Low Impact Development – Education & Research

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Bioretention Mesocosm Study
Bioretention Soil Mixes

- Shredded Bark
- Water Treatment Residuals
- Compost
- Sand

Compost Content:
- 15%
- 20%
- 30%
- 40%
Porous Asphalt Experiment

Street dirt applied

Impervious  Porous Unmaintained  Porous Maintained
Mulch Study - Purpose

1. Quantify stormwater treatment and flow control with mulch choice.
2. Quantify maintenance effort with mulch choice.

- Inclusion of mulch to help meet performance goals (Enhanced, Basic, Oil, Phosphorous)
- Inclusion of mulch to optimize maintenance effort (O+M protocols)
Tree Study - **Purpose**

Source: Stormwater to Street Trees, EPA 2013
Tree Study - Approach

• Measure **annual transpiration** - evergreen trees & deciduous trees
• Measure **annual canopy interception**
• Relate data to current stormwater tree retention guidelines

• Tree species picked because site chosen is secure and has power
• Soil moisture sensors to be added
Clear Creek
Education Programs

• **Statewide Hybrid LID Trainings (available 2018)**
  – Design Certificate (5 modules)
  – Operations and Maintenance Certificate (3 modules)

• **LID Builders Certificate (developed in 2018)**
  – Site assessment module
  – LID BMP module
Tying it all together

Economic Analysis

Community Survey

Geospatial Analysis
Acknowledgments

Funding
Watershed Protection and Restoration National Estuary Program (NEP) Puget Sound Projects, Grant Agreement Number: G1200452

Collaborators
- Technicians and Staff – Washington Stormwater Center
- T. Knappenberger – Auburn
- US Fish & Wildlife
- NOAA
- Cities of Puyallup and Tacoma
- Herrera Environmental
- SVR Consultants
- Puget Sound Partnership
- The Nature Conservancy