Napa River Watershed Stormwater Resource Plan

Elizabeth Yin January 26, 2023



LARRY WALKER ASSOCIATES science | policy | solutions

What is a Storm Water Resource Plan?

- Water Code sections 10560 et seq. (as amended by Senate Bill 985, Stats. 2014, ch. 555, § 5).1 Water Code section 10563, subdivision (c)(1), requires a Storm Water Resource Plan (Plan) as a condition of receiving funds for storm water and dry weather runoff capture projects from any bond approved by voters after January 2014.
- A planning document that identifies potential opportunities, projects, and programs that provide multiple benefits, including water quality, water supply, community enhancement, and other benefits.
- A process for evaluating potential opportunities and their multiple benefits.

SWRP Overview

- Watershed Characterization
- Water Quality Concerns and Regulatory Requirements
- Process for the Identification, qualification, and scoring of multiple benefits of potential project opportunities
- Education, Outreach, and Public Participation
- Implementation Strategy



Progress to Date



Performed Project Opportunity Screening Scored Opportunities on Multi-benefit Metrics

Draft SWRP

Schedule & Next Steps



Overview of Potential Project Opportunities

Process Overview

- 1. Data is Provided by Stakeholders
- 2. Raw GIS data goes through two screening steps
- Data sources are combined into single list of Project Opportunities
- 4. Classification criteria is developed for the list of Project Opportunities
- 5. Classification criteria is compared to benefits and given a score
- 6. List is sorted by overall score and weighted benefits



Screening Criteria: General Attributes

- Screening step to remove parcels ineligible for funding
- Ownership Criteria
 - Public ownership
 - Tax exempt parcels
- Parcel Characteristics
 - Parcels at least 0.1 acres in size
 - Parcels with average slope less than 10%
- ROW Criteria
 - Non interstate public ROW
 - State/County highways
 - Connector roads
 - Local, neighborhood, rural roads



Screening Criteria: Physical Constraints

- Sites with 50% of the area overlying landslides hazard ones
- Sites with more than 50% area within USFW Threatened/Critical Habitat
- Sites overlaying contaminated soil and/or contaminated groundwater (CA DTSC Geotracker criteria)





Benefits and Applicable Points



Benefit Scores - Weight

Benefit Category	Number of Criteria	Equal Weight for Each Criteria	Equal Weight for each Category	Example - Custom
All	4	24%	17%	20%
Water Quality	5	29%	17%	20%
Water Supply	2	12%	17%	20%
Flood Control	1	6%	17%	10%
Environmental	3	18%	17%	20%
Community	2	12%	17%	10%

Potential Project Opportunities Summary



Potential Project Opportunities: Output

- Database + maps
- Scores for all multiple benefits

									General Suitability			Water Quality				Flood Water Supply Contro		o Environmental			Community									
db_ind		Rank Reasonin	Weig hted Scor			Public /Priva	Street	Size	Slope	Infiltrat ion	Proximi ty to Existing Infrastr	Total Benefit (Gen. Suitabil itv)	PCBs Yield Class	Mercur y Yield Class	Region al Facility	Remov es Polluta nt Loads	Ground water Quality	Total Benefit (Water Quality)	Augme G nts Water C Supply	Ground water Critical Area	Total Benefit (Water Supply)	Total Benefit (Flood Control)	Natural Water Drainag e System	Habitat and Open Space Enhanc	GDE and ISW Enhanc ements	Total Benefit (Enviro nment al)	Recreat ion	Disadv antage d Comm unity	Total Benefit (Comm unity)	Total Score
ex	Rank	g	e	Parcel	Owner	te	Name					,,						,				,	S	ements	6	,		,		
PARCEL _2333	1	Sorted by Weighte d Score	3.8	011- 173- 001- 000	CALISTOGA JOINT UNIFIED SCHOOL DISTRICT	Public	N/A	2	2	2	2	8	1	1	1	2	1	6	1	1	2	2	1	1	2	4	1	0	1	23
PARCEL _3961	2	Sorted by Weighte d Score	3.8	011- 260- 003- 000	CALISTOGA CITY OF	Public	N/A	2	2	0	2	6	0	2	1	2	1	6	1	1	2	2	1	1	2	4	1	2	3	23
PARCEL _14581	3	Sorted by Weighte d Score	3.8	003- 172- 009- 000	NAPA CITY OF	Public	N/A	1	2	2	2	7	1	1	0	2	1	5	1	1	2	2	1	1	2	4	1	2	3	23
PARCEL _15731	4	Sorted by Weighte d Score	3.8	009- 180- 012- 000	ST HELENA CITY OF	Public	N/A	2	2	2	2	8	0	2	1	2	1	6	1	1	2	2	1	1	2	4	1	0	1	23

Example: St. Helena



• APN: 009-180-012-000

• Weighted Score: 3.8

	Gene	eral Suita	bility		Water Quality							
Size	Slope	Infiltrati on	Proximit y to Existing Infrastru cture	Total Benefit (Gen. Suitabilit y)	PCBs Yield Class	Mercury Yield Class	Regional Facility	Remove s Pollutan t Loads	Ground water Quality	Total Benefit (Water Quality)	Total Score	
2	2	2	2	8	0	2	1	2	1	6	23	

W	ater Supp	ly	Flood Control		Enviror	imental	Community				
Augment s Water Supply	Groundw ater Critical Area	Total Benefit (Water Supply)	Total Benefit (Flood Control)	Natural Water Drainage Systems	Habitat and Open Space Enhance ments	GDE and ISW Enhance ments	Total Benefit (Environ mental)	Recreati on	Disadvan taged Commun ity	Total Benefit (Commu nity)	
1	1	2	2	1	1	2	4	1	0	1	

Outreach and Next Steps

Table 1. Matrix of Stakeholder Audience and Outreach Methods

Stakeholder Audience	Outreach Method
SWRP Participating Agencies	MeetingsMailing List
Non-Municipal Public Landowners	 Email List/Targeted Messages General Flyer SWRP Webpage
Watershed Groups and NGOs	 Email List/Targeted Messages General Flyer SWRP Webpage Targeted Social Media Messages
Bay Area IRWMP	 Targeted Email Messages Presentation at Bay Area IRWMP Meeting or Discussion with Subgroup Contract
General Public	 SWRP Webpage Targeted Social Media Messages

Schedule and Next Steps





Questions

Elizabeth Yin, Senior Scientist Larry Walker Associates

elizabetny@lwa.cor