# PAJARO RIVER FLOOD RISK MANAGEMENT PROJECT NON-FEDERAL COST SHARE REPORT

## For

# STATE FLOOD CONTROL SUBVENTIONS PROGRAM

#### **INTRODUCTION**

The Pajaro River Federal Flood Control Project was built in 1949 by the United States Army Corps of Engineers (Corps) and is maintained jointly by the Santa Cruz County Flood Control and Water Conservation District – Zone 7 (District) and the Monterey County Water Resources Agency (MCWRA). Since construction of the levee system in 1949, there have been four major floods on the Pajaro River and its tributaries in 1955, 1958, 1995, and 1998 that have resulted in significant inundation and damage caused by overtopping or breaching of the levees. A 1963 report by the U.S. Army Corps of Engineers concluded that the levee system was "inadequate," and Congress authorized reconstruction of the Pajaro River levee system in 1966 through Section 203 of the Flood Control Act of 1966 (Public Law 89-789, 80 Stat. 1421):

The project for flood protection on the Pajaro River, California, is hereby authorized substantially in accordance with the recommendations of the Chief on Engineers in House Document Numbered 491, Eighty-ninth Congress, at an estimated cost of \$11,890,000.

Re-authorization was granted by the Water Resources Development Act 1990, Section 107 Continuation of Authorization of Certain Projects (Public Law 101-640), which reads:

(a) General Rule.—Notwithstanding section 1001(b)(1) of the Water Resources Development Act of 1986, the following projects shall remain authorized to be carried out by the Secretary: (1) Pajaro River, Santa Cruz, California. —The project for flood control, Pajaro River and tributaries, Santa Cruz, California, authorized by the Flood Control Act of 1966 (80 Stat. 1421).

To complete the Feasibility Phase for the Project, the Corps will release a finalized General Re-evaluation Report and Environmental Assessment (GRR/EA) in early 2020. The GRR/EA will be accompanied by a signed Director's Report, the latter of which has already been released to the non-federal sponsors and is attached to this Non-Federal Cost Share Report. The GRR/EA describes formulation of alternative plans to reduce flood risk in the Project area, evaluates economic and environmental impacts of the alternatives, including the no action alternative, and identifies the plan that maximizes the net National Economic Development (NED) benefits and complies with applicable federal and state environmental regulations.

A Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) was prepared by Cardno Entrix in April 2011 to support the Project. However, due to the changes that precipitated from the USACE implementation of the SMART Planning process, the NEPA and CEQA processes were

separated. The GRR/EA includes a Draft Finding of No Significant Impact (FONSI) in compliance with the National Environmental Policy Act (NEPA). The local non-federal sponsors (District and MCWRA) will complete the California Environmental Quality Act (CEQA) environmental review process, culminating in a Final Certified EIR by May of 2021. As such, both Federal and State environmental review will be completed prior to production of 30% designs developed by the Corps during initial phases of Preconstruction Engineering and Design (PED). All necessary permits from Federal, State, and local agencies will be secured during the PED phase.

Water Code 12687.5 authorized the State to provide subvention funds to the Project in 2006, in accordance with Water Code section 12585.7. Water Code 12687.5 was amended with passage of AB 489 in September 2019. Specifically, the amendment allows the State to provide subvention funds in accordance with Section 12585.7 to be used for planning, engineering, designing, and constructing the project in the absence of federal funding in an amount that would be the equivalent state share if there was federal project funding.

Water Code section 12585.7 states that the State shall pay:

- 50 percent of the nonfederal capital costs required by Section 2213 of Title 33 of the United States Code (subd. (a)),
- 50 percent of the nonfederal capital costs of fish, wildlife, and recreation mitigation (subd. (b)), and
- 50 percent of the nonfederal planning and engineering costs required by Section 2215(b) of Title 33 of the United States Code and the nonfederal design costs required by Section 2215(c) of Title 33 of the United States Code (subd. (c)) <sup>1</sup>.

Water Code section 12585.7 allows the State's share to be increased up to a maximum of 70% if DWR determines that the project will:

- Increase the level of flood protection for disadvantaged communities, as defined in Section 79505.5.<sup>2</sup>
- Increase the level of flood protection for state transportation facilities or state water supply facilities

Under the DWR regulations in Title 23 CCR, DWR or the Board will recommend a State Cost-Share, and the Legislature will determine the final state cost share (23 CCR 572.). 23 CCR § 572 allows the Department of Water Resources to recommend an increase in State cost-share if the Project qualifies for the Disadvantaged Area Objective or State Facilities Objective. A project provides a significant contribution to the Disadvantaged Area Objective by increasing the level of flood protection by at least 10% to a Benefited Area that has a median annual household income of less than 80% of the California Median Household Income. The increase in cost-share percentage above the baseline 50% of non-federal capital contributions is proportional to the degree to which the Benefited Area is economically

<sup>&</sup>lt;sup>1</sup> Costs under Section 12585.7, subdivisions (a) and (b) (capital costs and mitigation costs) are subject to the limitation that "such co-operation shall apply only to costs incurred for the project as finally authorized by the Congress and the State, and such costs shall not be eligible for reimbursement by the State until after federal and state authorization and after the appropriation of construction funds by the Congress."

<sup>&</sup>lt;sup>2</sup> Water Code section 79505.5 defines "Disadvantaged community" as "a community with an annual median household income that is less than 80 percent of the statewide annual median household income."

disadvantaged. A project provides a significant contribution to the State Facilities Objective by increasing the level of flood protection by at least 10% to a State Transportation Facility (23 CCR § 574). For each State Transportation Facility receiving this increase in flood protection, the increase in cost-share percentage above the baseline 50% of non-federal capital contributions is five (5) percent. 23 CCR § 574 allows increases in cost-share calculated for each multipurpose Objective to be combined, or summed, to determine an overall cost-share percentage. Additionally, 23 CCR 575 states "The recommended percentage increases will be:

- Up to twenty percent for a significant contribution to the Disadvantaged Area Objective;
- Five percent for a significant contribution to the State Facilities Objective by benefiting one State Facility;
- Ten percent for a significant contribution to the State Facilities Objective by benefiting two State Facilities;
- Fifteen percent for a significant contribution to the State Facilities Objective by benefiting three State Facilities[.]"

### **PROJECT DESCRIPTION**

Levels of flood protection along the Pajaro River system are among the lowest of any federal flood control project in California. Recent (2016) Corps analysis shows the levees provide only 5-year protection along the Pajaro River and 7-year protection along two Pajaro tributaries. Poor levee strength further reduces this expected performance. Existing State transportation facilities that cross tributary channels (Highway 129 and 152 bridges at Salsipuedes Creek) within the Project envelope can only safely convey the 10-year to 25-year floods. Floods in 1995 caused more than \$95 million in damage and two people lost their lives, with additional damage in 1997 and 1998 and displacement of hundreds of residents. Levees nearly broke again in the federally declared storm disasters of January-February 2017, and a 1600-foot-long seepage berm was needed to buttress the outboard levee flank when numerous observations of seepage and boils were made. The existing and proposed levee project protects the economically disadvantaged City of Watsonville in Santa Cruz County and Town of Pajaro in Monterey County, where per capita income is less than half the state and national average. The Project also impacts some of the most productive farmland in the world; agriculture is a \$750 million to \$1 billion per year industry in the Pajaro Valley. The Watsonville-Salinas agricultural region produces twice as many strawberries as any other area in California, and California produces nearly 80% of the nation's strawberries. Strawberries are California's 4th highest-grossing agricultural commodity, producing \$3.1 billion in annual revenue. The Project study area is shown in Figure 1, and the elements of the NED Recommended Plan are shown in Figure 2. As presented in the USACE GRR/EA report, Alternative 1 on the mainstem of the Pajaro River and Alternative 6 on the tributaries have been identified as the NED Plan, which reasonably maximizes net economic benefits, as calculated by USACE, and is the Recommended Plan.

The mainstem alternative includes improvements on both banks of Reaches 2, 3, and the left bank of Reach 4. Reach 2 includes demolition of the existing levees and construction of new 100-foot setback levees on both banks. In Reach 3, the existing levees on both banks would be improved in place with floodwalls. In Reach 4, the existing levee on the left bank would be degraded and a new 100-foot



Figure 1. Pajaro River Flood Risk Management Project Study Area

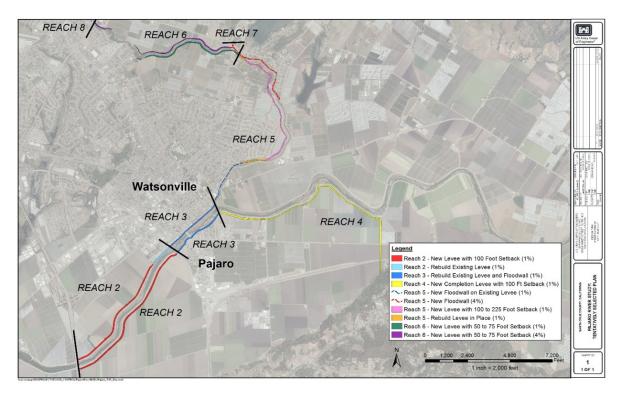


Figure 2. Pajaro Flood Risk Management Project Recommended Plan elements by Project Reach

setback levee would be constructed that ties into high ground on the east end. These levees and floodwalls would be constructed to provide FRM up to the 1% ACE (1/100) event with approximately 90% assurance. There would be no improvements to the right bank of Reach 4 due to lack of economic justification. Additionally, the recommended plan does not include any improvements to the originally constructed Reach 1 levees downstream of Highway 1 extending to the ocean.

The mainstem levees and levee/floodwalls would range from 13-14 feet in height. Approximately 9200 lineal feet of bank protection rip rap will be placed on the left bank and 4300 lineal feet of bank protection rip rap will be placed on the right bank.

On the tributaries, levee design for the right bank reaches of Salsipuedes and Corralitos Creek provides FRM up to the 1% ACE (1/100) event with approximately 90% assurance for the areas on the right bank of the streams. An incremental economic analysis concluded that improvements to levees on the left bank of the tributaries were not economically justified when designed to provide FRM for the 1% (1/100) ACE. Further analysis determined that features providing FRM to the urbanized areas along the left bank, the upper portion of reach 5 above Lakeview Road and Reach 6, were economically justified for the 4% ACE (1/25) event, which is consistent with the level of protection provided by the existing levee located further downstream in Reach 5. The tributary levees and levee/floodwalls would range from 10-13 feet in height.

In Reach 5 right bank, above the confluence with the Pajaro River, approximately 5,300 lineal feet of floodwalls or a combination levee with a floodwall on top would be constructed where urban development prevents raising existing levees. A 4,500-foot levee setback between 100 to 225 feet would be constructed upstream of the floodwall section. Then an approximately 500-foot-long section of the existing levee would be rebuilt in place. For Reach 5 left bank, beginning 8,800 feet upstream from the confluence with the Pajaro River, a floodwall or a combination levee with a floodwall on top will be constructed on the left bank between Lakeview Road and College Road—a distance of approximately 5,000 feet.

Reach 6, both right and left bank, includes construction of a new levee, approximately 5900 feet in length, set back 50 to 75 feet from the edge of the Corralitos Creek channel.

It is imperative to note that there may be slight changes to planform NED configuration following initial analysis in the PED phase. Some hydraulic and economic analyses were deferred into the PED phase by the Corps under risk-deferred decision-making consistent with existing policy. Any changes in planform configuration will be shared with Subventions Project staff when they are daylighted by Corps analyses and reporting.

## **DISADVANTAGED COMMUNITY OBJECTIVE**

The Pajaro River forms the boundary between Santa Cruz and Monterey Counties, coursing through the agricultural lowlands of the lower Pajaro Valley and straddled by an urban area in each County: the City of Watsonville in Santa Cruz County and the Town of Pajaro in Monterey County. The City of Watsonville is a State-designated disadvantaged community, while the Town of Pajaro is a State-designated severely disadvantaged community. The Project will provide 100-year flood protection for both communities. For these areas, per capita income is less than half the state and national average.

The Pajaro Census Designated Place (CDP), which is Severely Disadvantaged, has a median annual household income of 55% of the California Median Household Income. The Watsonville CDP has a median annual household income of 69% of the California Median Household Income. Within the Benefited Area<sup>3</sup>:

- Approximately 16,000 people live in households with a median annual household income of less than 60% of California Median Household Income.
- Approximately 26,400 people live in households with a median annual household income of less than 80% of the California Median Household Income.
- At least 1334 people live in households with a median annual income of \$22,798, or only 32% of California Median Household Income.

These residents are highly vulnerable to the consequences of flooding. While "wealth" enables communities to absorb and recover from losses more quickly (insurance, social, and other financial safety nets, etc), this financial descriptor does not apply to these two urban areas protected by the Project. Residents in Watsonville and Pajaro are less able to get out of harm's way and are less likely to financially recover following a flood event. The Town of Pajaro, representing a portion of the Project area with the greatest unemployment rate, lowest household income, and the greatest percentage of households living below poverty, is heavily reliant upon locally based resource extraction economies (farming) that would be greatly disrupted during a flood event. With the potential loss of employment following a disaster exacerbating (or at least contributing to) a slower recovery from the disaster, the effects of job loss would be particularly acute in these urban areas. Agriculture is the lifeblood of the region's economy and would be significantly disrupted by a flood event with a loss of crops, a loss of multiple production years, and thousands of farmworkers losing jobs. More importantly, these low wage earners can't simply wait for rebuilding and recovery: loss of agricultural productivity means a permanent exodus of workers and irrevocable business decisions for producers who can't afford to rebuild. This would also result in a national disruption to the strawberry, cane-berry, lettuce, artichoke, and broccoli markets. The population living in the project area is heavily skewed toward renters versus homeowners. This indicates a lower level of financial resources (drastically reduced resiliency in the aftermath of a disaster), lower likelihood of sufficient shelter in the event of a disaster, and a decreased ability to be warned of an imminent disaster. Home ownership is relatively low in these economically depressed areas, and displacement of renters tends to cause a more permanent loss of community structure than displacement of homeowners. As education level is directly correlated to socioeconomic status, which greatly enables a community to rebound after a disaster, it is important to point out that while 50% of Watsonville and 30% of Pajaro residents have graduated from high school (low compared to California's 80%), less than 10% of the Watsonville and 0% of Pajaro residents hold a bachelor's degree. The ability to evacuate is severely limited by a combination of the expected inundation of the key evacuation routes with low vehicle ownership in the area due to extreme poverty.

<sup>&</sup>lt;sup>3</sup> The Benefited Area is defined as an area that conjoins the 100-year inundation area in portions of the floodplain where proposed facilities protect against that event and the 25-year inundation area in portions of the floodplain where proposed facilities are absent. Alternatively, this describes the without-project inundation area for the 100-year event in the City of Watsonville and Town of Pajaro and the 25-year event on the Santa Cruz County side of the Pajaro River upstream of the Pajaro River-Salsipuedes Creek confluence.

The increase in cost-share percentage above the baseline 50% of non-federal capital contributions, ascribed to benefits provided to Disadvantaged Communities, requires quantification of the following information, as described in 23 CCR § 572-575:

- 1. The extent with which the Project increases the level of flood protection (by at least 10%) to a Benefited Area; and,
- 2. The degree to which the Benefited Area is economically disadvantaged.

The proposed Project offers the Town of Pajaro, the City of Watsonville, and adjacent areas protection from the 1% annual chance of exceedance (ACE) event with a 90% assurance target. Taken as a percentage of recurrence interval compared to existing levels of protection, this is a 2000% increase in flood protection for the Town of Pajaro, a 2000% increase for portions of Watsonville adjacent to the Pajaro River, and a 1429% increase for portions of Watsonville adjacent to Salsipuedes Creek. Taken as a percentage reduction in water surface elevation, this is a 34% improvement in flood protection for the Town of Pajaro, a 28% improvement for portions of Watsonville adjacent to the Pajaro River, and a 20% improvement to portions of Watsonville adjacent to Salsipuedes Creek. Taken as a percentage reduction of discharge (flood flow), this is a 302% improvement for the Town of Pajaro, a 214% improvement for portions of Watsonville adjacent to the Pajaro River, and a 144% improvement for portions of Watsonville adjacent to Salsipuedes Creek. By these metrics, the first requirement describing the increase in level of flood protection provided by the Project is easily met, regardless of the indicator used.

Table 1: Disadvantaged Communities, income levels, and benefited areas

DAC ID from Figure 3	DAC ID (Block Group or CDP GEOID10)	Total DAC Acreage	DAC Area within Benefit Area <sup>1</sup>	DAC Area outside of Benefit Area	DAC Median HH Income	DAC Median HH Income * DAC Area within Benefit Area
( - )	(-)	(ac.)	(ac.)	(ac.)	(\$)	(\$)
1	60871101003	72.22	61.7	10.52	\$41,525.00	\$2,562,092.50
2	60871101002	51.5	49.94	1.56	\$50,850.00	\$2,539,449.00
3	60871101001	87.1	83.28	3.82	\$46,136.00	\$3,842,206.08
4	60871103002	83.53	82.17	1.36	\$22,798.00	\$1,873,311.66
5	60871104001	260.63	217.69	42.94	\$33,445.00	\$7,280,642.05
6	60871104002	713.23	677.23	36	\$42,500.00	\$28,782,275.00
7	60871103004	100.27	99.56	0.71	\$44,803.00	\$4,460,586.68
8	655044	593.25	584.96	8.29	\$39,205.00	\$22,933,356.80
	Totals:	1961.73	1856.53	105.2	-	\$74,273,919.77

Total area-weighted DAC MHHI / Total DAC Area:
Difference between area-weighted DAC income (as % of MHI) and 80% MHI:

\$40,006.85 44%

To quantitatively assess the degree to which the Project provides benefit to Disadvantaged Communities, we assembled U.S. Census Bureau information on Median Annual Household Income in California as well as geospatial datasets that mapped the characteristics of disadvantaged community areas (as identified by the Department of Water Resources) and hydraulic characteristics of the without-

<sup>&</sup>lt;sup>1</sup> Total benefited area is 6,632 acres. Total benefited area outside of DACs is 4,670.27 acres.

and with-Project conditions. Figure 3 shows the Project's Benefited Area as well as census-designated disadvantaged communities (DAC). Data shown in Figure 3 as well as in Table 1 below illustrate that for DAC shapes (CDP, Tract, Block Group) that lie within the Benefited Area by at least 50%, the DACs intersected by the benefit area are within the area of benefit by 84-99%. This represents a total of 1856 acres of DAC area that would be protected by the Project, constituting 3,678 households inhabited by 16,201 residents. Table 1 shows that these DACs are characterized by median household incomes ranging between \$22,798 and \$50,850. We calculated an area-weighted income for each DAC shape mapped in Figure 3 and summed them over the 8 identified DAC areas, as recommended by DWR staff according to the calculation below:

Area-weighted DAC income =  $\sum_{n=1}^{8} (DAC_n Income \times Area Inside DAC_n)$ 

Consistent with DWR staff recommendation, we then calculated the difference between this total area-weighted DAC income and 80% *MHI*, as expressed as a percentage of *MHI*, where *MHI* is the California median household income as defined by the U.S. Census Bureau (\$71,805). The result is a 44% difference in area-weighted DAC income over the DAC areas that lie within the Benefit Area by at least 50%.

In general, benefit areas that do not intersect census-designated disadvantaged community areas would still need to be recognized as project segments necessary to protect identified disadvantaged

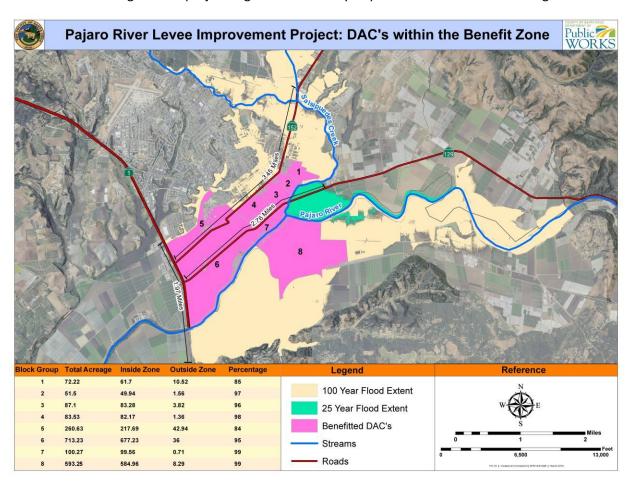


Figure 3. Pajaro River Flood Risk Management Project: DAC's within the Benefit Zone

communities. With the exception of project features proposed on the left bank of Salsipuedes-Corralitos Creeks, all FRM features provide hydraulic mitigation for disadvantaged communities and are not hydraulically separable from FRM features proposed immediately adjacent to the identified (mapped) DACs. For mapped DACs, the only way to increase their proportional area of protection would be to increase the proposed level of protection above the 1% chance exceedance event, which would likely describe a project that the protected disadvantaged communities cannot afford. Additionally, the NED project is optimized at the 1% chance exceedance level of protection, and increased FRM would jeopardize federal investment and funding support for these communities and would obviate a subventions appropriation.

In summary, for this Project, the Disadvantaged Community objective provides for enhancement of the State cost-share percentage by 44%, based on area-weighted income of protected DAC areas within the benefited area of the Project.

## Proposed State cost-share increase for Disadvantaged Area Objective: 44%

#### STATE FACILITIES OBJECTIVE

The increase in cost-share percentage above the baseline 50% of non-federal capital contributions, ascribed to benefits provided to State Transportation Facilities, requires quantification of the following information, as described in 23 CCR § 572-575:

- 1. The extent with which the Project increases the level of flood protection (by at least 10%) to a State Transportation Facility; and,
- 2. The number of State Transportation Facilities protected by the Project.

Figure 3 shows that the following State Transportation Facilities intersect the Project's benefited area:

- State Highways 1, 129, and 152 cross over the Pajaro River and Salsipuedes Creek within the benefited area of the existing flood protection facility and the benefited area of the proposed Project.
- The Pajaro Flood Risk Management Project will elevate the Highway 129 and 152 bridges over Salsipuedes Creek above the 100-year recurrence interval flood inundation area.
- 2.03 miles of Highway 129 will receive protection from the 100-year recurrence interval flow, and 0.73 miles of Highway 129 will receive protection from the 25-year recurrence interval flow.
- 3.45 miles of Highway 152 will receive protection from the 100-year recurrence interval flow.
- 1.97 miles of Highway 1 will receive protection from the 100-year recurrence interval flow.

Again, the proposed Project offers protection from the 1% annual chance of exceedance (ACE) event with a 90% assurance target. Taken as a percentage of recurrence interval compared to existing levels of protection, this is a 2000% increase in flood protection for 2.01 miles of Highway 129 and 1.97 miles of Highway 1, and a 1429-2000% increase for 3.45 miles of Highway 152. Taken as a percentage reduction in water surface elevation, this is a 28% improvement for 2.01 miles of Highway 129 and 1.97 miles of Highway 1, and a 20-28% improvement for 3.45 miles of Highway 152. Taken as a percentage reduction of discharge (flood flow), this is a 214% improvement for 2.01 miles of Highway 129 and 1.97 miles of Highway 1, and a 144-214% improvement for 3.45 miles of Highway 152. By these metrics, the

first requirement describing the increase in level of flood protection provided by the Project is easily met, regardless of the indicator used.

Because there are three (3) State Transportation Facilities protected by the proposed Project, we propose a State cost-share enhancement of 15%.

#### Proposed State cost-share increase for State Facilities Objective: 15%

#### **ESTIMATED COSTS**

Section 107 of WRDA 1990 provided that the Pajaro River FRM project as authorized by the FCA of 1966 remain authorized. As such, a USACE legal opinion and Authorities Analysis was prepared and concluded that: a) the project authorization provided by Section 203 of the Flood Control Act of 1966 remains valid; b) the non-Federal cost share for this project will be set at a minimum of 25% and maximum of 50% in accordance with Section 103 of the Water Resources Development Act (WRDA) of 1986 as physical construction as authorized by Section 203 of the 1966 FCA has not yet been initiated; and c) because this project was authorized in 1966 prior to WRDA 1986, Section 902 limits are not applicable.

The project's non-federal sponsors are the Santa Cruz County Flood Control and Water Conservation District – Zone 7 (Santa Cruz County) and the Monterey County Water Resources Agency (Monterey County). Both counties have submitted letters of support for the Pajaro FRM study, cost-shared in the study costs, and participated in significant planning activities. Cost-share apportionment, including Total Capital Costs, non-federal share of Total Capital Cost, non-federal Capital Cost of fish, wildlife, and recreation mitigation, non-federal planning and engineering costs (PED), are shown in Table 2 below.

Table 2: Cost-Share Apportionment for the Recommended Plan<sup>1</sup>

ACCT	ITEM	FEDERAL	NON-FEDERAL <sup>2</sup>	TOTAL
1	Lands and Damages		\$88,550	\$88,550
2	Relocations	=	\$39,113	\$39,113
6	Fish and Wildlife Facilities	-	-	-
11	Levees and Floodwalls	\$195,713	=	\$195,713
16	Bank Stabilization	\$11,813		\$11,813
18	Cultural Resources	=		=
30	PED	\$33,053		\$33,053
31	Construction Management	\$25,425		\$25,425
	First Cost			\$393,667
	Mandatory 5% Non-Federal Cash Contribution <sup>3</sup>	(\$19,683)	\$19,683	
	Total	\$246,321	\$147,346	\$393,667
	Cost Share (%)	62.6%	37.4%	100%

<sup>&</sup>lt;sup>1</sup>Recommended plan summary of project first cost from Pajaro River FRM Study, Based on October 2019 Price level, 2.75% interest rate, 50-year period of analysis

<sup>&</sup>lt;sup>2</sup>The applicable non-Federal cost share requirements is as stipulated by WRDA 1986, which the minimum is at 25% of the total project first cost and not to exceed 50%.

<sup>&</sup>lt;sup>3</sup>Mandatory non-Federal cash contribution for structural FRM features in accordance with WRDA 1986, which is credited to the non-Federal cost share.

Table 3: Annual Benefits and Costs for the Recommended Plan (\$1000's)

Net Benefits and Benefit-to-Cost Ratio – Recommended Plan (Alternatives 1 [Mainstem] & 6 [Tributaries]) (Dollar Values in 1,000s, October 2018 Price Level (FY19), 50-Year Period of Analysis, 2.875% Discount Rate)

Item	GRR
	Recommended Plan (NED Plan)
Total Project First Cost	\$393,667
Interest During Construction (IDC)	\$32,365
Total	\$426,032
Annual Costs	
Interest and Amortization	\$15,781
OMRR&R	\$400
Subtotal	\$16,181
NED Benefits (FRM)	\$16,538
Net Annual NED Benefits (FRM)	\$357
Benefit-Cost Ratio	1.02

Table 4: Sponsor's Estimated Share of Capital Costs towards Multi-purpose Objectives

OBJECTIVE	FEDERAL	NON-FEDERAL	TOTAL
Habitat Objective	-	-	-
Open Space Objective	-	-	-
Recreation Objective	-	-	-
Disadvantaged Area Objective	\$246,321	\$147,346	\$393,667
State Facilities Objective	See footnote 1	See footnote 1	See footnote 1
Total	\$246,321	\$147,346	\$393,667
Cost Share (%)	62.6%	37.4%	100%

<sup>&</sup>lt;sup>1</sup>The share of applicable capital costs towards the State Facilities Objective are one and the same as that indicated for the Disadvantaged Area Objective. The Project benefited area protects the values or facilities embodied by both objectives simultaneously and are not separable.

Table 3 shows total annual value of the Flood Risk Management benefits as well as annual benefit and cost of the Project allocable to flood management. The non-federal Project sponsor's estimated share of the capital cost of the Project towards each of the 5 multipurpose objectives are shown in Table 4.

### **CONCLUSION**

The Pajaro River Flood Risk Management Project will provide long-awaited protection to the disadvantaged communities of Watsonville and Pajaro, will protect three (3) State transportation facilities, and will protect valuable/prime agricultural farmland. In aggregate, the methodology described above results in a recommendation for enhanced State cost-share under the Subventions Program of 59% (15% ascribed to the State Facilities Objective and 44% ascribed to the Disadvantaged Area Objective). Statute limits the State cost-share enhancement to 20% above the baseline 50% cost-share. As such, the two non-federal Project sponsors recommend and request a State cost-share enhancement of 70% for the Pajaro River Flood Risk Management Project.