

GreenPlanIT A Watershed-scale Planning and Reporting Toolbox For Municipalities

Locate and determine cost effective Green Infrastructure implementation scenarios at the watershed scale, model future conditions with Reasonable Assurance, and track and report implementation and water quality improvements.

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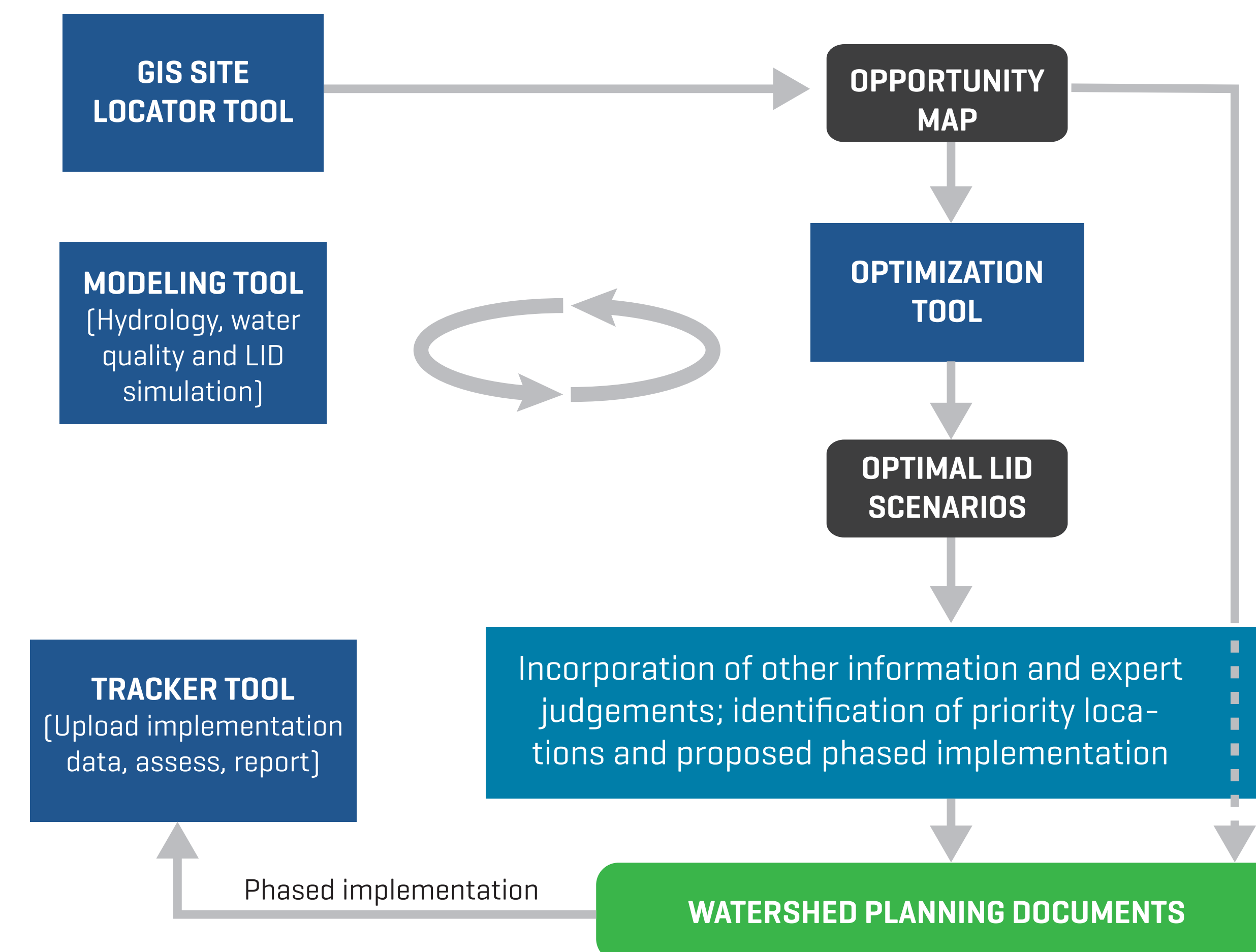
<http://greenplanit.sfei.org>

TOOLKIT | USER MANUAL | TOOLKIT REQUIREMENTS | DEMONSTRATION REPORT

FUNDED BY: STATE WATER RESOURCES CONTROL BOARD AND US ENVIRONMENTAL PROTECTION AGENCY

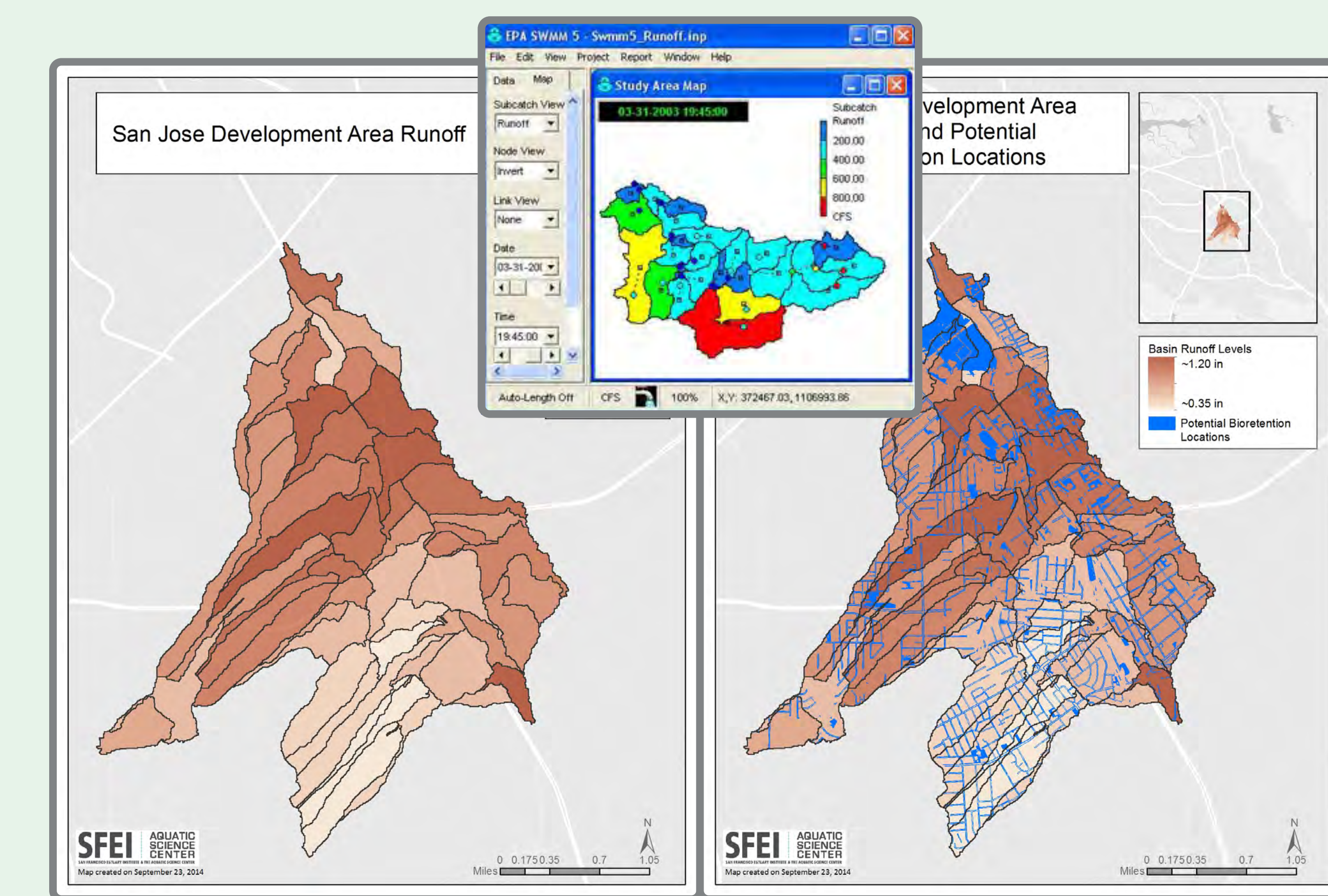
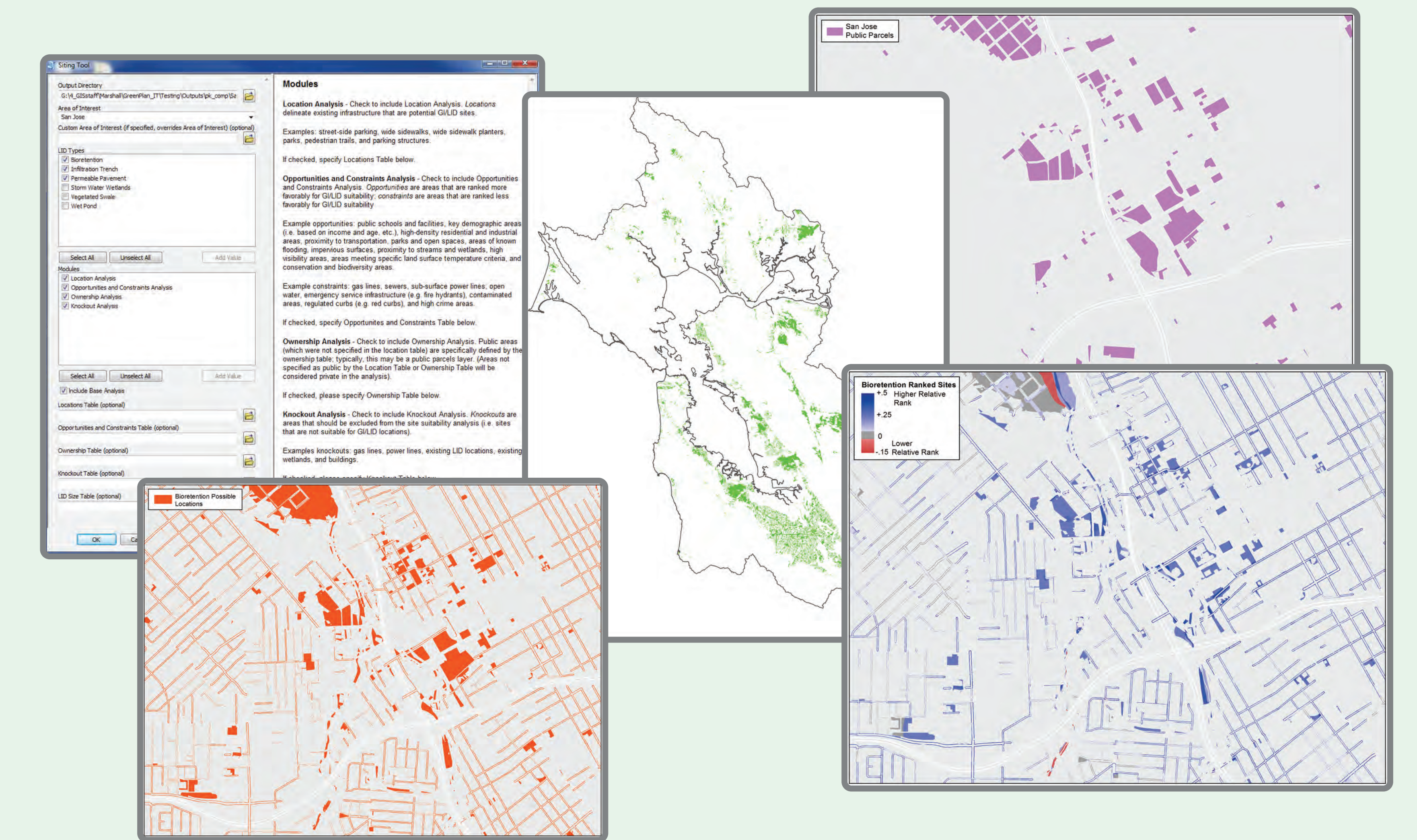
KEY FEATURES

- GIS site locator tool to assess feasible opportunities for Green Infrastructure (GI) at the watershed scale
- Modeling tool to simulate baseline runoff and pollution, GI performance under design storm conditions at optimal locations, and for continuous simulation to support reasonable assurance analysis
- Optimization tool to identify cost-effective scenarios for flow and load reductions
- Tracker tool to record, display and aggregate information, generate standardized reports, and track progress in relation to TMDL goals



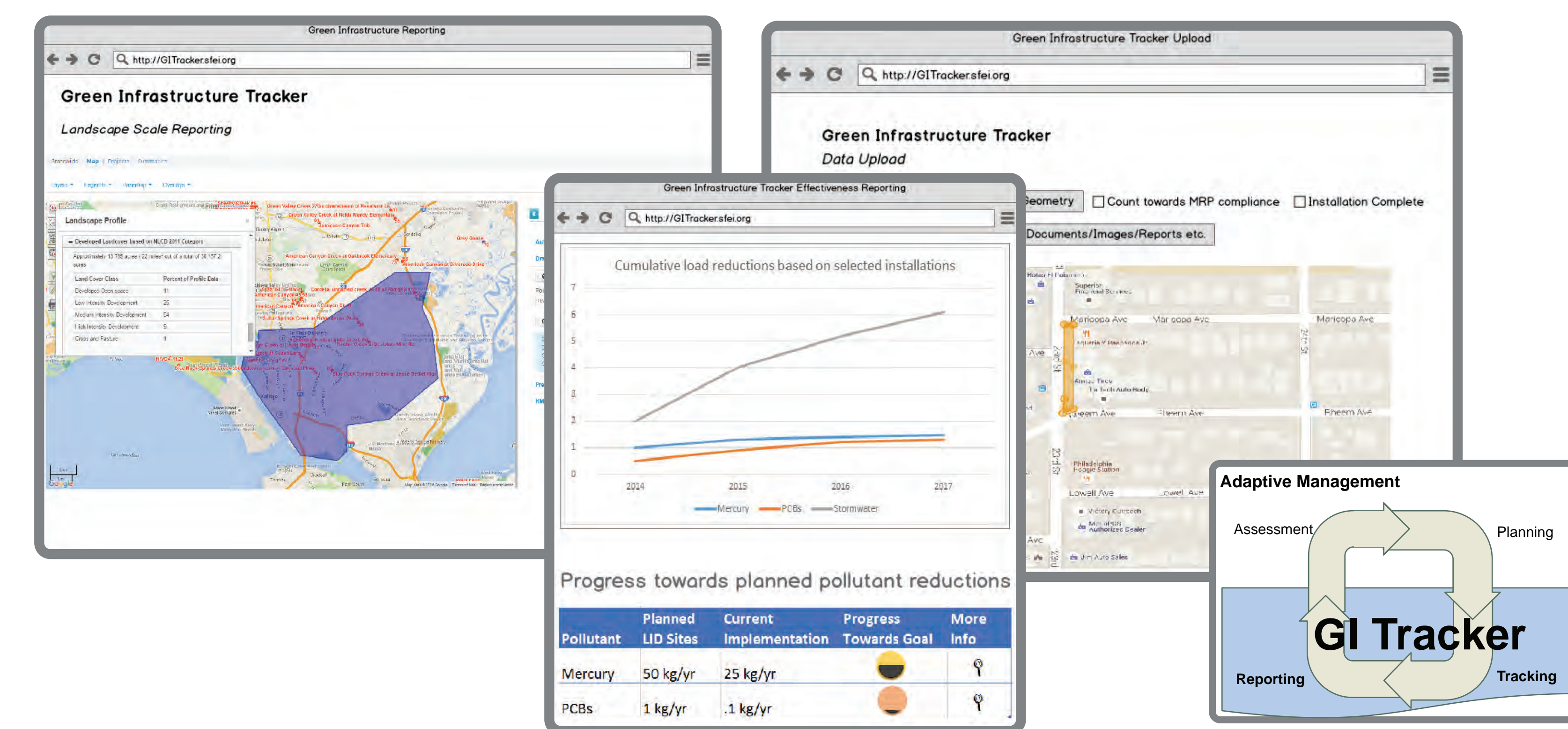
LOCATOR TOOL

- Ranks potential Green Infrastructure locations, public and private
- Weighting and buffering customizable 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



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)
- Provides support for tracking load reductions in relation to plans and goals

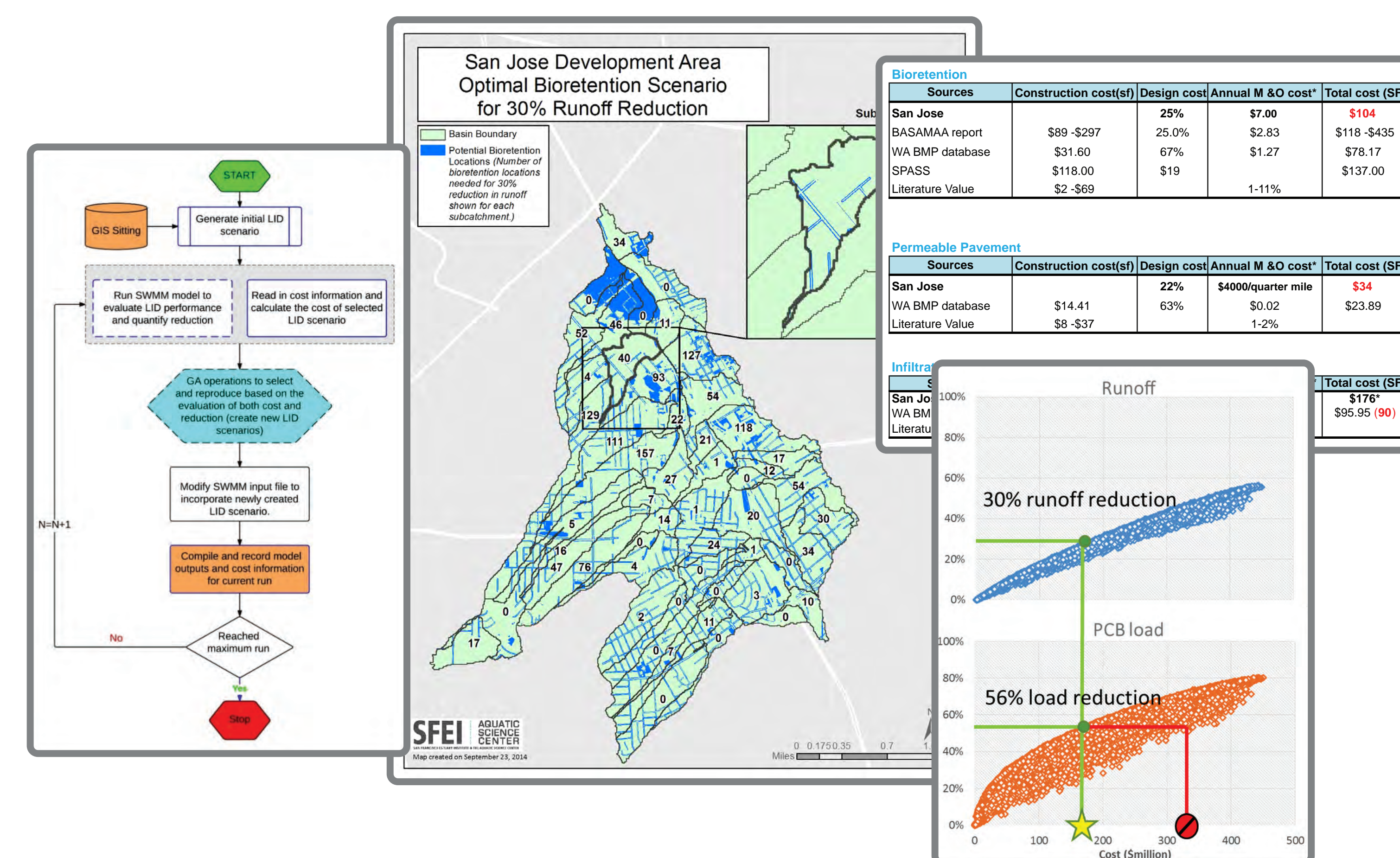


TRACKER TOOL

- Record and display information about GI implementation for individual sites
- Aggregate information across multiple sites within a city or any area of interest
- Generate standardized reports to track progress and demonstrate regulatory compliance
- Illustrate the broader lifecycle of GI planning, implementation and outcomes to municipal managers and the public using simple score cards on key information

OPTIMIZATION TOOL

- Provides a systematic approach to identify most cost-effective GI combinations for achieving groundwater infiltration, flow, and/ or load reduction goals
- Relate cost to various levels of flow or load reductions
- Customizable to allow the exploration of LID types individually or as a group



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 and a web-based tracker system to support regular standardized reports of progress towards plan implementation

