Stormwater Master Plan Update

Oct 28, 2019

Presented by:
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Local Government Commission
Leaders for Livable Communities

Corporation for National & Community Service

California Volunteers
Office of the Governor

On tonight's agenda

1. Why does Stormwater Planning Matter?
2. Relevant Regulations
3. 1999 Stormwater Master Plan
4. Condition of Existing System
5. Updated Plan Study Area
6. Project Prioritization
7. Funding Opportunities
8. Next Steps

Long-term Benefits of Stormwater Planning

1. Incorporation of community vision
2. Effective stormwater control
3. Compounding benefits
4. Enabling legal compliance

Regulations

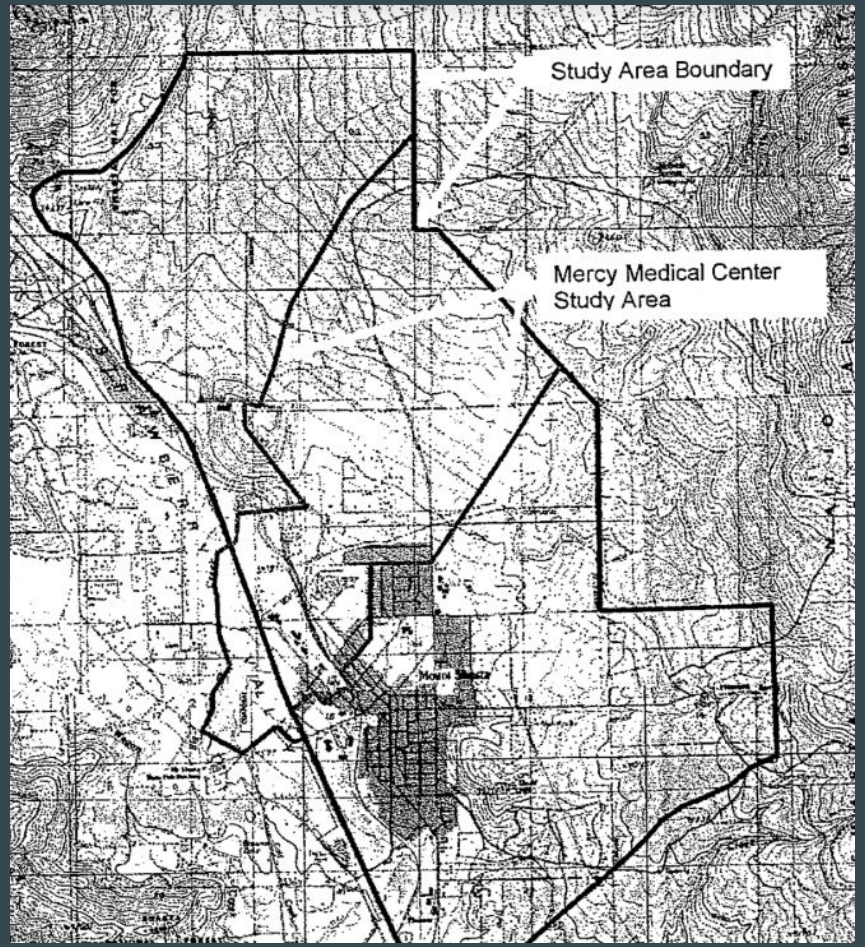
Federal	State	Local
- Clean Water Act	- Porter Cologne Act → Basin Plan - CEQA - Sustainable Groundwater Management Act Codes: - Health & Safety - Water	- Integrated Regional Water Management Plan - General Plan - City Ordinances

Current Master Plan (1999)

Preliminary Storm Drainage Master Plan

City of Mt. Shasta
Kellogg Engineering

May 24, 1999



Current Conditions

Current Conditions

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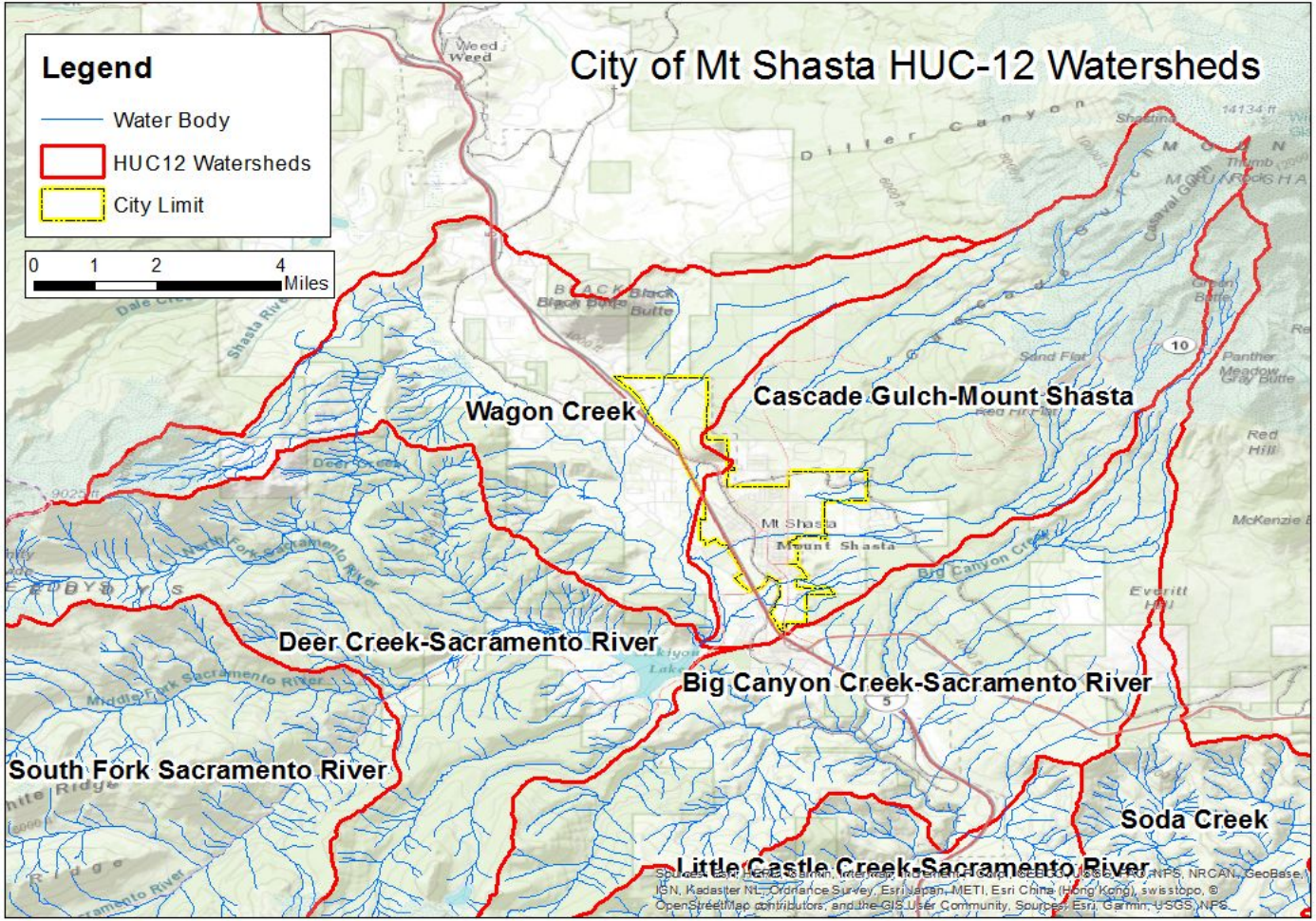
“This Stormwater Master Plan will identify and prioritize stormwater and dry weather runoff capture projects that provide **multiple benefits**, including water quality, water supply, flood management, environmental quality, and community enhancement.”

Study Area


City of Mt Shasta HUC-12 Watersheds
Legend
Water Body
HUC12 Watersheds
City Limit
0 1 2 4
Miles
Wagon Creek
Cascade Gulch-Mount Shasta
Deer Creek-Sacramento River
Big Canyon Creek-Sacramento River
South Fork Sacramento River
Soda Creek
Little Castle Creek-Sacramento River

Project Prioritization

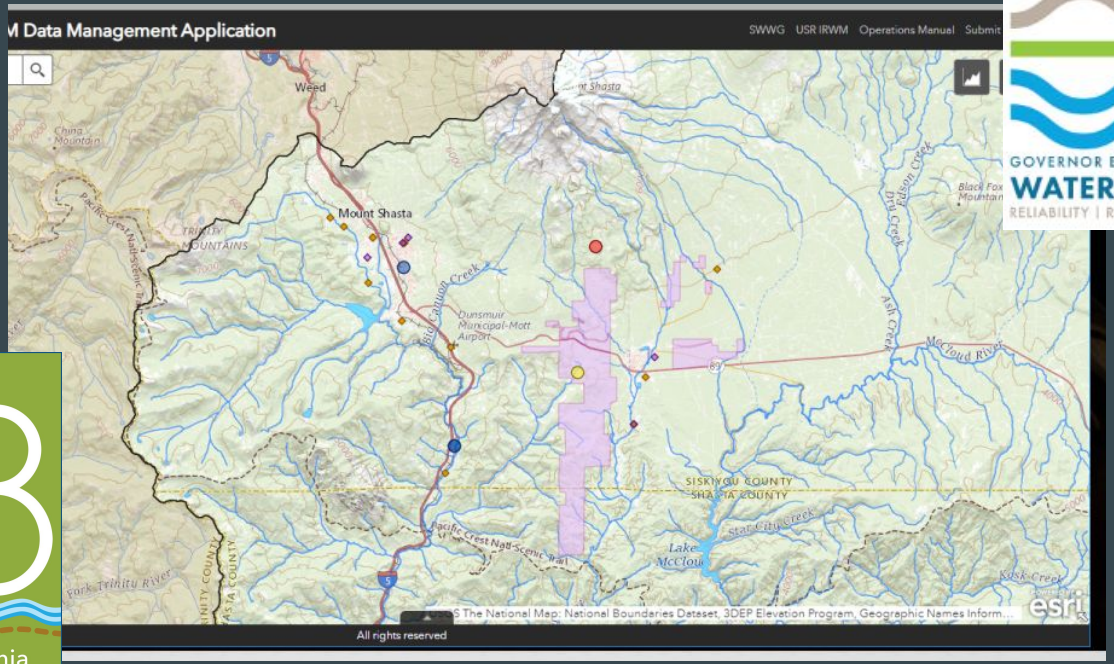
TABLE 3. BENEFIT METRICS

Benefit	Example	Metric Unit(s)
Water Quality *while contributing to compliance with applicable permit and/or TMDL requirements*	Increased filtration and/or treatment of runoff Nonpoint source pollution control Reestablished natural water drainage and treatment	**Pollutant Load Reduction** pounds (lbs)/day kilograms (kg)/day milligram/Liter microgram /Liter most probable number of bacteria or indicator organisms (mpn)/mL **Volume Treated** million gallons per day (mgd) acre-feet per year (afy)
Water Supply *through groundwater management and/or runoff capture and use*[11]	Water supply reliability Water conservation Conjunctive use	**Volume Captured** *in terms of augmentation/replacement of water supply, or reduced dependence on imported water* million gallons per day (mgd) acre-feet per year (afy) **Cost** dollars per volume per year (of augmented water supply)

TABLE 3. BENEFIT METRICS

Benefit	Example	Metric Unit(s)
Flood Management	Decreased flood risk by reducing runoff rate and/or volume Reduced sanitary sewer overflows	**Rate, Volume, and/or Size** cubic feet per second (cfs) acre-feet (af) cubic feet (cf) acres or linear feet
Environmental	Environmental and habitat protection and improvement, including: - wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	**Size and/or Rate** acres cubic feet per second (cfs) carbon sequestration (megagrams of carbon per area)
Environmental *(continued)*	Increased urban green space Reduced energy use, greenhouse gas emissions, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements	**Other**[12] area units of landscape and buffer measure of improved hydrology number of biotic structure number of physical structures reduced temperature (degrees)
Community	Enhanced and/or created recreational and public use areas Community involvement Employment opportunities provided	**Size** size of population served number of people number of jobs acres

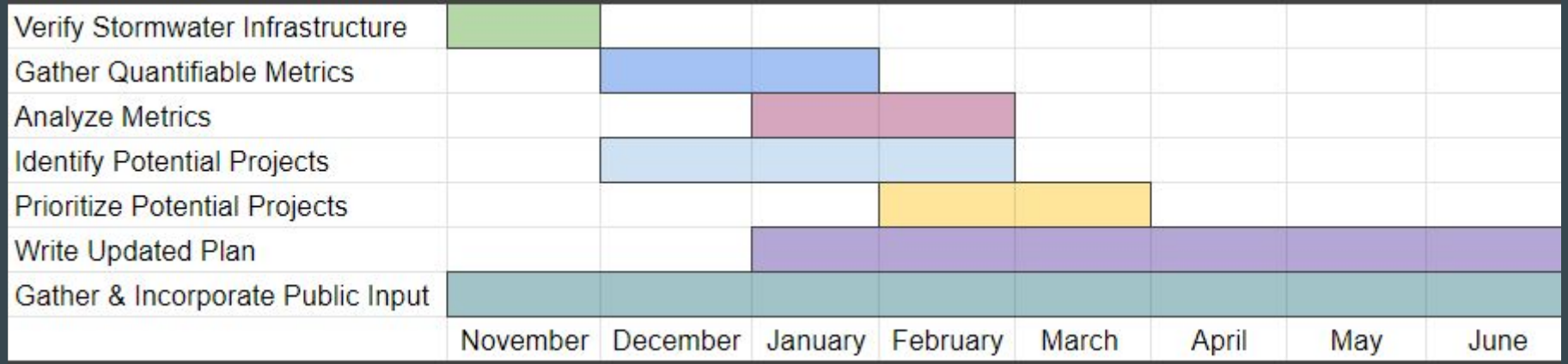
Funding



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

PROP 68
State of California
Parks & Water Bond 2018

Next Steps



Stormwater Plan Updates and Information:
https://mtshastaca.gov/planning/stormwater-master-plan-update/

Thank you!

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Questions?