WHAT CAN GREEN INFRASTRUCTURE PARTNERSHIP AND STRATEGIC INTEGRATION LOOK LIKE AND ACHIEVE IN DENSE URBAN VILLAGES?



Regional stormwater facilities can manage hundreds of acres of impervious surface, improve drainage and water quality, and provide attractive community open space, if designed and developed with these performance goals from the beginning. This approach requires on-going partnerships -- once our initial top tier system performance criteria are met -- to help identify open space gaps and suitable sites, acquire and co-develop sites with technically feasible best practices, and design long-term shared stewardship models.

FREQUENTLY ASKED QUESTIONS

What publicly available guidance exists to help designers There is a map layer on the City of Seattle's GIS portal that shows (1)and developers understand where infiltrating green infraall areas of the city where infiltration is known to be infeasible. structure is potentially technically feasible and what benefits The benefits of different technology approaches are described in exist for different technology approaches in different places? SPU's 'Right Place, Right Project' document. (2 Who is responsible for maintaining GSI in the right-of-way? SPU maintains these stormwater facilities. 'Right Place, Right Project' details all currently available opportu-What incentives are available for public-private partnerships? 3 nities for direct Utility support and grants. RainWise offers capital cost rebates for raingarden and cistern retrofits on private property in eligible areas. The Stormwater Facility Credit Program offers modest rate reductions for on-site stormwater improvements (both gray and green). Beyond-Code GSI integration can now be considered for FAR bonus, per the 2016 Land Use Code update. There is a Puget Sound-wide regional coalition (City Habitats) and Is there a regional GSI policy approach or is it tailored to a SPU policy appraoch to advocate for equitable distribution of each community? regional funding. SPU programs, project designs, and approaches are tailored to the place-specific needs of each neighborhood.



Stormwater facilities in the public right-of-way can manage run-off from the adjacent street and beyond while adding a sense of place, and beauty. For example, the Swale on Yale project project cleans polluted runoff coming from 435 acres of Capitol Hill and releases the cleaned water to Lake Union. The project involved a creative partnership between SPU and the adjacent land developer (Vulcan, Inc.) who provided a 1' easement, \$1M, and long term operations and maintenance assistance.



Reimagined and retrofitted parking lots and school yards can serve as outdoor classrooms/laboratories as well as solve stormwater challenges. School-based projects can also support public health outcomes with known environmental influences, such as learning disabilities and childhood obesity. For example, millions of U.S. school children take daily medication to treat Attention Deficit Hyperactivity Disorder (ADHD). Studies show when learning and play activities occur in natural areas or with a view of nature, students have fewer symptoms, learn more easily, and have greater long-term academic success.

WHY IS SPU PURSUING GSI INTEGRATION IN URBAN VILLAGES WITH HIGH PRIORITY SYSTEM NEEDS AT THIS TIME?

SPU's current ability to address high priority drainage and water quality system improvement needs with green infrastructure is limited to geographic areas where SPU has a Federal regulatory obligation under the CSO Consent Decree. The map below also includes areas where King County Wastewater Treatment Division (WTD) can invest in green infrastructure in Seattle.



There are high priority drainage, wastewater, and water quality system improvement needs across the city where SPU currently has no funding mechanism and no program capacity to prioritize and use green infrastructure tools where technically feasible. These needs include flooding, sanitary sewer overflows, system capacity contraints, spot drainage issues, and creek protection.



WORKING COLLABORATIVELY AT THE LOWEST COST MOMENT

We are preparing our built infrastructure systems for the next hundred years of service in a context of major new drivers such as unprecedented growth and climate change.

This proposed pilot will allow Seattle to tackle key green infrastructure policy issues, test designs and organizational collaborations in a range of contexts, monitor performance, and ensure responsiveness to community interests.

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ANALYTICAL APPROACH:

1

2

TODAY <u>ا</u>

Addressing long-standing system needs at the moment of redevelopment is also the lowest cost approach for our rate

MEET REQUIREMENTS, PROTECT HUMAN HEALTH, ENSURE EQUITY

- Meet regulatory and legal requirements
- Protect human health, public safety, and environmental quality
- Repair/rebuild failing infrastructure (critical needs)
- Meet service level targets and service equity (business needs)

OPTIMIZE SOLUTION SET

- Identify community co-benefits with neighborhoods
- Identify potentical benefits to other City infrastructure
- Identify project risks
- Leverage outside funding sources
- Use triple bottom line options analysis approach
- Deliver highest value / project life-cycle cost to rate payers

