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Sound impacts: building an impact metrics portal for tracking collective positive impacts of restoration and green infrastructure across the Puget Sound

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The problem

• The Salish Sea is in need of restoration and recovery.
• There are a lot of us working very hard for that goal.
• We all use science-based strategies to restore habitat, improve water quality, air quality, quality of life...
• Is it working?
• The vital signs aren’t exactly improving.
• We need to work smarter.
The problem

- Environmental impacts are tracked by many different entities in different ways.
- Water quality, Salmon populations, Orca populations, Puget Sound Vital Signs, are tracked.
- But effort and investments are not.
The problem

- If we don’t track our efforts, how will we know if they are working?

- How will we make them better?
The Solution

• The Survey:
  • Why aren’t we all collecting the same data?
  • Why aren’t we all reporting and sharing our efforts?
  • What’s the incentive to use an external reporting tool?
  • How can self-reported data be used/trusted for regional analysis.

• Collective ownership of the tool
• Clear and effective visualization tools (Tableau software)
• Transparency
How it works

• “Retail Users”
  • Orgs and agencies that engage in physical green infrastructure, and restoration activities.
  • Web-based and Bulk upload spreadsheet options
  • Create your own dashboard to track stormwater, carbon, habitat, and human impacts of your works: over time, over space
  • See your “fingerprints” and your “footprints”

• “Wholesale Users”
  • Looking regionally to see where efforts are, where they are working, and connect the effort to the end of pipe impacts (is it working? What is working and where? → adaptive management)
Introduction

Sound Impacts is an online portal for all of the region’s practitioners and implementers of Green Infrastructure as well as for anyone curious to see what efforts and investments are being made to protect and improve this region’s natural assets.

Legend

- Rain Garden, Bioretention, and Bioswale
- Invasive Plant Removal
- Tree Planting
- Green Roof
- Permeable Pavement
- Depaving

Map

- Rain Garden Projects: 3,986
  - Total Square Feet: 2,737,286
  - Earliest Project Date: Jan, 2000
  - Latest Project Date: Mar, 2018

- Gallons Of Runoff Managed: 64,748,163
  - Annual estimate based on the simple calculation: square footage x annual rainfall x gallons conversion
  - For more detailed impact calculations, please visit the dashboard page.

- Tree Planting Projects: 17
  - Total Square Feet: 381,935
  - Earliest Project Date: Apr, 1990
  - Latest Project Date: Dec, 2017

- Total Trees Planted: 11,198
## Rain Garden Summary by Contributor

<table>
<thead>
<tr>
<th>Contributor Name</th>
<th>Rain Gardens</th>
<th>Contributing Area (SqFt)</th>
<th>Rain Garden Size (SqFt)</th>
<th>Rutter Managed (Gal)</th>
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### Contributing Area

- **Pavement Contributing Area**
- **Roof Contributing Area**
- **Other Contributing Area**

© OpenStreetMap contributors
Adding Projects

**BULK IMPORT**

**Step 1: Get Template**
Download the excel sheet template for each project type you wish to enter:
- Rain Garden
- Invasive Plant Removal
- Debris
- Permeable Pavement
- Green Roof
- Tree Planting

**Step 2: Fill in Data**
Fill in project data, using one row per project.

**Step 3: Upload Data**
Use the form below to upload the templates you filled in.

File:
- Choose File
- No file chosen

Submit
Viewing Impact
Current work 2018

• Currently scheduling data import parties with partners

• Coming soon: travelling workshops

• 2019: Develop funding proposal and project team for a full Sound Impacts 2.0 build out and launch
The Future of Sound Impacts

- Beta version live now.
- For version 2.0:
  - More metrics (beta is focused on stormwater) add carbon capture, heat island effects, quality of life, air quality, human health...
  - Data transparency, public database (i.e. tableau public)
  - Make sure other tools can easily use Sound Impacts as a data layer
    - E.g. decision making tools like Trust for Public Land’s OSAT tool or TNC’s stormwater heatmap tool...
Sound Impacts Invites You to Discover Your Impact

Visit www.SoundImpacts.org To get started today

Contact me: AC@StewardshipPartners.org