1. Introduction
San Francisco’s location adjacent to the Pacific Coast and San Francisco Bay, the largest estuary on the west coast of the United States, gives the City significant environmental, social, and economic advantages; it also confers unique responsibilities for water quality protection upon the City and its citizens.

The San Francisco Public Utilities Commission (SFPUC) and the Port of San Francisco (Port) have partnered to create the San Francisco Stormwater Management Requirements and Design Guidelines (SMR) for San Francisco’s developers, designers, engineers, and general public. The SMR presents the regulatory requirements for post-construction stormwater management controls for new and redevelopment projects and helps design teams implement these stormwater controls. The San Francisco Stormwater Management Ordinance (SMO) requires such controls for new and redevelopment projects in both the City’s separate and combined sewer areas.

While water quality protection and reduced stormwater volume in the City’s sewer system are the fundamental drivers behind stormwater management, well-designed stormwater controls offer many ancillary benefits. The SMR encourages innovative and multi-purpose design solutions for meeting stormwater requirements in San Francisco’s urban setting. In addition to protecting water quality and reducing stormwater volume, well-designed multi-purpose solutions can contribute to attractive civic spaces, open spaces, and streetscapes. They can also protect and enhance wildlife habitat and reframe stormwater as a resource, not a waste product.
By implementing the stormwater management strategies articulated in this document, each project will contribute to the incremental restoration of the health of the City’s watersheds, protect the Bay and Ocean, and build a greener San Francisco. Patrick Condon, Chair in Landscape and Livable Environments at the University of British Columbia, underscores the contribution that each site can make to a region: “What the cell is to the body, the site is to the region. And just as the health of the body is dependent on the health of the individual cells that make it up, so too is the ecological and economic health of the region dependent on the sites that comprise it.”

The SMR functions as both policy document and design tool. It explains the environmental and regulatory drivers behind stormwater management, demonstrates the concepts that inform the design of stormwater controls, provides an overview of the benefits of Low Impact Design (LID) and green infrastructure (GI), describes the City’s post-construction stormwater management requirements and lays out the process of creating a Stormwater Control Plan (SCP) to comply with stormwater regulations. The SMR is specific to San Francisco’s environment and reflect the City’s density, climate, diversity of land uses, and varying topography.
Bioretention planters are a central feature in a courtyard area. Photo: Krystal Zamora