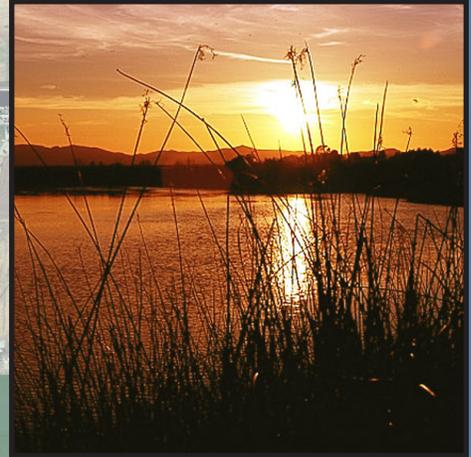


**City of Antioch
Proposition 1E Grant Proposal
Attachment 11**

Program Preferences



**City of Antioch
Proposition 1E Stormwater Flood Management Grant Proposal**

**ATTACHMENT 11 –
PROGRAM PREFERENCES**

<u>Program Preferences</u>	<u>Page</u>
Summary of Program Preferences Addressed By Proposal	11-1
Regional Project	11-3
Integrates Water Management	11-3
Contributes to CALFED Objectives	11-4
Addresses Critical Water Supply/Water Quality Needs of DACs	11-4
Integrates Water and Land Use Management.....	11-4
Not Part of SPFC and Provides Multiple Benefits.....	11-4
Statewide Priorities	11-6
Certainty, Breadth and Magnitude of Preferences Being Met	11-6

This attachment discusses how this proposal addresses the program preferences outlined in Section II.F of the Integrated Regional Water Management Guidelines. In accordance with the PSP, the following pages:

- ✓ Identify the specific Program Preferences that the Proposal will meet
- ✓ Discuss the certainty that the Proposal will meet the program preferences
- ✓ Discuss the breadth and magnitude by which the Program Preference will be met.

Summary of Program Preferences Addressed by Proposal

The City of Antioch is partnering with the Contra Costa County Flood Control District (District) to address chronic flooding of West Antioch Creek through the installation of three 14' by 7' Caltrans Standard Box Culverts spanning 620 feet. These box culverts will increase the storm water capacity of the creek, replacing an inadequate concrete trapezoidal ditch and arch culverts. This installation will provide a 25-year level of flood protection (the maximum achieved without expanding the AT&SF RR crossing) to commercial and multi-family properties adjacent to the channel and within a Disadvantaged Community (DAC) by addressing a gap that currently exists between channel improvements made by the Contra Costa County Flood Control & Water Conservation District in 1993 and the earthen channel on the Antioch Fairgrounds property.

This project will (1) **improve flood protection** for the community, including disadvantaged communities (DACs); (2) **eliminate the significant public health threat** to this Disadvantaged Community (DAC) caused by chronic flooding and exposure to constituents of concern in degraded flood waters; (3) **provide water quality and habitat protection benefits** by reducing flood-related debris and pollutant loading in West Antioch Creek, which flows directly into New York Slough, and (4) **provide recreation benefits**, as flooding in this area often results in the closure of the Contra Costa County Fairgrounds, the Antioch Little League Complex and Prosserville Park..

The *Drainage Area 55 – West Antioch Creek Channel Improvements Project* also achieves multiple Program Preferences. Of particular significance, there is a **HIGH DEGREE OF CERTAINTY** that the Proposal will address *critical water quality needs of disadvantaged communities (DACs)*. This Project is the City of Antioch’s highest priority flood control project in the region, lending a **HIGH DEGREE OF CERTAINTY** that the project will proceed as planned, providing significant **LOCAL and REGIONAL benefits**.

The table below identifies the Program Preferences addressed by the proposed Project. A more detailed discussion of the program preferences addressed by the Project and the certainty, breadth and magnitude by which the Preference will be met is provided on the following pages.

Project	Regional Project	Integrates Water Mgmt	Reduces Conflict	Contributes to CALFED Objectives	Addresses WS and WQ Needs of DACs	Integrates Water and Land Use Mgmt	Not part of a SPFC and Provides Multiple Benefits	Addresses Statewide Priority
Drainage Area 55 - West Antioch Creek Channel Improvements	✓	✓		✓	✓	✓	✓	✓
Certainty	High	High		High	High			High
Breadth and Magnitude	Local, Regional and Statewide	Local, Regional and Statewide		Local, Regional and Statewide	Local	Local	Local, Regional and Statewide	Local, Regional and Statewide

Regional Project

The *Drainage Area 55 – West Antioch Creek* project meets several of the regional criteria as defined by CWC §10537, including Improve Flood Management, Improve Water Quality; and Improve Resource Stewardship, as follows:

- ✓ **Improve Flood Management:** The Project will upsize / extend 620 feet of flood infrastructure from just west of 8th and O Streets to the earthen channel in the Antioch Fair Grounds just south of 10th Street. This will provide a 25-year level of flood protection to commercial and multi-family properties adjacent to the channel and within a Disadvantaged Community Area that currently experiences moderate to severe flooding multiple times per year.
- ✓ **Improve Water Quality:** Project implementation will provide water quality benefits by reducing flood-related debris and pollutant loading in West Antioch Creek, which flows directly into New York Slough. Beneficial uses in New York Slough (included in the revised Basin Plan) are: commercial and sport fishing, estuarine habitat, fish migration, preservation of rare and endangered species, wildlife habitat, water contact recreation, non-contact water recreation, and navigation. Implementation of this project would help to prevent against further surface water quality degradation in New York Slough, Suisun Bay, and the Delta by constituents of concern such as chloride and mercury.
- ✓ **Improve Resource Stewardship:** The Project will protect and enhance the valuable natural resources of East Contra Costa County by reducing the geomorphic and water quality impacts associated with flood waters from urbanized areas.

Integrates Water Management

The *Drainage Area 55 – West Antioch Creek Channel Improvements Project* integrates several water management strategies including Flood Management; Stormwater Capture and Management; Water Quality Protection and Improvement; Pollution Prevention NPS Pollution Control; and Habitat Protection and Improvement; as follows:

- ✓ **Flood Management:** As described previously, the primary benefit of this Project will be enhanced flood protection (to a 25-year level of protection) within a DAC that currently experiences chronic flooding problems.
- ✓ **Stormwater Capture and Management:** Existing stormwater capture and management infrastructure in place in the project area is unable to handle the excess flows generated during the frequent flood events. By alleviating chronic flooding in this urbanized area, stormwater capture and management will be optimized.
- ✓ **Water Quality Protection and Improvement:** The project provides for water quality protection and improvement by reducing flood-related debris and pollutant loading in West Antioch Creek, which flows directly into New York Slough.
- ✓ **Pollution Prevention NPS Pollution Control:** Project implementation will prevent nonpoint source pollution by maintaining flood waters within the channel, preventing polluted flood waters from transporting pollutants and debris from this urbanized area.
- ✓ **Habitat Protection and Improvement:** Currently, flooding in the project area results in the transport of flood-related debris and pollutants from an urbanized area into West Antioch Creek, which flows directly into New York Slough. Beneficial uses in New York Slough (included in the revised Basin Plan) include: estuarine habitat, fish migration, preservation of rare and

endangered species, and wildlife habitat. Therefore, Project implementation will protect and improve habitat by preventing further surface water quality degradation.

Contributes to CALFED Objectives

The *Drainage Area 55 – West Antioch Creek Channel Improvement Project* addresses the Water Quality CALFED program objective. An important project benefit is the reduction of pollutant loading to West Antioch Creek and New York Slough.

Addresses Critical Water Supply/Water Quality Needs of DACs

The *Drainage Area 55 – West Antioch Creek Channel Improvement Project* provides Water Quality benefits to a DAC. Project implementation would eliminate health risks to a disadvantaged community posed by chronic exposure to degraded flood waters. The chronic flooding exposes residents of this disadvantaged community to degraded – and potentially dangerous - flood waters. Degraded water quality of flood waters in urban areas poses a real threat to human health as they may contain potentially hazardous or infectious materials, such as fecal material from overflowing sewer systems, pathogens, agricultural runoff, and chemicals from commercial and industrial areas. Direct contact with polluted flood waters through wound infections, dermatitis, conjunctivitis, and ear, nose and throat infections poses a significant risk of infection.

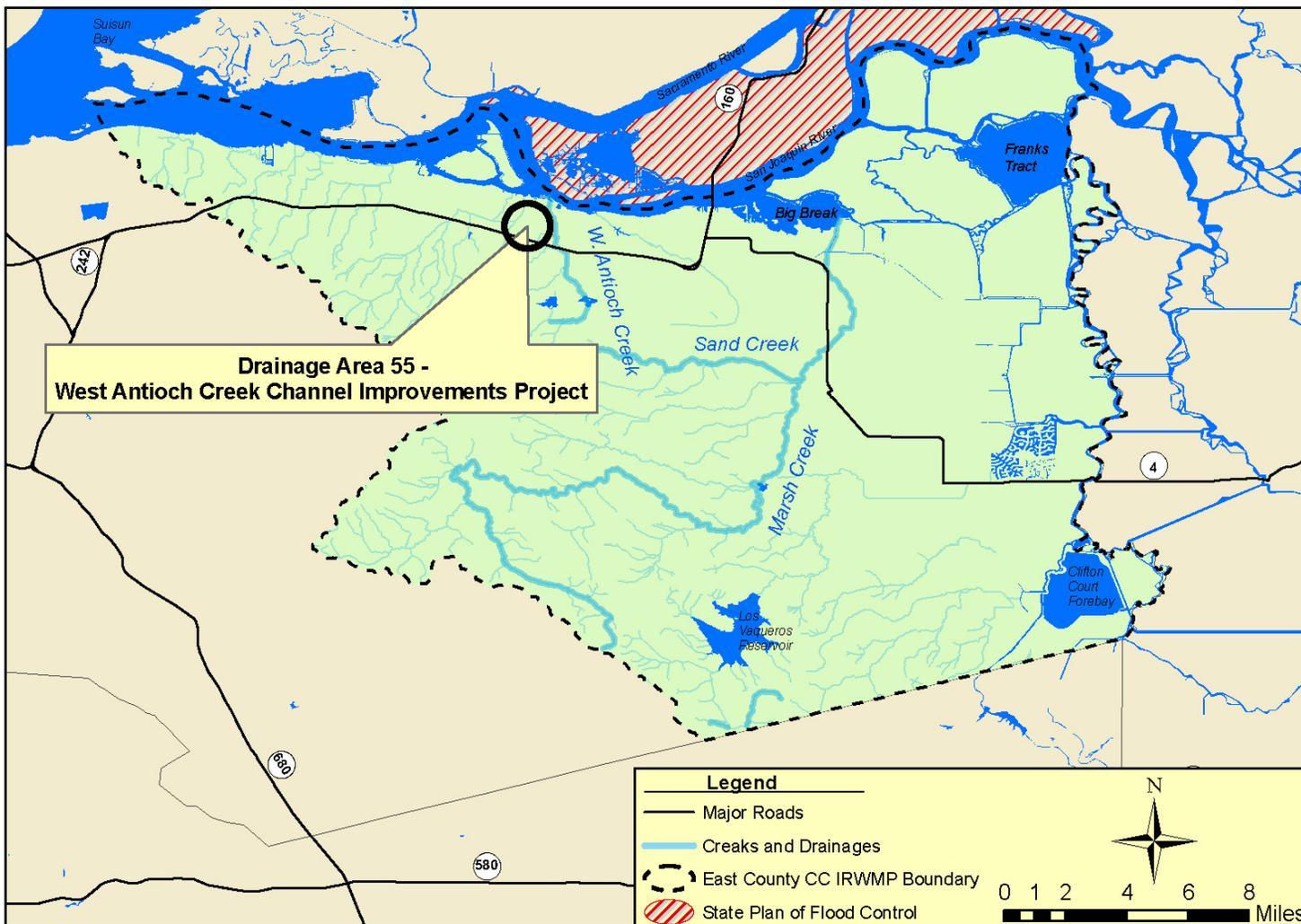
Integrates Water and Land Use Management

The project integrates water and land use management by reducing frequent flooding occurrences within this area, allowing for the development and improvement of local commercial, industrial, multi-family, and residential properties. Annual flooding events in this area have stymied business opportunities for decades. Regulatory requirements to offset project impacts will most likely include local and regional watershed restoration measures.

Not Part of a SPFC and Provides Multiple Benefits

As shown in the Figure on the following page, the *Drainage Area 55 – West Antioch Creek Drainage Improvement Project* is not part of the State Plan of Flood Control. In addition, this project provides multiple benefits:

- The Project will **improve flood protection** for the community, including disadvantaged communities (DACs).
- The Project will **eliminate a significant public health threat to a DAC** caused by exposure to various constituents of concern present in the degraded flood waters.
- The Project will **provide water quality and habitat protection** benefits by reducing flood-related debris and pollutant loading in West Antioch Creek, which flows directly into New York Slough; and
- The Project will **provide recreation benefits** by minimizing the number of times annually the Costa County Fairgrounds, the Antioch Little League Complex and Prosserville Park need to be closed due to flooding.



Statewide Priorities

The *Drainage Area 55 – West Antioch Creek Channel Improvement Project* addresses several statewide priorities, including Practice Integrated Flood Management and Protect Surface and Groundwater Quality, as follows:

- ✓ **Practice Integrated Flood Management:** This Project demonstrates integrated flood management by simultaneously addressing chronic flooding problems, improving water quality, and providing habitat protection and improvement benefits.
- ✓ **Protect Surface and Groundwater Quality:** As described previously, this Project will protect surface water quality in West Antioch Creek and New York Slough by reducing flood-related debris and pollutant loading in West Antioch Creek, which flows directly into New York Slough.

Certainty, Breadth and Magnitude of Preferences Being Met

The Drainage Area 55 - West Antioch Creek Channel Improvement Project addresses these preferences with a **HIGH degree of certainty**. This project is part of a long standing Flood Control District Zone Plan and is supported by both an Environmental Impact Report and an Engineer's Report. This project is focused on improving one specific channel segment of West Antioch Creek and is not reliant on any additional projects being completed. Currently, this is the City's number one priority flood control project within the region, and will be implemented expeditiously on receipt of funding.

Flood Protection Benefits. Construction of new structural concrete culverts will improve stormwater conveyance in West Antioch Creek and reduce the incidence of flooding, providing **LOCAL benefits**.

Public Health/DAC Benefits. This project addresses a critical water quality need of a DAC by preventing chronic flooding of the DAC adjacent to West Antioch Creek (which currently floods two to three times per year), eliminating exposure to pathogens and other contaminants found in degraded flood waters.

Water Quality Improvement Benefits. This project provides a **LOCAL, REGIONAL, and STATEWIDE benefit** to water quality by reducing/eliminating overland flooding events to surrounding commercial, industrial and residential areas, preventing surface contaminants from entering the creek and eventually the Delta.

Land Use Management/Resource Stewardship Benefits. The project will provide **LOCAL** urban land use management benefits by reducing frequent flooding occurrences within this area, allowing for the development and improvement of local commercial, industrial, multi-family, and residential properties. Annual flooding events in this area have stymied business opportunities for decades. Regulatory requirements to offset project impacts will most likely include local and regional watershed restoration measures.