

City of Mt Shasta, CA

Stormwater Master Plan (Draft Outline)

Executive Summary

The City of Mt Shasta is developing this Stormwater Master Plan (Plan) to 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.

While the City currently has a Stormwater Master Plan (adopted 1999), it is considered obsolete by City staff and does not sufficiently guide Public Works Dept operations, maintenance, or capital improvement priorities. As a result, the City has missed opportunities in the past to improve its drainage system and implement multi-benefit green infrastructure projects. Climate change will further exacerbate the City's drainage issues as storms intensify and winter precipitation shifts from snow to rain in future. A full update of the Plan is needed to adequately address the drainage needs of the City.

The updated Stormwater Master Plan will allow the City to identify and prioritize stormwater and dry weather runoff capture projects that improve local water quality and supply, enhance flood management strategies, and improve the quality of the local environment and community. An updated Plan will also improve the City's eligibility for outside funding sources such as grants and bonds. The new Plan begins by reviewing relevant regulations at the local, state, and Federal level. It then lists the City staff members and external stakeholders that the City hopes will participate in the update process. The third section provides a description of the City's environmental setting and the existing drainage system, including known infrastructure deficiencies. Potential projects are identified in the fourth section and prioritized in accordance with State guidelines in the fifth section. The Plan concludes with a strategy for the Public Works Dept's Operations and Maintenance of the City's Stormwater system.

Introduction

- a. Background
 - i. 1999 Stormwater Master Plan
 - 1. Approximately 50% of projects called for in the Plan were never completed
 - 2. Did not include any maintenance schedule
 - ii. Current General Plan Update: Water Resource Element
 - 1. [Mt Shasta 2045](#) vision statement and goals: "...provide cutting edge infrastructure will preserving the rich natural environment."
- b. Regulatory Context
 - i. Clean Water Act (especially sec 401, 404, [303\(d\)](#) etc)
 - ii. Porter Cologne Act
 - 1. Central Valley [Basin Plan](#)
 - iii. CEQA compliance

- iv. Compatibility with [Integrated Regional Water Management Plan](#)
- v. Pest and mosquito abatement compliance
- vi. California Water Code
 - 1. 10560 - 10565 - “Stormwater Resource Planning”
 - 2. Eligibility for voter approved bonds: 10563(c) waives requirement of SWRP for City of MS, more specifically, “With limited exceptions for certain small disadvantaged communities, Water Code Section 10563(c)(1) requires stormwater and dry-weather runoff capture projects be included in a SWRP to receive stormwater grants from bond measures passed by the State of California after January 1, 2014”
- vii. Sustainable Groundwater Management Act
- viii. Water rights permits
- c. Consistency with Existing Plans
 - i. Mt Shasta General Plan
 - ii. [City Codes](#) (ordinances)
- d. Purpose and Overview (see executive summary)

Public Outreach, Coordination, and Collaboration

- e. Technical Advisory Committee
 - i. Juliana Lucchesi, City Planner
 - ii. Rod Bryan, Public Works Director
 - iii. David Torres, Public Works Supervisor
 - iv. Paul Reutner & Seth Petrie, City Engineers (PACE Engineering)
- f. Potential Stakeholders
 - i. Residents and ratepayers within City of Mt Shasta
 - ii. Siskiyou County (including Flood Control District)
 - iii. Shasta-Trinity National Forest
 - iv. Upper Sacramento Regional Water Action Group (a.k.a. USR IRWM)
 - 1. Winnemem Wintu Tribe
 - 2. Shasta Tribe
 - 3. Pit River Tribe
 - 4. CalTrout
 - 5. City of Dunsmuir
 - 6. Trout Unlimited
 - 7. River Exchange
 - 8. Siskiyou Land Trust
 - 9. Pacific Forest Trust
 - v. Shasta Valley Resource Conservation District
 - vi. Mt Shasta Bioregional Ecology Center
 - vii. We Advocate Thorough Environmental Review (WATER)
 - viii. Mt Shasta Trails Association
 - ix. Mt. Shasta Recreation and Parks District\
- g. Meeting Schedules
- h. Environmental Justice/Disadvantaged Communities

- i. Summary of public comments

Study Area and Existing Drainage System Description

- j. Environmental Setting
 - i. Location and Climate
 - ii. Geology and soils
 - iii. Boundaries
 - 1. USGS Hydrologic Unit Code (HUC) 12
 - 2. IRWM
 - 3. Internal Boundaries
 - a. municipalities, USFS lands, groundwater, water services and their operations
 - iv. Watershed Hydrology
 - 1. Habitat and natural features description
 - 2. Water quality of all ground and surface water bodies (GIS)
 - a. Review of existing datasets and identification of data gaps
 - 3. Identify priorities
 - a. CWA 303(d) listed water bodies: [Shasta Lake](#), Lake Shastina, and [Lake Siskiyou](#) have excess mercury
 - 4. Human Effects on the Watershed
 - 5. Issues and Ongoing Restorative Efforts
 - v. Existing Drainage System Description

Identification of Multi-Benefit Projects

- k. Capital Improvement Projects and Associated Benefits
 - i. Review Proposed yet not completed projects from 1999 plan and IRWM
 - ii. New projects proposed by TAC

Project Prioritization and Implementation

- l. Project Prioritization and Analysis
- m. Implementation Schedule
- n. Collaborating Agency Roles
- o. [Funds](#) Needed for Implementation
 - i. Existing Funds
 - ii. Additional Funding Avenues
 - 1. Prop 1 [funding](#), Solicitations due March-June 2020
 - a. Integrated Regional Water Management Implementation Grant Program (DWR)
 - b. Storm Water Grant Program for Implementation Projects (SWRCB)

2. Prop 68 funding
 - a. Urban Stormwater and Waterways Improvement Program (CNRA)
 - b. Urban Green Infrastructure Program (CNRA)
 - c. Rural Recreation and Tourism Program (CDPR)
 3. Clean Water State Revolving Fund (SWRCB)
 4. Community Development Block Grant Program for Non-Entitlement Jurisdictions (CDHCD)
 5. Water & Waste Disposal Loan & Grant Program (USDA)
 6. Water Recycling Funding Program Construction Funding (SWRCB)
 7. Water Recycling Funding Program Planning Grant (SWRCB)
 8. Safe and Affordable Drinking Water Fund (SWRCB)
 9. Groundwater Grant Program (SWRCB)
 10. Nonpoint Source Pollution (NPS) Control Program (DWR)
 11. Sustainable Groundwater Planning Grant Program (DWR)
 12. WaterSMART Drought Response Program's Resiliency Grants (USBR)
 13. California River Parkways Grant Program (CNRA)
 14. Land and Water Conservation Fund (CDPR)
- p. Additional Actions
- i. Best Management Practices
 1. Public Education and Outreach
 2. Public Participation and Involvement
 3. Watershed Stewardship
 4. Illicit Discharge Detection and Elimination
 5. Construction Site Runoff
 6. Pollution Prevention and Good Housekeeping for Municipal Operations
 7. Industrial Discharge
 - ii. Design criteria for new and upgraded developments
 - iii. Include a list of activities that negatively contribute to the Plan

Monitoring Progress and Reporting

- q. Post-implementation Review
 - i. Performance Measures
 - ii. Adaptive Management Approach
- r. Data Management (website or GIS)
 - i. Identifying data gaps, ongoing and future monitoring efforts, data organization, frequency of updates, and publication

Operations and Maintenance

- s. Inspections
- t. Sediment Removal
- u. Vegetation Control

- v. Replacement
- w. Upsizing/downsizing (Upgrading system)