

Carmel Lagoon Scenic Road Protective Structure (SRPS), Ecosystem Protection Barrier (EPB), and Interim Sandbar Management Plan (ISMP) Project (REF120051)

County of Monterey Board of Supervisors

September 10, 2024

LEG ID 24-162



Recommendation

- A) Certify the Final Environmental Impact Report (FEIR) for the Carmel Lagoon Scenic Road Protective Structure (SRPS), Ecosystem Protection Barrier (EPB), and Interim Sandbar Management Plan (ISMP) ('Carmel Lagoon Project') (SCH#:2014071050);
- B) Select the Scenic Road Protective Structure at the Mid Slope Wall (alternative 5.3.2.5 of the FEIR) and Sandbar Management Plan (No EPB) (alternative 5.3.3.2 of the FEIR), with the potential for individual garden walls along the property lines (alternative 5.3.2.4 of the FEIR), and the potential long-term solution to the Sandbar Management Plan being a Home Elevation Program (alternative 5.3.2.3 of the FEIR) as the preferred project;
- C) Direct staff to seek funding for the design, permitting, construction, and ongoing maintenance of a Scenic Road Protective Structure at the Mid Slope Wall (alternative 5.3.2.5 of the FEIR) and Sandbar Management Plan (No EPB) (alternative 5.3.3.2 of the FEIR);
- D) Direct staff to coordinate with County of Monterey Department of Emergency Management to further investigate implementing a Home Elevation Program as described in Alternative 5.3.2.3 for homes in the floodplain adjacent to the Carmel Lagoon and return to the Board at a later date with a proposed Program; and
- E) Adopt a Mitigation Monitoring and Reporting Plan.

Butterfly House

Scenic Rd

Scenic Rd

Scenic Rd

Valley View Ave

17th Ave

Rio Ave

Carmel St

Carmel St

Scenic Rd

Deering Design

Fourth addition neighborhood

State Parks Parking Lot

Scenic Road

Mara Beach Carmel

Carmel River

Carmel River State Beach

Scenic bird sanctuary with scuba diving

Carmel River Beach

Carmel River



Monterey County
California 93923



36.538291, -121.927208

Background

- Sandbar management has occurred nearly annually
- County took over sandbar management in the 1970's
- The area is environmentally and culturally sensitive
- Threatened lawsuits and Jeopardy Opinion in 2005
- Northerly breach has previously damaged Scenic Road and State Parks parking lot and bathrooms, and restricted public access



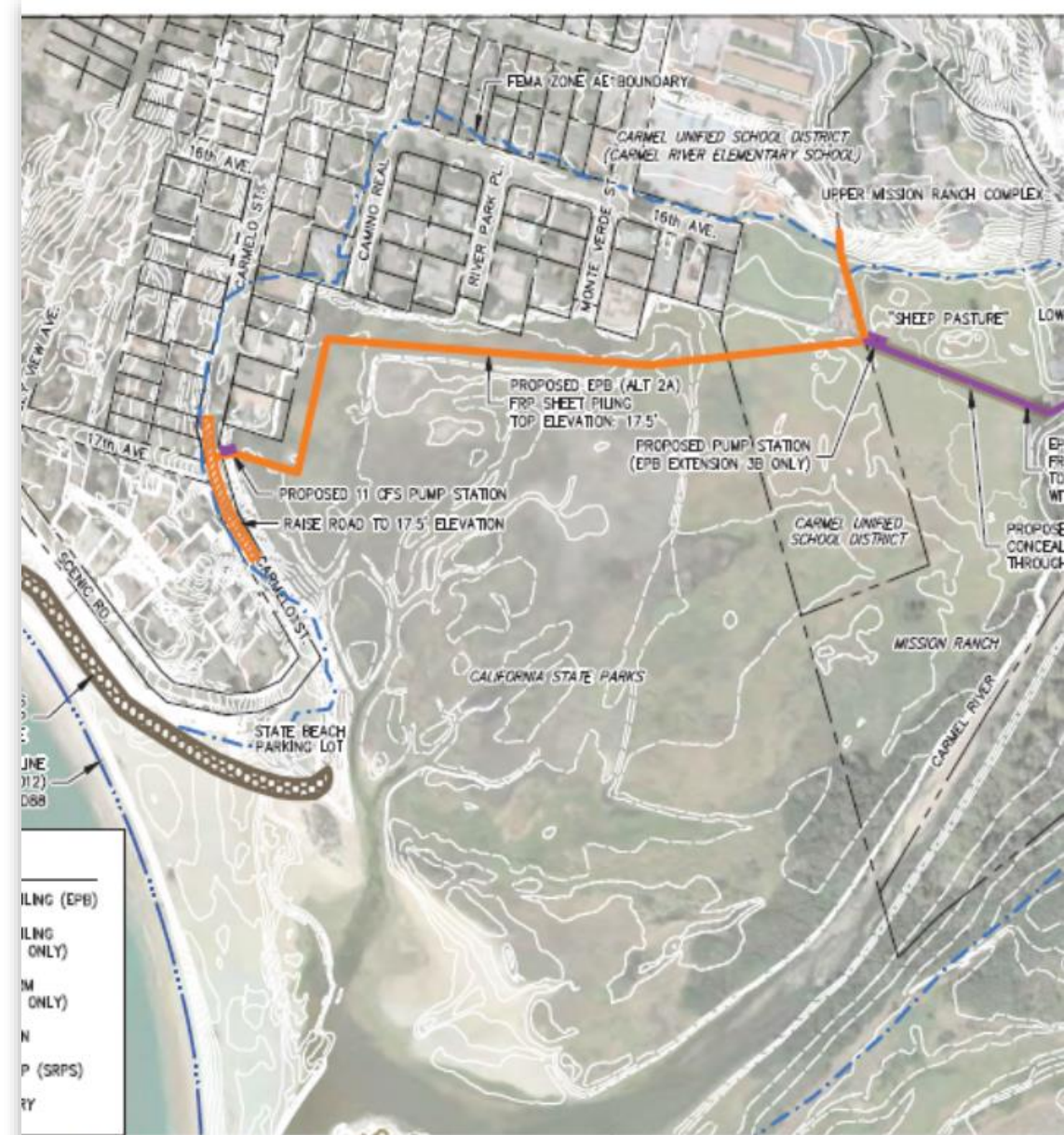
Background

- Homes in the fourth addition neighborhood are built at approximately 14.5-16 feet elevation
- The barrier beach can block the lagoon and cause it to rise above 16 feet elevation
- Regulatory and stakeholder agencies desire the County allow the lagoon to overtop the beach naturally
- Sandbar management or other option is necessary to maintain existing flood protection for neighborhood known as 'fourth addition'



Background:

- Main Objective of the EIR: *'Implement a solution to improve the functions and values of the ecosystem in and around the Lagoon by restoring the Lagoon's historic hydrologic, pre-management conditions to the extent feasible to protect and improve habitat for fish and wildlife while maintaining flood protection'*
- 2016 DEIR received significant comments
- Technical studies, TAC, stakeholder and agency input
- 2024 RDEIR recirculated new information
- The FEIR constitutes of the DEIR, RDEIR, and response to comments from both



Proposed Project Summary Map, August 7, 2013

Proposed



Denise Du
Planning and



Carmel Lagoon and Environment

Project Alternative 5.3.3.2: SRPS and ongoing sandbar management with no EPB

- No EPB
- Ongoing sandbar management
- Home elevation as an alternative to ongoing sandbar management (Alternative 5.3.2.3)
- SRPS at mid slope (Alternative 5.3.2.5)



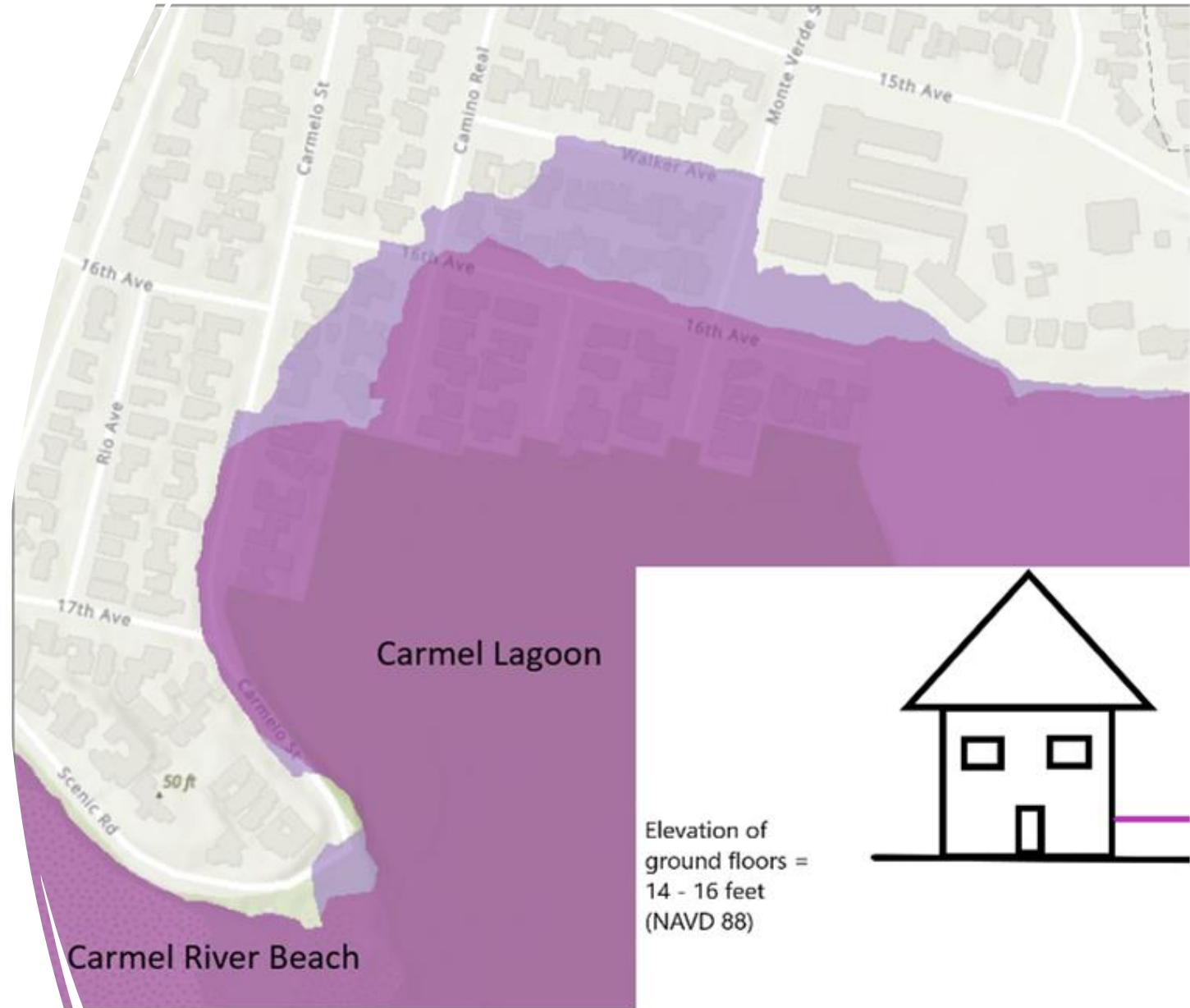
EPB Project Components

- Approximately 7.5-foot-high flood wall built in the Carmel River Lagoon and Wetland Nature Preserve
- 17.5-foot NAVD88 (ground elevation is approximately 10') located 38-120 feet from property line
- Pump stations with intermittent pumps to remove stormwater build up landward side of wall
- Significant unavoidable impacts to noise and aesthetic resources.

01/10/2

Alternative 5.3.2.3: EPB-Home Elevation Program

- Homes are already required to be raised above floodplain if undergoing a significant remodel
- Development of a program would include fund seeking
- Similar to Sonoma County's home elevation program
- Coordination between HCD, PWFP, and DEM

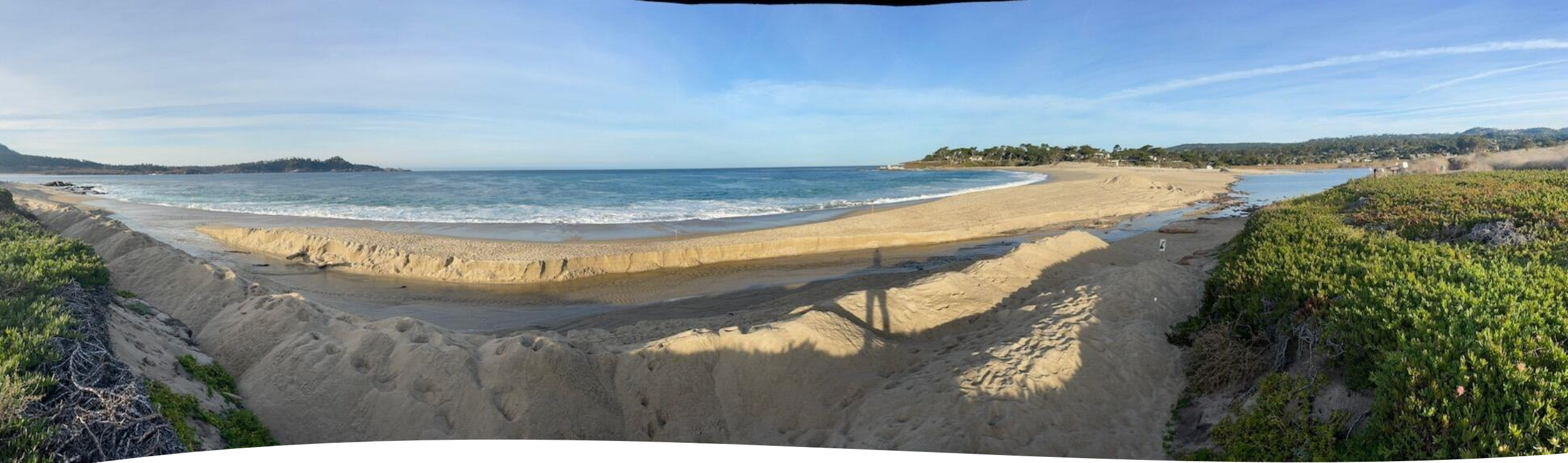


Areas from the Flood Insurance Rate Map created by the Federal Emergency

Alternative 5.2.3.4: Temporary EPB 'Garden Wall'

- Not a solution or long-term alternative
- Interim replacement for sandbag wall
- Three property owners adjacent to the lagoon
- Requested as a more aesthetic option to the sandbag wall
- Does not provide flood protection above 15 feet lagoon water surface elevation





Sandbar Management

- Mobilization when river, wave, or lagoon conditions indicate lagoon water surface level will be $>12.77'$ within 24 hours.
- 12.74' NAVD 88 pilot channel.



Alternative 5.3.2.5:
SRPS at mid-slope





Alternative 5.3.2.5:
SRPS at mid-slope

Proposed MSW Alternative Visual
Simulation of Wall (Summer/Fall)



Denise Duffy and Associates, Inc.

Date
1/31/2024

Figure



MANAGEMENT
SCHEDULED

MINIMUM

PUBIC

PUBIC

PUBIC

Alternative 5.3.2.5:
SRPS at mid-slope

ROCK REVETMENT EXPOSED
BY LAGOON BREACH

CONCRETE WALL
COVERED BY SAND

PUBLIC
ACCESS RAMP

PUBLIC
RESTROOMS

PUBLIC
PARKING

+16'
+13'

RAMP

Alternative 5.3.2.5:
SRPS at mid-slope



Common comments received

- Concern for infrastructure (SRPS)
- Opposition from landowners for EPB in any form
- Concern for Cypress tree
- Stormwater management system
- Preference for a northerly breach sandbar management
- Lack of parking at Carmel River State Beach



Carmel Lagoon Project Goals (FEIR Pages 2.0-2, 2.0-3)

- Reduce the necessity for mechanical breaching of the sandbar;
- Maintain the current level of flood protection for existing public facilities and private structures north of the Lagoon;
- Protect Scenic Road embankment and the State Parks' infrastructure from the Lagoon outflow channel;
- Protect the Scenic Road embankment from ocean storm surge and high tides, which could increase in severity due to climate change;
- Allow for interim management of the sandbar while the design and construction of the other project components proceed;
- Minimize infrastructure that could detract from the function and value of the natural environment.



Options – Projects and Components of the Project

	Option	Meet's Objectives?
1	No project	Does not meet objectives to protect infrastructure. Fewest environmental impacts due to lack of construction.
2	Proposed Project (SRPS, EPB, ISMP)	Significant unavoidable impacts, and strong opposition. Toe of slope SRPS is not favorable by State Parks, Rip Rap not favored by Coastal Commission. EPB not permissible by State Parks (landowner).
3	SRPS and Adaptive Sandbar management	Environmentally superior alternative that meets objectives, least impacts mitigated to less than significant, no significant unavoidable impacts. Requires sandbar management if flooding of neighborhood is threatened.
4	Home elevation	Protects homes from flooding. Removes the needs for sandbar management except in emergencies.

Finances

Project Component	Cost	Funding Source
Sandbar Management (annual average)	\$160,000	PWFP (General Fund)
SRPS at mid-slope (2023 estimate)	\$7.2 million	Unfunded, included in CIP
Home elevation Program estimate per house (2015 estimate provided to WRA)	\$213,000/home (approximately 25 homes)	Private homeowner (25%) and Federal grant funds (75%)



Direction for Staff



Do nothing further; or



Continue sandbar management and pursue longer-term permits



Pursue funding for SRPS



Pursue permitting



Continue design



Develop a program for home elevation and return to the Board

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Additional Info slides



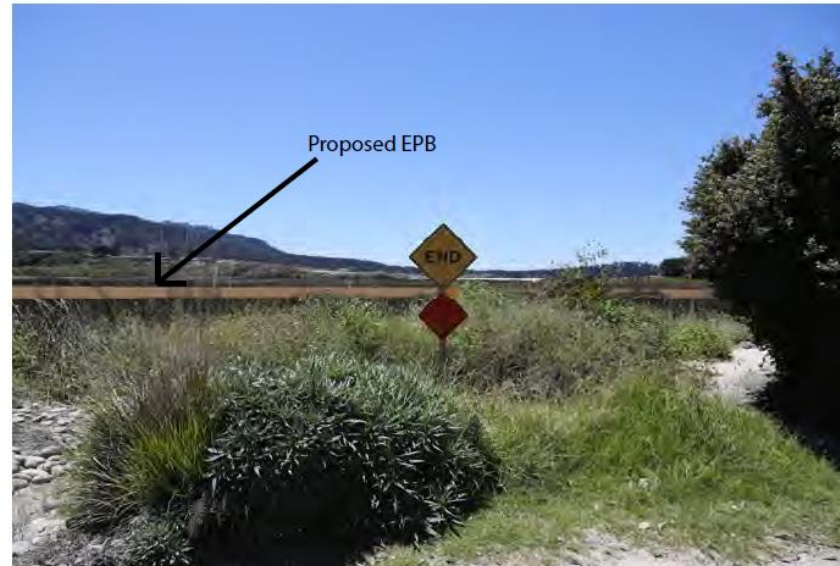
A.) Photo-simulation of EPB when viewing from terminus of Camino Real.



B.) Photo-simulation of EPB when viewing from Carmel Meadows.



C.) Photo-simulation of EPB when viewing from Carmelo Street.



D.) Photo-simulation of EPB when viewing from terminus of Monte Verde Street.

See **Figure 4.1-1, Site Photos of EPB**, for comparison of visual photo-simulation to No Project conditions.

Visual Simulations of Proposed EPB

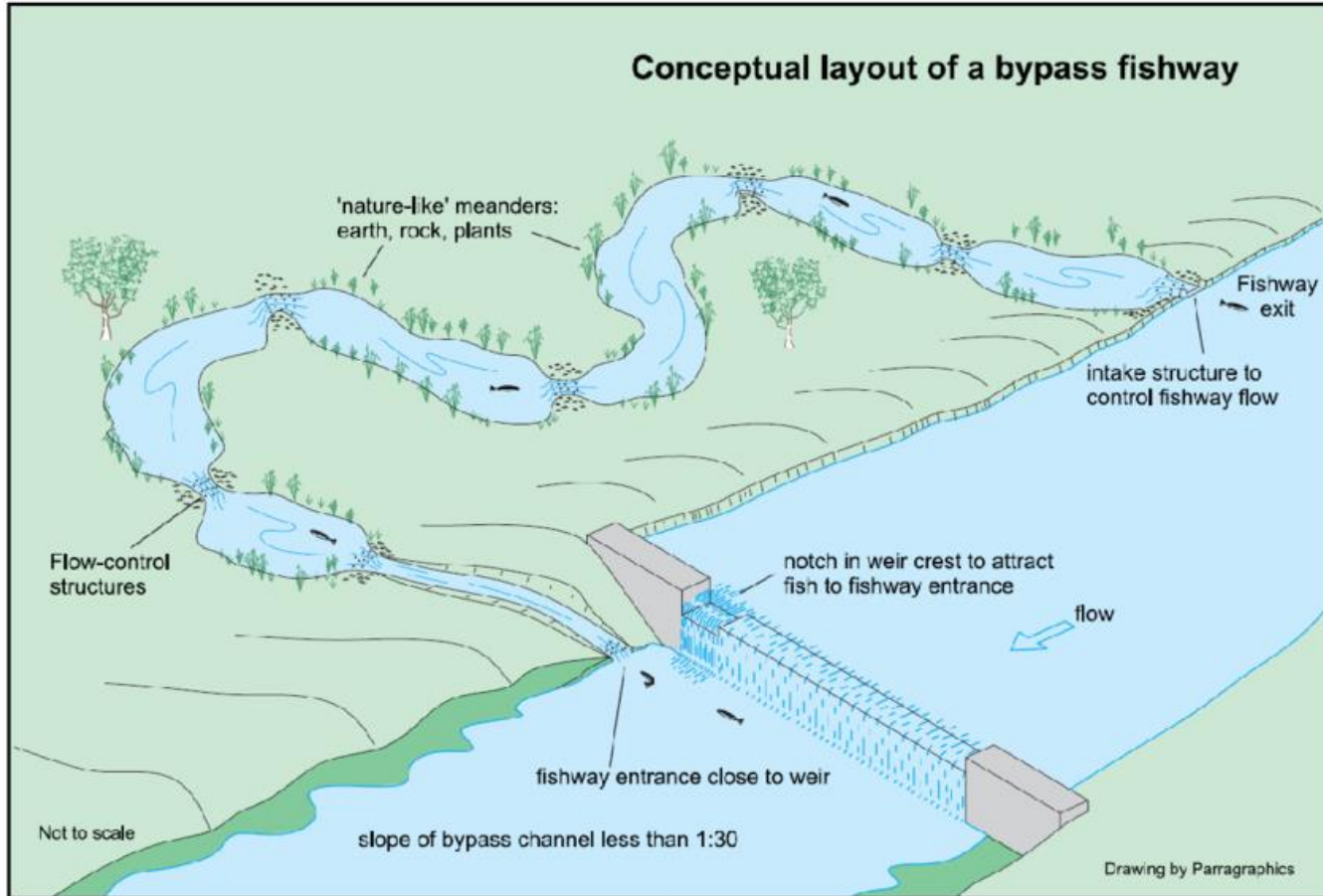


Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Date
2-25-16

Scale
N/A

Figure
4.1-5



Other options, not studied further:

- 20+ alternatives were analyzed and dismissed
- Using only the Emergency repair SRPS (no SRPS)
- A SRPS that reaches as far as the point