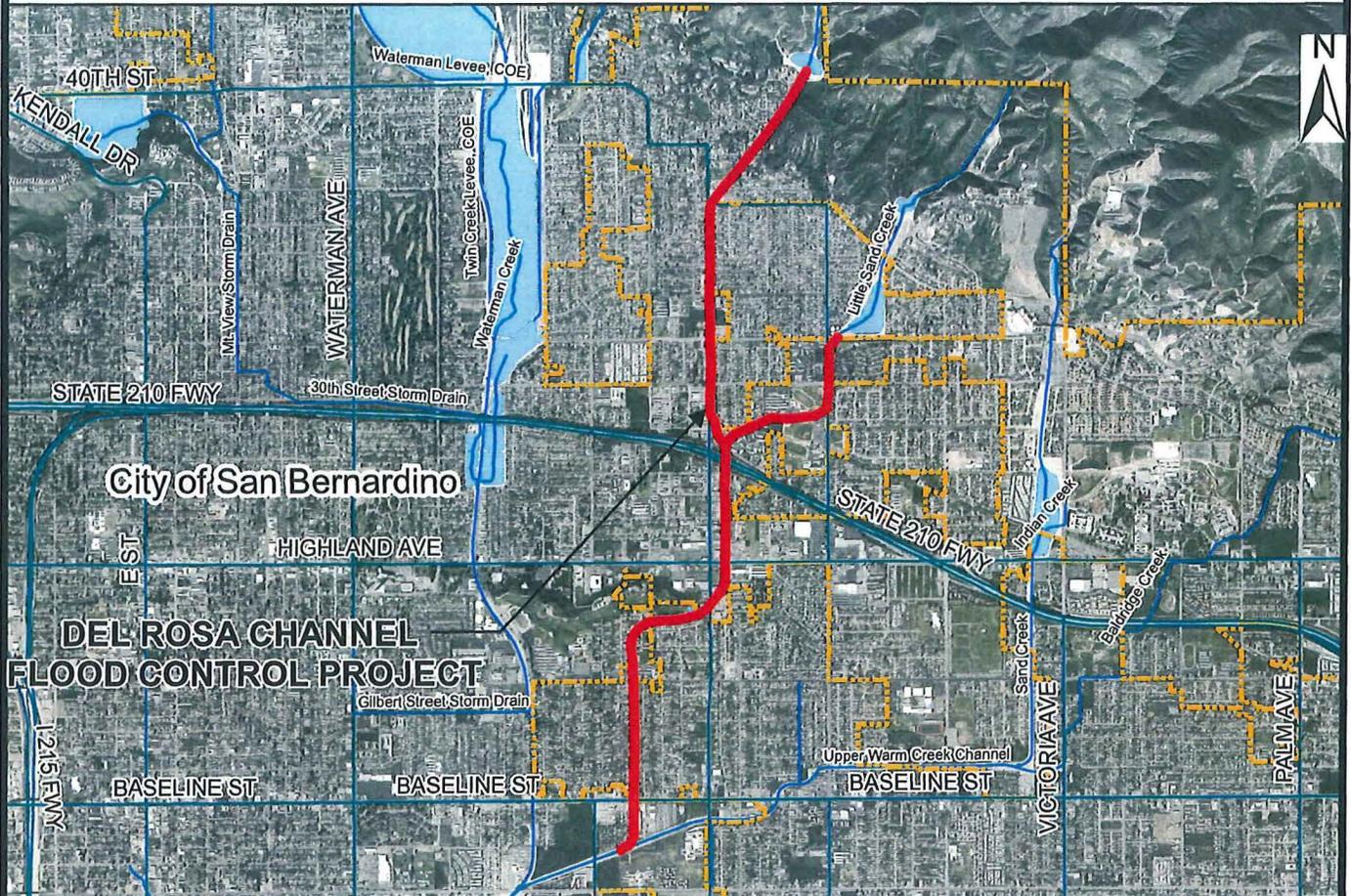


Proposal to:
 U.S. Army Corps of Engineers
 Attn: CECWCE Lisa Kiefel
 441 G. Street NW.,
 Washington, DC 23014-1000

Del Rosa Drainage Area
 Proposed Feasibility Study



Legend

-  Major Roads
-  City Boundaries
-  Channels
-  Basins and Dams



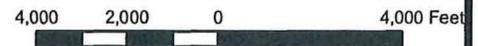
Project Sponsors:

City of San Bernardino

City of Highland



San Bernardino County Flood Control District





November 25, 2014

Department of Public Works
Environmental & Construction • Flood Control
Operations • Solid Waste Management
Surveyor • Transportation

Gerry Newcombe
Director

U.S. Army Corps of Engineers
441 'G' Street NW
Washington, DC 20314-1000

Attn: CECW-CE
Lisa Kiefel

Dear Ms. Kiefel:

The San Bernardino County Flood Control District, San Bernardino County, State of California, is pleased to submit the proposed Del Rosa Drainage Area for your consideration as a feasibility phase study.

The communities within this proposed feasibility study area include some which are disadvantaged in nature and represent periodic flooding from the steep mountainous drainage behind them. A feasibility phase study is needed to determine the best course of action to handle the flooding in this area of the Cities of San Bernardino and Highland. We would appreciate the opportunity to partner with U.S. Army Corps of Engineers to conduct this most needed study.

Thank you for your consideration.

Respectfully yours,

A handwritten signature in blue ink that reads "Kevin Blakeslee".

KEVIN BLAKESLEE, P.E.
Deputy Director, Flood Control

KB:KCE:DL:dja

Enclosure

BOARD OF SUPERVISORS

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GREGORY C. DEVEREAUX
Chief Executive Officer

DEL ROSA DRAINAGE AREA

The San Bernardino County Flood Control District (District), San Bernardino County, California has been working with the US Army Corps of Engineers since the 1940's to provide flood protection for the inhabitants of the County of San Bernardino. Our goal is to continue to search for projects that include elements of protection for the community and areas of habitat enhancement that will improve the safety the quality of life for local residents.

To that end, our goal is to partner with the Corps in a *Feasibility Study* for the Del Rosa Drainage Area. This study would have implications for the Cities of San Bernardino, Highland and unincorporated areas of San Bernardino County.

PROPOSED PROJECT: DEL ROSA DRAINAGE AREA FEASIBILITY STUDY

The Del Rosa Channel (Channel) is located in the northeast portion of the City of San Bernardino portions of the City of Highland and within portions of the unincorporated area of San Bernardino County. The Channel receives runoff from an upper watershed of approximately one thousand six hundred (1,600) acres. The Channel is approximately 3.7 miles long and passes through a highly urbanized area of the City of San Bernardino, which is an economically disadvantaged community, consisting of both residential and commercial properties. Portions of the existing Channel are mainly rectangular and has segments that are earthen and rail and wire revetment. Much of the existing facilities are antiquated and represent some of the oldest in the area. Of concern is an elementary school that lies within the floodplain. A *Feasibility Study* will provide some alternatives for the local sponsors to consider for improvements. Alternatives will provide information to further investigate methods of flood protection to the many residences and businesses along the Del Rosa Avenue Corridor. Improvements will also increase flood protection for local roads such as Highland Avenue, Baseline Road, and et.al.

PURPOSE:

Our desire is to pursue an insightful *Feasibility Study* to obtain data and presumably to assist in the design of protection alternatives to alleviate the flood issues throughout the watershed and provide environmental enhancements where possible.

LOCAL SUPPORT:

Given the periodic flooding issues that affect the infrastructure described above the interested parties include the City of San Bernardino, City of Highland and unincorporated San Bernardino County. All entities will receive benefit of a Feasibility Study in this particular drainage.

The non-monetary benefits to the community include obvious safety concerns, given the intense 'flash flood' nature of the storm events that occur and which disrupt travel and utilities within the two cities.

In addition, monetary benefits in this area include vast economic activity with railroad and trucking industries associated with nationwide commercial warehousing facilities, recently developed in this area. It becomes critical to our District to provide protection to insure employment and economic continuity for the region. Since much of the downstream end of this study area has only interim improvements we have the opportunity to update the system to include some environmental enhancements in selected areas. With the closing of Norton Air Force Base in 1994, the economy has struggled to gain a strong footing. This study and alternatives will provide a potential for improvements to keep much of our floodplain within a defined limit.

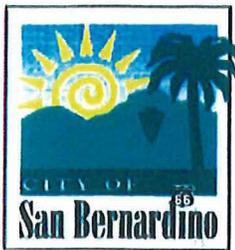
FINANCIAL CAPABILITY:

The San Bernardino County Flood Control District funds projects through local tax assessments to improve regional systems for the benefit of the public, regardless of the jurisdiction, and has the financial capability to provide funding for the local share portion. We have provided letters of support from local cities and continue to pursue other options for those cities to participate monetarily as the study alternatives are developed. Cost estimate and letters of support are included in this report.

Thank you for the opportunity to submit for this most needed Feasibility Study on Del Rosa Drainage Area.

DEL ROSA DRAINAGE AREA / FEASIBILITY STUDY ESTIMATE

HYDROLOGY:	300,000
HYDRAULICS:	120,000
ENVIRONMENTAL:	100,000
RIGHTS-OF-WAY:	140,000
PROJECT COORDINATION:	250,000
PLAN FORMULATION:	200,000
PRELIMINARY PLANS:	150,000
TOTAL:	1,260,000



**CITY OF SAN BERNARDINO
PUBLIC WORKS DEPARTMENT**

Tony Frossard – DIRECTOR
300 North "D" Street
San Bernardino, CA 92418-0001
909.384.5140

November 24, 2014

U.S. Army Corps of Engineers
441 "G" Street NW
Washington, DC 20314-1000

Attn: CECW-CE
Lisa Kiefel

RE: Feasibility Study on Del Rosa Drainage Area

Dear Ms. Kiefel,

The City of San Bernardino is a city with a population of 211,000 people within the San Bernardino Valley and situated along and within many watercourses of great significance to the local residents. In addition to the habitat and recreation benefits that present themselves, we are also acutely aware of the destructive nature of these watercourses and the "flashy" nature of storms in this area that subject our City and others to damages and costs to both public and private facilities.

These drainage and water courses impact a large portion of our historic areas, commercial centers, major transportation corridors (railways and automotive/trucking), and utilities as well as the local residents that reside in and around them.

We are writing to express our support for San Bernardino County Flood Control District and their proposal to the U.S. Army Corps of Engineers for a Feasibility Study of Del Rosa Drainage Area from the Foothills to the confluence with Warm Creek Channel. We expect to participate and provide information to the study to support further planning and CIP improvements to our area.

The City of San Bernardino wholeheartedly supports this proposal for a Feasibility Study on Del Rosa Drainage Area.

Thank you for your consideration.


MARK L. RAAB, P.E.
Principal Engineer

cc: Ken Eke, P.E., Flood Control Operations Division Chief
County of San Bernardino, Department of Public Works
821 E. Third Street, Room 108, San Bernardino, CA 92415-0835



November 24, 2014

U.S. Army Corps of Engineers
441 'G' Street NW.,
Washington, DC 20314-1000

Attn: CECW-CE
Lisa Kiefel

Subject: Proposed Feasibility Study Del Rosa Drainage Area

Dear Ms. Kiefel:

The City of Highland has a population of over 53,000 within the San Bernardino Valley and is situated along and within many watercourses of great significance to the local residents. In addition to the habitat and recreation benefits that present themselves, we are also acutely aware of the destructive nature of these watercourses and the unpredictable nature of storms in this area that subject our city and others to damages and costs to public and private facilities.

These drainages and watercourses can impact a large portion of our commercial centers, major automotive and trucking transportation corridors, and utilities as well as local residents. These watercourses can also impact the ability of first responders to access various locations within the City of Highland and the ability for anyone to access medical facilities within and outside of the City.

We are writing to express our support for San Bernardino County Flood Control District and their proposal to the U.S. Army Corps of Engineers for a feasibility study of Del Rosa Channel Drainage Area from the foothills to the confluence with Warm Creek Channel. We expect to participate and provide information to the study to support further planning and construction of this capital improvement project in our area.

The City of Highland wholeheartedly supports this proposal for a Feasibility Study on Del Rosa Channel Drainage Area. Thank you for your consideration.

Sincerely,

Ernest Wong
Public Works Director/City Engineer

Cc: San Bernardino County Flood Control District/Ken Eke, P.E.

Mayor
Sam J. Racadio

Mayor Pro Tem
Larry McCallon

City Council
Penny Lilburn

City Council
Jody Scott

City Council
John P. Timmer

City Manager
Joseph A. Hughes

San Bernardino County
Unincorporated Areas
060270

NOTE: MAP AREA SHOWN ON THIS
PAGE IS LOCATED WITHIN
TOWNSHIP 1 NORTH, RANGE 4 WEST.

San Bernardino
National Forest



ZONED
BOUNDARY COINCIDENT
WITH CORPORATE LIMITS

ZONED
BOUNDARY COINCIDENT
WITH CORPORATE LIMITS

FOREST BOUNDARY
COINCIDENT WITH
ZONE D BOUNDARY

SAN BERNARDINO COUNTY
CITY OF SAN BERNARDINO

ZONE X

ZONE X

ZONE X

ZONE X

ZONE X

ZONE D AND FOREST
BOUNDARY COINCIDENT WITH
CORPORATE LIMITS

San Bernardino County
Unincorporated Areas
060270

San Bernardino
060281

San Bernardino
060270

San Bernardino
060281

WARNING: THIS AREA IS SHOWN AS BEING
PRODUCED FROM THE 1-PERCENT ANNUAL
CHANCE OR GREATER FLOOD HAZARD BY
LEVEES. IF YOU ARE CONSIDERING THIS
AREA FOR OTHER PURPOSES, SEE THE
EXPLANATION, SEE THE NOTES TO USERS.

Del Rosa Channel
1378

San Bernardino County
Unincorporated Areas
060270

San Bernardino
060281

San Bernardino
060270

San Bernardino County
Unincorporated Areas
060270

San Bernardino
060281

San Bernardino
060270



SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1 percent chance of being equaled or exceeded in any given year. The Special Flood Hazard Area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.



OTHER FLOOD AREAS

ZONE X
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas of less than 1 square mile; and areas protected by levees from 1% annual chance flood.

NOTE: MAP AREA SHOWN ON THIS
PAGE IS LOCATED WITHIN
TOWNSHIP 1 NORTH, RANGE 4 WEST
AND TOWNSHIP 10 NORTH, RANGE 4 WEST.

San Bernardino
National Forest

SAN BERNARDINO COUNTY
CITY OF SAN BERNARDINO

City of
San Bernardino
060281

City of
San Bernardino
060281

San Bernardino County
Unincorporated Areas
060270

City of
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