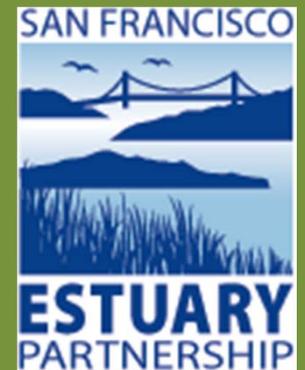


# GreenPlan Bay Area

Kick Off Meeting

9/19/13, 2-4pm

Elihu Harris Building, Oakland, CA



# Agenda

- Welcomes 2pm
- Introduction of Project 2:15
- Roles for Cities 2:25
- Discussion / Q & A 2:35
- Overview of GreenPlan-It 3:00
- Initial Thoughts on Data / Discussion 3:20
- Next Steps 3:45

# Welcome 2-2:15

Jennifer Krebs

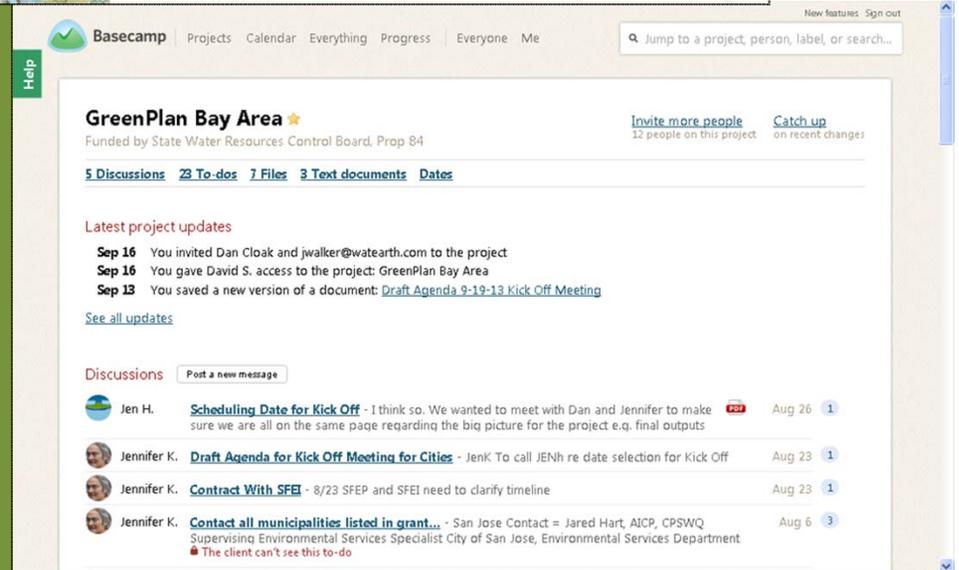
- Greetings from SFEP
- Go around room
- Sign-in sheet (needed for State Board)

# Introduction of Project 2:15-2:25

Jennifer Krebs

- Project Team: SFEP, SFEI, Dan Cloak, Jennifer Walker
- Web Page <http://www.sfestuary.org/greenplanning>
- Basecamp
- Project Schedule
- Project Outcomes
- Purpose of Meeting

Jesse Mills



# Roles for Municipalities 2:25 – 2:35

Jennifer Krebs

- TAC Members
- “Master Planning” Agency
- Interested Party

# Discussion / Q&A 2:35 – 3:00

Jennifer Krebs

- Municipalities current efforts that dovetail with Green Infrastructure Master Planning?
- How do you think the Plans can benefit your municipality?
- How do you think an alternative compliance program can benefit your municipality?
- Questions?

# Overview of Green Plan-It

Lester McKee SFEI

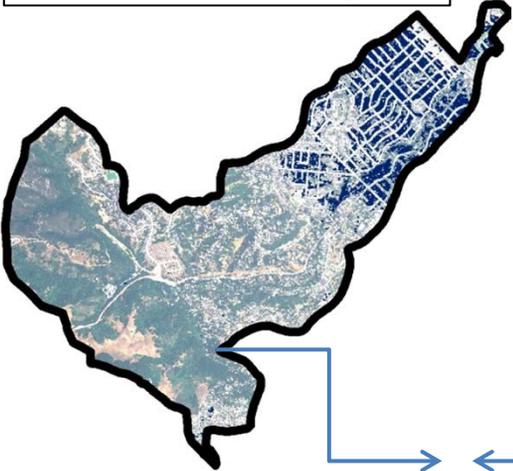
3:00-3:20

## In a given watershed...

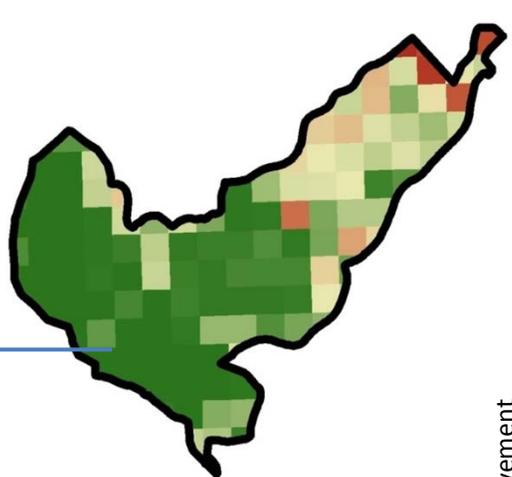
- What quantitative water quality and hydrological improvements can be made with Low Impact Development?
- What is the optimal plan?
- With LID, can we improve upon the cost/benefit of grey infrastructure alone?

# GreenPlan-it toolbox

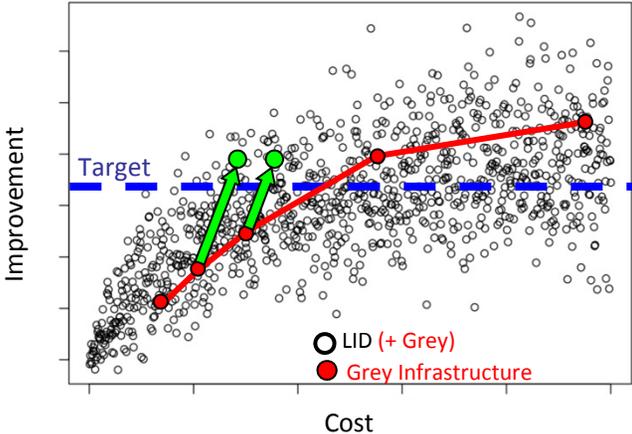
GIS Siting Tool



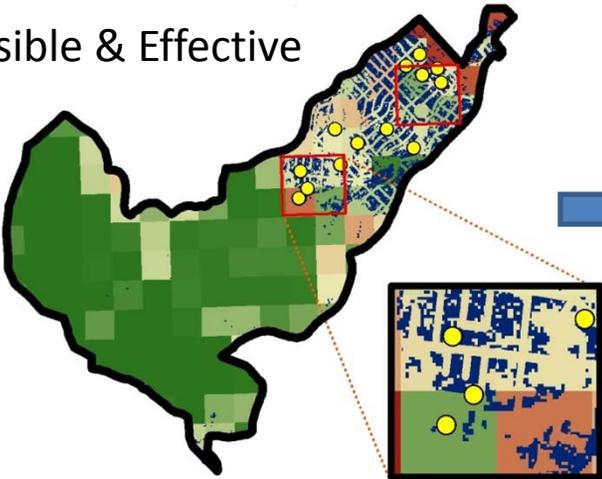
Critical Areas Tool



Improvement vs. Cost

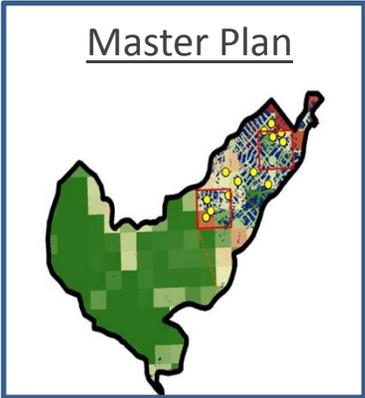


Feasible & Effective

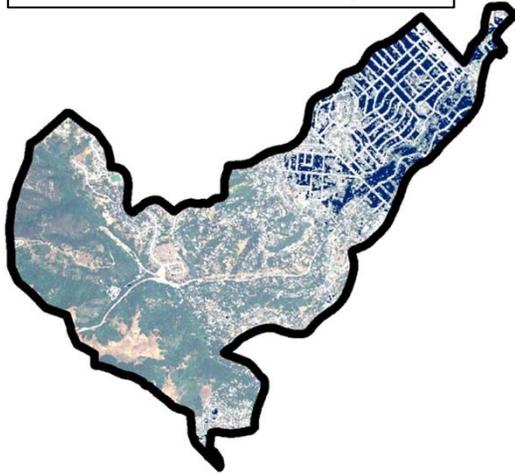


Optimization Tool

- Maximize benefit
- Minimize cost

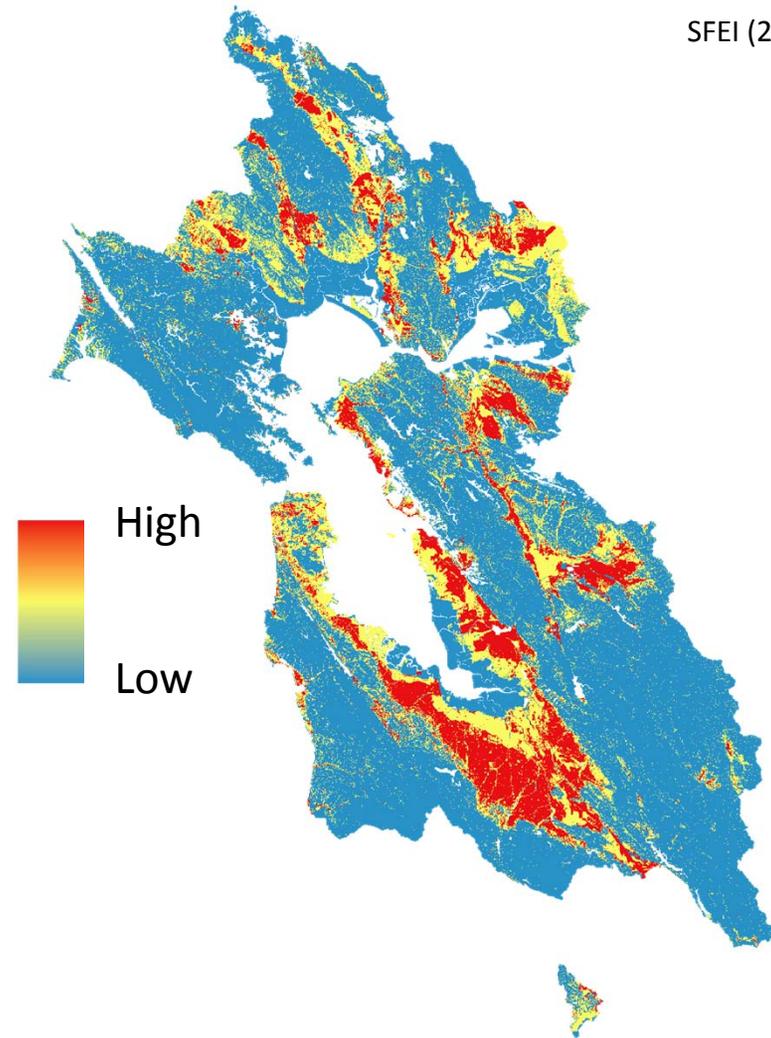


## GIS Siting Tool



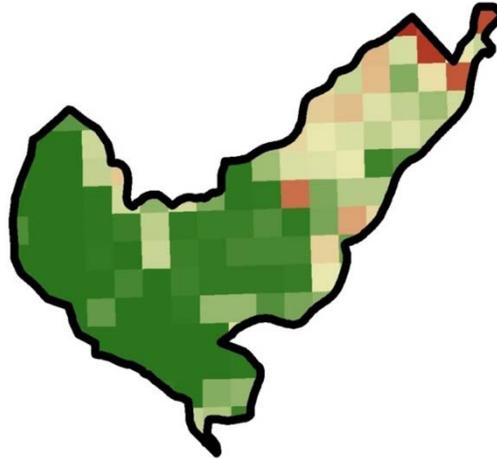
## Regional LID Site Suitability Tool

SFEI (2012)



- Use local + regional GIS layers to identify feasible sites
  - Infrastructure
  - Private vs. public land
  - Redevelopment plans
  - Capital improvement plans

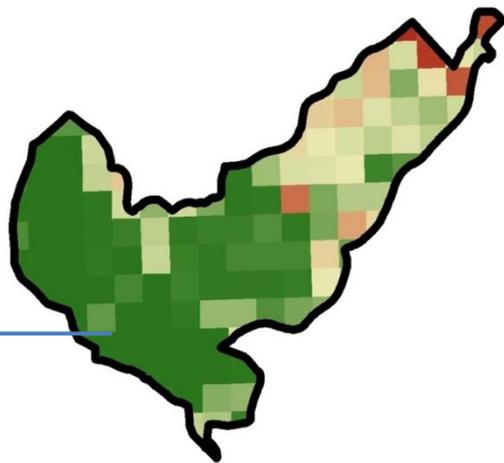
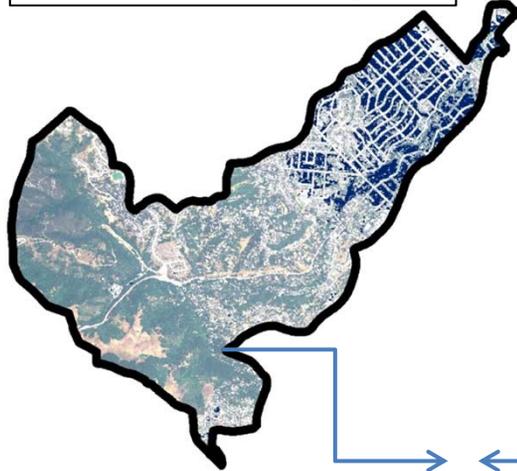
## Critical Areas Tool



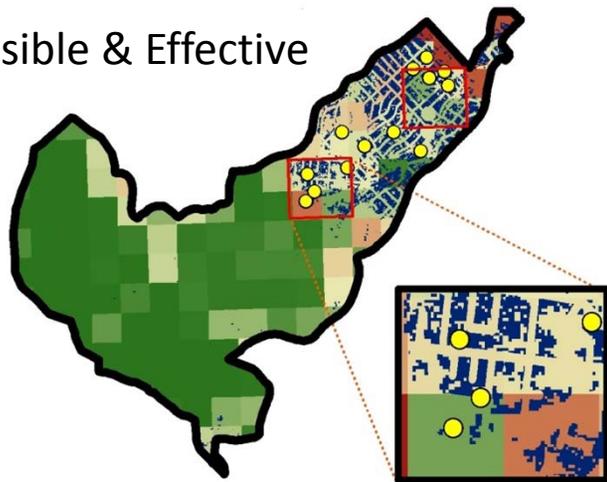
- Simulate watershed processes
- Identify critical sources areas
  - Flow
  - Contaminants
- Overlay area-specific considerations
  - Areas of known flooding

GIS Siting Tool

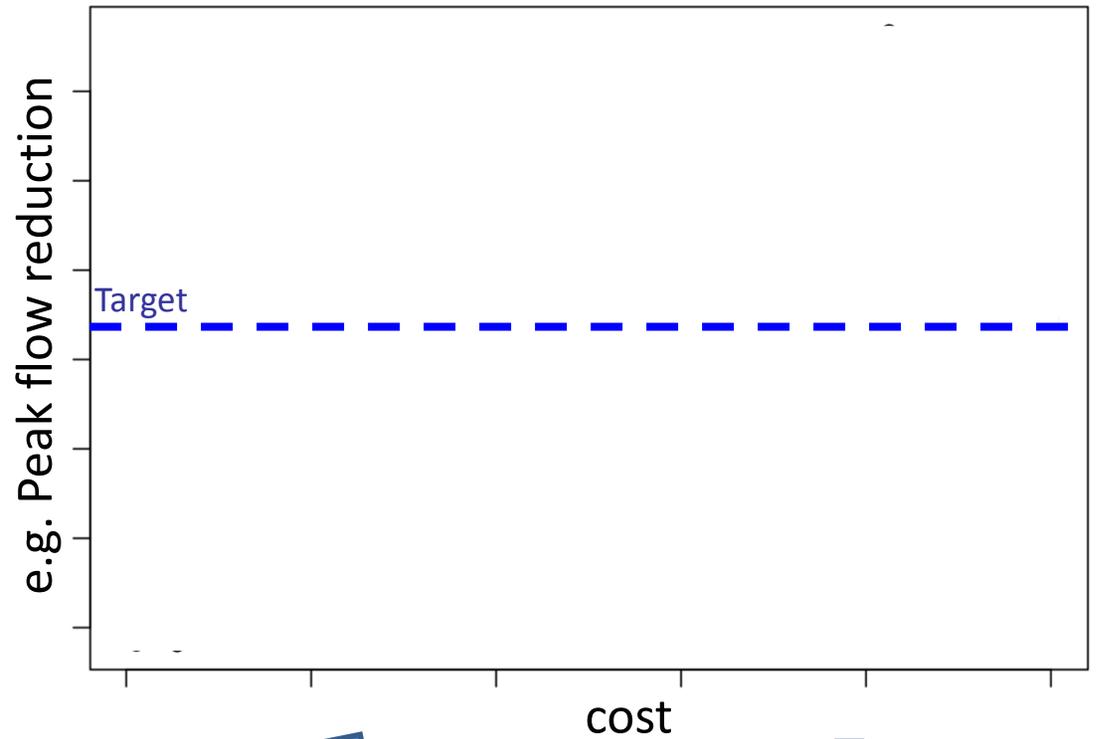
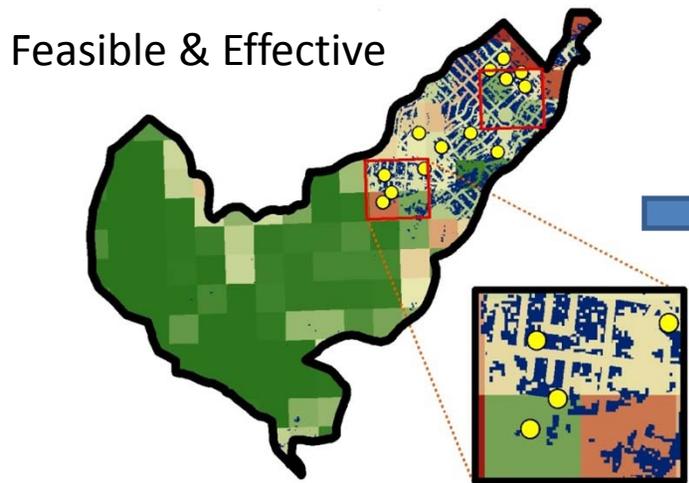
Critical Areas Tool



Feasible & Effective



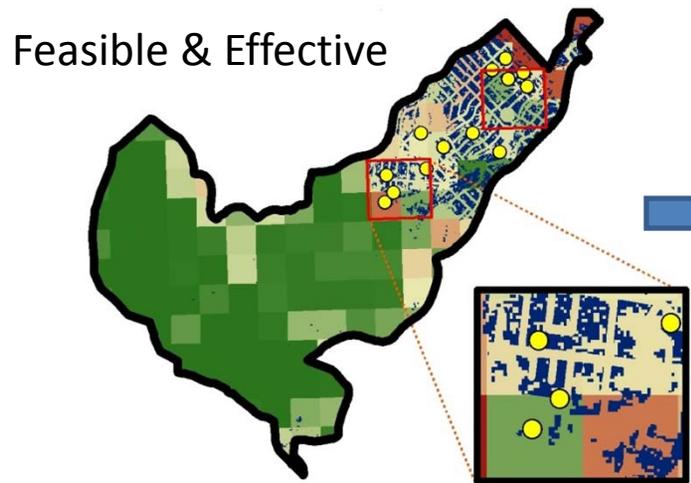
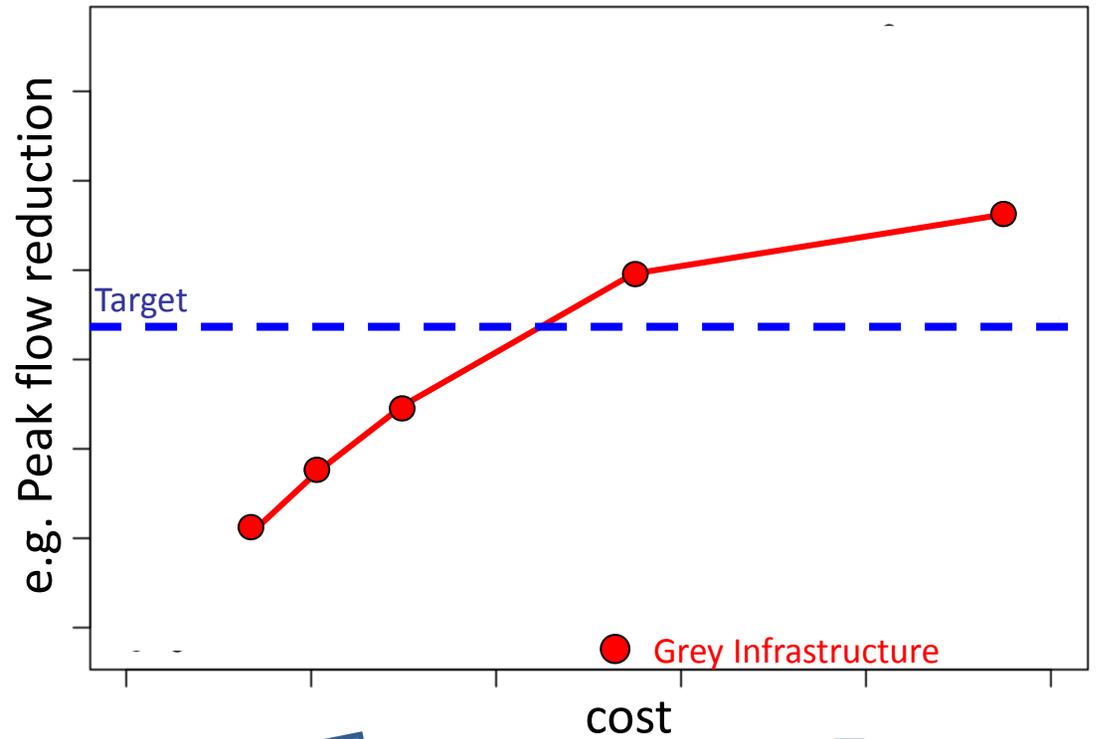
- Combination = Initial for optimization
  - e.g., 1000 possible locations
- Field verification



Optimization Tool

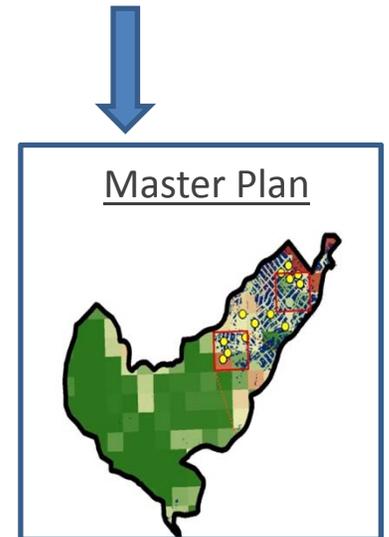
- Maximize benefit
- Minimize cost



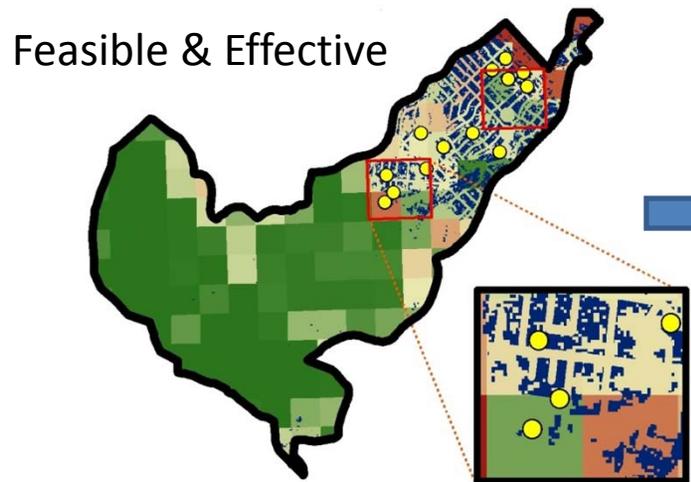
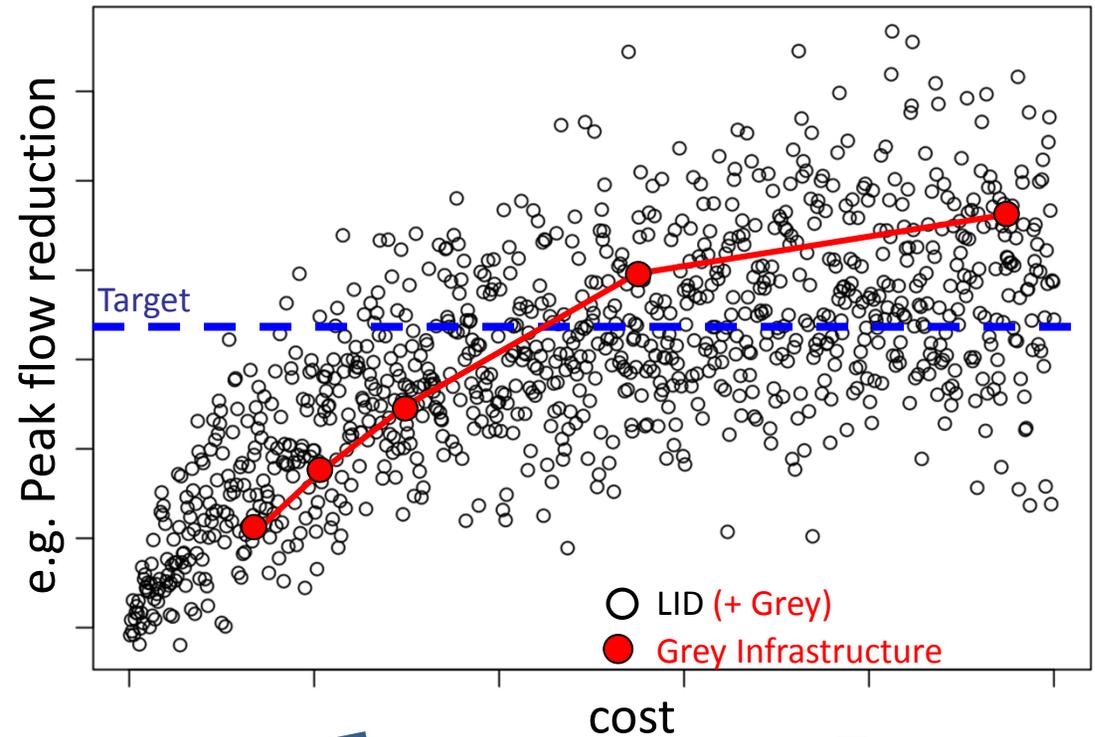


**Optimization Tool**

- Maximize benefit
- Minimize cost



- Multiple simulations
- Quantify potential effectiveness
- Balance benefit and cost
- LID + Grey Infrastructure

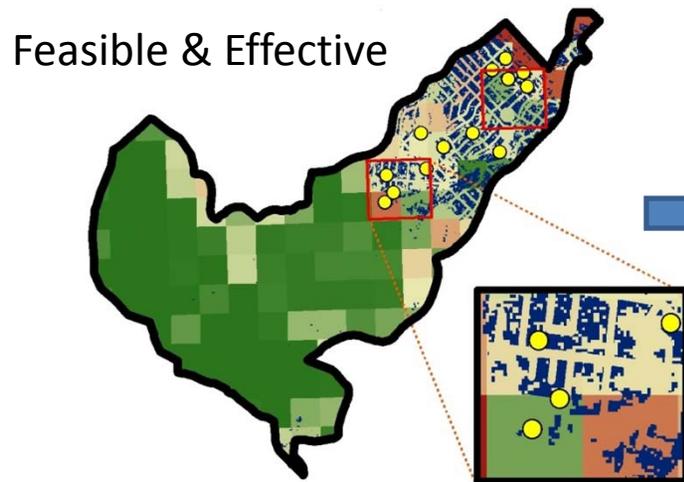
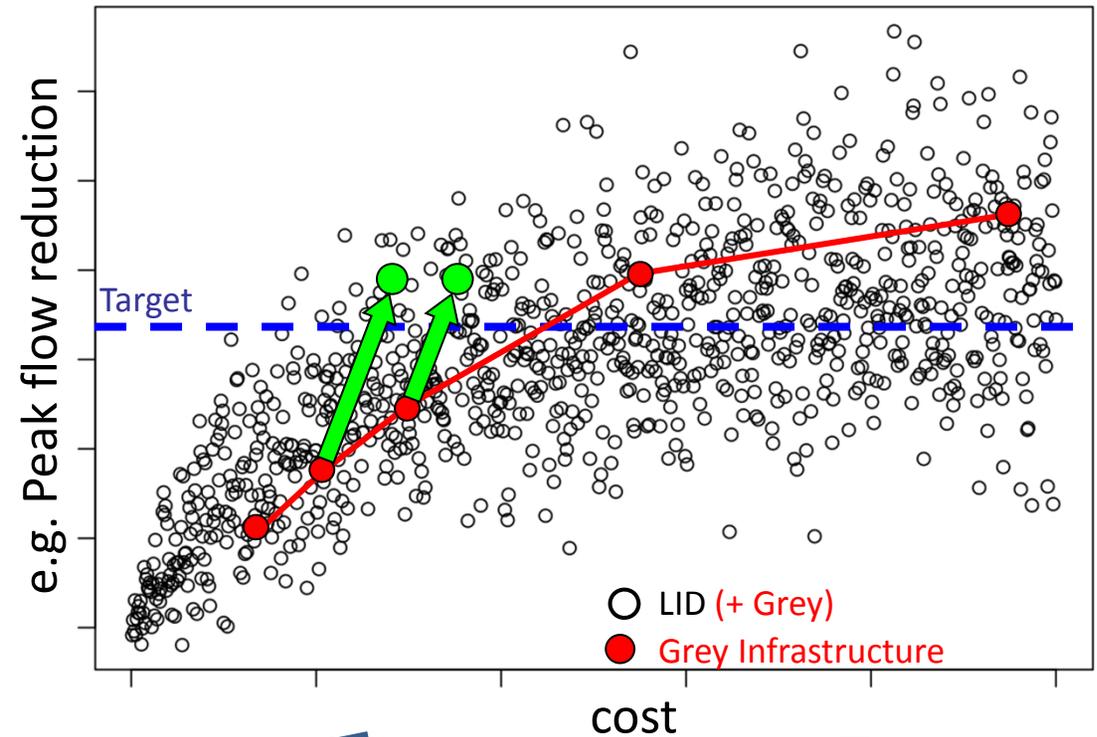


Optimization Tool

- Maximize benefit
- Minimize cost



- Multiple simulations
- Quantify potential effectiveness
- Balance benefit and cost
- LID + Grey Infrastructure



Optimization Tool

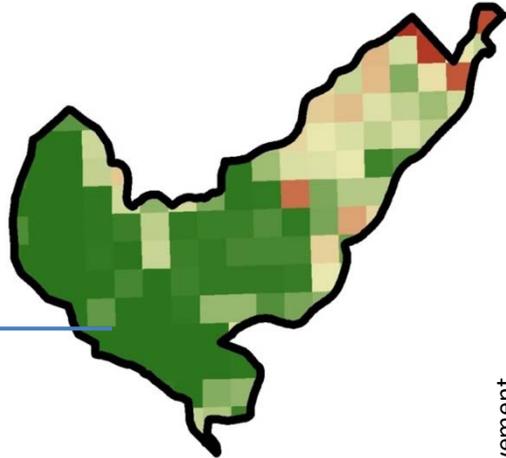
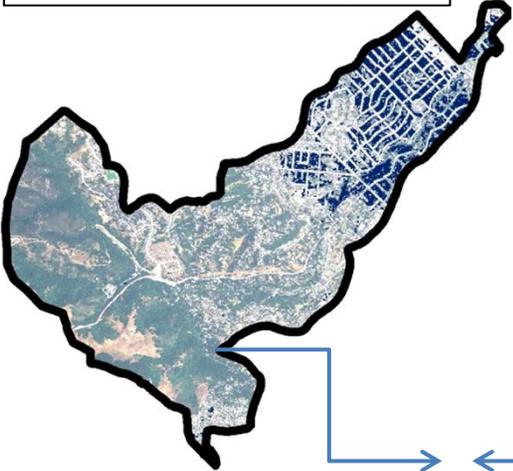
- Maximize benefit
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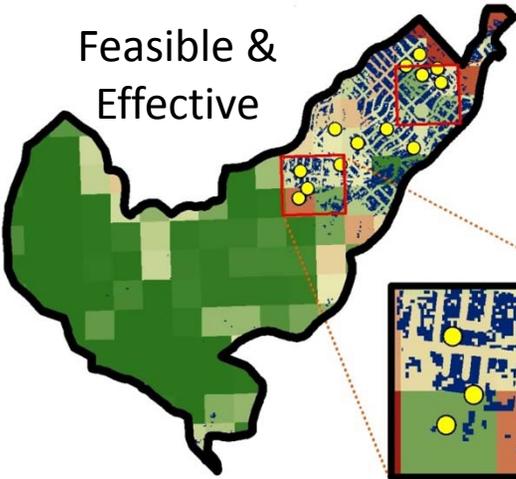
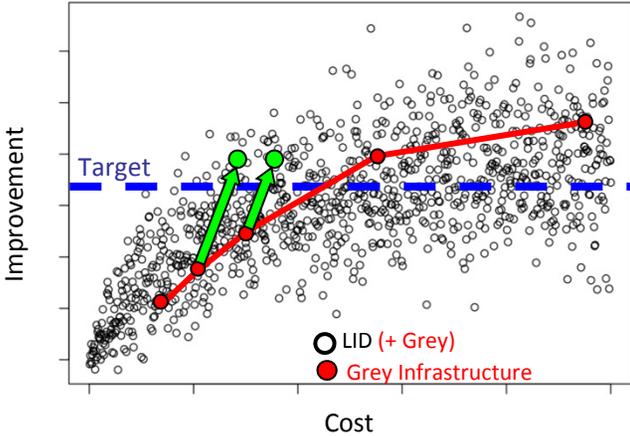
# GreenPlan-it toolbox

GIS Siting Tool

Critical Areas Tool



Improvement vs. Cost



Optimization Tool

- Maximize benefit
- Minimize cost



# Discussion Questions

- What output would be most useful?
- How could this project/toolkit best integrate with near-term and longer-term planning processes?

# Local Data Needed for Toolkit

- **Topography** – ~1ft vertical resolution (LiDAR)
- **Land cover** - ownership, parcels, roads
- **Hydrology** - storm drainage network, depth to groundwater, flow
- **Water Quality Monitoring**
- **Imagery** – current (2010 or later) high resolution (<1 ft) aerial photography
- **Catchment Delineations** - <HUC12
- **Additional data** - any other partner-specific data themes or locations to be included in analysis of LID implementation, e.g., red curbs, right of ways, public parks, etc.
- **Meteorology** – precipitation, temperature
- **Diversion** - any water uses that divert water from the stream/watershed (locations and amounts)
- **Existing LID information** - Location, type, remove efficiency, design capacity, any post-implementation monitoring data
- **Existing Stormwater Models**
- **Local cost information on various types of LID** - capital, operation and maintenance

# Questions on Data 3:20-3:45

Kristen Cayce

## Input:

- What local data sets do cities have?
- Who might we contact to acquire data?

## Output:

- What type of format of outputs that works best for cities? (map, list....)

# Next Steps 3:45 – 3:55

Jennifer Krebs

- Memo to Munis re data availability, interest in X role in project, reflections on this meeting (regarding project goals, etc.) – 9/25/13 – SFEP
- Due date for response to memo – 10/15/13 - Municipalities
- Selection of munis for various roles - 11/1/13 - SFEP
- Memo to selected munis on data collection next steps (11/1/13), and follow up communications as needed on how to collect data (data due 12/13)