GreenPlan San Mateo Meeting Minutes

8-12-14, 9:30 to 11:30 am

San Mateo Conference Room C

Attendees: Dan Cloak (DCE), Lester McKee & Pete Kauhanen (SFEI), Josh Bradt & Jennifer Krebs (SFEP), Ken Chin, Sarah Scheidt, Jocelyn Walker, Gary Heap (San Mateo), Matt Fabry (C/CAG)

Pete K of SFEI presented information on GreenPlan-IT (powerpoint attached)

Q & A -
Sarah - want to overlay PCB and trash areas to assure that the areas identified meet MRP compliance.

Ken – the improvements in GreenPlan-IT are great! It is cool, useful, and usable. I should have invited more folks to attend the meeting. It will help the city move from "pin the tail on the donkey" to a better approach. 2 areas to be included (maybe) are Bay Meadows and Humboldt offramp.

Gary – what is relevant about the Humboldt corridor - bids for work are coming back high – We can nix areas in non-high-priority areas.

Matt - how to incorporate this info in Sustainable Streets Plan?
Ken – The outputs should be in plan - maps etc. City will approve the plan in Feb/Mar. CEQA will take place in June/July. Then the Planning Dept will update City General Plan.

Next Steps:
- SFEI will schedule a follow up conference call to determine how to prioritize data layers, weighting issues, etc.
- This Group (expanded) will meet again in mid/late sept. to review the updated data outputs
- Site verification/site design. Dan Cloak will check out San Mateo drive and grant Ave. He will work on drawings to for the sustainable streets plan, or appendix, or ....
- Josh Bradt is working on alternative compliance methodologies. He presented an outline of thoughts to date and got feedback (outline attached). This will also be expanded by the next meeting.

Extra notes for Josh

Dan to date some developers have taken street run off or other uphill site. REstrictions willl probably go away next MRP. Not too many projects will need offsite; so they might not really push public infrastructure. But might help city allow the development to happen. Josh - add swales to city parking lot.

Impact fees. Matt - in Portland they charge vehicle fees, Ken - San Mateo wants to add traffic fee, might be sustainable streets fee. Burlingame has SW fee.

Matt will try to make progress on regional level, but need help on local funding.

GreenPlanIT
LID Site Suitability Tool
San Mateo Draft Output

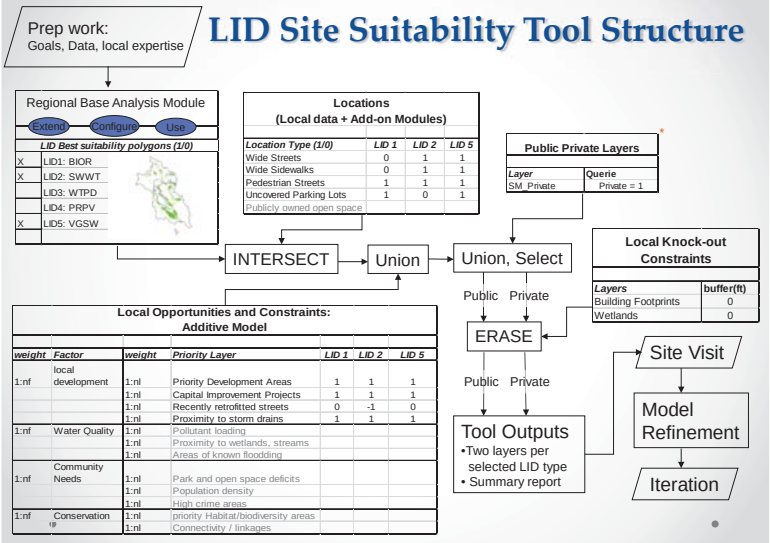
Pete Kauhanen, petek@sfei.org

San Mateo GreenPlanIT Meeting, 06/17/2014

Presentation Outline

- Tool Structure
- User Input Tables
- San Mateo Draft Process
  - o Maps
  - o Tables
- San Mateo Draft Output

LID Site Suitability Tool Structure



User Input

- Check which LID types to run
  - o Infiltration Trench*
  - o Bioretention
  - o Permeable Pavement
  - o Vegetated Swale
  - o Storm Water Wetlands
  - o Wet Pond
- Configuration Data Tables
  - The scale/accuracy of input data determines the scale/accuracy of the final outputs
  - o Location Layer Table
  - o Opportunities and Constraints Weighted Addition Table
    - Rank layer factors to match funding opportunities and local importance
  - o Public Private Layer table
  - o Knock-Out Constraint Table

Base analysis table (check)

LID Selection	include	Location Analysis	Opportunities and Constraints	Ownership	Knockouts
LID1 (bior)	1	1	1	1	1
LID2	0	1	1	1	1
LID3	0	1	1	1	1
LID4	0	1	1	1	1
LID5	0	1	1	1	1
LID6	0	1	1	1	1

Location table

Full_File_Name	layer alias	LID 1	LID 2	LID 3	LID 4	LID 5	LID 6	Assume_Public
G:\1_CleanWater\GreenPlan_\SitingToolAnalysis\SitingToolAnalysis.gdb\SM_streets_sidemix_1lnstreets_100Ln	1lnStreet_SideParking	1	1/0	1/0	1/0	1/0	1/0	1
G:\1_CleanWater\GreenPlan_\SitingToolAnalysis\SitingToolAnalysis.gdb\SM_streets_sidemix_2lnstreets_250Lcw	2lnStreet_SideParking	1	1/0	1/0	1/0	1/0	1/0	1
G:\1_CleanWater\GreenPlan_\SitingToolAnalysis\SitingToolAnalysis.gdb\SM_Sidewalks_planter_mrthin4ft	4ft+_Sidewlk_Planter_Width	1	1/0	1/0	1/0	1/0	1/0	1
G:\1_CleanWater\GreenPlan_\SitingToolAnalysis\SitingToolAnalysis.gdb\SM_Sidewalks_width_mrthin8ft	8ft+_Sidewalk_Width	1	1/0	1/0	1/0	1/0	1/0	1
G:\1_CleanWater\GreenPlan_\SitingToolAnalysis\SitingToolAnalysis.gdb\SM_PedTrail_4ft	Pedestrian Trails	1	1/0	1/0	1/0	1/0	1/0	0
G:\1_CleanWater\GreenPlan_\SitingToolAnalysis\SitingToolAnalysis.gdb\SM_PossiblePedTrail_4ft	Potential Pedestrian Trails	1	1/0	1/0	1/0	1/0	1/0	0
G:\1_CleanWater\GreenPlan_\Data\SanFrancisco_OSM\SF_OSM_20140709.gdb\SF_OSM_amenity__parking_pSy	Parking_OSM	1	1/0	1/0	1/0	1/0	1/0	0
G:\1_CleanWater\GreenPlan_\Data\SanFrancisco_OSM\SF_OSM_20140709.gdb\SF_OSM_amenity__parks_pSy	Parks_OSM	1	1/0	1/0	1/0	1/0	1/0	0

Location Details

- **Street-side parking**
  - 2 Lane
    - Width of street – (Width of street – 8ft on both sides)
    - Where there are at least 20ft of lane space left
  - 1 Lane
    - Width of street – (Width of street -8ft on one side)
    - Where there is at least 10ft of lane space left
- **Wide Sidewalk**
  - Sidewalk width ≥ 8ft
- **Wide Sidewalk Planter**
  - Planter width ≥ 4ft

Location Details

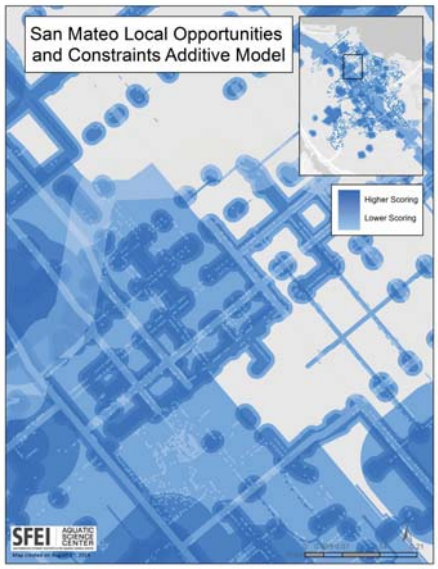
- **OSM Parks**
  - Open Street Maps
    - Free, Bay Wide
  - Not exhaustive
- **Pedestrian Trails**
  - Trail line buffered 4 ft (Bior width?)

Location Details

- **OSM Parking**
  - Open Street Maps
    - Free, Bay Wide
  - Not exhaustive
  - Not high quality everywhere
  - Includes parking structures
    - Building foot prints?

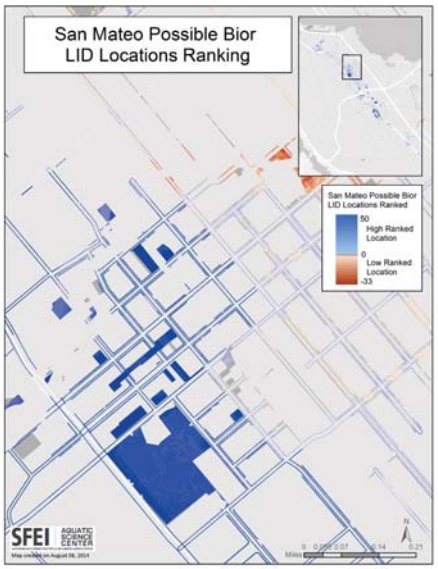
Opportunities and Constraints Table

factor_ weight	factor_name_alias (10 char)	factor	layer_ weight	layer_name_alias (10 char)	layer_name	layer_filename	layername_in_file	layer_querie	buffer_ type	lid_1_rank	lid_1_ buffer_ft
1 / 3	**LocDev**	**local development**	1	BayPDA	priority development areas	G:\1_CleanWater\GreenPlan_1Data\ABAG_Info\Priority_Development_Areas_current.shp	Priority_Development_Areas_current.shp		Full	1	0
1 / 6	**IntllFeas**	**Install Feasibility**	0.25	StrmLn60	Storm Line 60ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\SD_STORMLINES.shp	SD_STORMLINES.shp		Full	1	60(ft)
			0.25	StrmLn100	Storm Line 100ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\SD_STORMLINES.shp	SD_STORMLINES.shp		Full	1	100(ft)
			0.25	StTree12	***Street Trees**** ***12ft***	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	PARKS_STREET_TREES.shp		Full	-1	12(ft)
			0.25	StLit5	Street Lights5ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	STREETLIGHTS.shp		Full	-1	5(ft)
1 / 6	**wtrQual**	**water quality**	1	Strm200	***Streams 200ft****	G:\1_CleanWater\GreenPlan_1Data\SanMateoCountyNATURAL FEATURES\	STREAMS.shp		Full	-1	200(ft)
1 / 6	**ComNds**	**community needs**	0.25	Bike15	Regional Bike Facilities	G:\1_CleanWater\GreenPlan_1Data\From_MTC_Data_Portal\	Regional_Bike_Facilities_Bay.shp		Full	1	15(ft)
			0.25	DmgSt	Damaged Streets	G:\1_CleanWater\GreenPlan_1Data\SanMateoStreetsevents\data\	SM_StreetsJoinedWithTable.shp		Full	1	halfWIDTH
			0.25	DmgSdwlk	Damaged Sidewalk	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\SIDEWALKS.shp	SIDEWALKS.shp	[illegible]	n/a	1	0
			0.25	FireIns36	Fire Running Lanes 36ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	FD_FIRE_RUNNING_LANES.shp		Full	-1	36(ft)
1 / 12	**Cons**	**conservation**	1	Lks300	***Lakes 300ft****	G:\1_CleanWater\GreenPlan_1Data\SanMateoCountyNATURAL FEATURES\	LAKES.shp		Full	-1	300ft(ft)
1 / 12	**ComVis**	**community visibility**	0.25	School200	Schools 200ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	DOIT_SCHOOLS.shp		Full	1	200(ft)
			0.25	School500	Schools 500ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	DOIT_SCHOOLS.shp		Full	1	500(ft)
			0.25	Lib200	Libraries 200ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	DOIT_LIBRARIES.shp		Full	1	200(ft)
			0.25	Lib500	Libraries 500ft	G:\1_CleanWater\GreenPlan_1Data\SanMateoData20140331_Jenns_JessicaA\GIS layers\	DOIT_LIBRARIES.shp		Full	1	500(ft)


San Mateo Local Opportunities and Constraints Additive Model
Higher Scoring
Lower Scoring
SFEI
AQUATIC SCIENCE CENTER

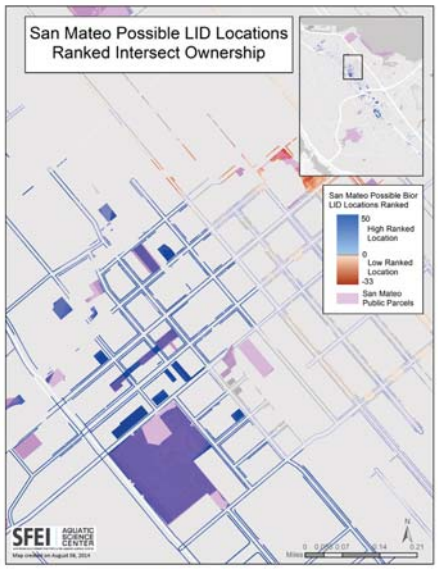

San Mateo Weighted Opportunities and Constraints Additive Model
Higher Scoring
Lower Scoring
SFEI
AQUATIC SCIENCE CENTER

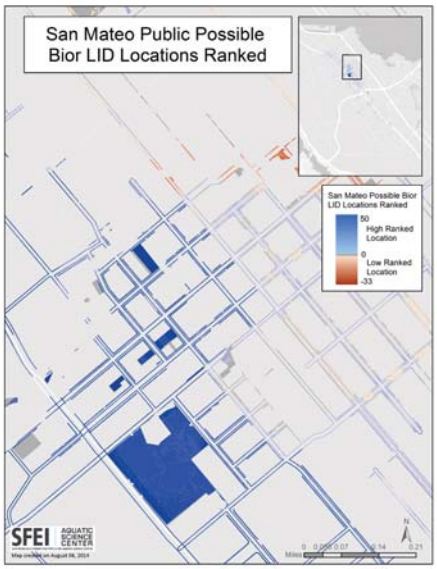

San Mateo Possible Bior LID Locations Ranking
San Mateo Possible Bior LID Locations
Higher Scoring
Lower Scoring
SFEI
AQUATIC SCIENCE CENTER

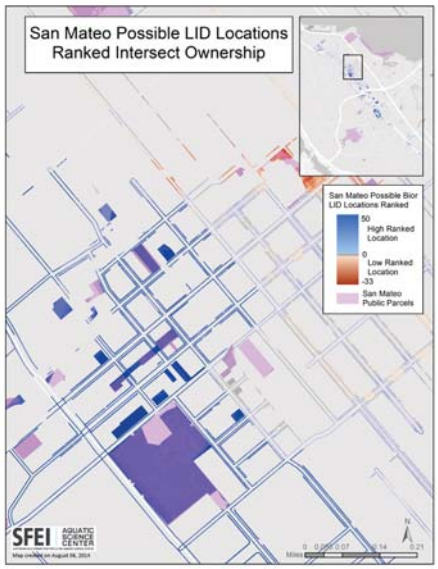

San Mateo Possible Bior LID Locations Ranking
San Mateo Possible Bior LID Locations Ranked
50
High Ranked Location
0
Low Ranked Location
-33
SFEI
AQUATIC SCIENCE CENTER

Public Table*

Layer Location	Layer Name	Ownership field	public value	Public queried
G:\1_CleanWater\GreenPlan_1\Data\SanMateo_fromKenChin20140402\SM_PublicParcels\CSM_PROPS\City_parcels_merged.shp	City_parcels_merged	public	1	
If Public query is false – then use ownership field and public value				

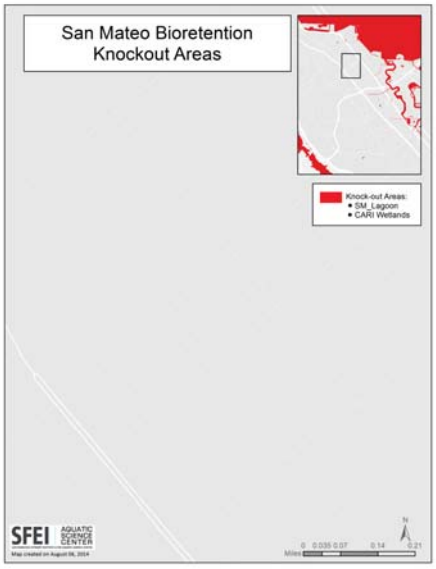


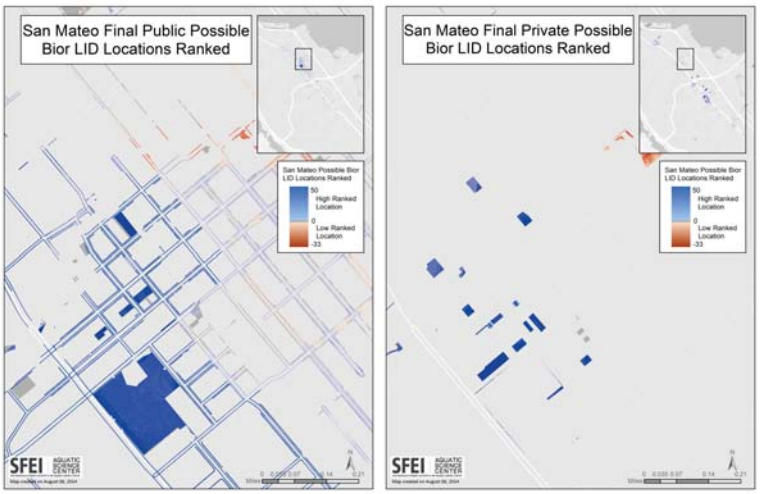


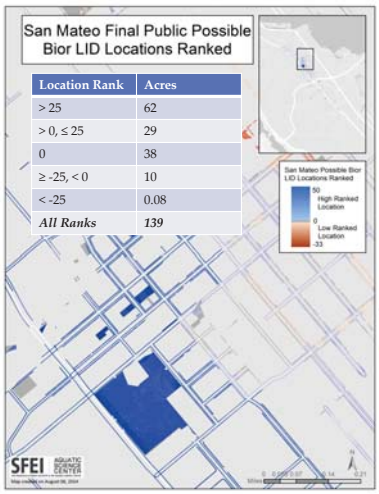


Knockout Table

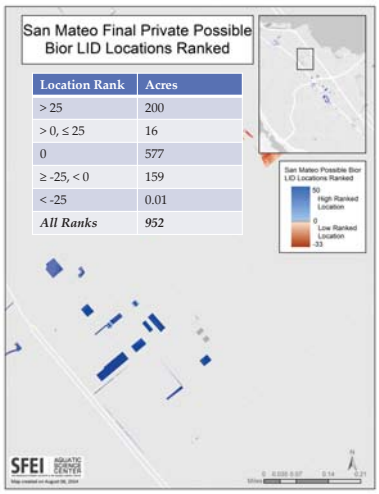
Full_File_Name	layer alias	LID 1	LID 2	LID 3	LID 4	LID 5	LID 6
G:\1_CleanWater\ GreenPlan_ \Data\SM_CustomLayer s\R2_CARI_Public*.shp	CARI Wetlands*	1	1/0	1/0	1/0	1/0	1/0
G:\1_CleanWater\ GreenPlan_ \Data\SanMateoData201 40331_from_Jessica\A\GIS layers\BAY_LAGOON.shp	SM_Lagoon	1	1/0	1/0	1/0	1/0	1/0
Path	Building Footprints	0	1/0	1/0	1/0	1/0	1/0



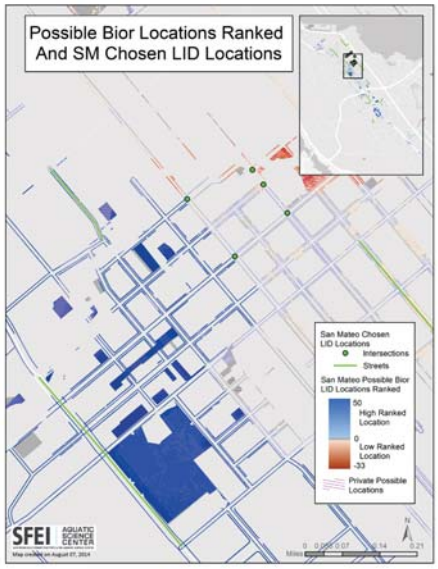




Location Rank	Acres
> 25	62
> 0, ≤ 25	29
0	38
≥ -25, < 0	10
< -25	0.08
All Ranks	*139*



Location Rank	Acres
> 25	200
> 0, ≤ 25	16
0	577
≥ -25, < 0	159
< -25	0.01
All Ranks	*952*



Discussion

1. Group to fill out Opportunities and Constraints Table for San Mateo
   - In person or web-ex
   - Possibly a few hours to complete
2. Sustainable Streets Plan
3. Layers that rank differently in different areas or for different attributes
   - Ex: Different buffers for different diameters of storm drain pipe?

Thank You!

- Please email or call with additional feedback

Stormwater Management Alternative Compliance Framework

Project Deliverables: 1) Alternative Compliance Framework
2) Memorandum describing program
3) Case study/progress of program development (Final Report)

Alternative Compliance (aka "Off-site Mitigation") = provision offered by municipality allowing developers to meet new & redevelopment sw mgmnt requirements off-site of a project. This option provides flexibility to developer (where on-site sw controls are infeasible or limited), and potentially leads to net environmental benefits above those achievable on-site.

MRP parameters for AC programs:
Provision C.3.e.: Permittees may allow a Regulated Project to provide alternative compliance with Provision C.3.c , where LID treatment of Stormwater runoff not treated on site may be provided at either:

Option 1: An Offsite Location

Treat the remaining portion of the Provision C.3.d runoff with LID treatment measures at an offsite project in the same watershed. The offsite LID treatment measures must provide hydraulically-sized treatment (in accordance with Provision C.3.d) of an equivalent quantity of both stormwater runoff and pollutant loading and achieve a net environmental benefit.

Offsite Projects:

- Must be constructed by the end of construction of the Regulated Project.
- Or for each additional year, up to three years, after the construction of the Regulated Project, the offsite project must provide an additional 10% of the calculated equivalent quantity of both stormwater runoff and pollutant loading.

Option 2: A Regional Project[1] with an in-lieu fee[2] contribution

Pay equivalent in-lieu fees to treat the remaining portion of the Provision C.3.d runoff with LID treatment measures at a Regional Project. The Regional Project must discharge into the same watershed as the Regulated Project and must achieve a net environmental benefit.

Regional Projects:

- Must be completed within three years after the end of construction of the Regulated Project
- Or up to five years with Executive Officer approval.

[1] **Regional Project:** A regional or municipal stormwater treatment facility that discharges into the same watershed as the Regulated project does

[2] **In-lieu Fee:** "Monetary amount necessary to provide both hydraulically-sized treatment (in accordance with Provision C.3.d) with **LID treatment** measures of an equivalent **quantity** of stormwater runoff and **pollutant loading**, and a proportional share of the **operation and maintenance** costs of the Regional Project."

Regulated Project Compliance Hierarchy/Options (taken from West Virginia program)

1) On-site Compliance – Developer designs & installs required sw controls on-site.

Muni Role	Developer Role
• reviews and approves developer compliance • conduct tracking and reporting	• demonstrate full compliance on-site

2) Developer-driven Off-site Mitigation (private/private) – use off-site project to fulfill entire runoff/pollutant reduction volume or remaining volume after partial on-site management.

Muni Role	Developer Role
• verify on-site infeasibility • review on-site & off-site plans • inspect installation • verify on/off-site LT maintenance practices • conduct tracking and reporting	• must document infeasibility • ID locations for off-site • prepare plans, • secure property rights • construction • maintenance

3) Muni-facilitated (Regional) Off-Site Mitigation (private/public) – developer builds off-site project on public land (right of way or environmentally sensitive area) at site(s) suggested/determined by muni.

Muni Role	Developer Role
• verify on-site infeasibility • IDs priority areas & potential projects • works with developer to select site (meeting community-watershed goals) • review on-site & off-site plans • may assist with securing property rights, approvals, permits • inspect installation • verify on/off-site LT maintenance practices • conduct tracking and reporting	• must document infeasibility • ID locations for off-site • prepare plans • secure property rights • construction • maintenance

4) Payment In-Lieu (private/public) – developer pays fee to cover cost of muni implementing project off-site in the public right-of-way or on municipal property.

Muni Role	Developer Role
• IDs priority areas and potential projects, • sets payment in lieu rate • assess and collect fee from developer • plan off-site project • construct off-site project • maintain off-site project • administer In-Lieu program • conduct tracking and reporting	• documents on-site infeasibility • pays in-lieu fee

Alternative Compliance Program Establishment Needs

- ID Municipal preference (or hierarchy) for AC program options (off-site, regional, in lieu)
- List of Opportunity sites (Green Plan-IT, watershed plans, CIP plans, or other structure to define implementation objectives of program)
- ID internal administrative costs to muni
    - Permits
    - Design review
    - Inspections
    - Reporting
- Modify existing SW Ordinance to codify/authorize program
- Develop rates for In Lieu program
    - Internal/administrative costs
    - Site selection/planning cost
    - Design, engineering cost
    - Operations & Maintenance

San Mateo GreenPlan Meeting

AGENDA

8-12-14

9:30 am

San Mateo City Hall

- Welcomes and Introductions
- SFEI presentation of San Mateo GreenPlan-IT "outputs"
- Questions/methodology discussion/comments on the outputs & GreenPlan-IT based upon the outputs
- Next steps
  - Getting outputs in Sustainable Streets Plan
  - Site verification
  - Conceptual design of sites
- Adjourn