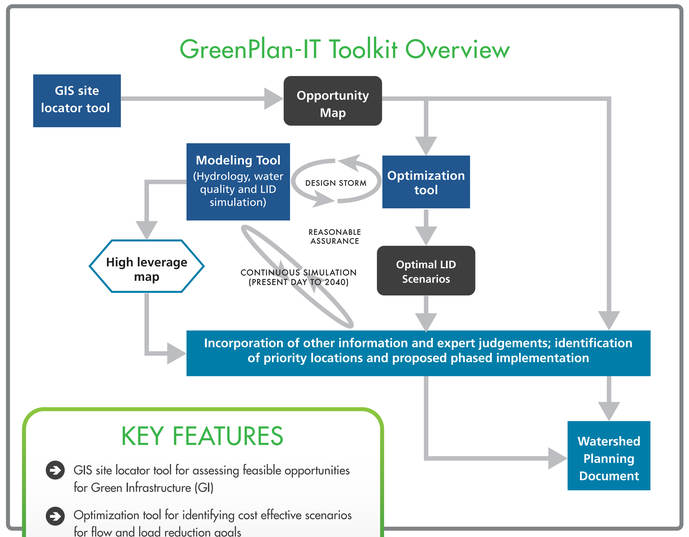
A PLANNING TOOLBOX FOR MUNICIPALITIES



GreenPlan-IT

Locate and determine cost effective watershed scale Green Infrastructure implementation scenarios and model future conditions with Reasonable Assurance

http://greenplanit.sfei.org

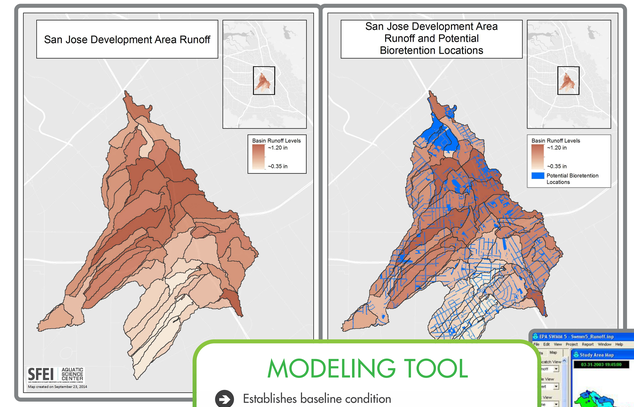
TOOLKIT USER MANUAL TOOLKIT REQUIREMENTS DEMONSTRATION REPORT

SFEI AQUATIC SCIENCE CENTER

Funded by: State Water Resources Control Board

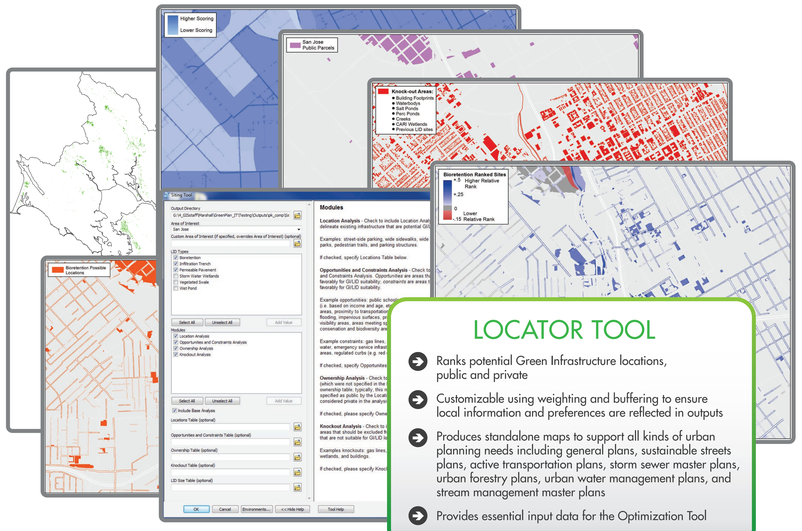
CONTACT: Lester Mckee (lester@sfei.org), Jennifer Hunt (jhunt@sfei.org), Pete Kauhanen (petek@sfei.org), and Jing Wu (jingw@sfei.org)

SAN FRANCISCO ESTUARY INSTITUTE & THE AQUATIC SCIENCE CENTER | 4911 Central Ave, Richmond, CA 94804, p: 510-746-7334 f: 510-746-7300



MODELING TOOL

- Establishes baseline condition
- Identifies critical source areas
- Quantifies flow and water quality reduction in relation to various Green Infrastructure scenarios
- To support reasonable assurance analysis, simulates surface water flows, ground water recharge, and load reductions associated with future decadal implementation milestones (e.g. 2020, 2030, or 2040)

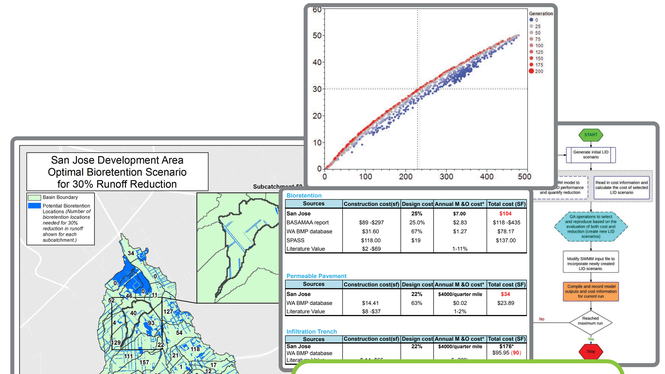


LOCATOR TOOL

- Ranks potential Green Infrastructure locations, public and private
- Customizable using weighting and buffering to ensure local information and preferences are reflected in outputs
- Produces standalone maps to support all kinds of urban planning needs including general plans, sustainable streets plans, active transportation plans, storm sewer master plans, urban forestry plans, urban water management plans, and stream management master plans
- Provides essential input data for the Optimization Tool

TOOL OUTPUTS — MUNICIPAL PLANS

- Toolkit outputs are incorporated with other local information and expert judgments:
  - Infrastructure maintenance histories
  - Water quality and flooding concerns
  - Private partnerships and funding opportunities
  - Field reconnaissance by city engineers and planners
- Final products are maps or tables of locations, types and numbers ready for inclusion into various planning documents



OPTIMIZATION TOOL

- Provides a management tool to identify the most cost-effective Green Infrastructure combinations for achieving flow and/or load reduction goals
- Customizable to allow the exploration of LID types individually or as a group
- The use of local and current cost information allows exploration of piecemeal versus broad-scale implementation scenarios