

PROCEEDINGS OF THE BOARD OF DIRECTORS
COUNTY OF SANTA CRUZ
FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7 MEETING
GOVERNMENTAL CENTER BUILDING
701 OCEAN STREET, ROOM 525, SANTA CRUZ, CA

9:00 A.M.

June 25. 2002

- A. Roll Call
- B. Consideration of Late Additions
- C. Additions and Deletions

- 1. ORAL COMMUNICATIONS - The Board ~~will~~ receive Oral Communications. Any person ~~may~~ address the Board during its Oral Communications period. Presentations must not exceed three minutes, must be directed to an item not listed on today's Agenda, and must be within the jurisdiction of the Board. Board members ~~will~~ not take action or respond immediately to any Oral Communications presented, but ~~may~~ choose to follow up at a later time, either individually, or on a subsequent District Agenda.
- 1.1 AS THE BOARD OF DIRECTORS OF THE SANTA CRUZ COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7, approve the Pajaro River and Salsipuedes and Corralitos Creeks Management and Restoration Plan, as described under alternative No. 6 of the Environmental Impact Report and take related actions

COUNTY OF SANTA CRUZ
Inter-Office Correspondence

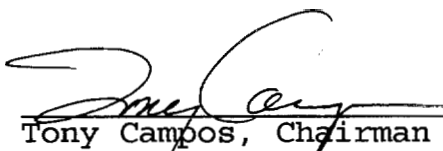
DATE: June 19, 2002

TO: Each Member of the Board of Directors of the Santa Cruz
County Flood Control and Water Conservation District -
Zone 7

FROM: Chairman Tony Campos

RE: SPECIAL MEETING

As Chairman of the Board of Directors of Zone 7, and in accordance with the rules and regulations for the operation of the Board of Directors, I am calling a special meeting of the Zone 7 Board on June 25, 2002, at 9:00 a.m. or thereafter in the Board of Supervisors Chambers, for the sole purpose of gaining your approval of the Pajaro River and Salsipuedes and Corralitos Creeks Management and Restoration Plan, following the decision on June 18, 2002, by the Board of Supervisors not to take jurisdiction on the two recent appeals of the Interim Maintenance Plan permits. A letter of explanation is attached. Thank you for your cooperation.


Tony Campos, Chairman

TC:ted
Attachment

cc: Public Works

3151A4

1.1



THOMAS L. BOLICH
DISTRICT ENGINEER

County of Santa Cruz

FLOOD CONTROL AND WATER CONSERVATION DISTRICT - ZONE 7

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 950604070
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

AGENDA: JUNE 25,2002

June 19,2002

BOARD OF DIRECTORS-ZONE 7
SANTA CRUZ COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
701 Ocean Street
Santa Cruz, CA 95060

SUBJECT: PAJARO RIVER MANAGEMENT AND RESTORATION PLAN

Members of the Board:

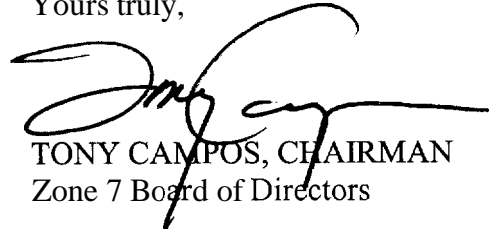
At the September 16, 1997, meeting of the Board of Directors of the Santa Cruz County Flood Control and Water Conservation District, Zone 7, your Board initially approved the preferred restoration plan for the Pajaro River (Alternative 2) and directed staff to apply for the necessary permits and proceed with the environmental impact report (EIR). Your Board then certified the EIR for the Pajaro River Management and Restoration Plan at your meeting on April 9,2002, based on Mitigated Alternative 6 of the Plan (see attached summary from the EIR). At their June 18,2002 meeting, the Santa Cruz County Board of Supervisors voted unanimously to decline to take jurisdiction of the appeals submitted by the Monterey County Water Resources Agency or the Santa Cruz Group of the Sierra Club regarding the Planning Commission's approval of application number 97-0770, to establish an interim maintenance program for the Pajaro River and Salsipuedes and Corralitos Creeks, based on the fact that the appellants did not establish sufficient grounds for the Board to take jurisdiction for further review.

As a result, I have called this special meeting of the Zone 7 Board of Directors for June 25,2002, to be held at 9 a.m. in the Board of Supervisors Chambers, 701 Ocean Street, Santa Cruz, California to allow our Board to formally approve the Plan so staff can now proceed, once they have obtained the necessary permits, to implement the interim maintenance program and complete the necessary maintenance along the Pajaro River and its tributaries this summer.

1.1

I therefore recommend that the Zone 7 Board of Directors approve the Pajaro River and Salsipuedes and Corralitos Creeks Management and Restoration Plan, as described under Alternative 6 of the Environmental Impact Report.

Yours truly,

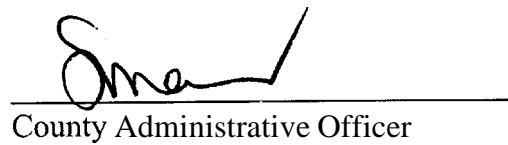


TONY CAMPOS, CHAIRMAN
Zone 7 Board of Directors

TLB:ma

Attachments

RECOMMENDED FOR APPROVAL:



County Administrative Officer

Copy to: Zone 7 Board of Directors
 Carlos J. Palacios, Manager, City of Watsonville
 Public Works Department

Table 3.8-1. Pajaro River Management and Restoration Plan Project Alternatives

ITEM	ALTERNATIVE 1 (PREUM. PLAN)	ALTERNATIVE 2: OR 16. PROPOSED PROJECT (9-16-97)	ALTERNATIVE 6: SELECTED MITIGATED ALTERNATIVE (SELECTED ALT.) (4-9-02)
MANAGEMENT AND MAINTENANCE			
Levee resurfacing	Levee resurfacing on an as-needed basis along selected portions of the levees that contain low spots, upstream of Highway 1	Levee resurfacing on an as-needed basis along selected portions of the levees that contain low spots, upstream of Highway 1	Levee resurfacing on an as-needed basis along selected portions of the levees that contain low spots, upstream of Highway 1
Bank stabilization and erosion control	Bank stabilization and erosion control at Priority 2 and 3 sites where specific conditions are present	Bank stabilization and erosion control at Priority 2 and 3 sites where specific conditions are present	Bank stabilization and erosion control at Priority 2 and 3 sites where specific conditions are present
Managing vegetation and sediment on the channel bottom, banks , benches and levees.	<ul style="list-style-type: none"> Removal of fallen trees and debris jams from the Pajaro River and Salsipuedes and Corralitos Creeks. Manual removal of woody vegetation greater than 3" dbh from the Pajaro River Low Flow Channel 5' Foot Vegetation Buffer. Manual and/or mechanical removal of woody vegetation from the Pajaro River Channel Bottom (excluding the Low Flow Channel Vegetation Buffer). Manual removal of woody vegetation from the Salsipuedes Creek Channel Bottom (leaving emergent vegetation). Control and/or removal of vegetation 	<ul style="list-style-type: none"> Removal of fallen trees and debris jams from the Pajaro River and Salsipuedes and Corralitos Creeks. Manual removal of woody vegetation greater than 3" dbh from the Pajaro River Low Flow Channel 5' Foot Vegetation Buffer. Manual and/or mechanical removal of woody vegetation from the Pajaro River Channel Bottom (excluding the Low Flow Channel Vegetation Buffer). Manual removal of woody vegetation from the Salsipuedes Creek Channel Bottom (leaving emergent vegetation). Control and/or removal of vegetation 	<ul style="list-style-type: none"> Removal of fallen trees and debris jams from the Pajaro River and Salsipuedes and Corralitos Creeks. Manual removal of woody vegetation greater than 3" dbh from the Pajaro River Low Flow Channel 5' Foot Vegetation Buffer. Manual and/or mechanical removal of woody vegetation from the Pajaro River Channel Bottom (excluding the Low Flow Channel Vegetation Buffer). Manual removal of woody vegetation from the Salsipuedes Creek Channel Bottom (leaving emergent vegetation). Control and/or removal of vegetation

February, 2002

Harding ESE

Pajaro River and Salsipuedes and Corralitos Creeks
Management and Restoration Plan

2/6/5

ITEM	ALTERNATIVE 1 (PRELIM. PLAN)	ALTERNATIVE 2: ORIG. PROPOSED PROJECT (1997)	<u>ALTERNATIVE 6:</u> <u>SELECTED MITIGATED</u> <u>ALTERNATIVE</u> (2002)
	<p>on the Upper Channel Bank or benches of the Pajaro River.</p> <ul style="list-style-type: none"> Control of vegetation on the levee slopes and benches by mowing and with herbicides on the Pajaro River and Salsipuedes Creek. Periodic mechanical removal of accumulated sediment (sandbars) on the channel bottom of the Pajaro River (between 3500 ft downstream and 500 ft upstream of Salsipuedes confluence) and Salsipuedes Creek every 4-5 years at a single location. Overhead mechanical removal of accumulated sediment and debris from flap gate channels on the Pajaro River and Salsipuedes Creek. 	<p>on the Upper Channel Bank or benches of the Pajaro River.</p> <ul style="list-style-type: none"> Control of vegetation on the levee slopes and benches by mowing and with herbicides on the Pajaro River and Salsipuedes Creek. Periodic mechanical removal of accumulated sediment (sandbars) on the channel bottom of the Pajaro River (between 3500 ft downstream and 500 ft upstream of Salsipuedes confluence) and Salsipuedes Creek every 4-5 years at a single location. Overhead mechanical removal of accumulated sediment and debris from flap gate channels on the Pajaro River and Salsipuedes Creek. 	<p>on the Upper Channel Bank or benches of the Pajaro River.</p> <ul style="list-style-type: none"> Control of vegetation on the levee slopes and benches by mowing and with herbicides on the Pajaro River and Salsipuedes Creek. Periodic mechanical removal of accumulated sediment (sandbars) on the channel bottom of the Pajaro River (between 3500 ft downstream and 500 ft upstream of Salsipuedes confluence) and Salsipuedes Creek every 4-5 years at a single location. Overhead mechanical removal of accumulated sediment and debris from flap gate channels on the Pajaro River and Salsipuedes Creek.
Re-vegetation (applies to Santa Cruz side of the Pajaro River between Highway 1 and Murphy's Crossing). See Table 2.3-3 for details of the re-vegetation program.	<ul style="list-style-type: none"> 5' wide band of riparian vegetation adjacent to each side of the low flow channel Minimum 10' wide band of riparian vegetation along Santa Cruz County lower channel bank Meandering plantings of riparian trees at 40' centers, planted alone 	<ul style="list-style-type: none"> 5' wide band of riparian vegetation adjacent to each side of the low flow channel Riparian vegetation from toe of channel bank to 8 feet below the top of bank Meandering plantings of riparian trees at 40' centers, planted along the inner channel bench. 	<ul style="list-style-type: none"> 5' wide band of riparian vegetation adjacent to each side of the low flow channel Riparian vegetation from toe of channel bank to 8 feet below top of bank Meandering plantings of riparian trees at 40' centers, planted along the inner channel bench

February, 2002

Harding ESE

Pajaro River and Salsipuedes and Corralitos Creeks
Management and Restoration Plan

1.1

ITEM	ALTERNATIVE 1 (PREUM.)	ALTERNATIVE 2: ORIG. PROPOSED PROJECT (1997)	ALTERNATIVE 6: <u>SELECTED MITIGATED</u> <u>ALTERNATIVE</u> (2002)
	the inner channel bench. Note: these three items meet the special conditions of the USCOE 404 permit for sandbar removal.		
Riparian area revegetated	9 acres at bank	21 acres at bank	21 acres at bank
IMPACTS: The relative weight (1-5) of the impact is given for each alternative. 1= least impact 5=greatest impact	1= least impact 5=greatest impact	1= least impact 5=greatest impact	The mitigation measure(s) associated with each impact are given following the relative weight of that impact for this alternative (Mitigated Alternative)
Water quality and hydrology			
Establishment of vegetation in channel bottom and on banks and bank protection measures will reduce hydraulic capacity.	2	2	2 Install bank protection only where it will not decrease hydraulic capacity and erosion is substantial as to threaten levee
Geology and soils			
Levee resurfacing and maintenance may cause erosion and in-stream sedimentation	3	3	2 Implement erosion control plan to reduce sediment Apply grass seed and mulch immediately after maintenance activities
Bank stabilization on Santa Cruz Co. side may increase erosion and bank movement on Monterey Co side or other areas up or downstream of the improvement.	3	3	2

February, 2002

Harding ESE

Pajaro River and Salsipuedes and Corralitos Creeks
Management and Restoration Plan

ITEM	ALTERNATIVE 1 (PRELIM.)	ALTERNATIVE 2: ORIG. PROPOSED PROJECT (1997)	ALTERNATIVE 6: SELECTED MITIGATED
			ALTERNATIVE (2002)
Re-vegetation of banks will reduce bank erosion.	4	3	3
Sediment deposition in the Salsipuedes Creek confluence area may reduce hydraulic capacity.	1	1	2 Reduced sandbar removal
Biological resources			
Removal of fallen and leaning trees would decrease shade cover, escape cover and pool formation for steelhead and tidewater goby, decrease estivation habitat for red-legged frogs and basking sites for pond turtles.	4	4	2 Place three-foot boulders, log sections or other structures in channel to replace woody debris removed Clarification of a leaning tree that can be removed
Vegetation removal from channel bottom will affect low flow channel and reduce shading impacting steelhead. These activities in ponded areas may directly impact red-legged frogs.	4	4	2 Monitor low flow channel vegetation buffer and water temperature and re-establish vegetation, if necessary Avoid vegetation and sandbar removal in ponded areas of creeks to avoid impact to red-legged frogs
Establishment of riparian vegetation on banks would benefit steelhead and birds.	4	3	1 Monitor the effect of re-vegetation to birds
In-channel removal of accumulated sediment (sandbars) may adversely impact steelhead, red-legged frog and pond turtle as well as snowy plover at the river mouth.	3	3	2 Conduct sandbar removal at end of summer while minimizing in-stream sedimentation, maintaining the low flow channel and reconstructing the channel following activities, if necessary Avoid impacts to breeding snowy plovers during

February, 2002

Harding ESE

Pajaro River and Salsipuedes and Corralitos Creeks
Management and Restoration Plan

ITEM	ALTERNATIVE 1 (PRELIM.)	ALTERNATIVE 2: ORIG. PROPOSED PROJECT (1997)	ALTERNATIVE 6: <u>SELECTED MITIGATED</u> <u>ALTERNATIVE</u> (2002)
			sandbar removal at mouth of Pajaro
Removal of vegetation on levee slopes and benches would impact nesting birds.	3	3	2 Wait until July for vegetation removal, including herbicide application, along creeks
Bank protection measures will reduce potential nesting habitat for swallows.	3	3	2 Limit bank stabilization measures to areas that severely threaten levee system Survey eroded banks slated for repair work for the presence of swallows
Herbicide use to control vegetation may adversely impact in-stream wildlife.	3	3	2 Reduce herbicide use
Rodent control may directly or indirectly impact red- legged frogs.	3	3	2 Control rodents only where they severely threaten integrity of levee
Air quality			
Levee maintenance, bank protection measures and vegetation management activities would generate dust and vehicle exhaust emissions.	3	3	2 Limit maintenance activities to those that will not exceed regulatory thresholds of dust emissions.
Noise			
Equipment used for maintenance activities would generate noise.	3	3	2 Limit equipment operation to the hours of 8am to 5pm weekdays and outfit equipment with mufflers in good working condition.
Visual resources			
Management activities may impact scenic quality.	5	4	2 See mitigation measures

February, 2002

Harding ESE

Pajaro River and Salsipuedes and Corralitos Creeks
Management and Restoration Plan

RECOMMENDED
FOR APPROVAL



ITEM	ALTERNATIVE 1	ALTERNATIVE 2: ORG. PROPOSED PROJECT (1997)	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5: REDUCED VEGETATION REMOVAL ON CREEKS	ALTERNATIVE 6: SELECTED MITIGATED ALTERNATIVE (2002) above	ALTERNATIVE 7: NO PROJECT ALTERNATIVE	ALTERNATIVE 8: MECHANIZED CLEARING (NEWRA PREF)
Impact totals: Higher values= greater impact	51	48	42	45	44	32	21	58
Impact totals when hydraulic capacity is given double weighting: Higher values=greater impact	53	50	44	47	45	34	26	59
HYDRAULIC CAPACITY AND COST								
Hydraulic capacity, based on 1997 river conditions (with no levee improvements)	In Pajaro a reduction of: 5-7% (Reaches C-E) 10-15% (Reaches E-G) Unknown for creeks ¹	In Pajaro a reduction of: 8-11% (Reaches C-E) 12-18% (Reaches E-G) Unknown for creeks	In Pajaro a reduction of: 10-14% (Reaches C-E) 16-20% (Reaches E-G) Unknown for creeks	In Pajaro a reduction of: 8-11% (Reaches C-E) 12-20% (Reaches E-G) Unknown for creeks	In Pajaro a reduction of: 8-11% (Reaches C-E) 12-20% (Reaches E-G) Unknown for creeks	In Pajaro a reduction of: 8-11% (Reaches C-E) 12-18% (Reaches E-G) Unknown for creeks	In Pajaro a reduction of: 12-18% (Reaches C-E) 15-23% (Reaches E-G) Unknown for creeks	See estimates below
Hydraulic capacity, with levee resurfacing project ²	In Pajaro approximately: 32 yr. With no freeboard	In Pajaro approximately: 31 yr. With no freeboard	In Pajaro approximately: 29 yr. With no freeboard	In Pajaro approximately: 31 yr. With no freeboard	In Pajaro approximately: 31 yr. With no freeboard	In Pajaro approximately: 31 yr. With no freeboard	In Pajaro approximately: 20 yr. With no freeboard	In Pajaro approximately: 65 yr. With no freeboard
Estimated carrying capacity in CFS (without freeboard)	34,000 cfs	33,000 fs	32,000 cfs	32,800 cfs	33,000 cfs	33,000 cfs	26,900 cfs	44,000 cfs
Hydraulic capacity compared to a completely cleared channel	23% Reduction	25% Reduction	27% Reduction	25% Reduction	25% Reduction	25% Reduction	38% Reduction	
Total restoration costs ³	\$270,000	\$288,200	\$334,500	\$990,000	\$990,000	\$288,200	None	\$288,200
Annual vegetation management costs	\$229,350	\$200,800	\$184,100	\$194,050	\$194,050	\$200,800	None	Unknown

¹No hydraulic modeling has been conducted to determine hydraulic capacity of Corralitos and Salispuedes Creeks under various management regimes.

²Capacities are relative approximations based upon the varying degrees of impedance created by the different vegetative conditions. The values presented should not be used to predict precisely when failure / overtopping may occur. Values for alternatives 1 through 4 are from Table 4 of the Management and Restoration Plan and the hydraulic analysis for the levee resurfacing project. However, the recurrence intervals have been adjusted to more precisely match the flow reductions indicated. Alternatives 5 and 6 are essentially the same as Alternative 2 with respect to vegetative impedance to Pajaro River flows. The "Mechanized Clearing" alternative was modeled assuming a fully cleared condition and Manning's "n-values" of 0.02-0.03 for the main channel and 0.035 for the overbanks. Actual capacity for the "Mechanized Clearing" option would be less due to the tendency of this option to be subject to scour damage. The "No Project" alternative was modeled assuming vegetation becomes fully established throughout the River and Manning's "n-values" of 0.05 for the main channel and 0.045 for the overbanks except where the current condition is higher. (A176)

³Levee resurfacing costs, erosion repair costs, mitigation costs and annual maintenance costs are not included.

6/69