



*San Francisco Public Utilities Commission*

# Urban Watershed Planning Charrette

*Bayside Basins Summary Report*





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## Bayside Basins Summary Report - May 2008

### Project Team

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- Appendix **A**: Low Impact Design Toolkit
- Appendix **B**: Reference Maps
- Appendix **C**: Development and Planning Trends
- Appendix **D**: Charrette Participant List
- Appendix **E**: San Francisco Infiltration Zone Rating Map
- Appendix **F**: LID Quickfact Sheet and Engineering Assumptions

# Executive Summary



San Francisco is a city of neighborhoods, each with its distinct culture, architecture and urban form. From its foggy peaks with their sweeping views, to the bustling financial district and the quiet residential streets, each neighborhood is characterized by distinctive geology, hydrology, soils, vegetation, and water resources that create unique opportunities and challenges for drainage and stormwater management. These conditions converge and inform where and how to best implement green stormwater management strategies, known as Low Impact Design (LID), throughout the City.

LID uses urban design to mimic natural watershed processes. By increasing the natural storage and infiltration of rainwater, cities like San Francisco can begin to reduce the quantity and improve the quality of urban stormwater runoff.



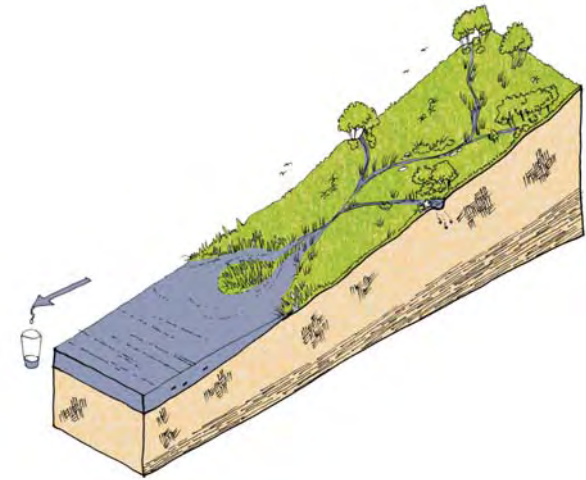
As part of its efforts to expand LID in San Francisco, the San Francisco Public Utilities Commission (SFPUC) hosted two Urban Watershed Planning charrettes to encourage a dialogue with the larger community about what stormwater management could look like in San Francisco's future. A charrette is an intensive brainstorming activity in which participants collaborate to complete a design project in a finite amount of time.

SFPUC staff convened the first charrette for City and County of San Francisco employees on September 6, 2007. This event engaged City staff who are involved in stormwater and drainage management in furthering the concept of green stormwater management. It was also an opportunity for staff to begin to conceptualize drainage problems from a watershed perspective and to include the larger land use, urban design and planning issues as they relate to stormwater management. Staff proposed green stormwater management strategies in the Sunnyside and Islais Creek Basins. Participants were engineers, hydrologists, and

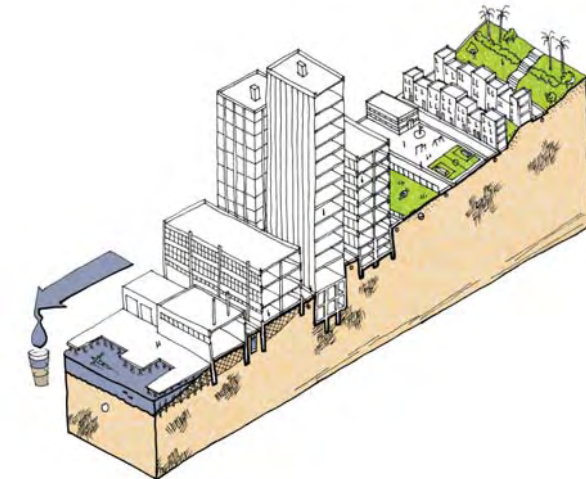
water planning specialists whose insights yielded many ideas for improving management of the drainage basins.

The second Urban Watershed Planning Charrette was held on September 27, 2007 at the Port of San Francisco's Pier I offices. Approximately 70 members of San Francisco's greater community with interest in stormwater management, which consisted of activists, engineers, landscape architects, ecologists and urban designers, gathered to "play" the watershed planning game. Participants were provided basic information about LID and used maps of San Francisco's four eastern watershed basins: Channel Basin, Islais Creek Basin, Yosemite Basin, and Sunnyside Basin to make recommendations for stormwater management projects that reduce and detain peak flows and volumes of stormwater using of LID measures. Each team was careful to work within both a capital cost budget and towards specified stormwater management goals. The groups tallied the stormwater benefits and costs of their proposals, voted on their favorite ideas, and presented their recommendations to the larger group. Volunteers were on hand to record all of the ideas that came out of each group.

This summary document contains a composite of ideas common between groups or that were particularly unique and compelling. These proposals will undergo a more detailed analysis to determine their impacts on the stormwater management system and their feasibility in terms of costs, pipe alignment and opportunity to overlap with various planning efforts already underway throughout the City. SFPUC staff will use the results of the analysis to identify and prioritize future stormwater management efforts in San Francisco.



*natural watercourse system*



*existing urban scenario*