Portland's Stormwater Permitting, Policy & Processes: A Stakeholder & Geospatial Analysis

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A partnership between Portland State University, Hatfield School of Government, and West Multnomah Soil & Water Conservation District

QUESTION

How to improve stormwater outcomes at the subwatershed level in Portland's West Hills?

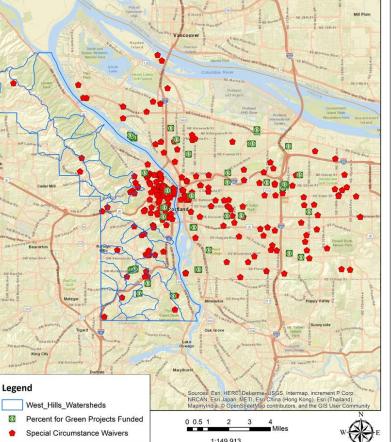
BACKGROUND

Portland's West Hills are characterized by steep and landslideprone slopes situated on poorly infiltrating soils. The City of Portland is a nationally recognized leader in stormwater management with strategies that highlight working at the subwatershed level as the ideal scale for planning, implementing and evaluating watershed improvements. Despite being at the leading edge, reports examining Portland's West Hills find significant problems in its subwatersheds. The health of these subwatersheds may further decline if stormwater functionality issues aren't addressed at the subwatershed level.

METHODS

- A literature review of agency and scholarly sources
- Semi-structured interviews with regulatory agency staff, permittees, and watershed organization staff
- Geospatial analysis using ArcMap to conduct a visual and quantitative map point attribute assessment focused on the subwatershed distribution of funding, and stormwater treatment areas lost through Portland's Development or Redevelopment Special Circumstance Waivers ("Waivers") alongside stormwater treatment areas gained through "% for Green" program project installations (funded by Waivers)

Special Circumstances & Green Fee Installs



A full report along with a list of references is available upon request. Contact mary@wmswcd.org

FINDINGS

Interview Emergent Themes:

- Permitting, policy and processes often lack subwatershed review and/or responses mechanisms
- Need for increased coordination & collaboration
- Inability to fully address past & present challenges
- Need for scaled tracking, review & response tools
- Increase outreach, engagement, incentivization and innovation with individuals, watershed organizations and permittees to ensure action at the subwatershed scale across private and public stormwater infrastructures

Geospatial Analysis (Map shown left):

- In areas reviewed, fees collected from Waivers permitted when stormwater cannot be managed onsite – are greater in Portland's West Hills than other areas of the City, and disproportionate across its subwatersheds
- When comparing stormwater treatment area lost through permitted Waivers and "% for Green" gains, subwatershed treatment area losses are found and an overall loss for West Hills watersheds is also found
- Waiver fees alone do not provide enough funding to fully mitigate stormwater treatment losses, however this is not the only funding that Portland uses to implement stormwater improvement projects and the "% for Green" program has broader goals than solely restoring stormwater functionality where it's been lost

The Bottom Line

 Interviewees recommend increased coordination and collaboration between and within stakeholder groups focused on tracking, developing and implementing responsive and creative subwatershed-scale strategies to improve stormwater outcomes. Geospatial analysis showcases potentially disproportionate stormwater treatment area losses in Portland's West Hills.