



PRELIMINARY IMPLEMENTATION PROJECT APPLICATION

Increasingly, funding opportunities for project implementation require or give preference to projects that are included in an IRWM Plan. The following process will provide a mechanism for including projects on an on-going basis into the North Coast Resource Partnership (NCRP) Integrated Regional Water Management (IRWM) Plan.

1. Project proponents will complete the following preliminary project information.
2. Project proponent will submit a signed [Memorandum of Mutual Understandings \(MoMU\)](#) if one has not already been submitted.
3. Staff will review the project and follow-up with project proponents regarding any eligibility concerns (Urban Water Management Plan, Agricultural Water Management, Surface Water Diverter, Groundwater Management Plan, CASGEM/SGMA compliance, proponent type)
4. The NCRP Technical Peer Review Committee (TPRC) will review and accept eligible projects
5. Staff will 'Publish' eligible NCRP Projects and project summaries will be included on the website; and staff will report to the Policy Review Panel at a NCRP Quarterly Meeting
6. Additional project information will be required when NCRP funding solicitations and calls for proposals occur; NCRP project proponents will be allowed to edit preliminary project information.
7. NCRP Projects will be reviewed and scored by the TPRC if required by a respective funding solicitation; NCRP Priority Projects will be selected by the PRP. NCRP Priority Project proponents will need to adopt the NCRP IRWM Plan as per the IRWM Guidelines.

Please fill out grey text boxes and select all the check boxes that apply to your project. **It is important to save the application file with a distinct file name that references the project name. When the application is complete, please email the application to kgledhill@westcoastwatershed.com**

Application responses should be clear, brief and succinct. Character limits are provided and include spaces. **If you have questions or need additional information please contact Katherine Gledhill at kgledhill@westcoastwatershed.com or 707.795.1235.**

Preliminary Implementation Project Information

Organization Information

1. **Organization Name:** City of Fortuna

 2. **Organization Address (City, County, State, Zip Code):**
PO Box 545, Fortuna, CA 95540

 3. **Contact Name/Title**
 - a) Name: Brendan Byrd
 - b) Title: Deputy City Engineer
 - c) Email: bbyrd@ci.fortuna.ca.us
 - d) Phone Number (include area code) : 707-725-1469

 4. **Organization Type**
 - Public Agency
 - Nonprofit Organization
 - Tribe
 - Other: _____

 5. **Organization Information Notes:**

-

Eligibility

1. **North Coast Resource Partnership and North Coast Integrated Regional Water Management Objectives**

[for more information see the [North Coast Integrated Regional Water Management Plan](#)]

Check any of the following that apply to your project:

GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT

Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation

Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation

Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

GOAL 2: ECONOMIC VITALITY

Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing

Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT

- Objective 6** – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity
- Objective 7** - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

GOAL 4: BENEFICIAL USES OF WATER

- Objective 8** - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, cultural, and recreational uses while minimizing impacts to sensitive resources
- Objective 9** - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities
- Objective 10** - Protect groundwater resources from over-drafting and contamination

GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE

- Objective 11** - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health
- Objective 12** - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

GOAL 6: PUBLIC SAFETY

- Objective 13** - Improve flood protection and reduce flood risk in support of public safety

2. **Describe how your project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected** [1000 characters max.]

The City of Fortuna’s 12th Street Integrated Stormwater Enhancement Project addresses goals and policies identified in the City's General Plan and Storm Drain Master Plan pertaining to the enhancement of storwater management, natural resources, safety, and aesthetics. This multi-benefit project provides a sense of welcome and arrival to the City from Highway 101 to the shops on Main Street in this economically disadvantaged community. The implemenation of bioretention swales, trees and other plantings along 12th Street and within the High School parking lot will improve stormwater capture, infiltration and uptake, restoring watershed hydrologic processes muted by previous development and impacted by climate change. The project will enhance groundwater resources, improve water quality, attenuate stormwater runoff, and reduce roadway flooding.

General Project Information

1. **Project Name:** 12th Street Integrated Stormwater Enhancement Project

2. **Project Description/Summary**

[2000 characters max.]

The project proposes to reduce common nonpoint sources of pollution from reaching Rohner Creek, a salmonid-bearing stream tributary to the Eel River, while attenuating peak flows of urban runoff, enhancing groundwater recharge and providing urban greening to the 12th Street corridor of the city of Fortuna. The project focuses on mitigating stormwater generated from 17.8 acres of commercial, and residential development, including heavily paved street right of ways. This generates approximately 0.7

acre-feet of runoff during an 85th percentile storm. This volume will be directed into a system of streetside bioretention basins. An estimated 30% of this runoff will be captured and infiltrated, resulting in a reduction of peak flows and reduction in pollutants. Much of the remainder will also benefit from its contact with plant material and soil media, also contributing to reductions in pollutants to receiving waters.

The bioretention basins intended for use in this system are selected from the CASQA-LIDI details. The street bioretention planter box, no parking, no underdrain (SW-4A) was selected for bioretention facilities located within the roadway parking lanes. The street bioretention bulb out, no parking, no underdrain, single slope (SW-5) was selected for the Fortuna High School parking lot. In select locations, to accommodate tree plantings, portions of the bioretention facilities are composed of two types of cells. One cell follows the CASQA design standard bioretention soil media composed of sand and compost best suited to grasses and drought tolerant wetland emergent plant species; the second cell is slightly elevated and composed of amended native soil to accommodate trees and/or shrubs. Bioretention basins within the parking lanes strike a balance between capture opportunities, pedestrian visibility and safety, and parking needs. The Fortuna High School parking lot mitigates runoff from this site while providing screening and visual enhancements.

3. Specific Project Goals/Objectives

[for each goal list specific objectives]

Goal 1: To improve water quality and reduce peak flows of local creeks and the Eel River [100 characters max.]

Goal 1 Objective: Maximize capture of urban runoff on 12th Street during 85th Percentile storm [200 characters max.]

Goal 1 Objective: Reduce the transmission of sediment to receiving waters [200 characters max.]

Goal 1 Objective: Reduce the transmission of nutrients to receiving waters [200 characters max.]

Goal 1 Objective: _____ [200 characters max.]

Goal 2: To improve the resiliency of an urban watershed in Fortuna

Goal 2 Objective: Increase carbon sequestration of the urban forest

Goal 2 Objective: Improve the visual character of 12th Street through urban greening.

Goal 2 Objective: _____

Goal 2 Objective: _____

Goal 3: To enhance groundwater recharge

Goal 3 Objective: Maximize capture of stormwater runoff on 12th Street

Goal 3 Objective: _____

Goal 3 Objective: _____

Goal 3 Objective: _____

Additional Goals & Objectives (List)

4. **Projected Project Start Date** (format M/d/yyyy): 10/01/2020

5. **Anticipated Project End Date** (format M/d/yyyy): 12/01/2022

6. Project Type:

[select all that apply]

- Water supply reliability, water conservation, and water use efficiency
- Stormwater capture, storage, clean-up, treatment, and management
- Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands
- Non-point source pollution reduction, management, and monitoring
- Groundwater recharge and management projects
- Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users
- Water banking, exchange, reclamation, and improvement of water quality
- Non-point source pollution reduction, management, and monitoring
- Planning and implementation of multipurpose flood management programs
- Watershed protection and management
- Drinking water treatment and distribution
- Ecosystem and fisheries restoration and protection
- Other: Urban Greening

7. Current Project Phase:

- Feasibility Study
- Planning
- Environmental Documentation & CEQA
- Permitting
- Implementation / Construction
- Maintenance
- Monitoring
- Other: _____

8. Project Elements

[select all that apply]

- Water supply reliability, water conservation and water use efficiency
- Storm water capture, storage, clean-up, treatment, monitoring and management
- Water banking, exchange, reclamation and improvement of water quality
- Non-point source pollution reduction, management and monitoring
- Groundwater recharge and management projects
- Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users
- Planning and implementation of multipurpose flood management programs
- Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands
- Watershed protection and management
- Drinking water treatment and distribution
- Ecosystem and fisheries restoration and protection
- Critical water quality or supply enhancement for Economically Disadvantaged Communities
- Stormwater management to reduce flood damage
- Monitoring / assessment of resources
- Other: Urban Greening

9. Project Information Notes:

Project Funding

1. Total Project Cost: \$1,000,000.00

2. Total Funding Request: \$900,000.00

3. Funding Type

- Loan
- Grant
- Other

4. List Potential Funding Program Name(s)

State Water Resources Control Board, Round 2, Proposition 1 Stormwater Implementation Grant
DWR Prop. 1 Stormwater Implementation Grant funding

5. Total Amount of Matching Funds: \$100,000.00

Select the source of these funds (select all that apply):

- Local
- State
- Federal

Select the status of these funds:

- N/A
- Received and Date when funds were received: _____
- Pending and Date when funds were requested: _____
- Have not applied

6. List Matching Fund Sources

City of Fortuna

7. Funding Information Notes:

Conceptual Design Development funded by California State Water Resources Control Board, Technical Assistance Grant, Water Bond 2014, Proposition 1, Technical Assistance for Improved Stormwater Mangement

Collaborative Partnerships

1. List all collaborating partners and agencies and nature of collaboration:

Council for Watershed Health, received grant to provide technical support to City of Fortuna

2. Describe local and/or political support for this project. [500 characters max.]

The city council has received updates on this project from city staff and supports the project.

3. Partnership Information Notes:

The Council for Watershed Health has been working with GHD, Inc and Darla Elswick, a stormwater quality specialist, for the technical development of the project concepts.

Project Location

1. Project Location Site Address or Description:

12th Street corridor from K Street to Loni Drive, City of Fortuna

2. Mapped Location

- a) County(s): Humboldt
- b) City/Town(s): Fortuna
- c) Stream(s): Rohner Creek, tributary to Eel River

3. Is this project located in a Disadvantaged Community?

[\[Click layer on North Coast interactive maps\]](#)

- Entirely
- Partially
- No

List the Disadvantaged Community(s)

Fortuna city GEOID 0625296

Project Benefits

1. Project Benefits

[select all that apply]

Increase Water Supply

- Increased water supply or range in water supply (i.e. acre-feet per year)
- Improved water quality
- Increased recreational opportunities
- Decreased reliance on imported water
- Reduced groundwater overdraft
- Creation of wetlands and riparian habitat
- Decreased operational costs
- Other _____

Water Quality Improvement

- Increased water supply
- Improved aquatic and wetland species habitat and populations
- Increased cropland production
- Creation of wetlands and riparian habitat
- Improved recreation opportunities
- Decreased treatment costs
- Other _____

Groundwater Improvements

- Improved flood protection
- Decreased reliance on imported water
- Reduced surface water use, reduced pumping costs
- Decreased or prevention of groundwater overdraft
- Other _____

Water Conservation and Reuse

- Increased water saving
- Efficient reuse of wastewater
- Costs savings from reduced purchases of imported water
- Saving construction of water storage facilities
- Increased nutrient levels for plant and crop use from use of reclaimed wastewater
- Other _____

Watershed Rehabilitation

- Long-term sediment reduction and temperature improvements
- Reduced surface water nutrient and bacteria concentrations (improved water supply quality)
- Improved fish and wildlife habitat and passage
- Enhanced public safety and recreational opportunities
- Instream rehabilitation to redress hydromodification
- Other _____

Habitat Improvement

- Reduced surface water nutrient and bacteria concentrations (improved water supply quality)
- Enhanced fish habitat
- Increased opportunities for recreational hunting and viewing
- Increased numbers of native species
- Reduced flood risks
- Education opportunities
- Other _____

Flood Management

- Increased aquifer recharge
- Runoff reduction
- Improved surface water quality
- Natural resources preservation and restoration
- Reduced risk to life and property
- Decreased flood insurance costs
- Other _____

2. Describe how your project benefits the Economically Disadvantaged Communities it serves:

[1000 character max.]

This project benefits the health, welfare, safety, resiliency and economy of the city of Fortuna, designated a Disadvantaged Community Place. The project improves water quality for habitat but also will result in increases in groundwater supply, which is critical for resiliency under climate

change. It is designed using curb extensions and with sensitivity to pedestrian crossings. Curb extensions are a tested technique to reduce vehicular speeds (e.g. traffic calming) that improve pedestrian safety. Street trees and urban greening which will accompany the LIDs also provide traffic calming, provide shade to mitigate urban heat islands, and have been documented to contribute to improvement in health markers like blood pressure and obesity. They have also been associated with improvements in local economies as they create more attractive and comfortable spaces to physically occupy.

3. Project Benefits Information Notes:

Street trees are also documented to reduce urban runoff as their canopies intercept rainfall, thus preventing it from becoming urban runoff.