



Marin County Flood Control and Water
Conservation District
**Corte Madera Creek Flood Risk Management
Project, Phase 1**
Draft Environmental Impact Report

February 2021

Marin County Flood Control and Water Conservation District Corte Madera Creek Flood Risk Management Project, Phase 1 Draft Environmental Impact Report

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Prepared for:

Marin County Flood Control and Water Conservation District
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903

Prepared by:

Panorama Environmental, Inc.
717 Market Street, Suite 650
San Francisco, CA 94103

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Acronyms, Abbreviations, and Glossary

Acronyms and Abbreviations

μPa	micro-Pascals
AB	Assembly Bill
ABAG	Association for Bay Area Governments
ACC	Advanced Clean Cars
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan
Bay Area	San Francisco Bay Area
BMPs	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalRecycle	California Department of Resources Recycling and Recovery
Cal OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model®
CANAGPRA	California Native American Graves Protection and Repatriation Act
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCC	Central California Coast
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

CEC	California Energy Commission
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CGS	California Geological Survey
CH ₄	methane
CIP	Capital Improvement Plan
CMCFCP	Corte Madera Creek Flood Control Project
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO _{2e}	equivalent CO ₂
COM	College of Marin
COPCs	contaminants of potential concern
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CRS	Community Rating System
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
cy	cubic yard
dB	decibels
dBA	A-weighted sound levels
dbh	diameter at breast height
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

EAP	Energy Action Plan
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ER	Engineering Regulation
ESCP	erosion and sediment control plan
ESLs	Environmental Screening Levels
ESU	Evolutionarily Significant Unit
EWOP	Existing Condition without Project
EWP	Existing Condition with Project
FDS	flood diversion and storage
FESA	Federal Endangered Species Act
FHWG	Fisheries Hydroacoustic Working Group
FIGR	Federated Indians of Graton Rancheria
FWOP	Future Condition without Project
FWP	Future Condition with Project
g	gravity
GASGEM	California Statewide Groundwater Elevation Monitoring
GHG	greenhouse gas
GWP	global warming potential
GPS	global positioning system
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
HMBP	Hazardous Materials Business Plan
HWMs	high water marks
Hz	Hertz

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

I-580	Interstate 580
in/sec	inches per second
IPCC	International Panel on Climate Change
IWMA	Integrated Waste Management Act
KFPD	Kentfield Fire Protection District
KOPs	key observation points
LCFS	Low Carbon Fuel Standard
L _{eq}	Equivalent Sound Level
LEV	Low-Emission Vehicle
L _{dn}	Day-Night Average Level
LID	low-impact development
L _{max}	Maximum Sound Level
L _{min}	Minimum Sound Level
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MCE	Maximum Credible Earthquake
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
MMWD	Marin Municipal Water District
MPOs	Metropolitan Planning Organizations
MS4s	Small Municipal Separate Storm Sewer Systems
msl	mean sea level
MTC	Metropolitan Transportation Commission
MTCO _{2e}	metric tons of CO ₂ equivalent
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NMFS	National Marine Fisheries Service
NOI	notice of intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTDE	National Tidal Datum Epoch
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PBF	physical or biological features
PFCs	perfluorocarbons
PGA	peak ground acceleration
PG&E	Pacific Gas and Electric
PPV	peak particle velocity
PRDs	permit registration documents
Program	Ross Valley Watershed Flood Protection and Watershed Program
RCRA	Resource Conservation and Recovery Act
RVFD	Ross Valley Fire Department
RWQCB	Regional Water Quality Control Board
SAFZ	San Andreas Fault Zone
SARA	Superfund Amendments and Reauthorization Act
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SEL	sound exposure levels
sf	square feet

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFHA	Special Flood Hazard Areas
SIP	State Implementation Plan
SLC	sea level change
SMN	Science-Math-Nursing building
SMP	Stream Maintenance Program
SOD	Sudden Oak Death
SPF	standard project flood
SPL	sound pressure level
SRA	State Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
The District	Marin County Flood Control and Water Conservation District
The project	Corte Madera Creek Flood Risk Management Project, Phase 1
TACs	toxic air contaminants
TCP	traditional cultural property
TMDL	Total maximum Daily Load
TMP	Traffic Management Plan
TSCA	Toxic Substances Control Act
TTLCS	Total Threshold Limit Concentrations
US 101	U.S. Highway 101
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

VbD	vibration decibels
VHFHSZ	very high fire hazard severity zones
VMT	vehicle miles traveled
WDRs	Waste District Requirements
WSE	water surface elevation

Glossary

100-year flood event: A flood that statistically has a one-percent chance of occurring in any given year.

Aggradation: The act of raising the grade or level of a stream bed by depositing detritus, sediment, or the like.

Alluvial strata: Consists of unconsolidated mixtures of gravel, sand, clay, and silt typically deposited by streams.

Anadromous: Characterizes the life cycle of a fish that spawns in fresh water and spends a significant portion of its adult life in the ocean. Salmon and steelhead are anadromous.

A-weighted decibel (dBA): Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, human response is factored into sound descriptions in a process called “A-weighting,” expressed as “dBA.” The dBA, or A-weighted decibel, refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies.

Backwater flooding: Upstream flooding caused by downstream conditions such as channel restriction and/or high flow in a downstream confluence stream.

Bankfull: The term bankfull refers to the water level stage that just begins to spill out of the channel into the floodplain.

Beneficial reuse: The use of byproducts or waste materials rather than discarding them.

Coarse sediment load: Particulate sediment, varying in size from sand to gravel, that is carried in the body of the flow.

Cofferdam: A watertight enclosure pumped dry to permit construction work below the waterline.

Dam inundation area: The specific areas of land that would become flooded and covered with water if a particular dam were to break or fail.

Emergent groundwater: Groundwater that emerges to the surface of the ground naturally, by an increase in infiltration from stormwater or other water source.

Floodplain: An area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding.

Floodwalls: A primarily vertical artificial barrier designed to temporarily contain the waters of a river or other waterway that may rise to unusual levels during seasonal or extreme weather events.

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

Groundwater basin: An area underlain by permeable materials capable of furnishing a significant supply of groundwater to wells or storing a significant amount of water.

Hydraulic capacity: The amount of water that can pass through a structure or watercourse.

Hydraulic constriction: A short reach of a creek where the cross-section is reduced.

Left bank: refers to the east or north side of the channel.

Level of service (LOS): A qualitative description of a facility's performance based on average delay per vehicle, vehicle density, or volume-to-capacity ratios. Levels of service range from LOS A, which indicates free-flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with extremely long delays.

Manning's 'n' factor: The Manning's 'n' is a coefficient which represents the roughness or friction applied to the flow by the channel.

Perennial safe yield: The amount of groundwater that can be withdrawn from a groundwater basin over a period of time without exceeding the long-term recharge of the basin or unreasonably affecting the basin's physical and chemical integrity.

Regulatory floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Right bank: Refers to the west or south side of the channel.

Riparian: The land adjacent to a natural watercourse such as a river or stream. Riparian areas support vegetation that provides important wildlife habitat as well as important fish habitat when sufficient to overhang the bank.

Scour protection: Rock, riprap, or similar materials added to edge of a waterway to protect the banks.

Sediment deposition: The process by which sediment, including soil and rocks, is deposited on the creek bottom due to a loss of kinetic energy in the water.

Sheetflow flooding: Floodwater flows that spread out over a large area at a uniform depth.

Special-status species: Several species known to occur within the general region of the program area are accorded "special status" because of their recognized rarity or vulnerability to habitat loss or population decline. Some of these species receive specific protection in federal and/or state endangered species legislation. Others have been designated as "sensitive species" or "species of special concern" on the basis of adopted policies of federal, state, or local resource agencies. These species are referred to collectively as "special-status species."

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

Streamflow gage: A tool to measure stream-water height and thereby measure the amount of water in the stream.

Threshold conveyance capacity: The flow a creek channel can contain before overtopping its banks.

Vegetated soil lift: A vegetated soil lift consists of soil encapsulated or wrapped in a facing element or fabric such as a rolled erosion control product, or a combination of erosion control products, that also act a reinforcing element.

Watershed: The region or area drained by a river, stream, etc.; drainage area.