to bring the catchment up to current stormwater standards

<table>
<thead>
<tr>
<th>Tier</th>
<th>Retrofit ID#</th>
<th>Estimated Cost</th>
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<tbody>
<tr>
<td>1</td>
<td>SPO_028</td>
<td>$85,000</td>
</tr>
<tr>
<td>2</td>
<td>SPO_035</td>
<td>$80,000</td>
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<tr>
<td></td>
<td>SPO_036</td>
<td>$80,000</td>
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<tr>
<td>3</td>
<td>SPO_037</td>
<td>$186,000</td>
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Considerations

The current wet pond diversion structure may require reconfiguration or reconstruction for the new stormwater management system. Soil Filter SPO_030 would likely require some tree removal and drainage easement acquisition.
II. Non-Structural Recommendations

A. Land Use Planning

B. Pollution Prevention and Good-housekeeping

C. Education and Training

D. Monitoring Plan
A. Land Use Planning Recommendations

- **Revise Code, Zoning & Design Guidelines:** lots of opportunities for enhancing protection efforts – see plan for specifics

- **Implement Long-term Planning Committees:** snow storage; MTA / MDOT infrastructure upgrades; Portland Jetport; SPLT

- **Complete Watershed Drainage Map:** important for long-term SW management considerations (e.g., hydrological modeling)
B. Pollution Prevention & Good House-keeping Recommendations*

- **Pavement Management**: targeted and well-timed sweeping program
- **Materials Substitution & Management**: winter salt and pavement sealant alternatives; PP
- **Landscaping Management**: materials handling; reduced fertilizer / pesticide use; pavement shade
- **Private Facility Inspection & Maintenance Program**: SW infrastructure and pavement; dumpsters; hazmat handling; winter deicer app.

* All have property manager / contractor training component
C. Education & Training Recommendations

- Develop Stormwater Grant Program for Private Restoration Efforts
- Develop Long Creek Stewardship Program

D. Develop Monitoring Plan
III. Restoration Recommendations for In-Stream, Floodplain & Riparian Habitats

- 10 Priority Reaches Identified
- Types of restoration in each priority reach identified, costs estimated
Long Creek Watershed Restoration Recommendations for In-stream Habitats, Riparian Habitats & Floodplains Project Locations & Priorities