

Eureka Area Watersheds Storm Water Resource Plan

The Eureka Area Watersheds Storm Water Resource Plan (EAWSWRP) is a regional storm water planning document that facilitates a watershed-based analysis and planning effort, within watersheds that drain to Humboldt Bay (Figure 1). The EAWSWRP is intended to maximize cooperation and collaboration among state, regional and local agencies, and nongovernmental organizations during the development and implementation of storm water projects; and provide guidance for the identification and prioritization of storm water projects.

Need and Purpose of a Storm Water Resource Plan

A Storm Water Resource Plan (SWRP) is a planning document that is now required as a condition of receiving funds for storm water and dry weather runoff capture projects (Water Code section 10563 (c)(1)). This requirement applies to Proposition 1, which authorized \$200 million in grants for multi-benefit storm water management projects. The City of Eureka and surrounding Humboldt County areas in the watershed planning area (Figure 1) are required to develop a SWRP to receive Proposition 1 storm water grant funding.

Traditional approaches to storm water management have focused on conveyance to surface waters without providing treatment of runoff. These traditional approaches can cause detrimental impacts to downstream surface water bodies including hydromodification, destabilization, erosion, and pollution. The impetus of a SWRP is to prioritize projects that address the water quality impacts from storm water discharges while providing multiple benefits, such as public education and ecological enhancement within a local watershed. Projects can range from small retrofits such as standardized parkway curb cuts and tree wells in public rights-of-way to creation of constructed natural wetlands and/or installation of underground vaults that store and infiltrate or used the captured runoff, for more examples see the Project Benefits and Examples Table (Figure 2).

Goals and Management Objectives

The EAWSWRP is guided by a Technical Advisory Committee (TAC) made of staff from the City of Eureka, County of Humboldt, Humboldt Community Services District, and North Coast Regional Water Quality Control Board. The TAC has developed a working set of goals and management objectives for the EAWSWRP as follows:

Goals

- Characterize watershed processes, surface water quality, storm drainage systems, and land use characteristics of the Eureka Area watersheds
- Provide historical context and analysis of Eureka Area watersheds through previous regional planning efforts, analysis of drainage issues, analysis of water quality and compliance, and existing Total Maximum Daily Load (TMDL) implementation plans
- Provide a quantitative and transferable methodology for the identification and prioritization of storm water and dry weather runoff capture projects for multiple benefits
- Outline specific storm water and dry weather runoff capture projects within the SWRP area
- Leverage stakeholder expertise and knowledge through past planning documents, community engagement efforts, and continued communication and data sharing among stakeholder groups
- Develop a framework for future storm water resource planning and program implementation through adaptive management

Management Objectives

- Increase Regional Coordination
- Support MS4 Permit Compliance
- Improve Water Quality
- Improve Flood Management
- Protect and Enhance Natural Resources & Community Benefits

Public and Stakeholder Input into the EAWSWRP

The development of the EAWSWRP is an opportunity for public and stakeholder input on storm water management in the Project Area Watersheds. There are several ways you can get involved and engaged:

- **Submit a Storm Water Project for Inclusion in the EAWSWRP:** Submit a project recommendation to be considered for inclusion in the EAWSWRP, by visiting the North Coast Stormwater Coalition (NCSC) website, <http://northcoaststormwatercoalition.org/index.php/stormwaterresourceplan/>.
- **Public Opinion Survey:** Fill out the public opinion survey developed by the NCSC, which will be circulated throughout the Humboldt County area in spring 2018 and will also be available at, <http://northcoaststormwatercoalition.org/>.
- **Attend Meetings:** Attend and participate in stakeholder and public meetings. For time and location of meetings, please visit the NCSC website, <http://northcoaststormwatercoalition.org/index.php/stormwaterresourceplan/>.

Figure 1. Project Area Map

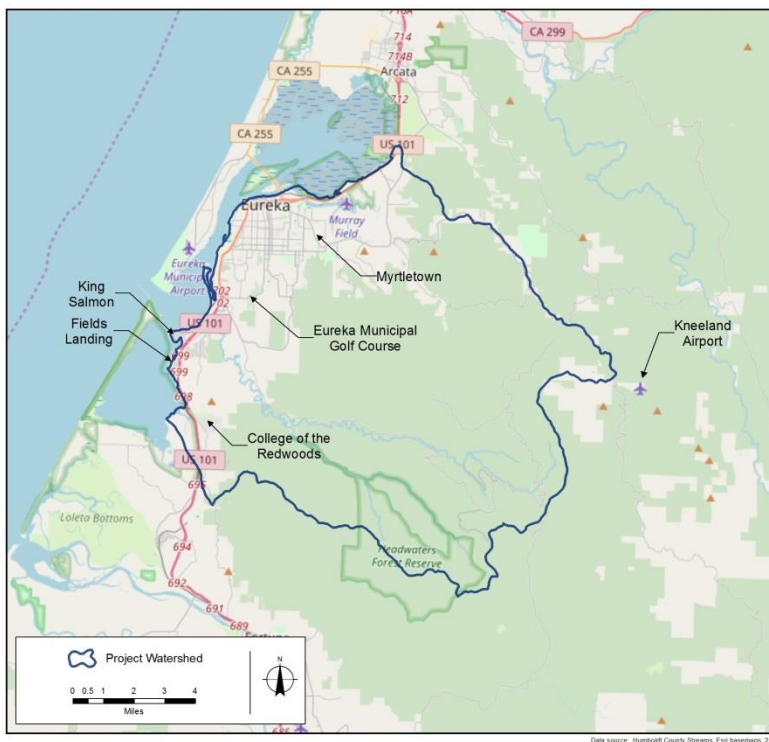


Figure 2. Stormwater Project Benefits and Examples Table

Benefit Category	Benefit	Example(s)
Water Quality <i>while contributing to compliance with applicable permit and/or TMDL requirements</i>	Increased filtration and/or treatment of runoff	<ul style="list-style-type: none"> • Bioretention facility, rain garden, green roof, bioswale
	Trash capture	<ul style="list-style-type: none"> • Program to organize community members to collect trash from streets • Low impact development project with trash capture system
	Nonpoint source pollution control	<ul style="list-style-type: none"> • Sediment reduction project at timber production site • Bioswale, rain garden, bioretention facility
	Reestablished natural water drainage and treatment	<ul style="list-style-type: none"> • Conversion of pervious surface to impervious surface • Creek restoration project to naturally filter storm water runoff
Water Supply <i>through groundwater management and/or runoff capture and use</i>	Water conservation	<ul style="list-style-type: none"> • Rainwater collection system • Native landscaping incorporated into projects to reduce potable water needs
	Water supply reliability	<ul style="list-style-type: none"> • Storm water infiltration project
	Conjunctive use	<ul style="list-style-type: none"> • Program or project that facilitates the use of groundwater infiltration of surface storm water into a drinking water supply aquifer
Flood Management	Reduced sanitary sewer overflows	<ul style="list-style-type: none"> • LID style basin to mitigate volumetric overflow • LID retrofit incorporated with illegal storm water connection removal
	Decreased flood risk by reducing runoff rate and/or volume	<ul style="list-style-type: none"> • Rainwater collection system • Bioretention facility, rain garden, bioswale • Conversion of pervious surface to impervious surface

	Increased sea level rise resiliency	<ul style="list-style-type: none"> • Tide gate installation or improvement that prevents backwatering in the storm water system • Project that increases storm water storage
Environmental	Reduced energy use, greenhouse gas emissions, or provides a carbon sink	<ul style="list-style-type: none"> • Creation of wetland with quantifiable greenhouse gas emission reduction
	Reestablishment of the natural hydrograph	<ul style="list-style-type: none"> • Conversion of pervious surface to impervious surface • Creek restoration project that removes riprap or concrete and converts river bed back to native material
	Water temperature improvement	<ul style="list-style-type: none"> • Deep media bioretention facilities that shield water from sunlight • Riparian forest restoration for infiltration of stormwater
	Environmental and habitat protection and improvement, including: <ul style="list-style-type: none"> - wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement 	<ul style="list-style-type: none"> • Storm water treatment wetland • Channel enhancement project to reduce storm water turbidity • Replacement of undersized culvert that causes flooding and debris accumulation • Floodplain enhancement project to infiltrate storm water
	Increased urban green space	<ul style="list-style-type: none"> • Green streets project
Community	Employment opportunities provided	<ul style="list-style-type: none"> • LID project at public school • LID project with signage
	Public education	
	Community involvement	<ul style="list-style-type: none"> • Community built demonstration LID project
	Enhance and/or create recreational and public use areas	<ul style="list-style-type: none"> • Creation or enhancement of trail drainages to filter storm water runoff or wildlife areas • Installation of bioswale or rain garden at existing public use area