Marin County Stormwater Resource Plan (SWRP)

Marin County Stormwater Pollution Prevention Program (MCSTOPPP)

NBWA Presentation
July 7, 2017
MCSTOPPP
Rob Carson

Storm Water Resource Plan Overview

- SB 985 established SWRP Requirement

- Requires public agencies to develop a **Storm Water Resource Plan (SWRP)** to apply for grant funding for storm water and dry weather runoff capture and re-use projects

- Required for Prop 1 Grant funding
  - No SWRP = No Bond-Funded Grant $

- SWRP Components:
  - Watershed resource planning
  - Identify project opportunities with multiple benefits

PROP 1
GOVERNOR EDMUND G. BROWN, JR.
WATER BOND 2014
RELIABILITY | RESTORATION | RESILIENCE

Stormwater Resource Plan Guidelines

- Identify opportunities (sites) for storm water and dry weather runoff capture and re-use projects. Thinking of ‘Stormwater as a Resource’
- Watershed-based management approach
- Prioritize list of potential project sites
- Quantify multiple benefits

Project Analysis & Prioritization

- All projects include **multiple benefits**, for example:
  - Augment water supply
  - Improve water quality
  - Provide source control
  - Reestablish natural water drainage or mimic natural functions
  - Develop, restore, enhance habitat
  - Use publicly owned lands
  - Provide community benefit
- Must include metrics-based analysis to quantify multiple benefits

Multi-benefit Stormwater Management Examples

Water Quality
Low Impact Development

Regional Water Quality
Stormwater Capture

Flood Control

Water Supply

Habitat Enhancement

Community Benefit

Marin County SWRP Project

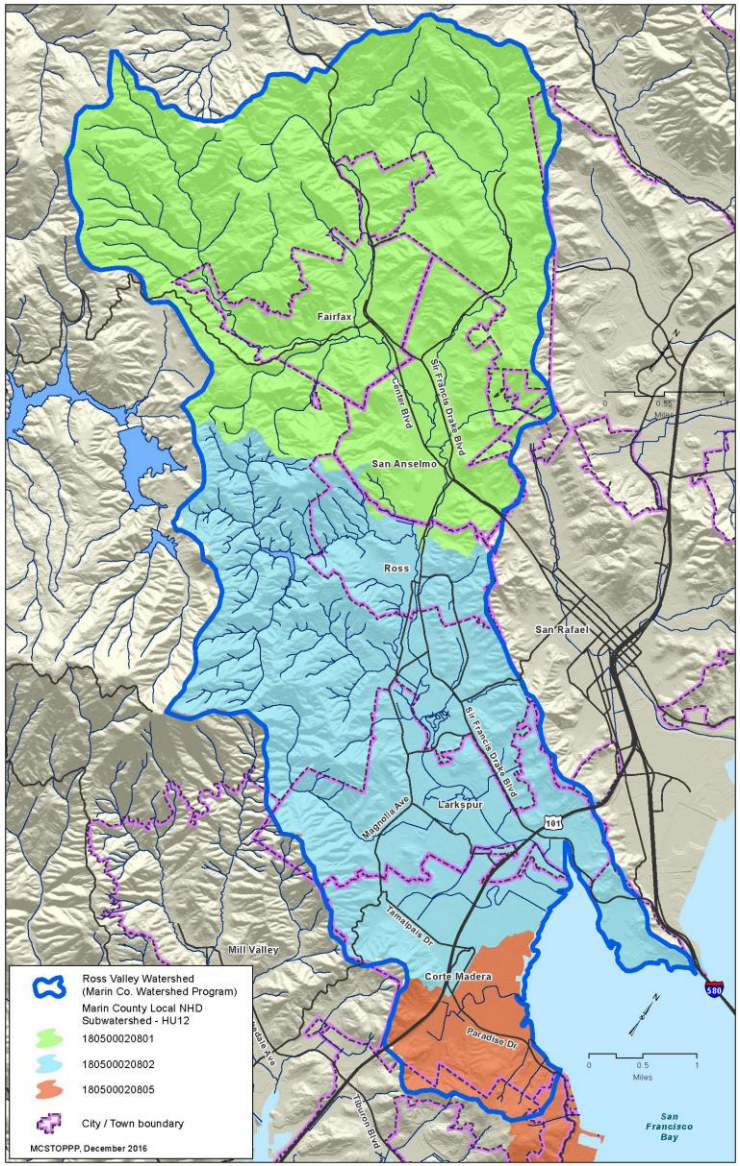
1. Compile knowledge of watersheds
2. Develop Functionally Equivalent SWRP
3. Create prioritized site list for all Marin jurisdictions based on metric-based methodology
4. Develop one concept project for each municipality:
    1. BMP design for each municipality's top priority project
    2. Evaluation of the multiple benefits of this concept project.
5. Engage community participation in the SWRP development

Marin County SWRP Watersheds

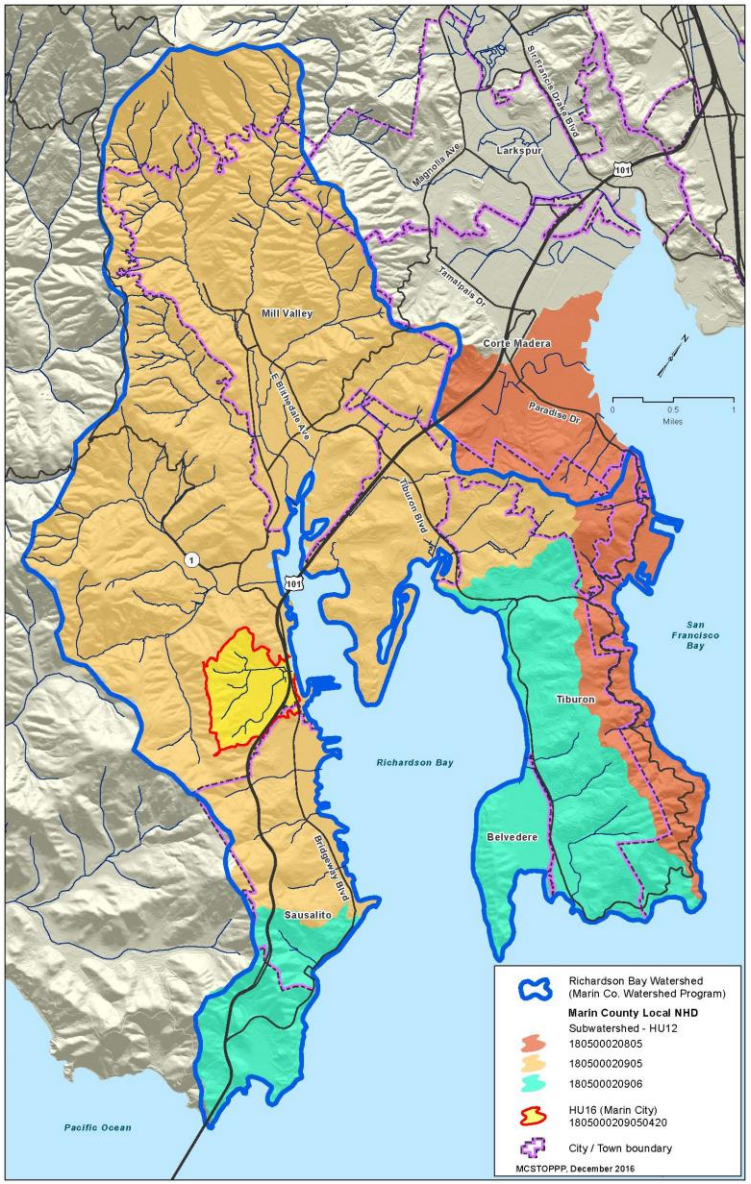
- Novato Creek Watershed
- Miller Creek Watershed
- Gallinas Creek Watershed
- San Rafael Watershed
- Ross Valley Watershed
- Richardson Bay Watershed
- Alder Creek Watershed on the Bolinas Mesa
- Stinson Beach Watershed
- Lagunitas Creek Watershed in west Marin

Approach for analysis – **consistency with existing planning areas**

Richardson Bay Watershed And Watersheds in Eastern Tiburon



Ross Valley Watershed



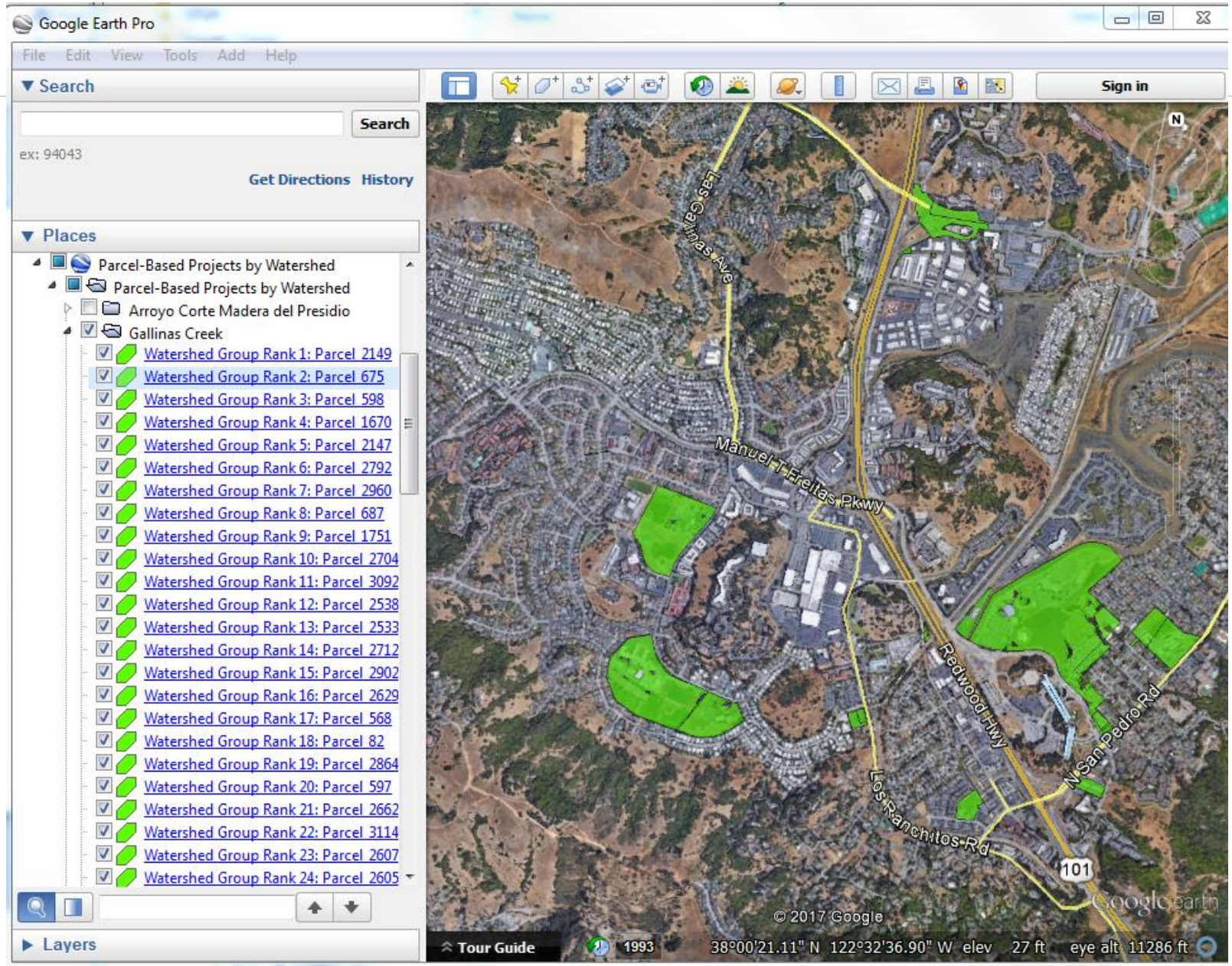
Functionally Equivalent SWRP

- “Functional Equivalency” = stitching together many planning documents to meet SWRP guidelines
- Creates consistency with existing planning efforts
- Satisfies SWRP requirements to be eligible for Prop 1 funds
- Functional Equivalency SWRP will include info from: Countywide/City General Plans, IRWMP, Water Management Plan, Sea Level Rise Plans, TMDL & ASBS Plans, Watershed Restoration Plans, Hydraulic Studies, Flood Protection & Flow Reduction Studies, etc.

Prioritized Potential Project Sites

- Applied criteria to all publicly-owned streets and parcels to **identify potential projects**
- Developed criteria to prioritize potential project sites based on quantifying multiple benefits:
  - Soil type, slope, landslide potential, impervious area, land use, floodplain proximity
- Input from agencies on CIP, local priority projects
- Four categories of projects: Planned by Agency, Green Streets, Regional, and Parcel-based

Parcel-based

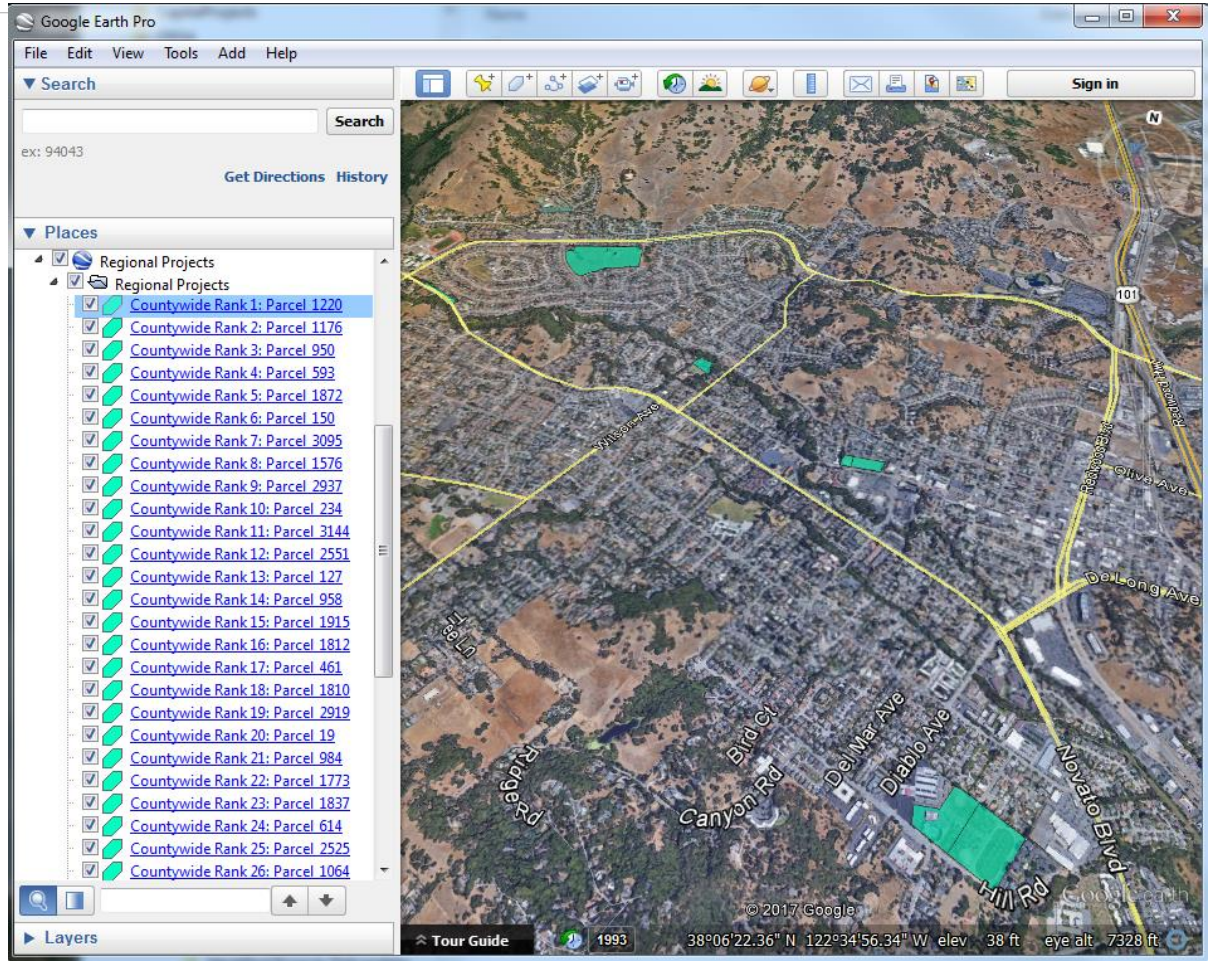


Parcel Projects Scoring Criteria

Project Component Categories	Points		
	0	1	2
Parcel area	< 1 acre	1 - 4 acres	> 4 acres
Area-weighted runoff coefficient (i.e., imperviousness)	< 0.4	0.4 - 0.6	> 0.6
Infiltration feasible	No	--	Yes
Average slope	5% - 10%	2% - 5%	0 - 2%
Proximity to 100-year floodplain	> 1 mile	0.5 - 1 mile	< 0.5 miles
Augments water supply	No	--	Yes
Provides source control for stormwater pollution (i.e., water quality control)	--	Full Trash Capture Projects; Non-Green Infrastructure Treatment Control Facilities	Green Infrastructure
Reestablishes natural water drainage systems	--	Non-Green Infrastructure Treatment Control Facilities; Green Infrastructure	Hydromodification Control
Develops, restores, or enhances habitat and open space	--	Green Infrastructure	Habitat Restoration Project
Provides community enhancement	--	Green Infrastructure	Project that provides enhanced community benefit

Regional

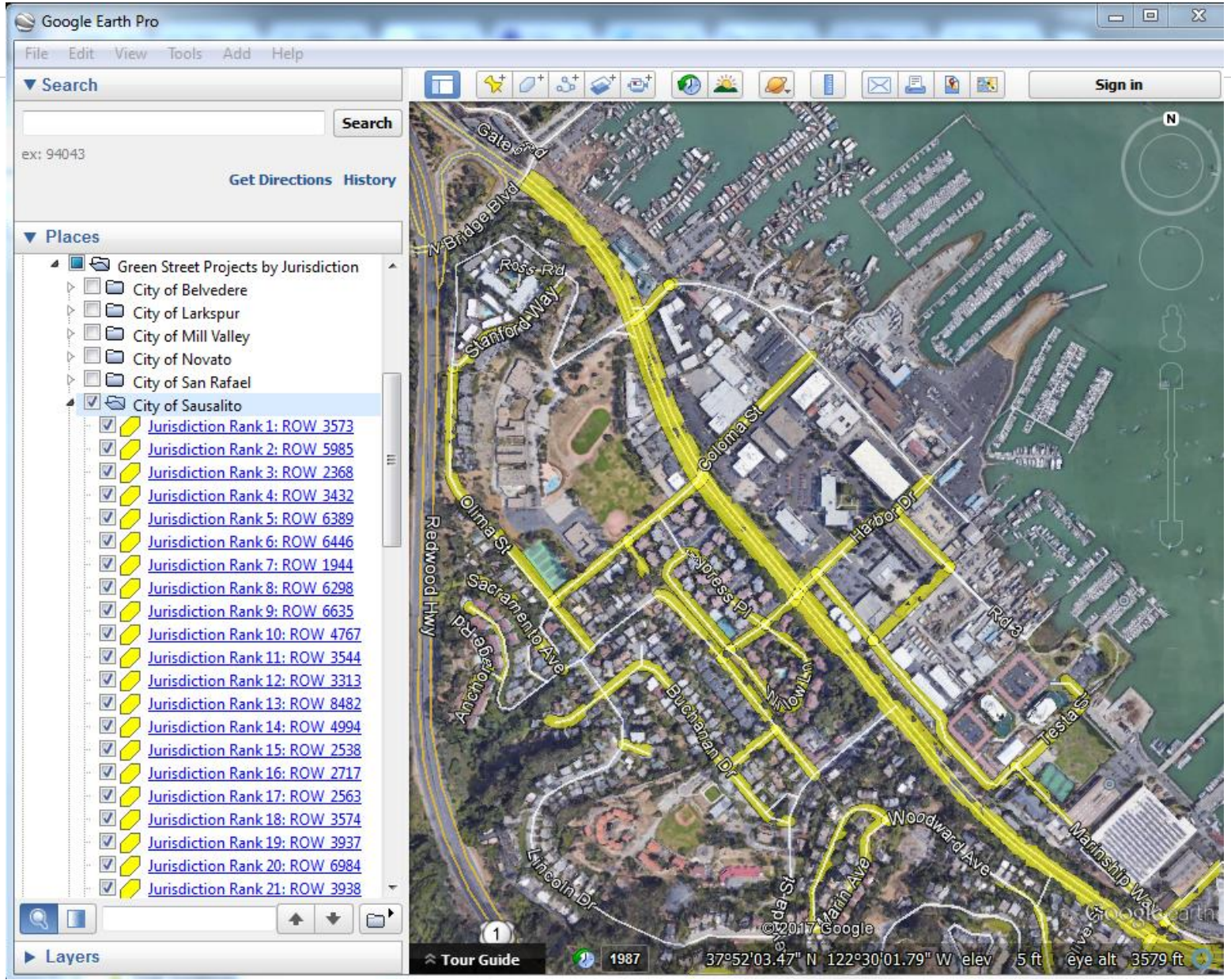
- At least 0.5 acres
- Undeveloped area
- Potential regional stormwater capture



Regional Projects Scoring Criteria

Project Component Categories	Points		
	0	1	2
Parcel area	< 1 acre	1 - < 4 acres	> 4 acres
Majority adjacent land use[6]	Open Space/Park	Residential	Commercial/Industrial
Infiltration feasible	No	--	Yes
Average slope	5% - < 10%	2% - < 5%	0 - < 2%
Proximity to 100-year floodplain	> 1 mile	0.5 - 1 mile	< 0.5 miles
Augments water supply	No	--	Yes
Removes pollution from stormwater (i.e., water quality control)	--	Full Trash Capture Projects; Non-Green Infrastructure Treatment Control Facilities[7]	Green Infrastructure[8]
Reestablishes natural water drainage systems	--	Non-Green Infrastructure Treatment Control Facilities; Green Infrastructure	Stream Restoration or Hydromodification Control
Develop, restores, or enhances habitat and open space	--	Green Infrastructure	Habitat Restoration Project
Provides community enhancement	--	Green Infrastructure	Project that provides enhanced community benefit[9]

Green Streets



Green Streets Projects Scoring Criteria

Project Component Categories	Points		
	0	1	2
Street type	Local	Collector	Arterial
Adjacent land use	Open Space/Park	Residential	Commercial/Industrial
Infiltration Feasible[1]	No	--	Yes
Average Slope	5% - 10%	2% - 5%	0 - 2%
Proximity to 100-year floodplain	> 1 mile	0.5 - 1 mile	< 0.5 miles
Augments water supply	No	--	Yes
Provides source control for stormwater pollution (i.e., water quality control)	--	Full Trash Capture Projects; Non-Green Infrastructure Treatment Control Facilities	Green Infrastructure
Reestablishes natural water drainage systems	--	Non-Green Infrastructure Treatment Control Facilities; Green Infrastructure	Hydromodification Control
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Next Steps: Priority Project Design

- Each MCSTOPPP agency – one concept project
- Identification of BMP-type based on parcel area, soil conditions, and agency priorities
- Quantify benefits of BMP design:
  - Treated volume, pollutant load reduction
  - Water supply capture volume
  - Peak flow rate and/or volume for decreased flood risk
- Discuss additional multi-benefits (qualitative or semi-quantitative)

SWRP Project: End Results

- Each municipality has one project with design-level BMPs – better chance of Prop 1 funding
- All municipalities will be eligible to apply for funding for any project on the priority list:
  - Green streets
  - Regional
  - Parcels
- Barrier to Prop 1 Funding (or any Bond-funded Grants) for projects on municipally-owned parcels and streets will be overcome – **Functionally Equivalent SWRP**
- Intended to be a living document – periodically revise project list

Next Steps: Timeline

- Finalize Priority Project List – **Done June 30**
- Draft Functionally Equivalent SWRP – **July 28**
- Public comment on Draft SWRP - **August**
- Quantify Final Benefits of Municipality's Top Priority Projects – **Sept 1**
- Final Functionally Equivalent SWRP – **Oct 31**
- Next Prop 1 Grant Solicitation – **Spring 2018**

Community Participation

- NBWA Board
- Posting Draft SWRP on MCSTOPPP website for community comment before final draft
- MCSTOPPP Citizens Advisory Committee
- **Questions/Comments or Recommendations**

Thanks!

Questions or comments to Rob Carson at MCSTOPPP
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