Final Initial Study/Mitigated Negative Declaration

for the

CARMEL RIVER FLOODPLAIN RESTORATION AND ENVIRONMENTAL ENHANCEMENT PROJECT SCH#2011021038

April 15, 2010

Prepared for:

Big Sur Land Trust 509 Hartnell Street Monterey, CA 93940 Contact: Donna Meyers Director of Conservation Monterey County Water Resources Agency 893 Blanco Circle Salinas, CA 93901 Contact: William L. Phillips Deputy General Manager

Prepared by:



Denise Duffy & Associates 947 Cass Street, Suite 5 Monterey, CA 93940

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1.0 INTRODUCTION

1.1 BACKGROUND

This document, together with the Draft IS/MND, constitutes the Final Initial Study/Mitigated Negative Declaration for the Carmel River Floodplain Restoration and Environmental Enhancement Project. The FIS/MND consists of an introduction, comment letters received during the 30-day public review period, responses to comments, and revisions to the Draft IS/MND if deemed applicable.

The Monterey County Water Resources Agency (MCWRA) is lead agency for the project. The Big Sur Land Trust, a 501(c)(3) non-profit organization, is proposing to enhance native riparian and wetland habitat and hydrologic function to a portion of the lower floodplain along the Carmel River on property owned by the Big Sur Land Trust, California State Parks (State Parks), Monterey Peninsula Regional Park District, and Clint and Margaret Eastwood. The Proposed Project is located in the unincorporated area of Monterey County in the Carmel Area; the Project site is immediately adjacent to the south bank and floodplain of the lower Carmel River and associated riparian corridor. The Project site is located within the Coastal Zone. The Proposed Project site consists of four parcels (APN 243-071-006-000, 243-021-007-000, 243-071-003-000, and 157-121-001-000). The Project is located at the downstream end of the Carmel River Watershed, approximately one mile from its mouth and immediately east of State Route 1 (SR 1). A small portion of the Project is also located west of SR 1.

This is a first level Initial Study/Mitigated Negative Declaration to consider three separate, but related, Project actions/components, each of which would be completed based on available funding. The Monterey County Water Resources Agency is considering the initial Project action, commonly referred to as the Odello East Component, which consists of 1) grading the existing farmland and access road to create an elevated agricultural preserve on approximately 40 acres on the southern edge of the Odello East site outside of the 100-year floodplain elevation; and 2) grading to restore the site's ecological function as a floodplain by creating the hydrological characteristics necessary to support floodplain restoration activities on approximately 55 acres of existing farmland. A portion of the agricultural preserve would be graded to accommodate future fill material as part of subsequent Project components/action. The second Project action, referred to as the Causeway Component, consists of replacing a portion of the SR 1 roadway embankment with a 520-foot long causeway. This Project action/component is considered a separate project that will undergo separate, project-level, environmental review as administered by Caltrans. The third Project action, referred to as the Levee Component, consists of 1) removing approximately 2,400 linear feet of non-structural earthen levees on the south side of the Carmel River channel, and (2) grading at the eastern boundary of the Project site on property owned by the Monterey Peninsula Regional Park District in order to encourage flood flows to enter into the south floodplain area at Odello East.

The Proposed Project would improve hydrologic connectivity between the Project site and the Carmel River Lagoon Enhancement Project by allowing flood flows to pass under SR 1 from the east side of the floodplain to the west side of the floodplain. In addition, the Proposed Project would also reduce

potential flooding hazards to SR 1 and developed north overbank areas by accommodating the lateral dispersal of floodwaters onto the south overbank area during storm events. The Proposed Project would restore native riparian and wetland habitats on a portion of the Odello East property and preserve the site's agricultural heritage with an approximately 40 acre agricultural preserve raised out of the FEMA 100-year floodplain. Overall, the Project would: 1) restore approximately 90 acres of historic coastal wetlands, upland habitat, and/or riparian habitat on existing agricultural land to enhance the site's capacity to function as part of the historical Carmel River floodplain and to provide additional habitat to the lower Carmel River ecosystem; 2) create an approximately 40 acre agricultural preserve to achieve the goal of preserving the agricultural heritage of the Project area in a manner that is compatible with adjacent habitat; 3) improve floodwater conveyance under the highway and reduce flood hazards to SR 1; and 4) remove approximately 2,400 feet of the south bank levee and "Blister" to allow the lateral dispersal of floodwater onto the south overbank area and Project site. Grading and planting of native species would also be completed within the restored floodplain to establish the topographic and riparian habitat diversity that characterizes floodplain environments in similar settings.

This Initial Study contains a broad discussion of potential impacts and mitigation measures for the Causeway and Levee Components based on currently available information. In addition, project-level environmental analysis will be conduct on the Causeway Component by the California Department of Transportation (Caltrans) at the time additional funding and design information is available. Additional environmental review may also be conducted on the Levee Component if the design of this component changes substantially from that considered in this Initial Study. This document is intended to serve as the primary environmental document for federal and/or state grant or funding requirements for this Project. While the exact future effect of subsequent project actions, particularly the Causeway Component, cannot be known with certainty, it is possible to make an informed decision on the project based on the reasonably foreseeable environmental effects considered in this analysis. This Initial Study appropriately uses such information to aid in the decision-making process as to the general level of anticipated environmental effects associated with subsequent project components/actions.

The Draft IS/MND was prepared to inform the public of the potential environmental effects of the project and identify possible ways to minimize project related impacts.

1.2 Public Participation

Pursuant to Section 15073(a), the proposed Draft IS/MND was circulated for a 30-day review period during which comments were received. In accordance with CEQA, this document is included in the official public record for the Initial Study. On February 17th, the Draft IS/MND was distributed for public review to responsible and trustee agencies, interested groups, and individuals. The review period ended on March 18, 2011.

2.0 RESPONSE TO COMMENT

2.1 Introduction

This section provides responses to comments on the Draft IS/MND. This section contains all information available in the public record related to the Draft IS/MND as of March 18, 2011, and responds to comments received during the review period. In addition, a comment letter from the State of California Office of Planning and Research was received after the close of the public review period to document compliance with the State Clearinghouse's review requirements for draft environmental documents.

2.2 List of Comment Letters

The following is a list of comment letters received on the Draft IS/MND and the dates these letters were received:

2.3 Response to Comments

Each of the comment letters received on the Draft IS/MND is presented in this chapter, as described above. Individual comments in each letter are numbered. Correspondingly numbered responses to each comment are provided in the discussion following the comment letter. Some comments do not raise environmental issues, or do not require additional information. A substantive response to such comments is not required within the context of CEQA.

If comments raised environmental issues that required additions or deletions to the text, tables, or figures in the Draft IS/MND, a brief description of the change is provided and the reader is referred to **Section 3.0, Revisions to the Draft IS/MND**. The comments received on the Draft IS/MND did not result in a "substantial revision" of the negative declaration, as defined by CEQA Guidelines Section 15073.5, and the new information added to the negative declaration merely clarifies, amplifies, or makes insignificant modifications to the IS/MND. No new, avoidable significant effects were identified since the commencement of the public review period that would require mitigation measures or project revisions to be added in order to reduce the effects to insignificant.



STATE OF CALIFORNIA

GOVERNOR'S OFFICE of PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT



March 21, 2011

William L. Phillips Monterey County Water Resources Agency 893 Blanco Circle Salinas, CA 93901

Subject: Carmel River Floodplain Restoration and Environmental Enchancement Project SCH#: 2011021038

Dear William L. Phillips:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on March 18, 2011, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality

Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan

Director, State Clearinghouse

A-1

Document Details Report State Clearinghouse Data Base

SCH# 2011021038

Project Title Carmel River Floodplain Restoration and Environmental Enchancement Project

Lead Agency Monterey County

Type MND Mitigated Negative Declaration

Description

The Carmel River Floodplain Restoration and Environmental Enhancement Project proposes to restore and enhance the hydrologic function and connectivity of the Odello East property with the lower Carmel river region and southern floodplain. The proposed Project is an integral part of on-going restoration efforts for the lower Carmel River region begun in 1998. The California State Parks Department recently completed the Carmel River Lagoon Enhancements Project in 2004; this project is located west of the Project site and includes the Carmel River Iagoon. California State Parks and the California Department of Transportation (Caltrans) also completed riparian restoration activities at the Carmel River Lagoon and associated wetlands areas west of SR 1 prior to the implementation of the lagoon Enhancement Project.

The proposed Project would improve hydrologic connectivity between the Proposed Project site and the Carmel River Lagoon Enhancement Project by allowing flood flows to pass under SR 1 from the east side of the floodplain to the west side of the floodplain. In addition, the Proposed Project would also reduce potential flooding hazards to SR 1 and developed north overbank areas by accommodating the lateral dispersal of floodwaters onto the south overbank area during storm events. The Proposed Project would restore native riparian and wetland habitats on a portion of the Odello East property and preserve the site's agricultural heritage with an approximately 40 acre agricultural preserve raised out of the FEMA 100-year floodplain.

Lead Agency Contact

Name William L. Phillips

Agency Monterey County Water Resources Agency

Phone 925-314-3349

Fax

email

Address 893 Blanco Circle

City Salinas

State CA Zip 93901

Project Location

City

County Monterey

Carmel-by-the-Sea

Region

Lat/Long 36° 31' N / 121° 54' 25" W

Cross Streets State Route 1/Ribera road

Parcel No. 243-071-006-000, 243-021-007-000, 243-071-003-000, and 157-121-001-000

Township Range Section Base

Proximity to:

Highways SR 1

Airports

Railways

Waterways Carmel River

Schools Carmel Unified School District, Junipero Sera Bay School,

Land Use Coastal Agricultural Preserve (CAP), Medium Density Residential (MDR), Resource Conservation, and

Watershed Scenic Conservation / Residential, Agricultural Preserve, Resource Conservation, and

Watershed & Scenic Conservation

Document Details Report State Clearinghouse Data Base

Project Issues

Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Landuse; Cumulative Effects

Reviewing Agencies

Resources Agency; California Coastal Commission; Department of Fish and Game, Region 4; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Management Agency, California; California Highway Patrol; Caltrans, District 5; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 02/17/2011

Start of Review 02/17/2011

End of Review 03/18/2011

LETTER A: State of California Office of Planning and Research

A-1: This comment identifies that the project has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA This letter also contained notices that OPR sent to the relevant state agencies demonstrating that the procedural items have been satisfied. No response is necessary.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET SAN LUIS OBISPO, CA 93401-5415 PHONE (805) 549-3101 FAX (805) 549-3077 TDD (805) 549-3259 http://www.dot.ca.gov/dist05/

Letter B



Flax your power!
Be energy efficient!

March 17, 2011

MON-1-71.74 SCH# 2011021038

William Phillips Monterey County Water Resources Agency 893 Blanco Circle Salinas, CA 93901

Dear Mr. Phillips:

COMMENTS TO CARMEL RIVER FLOODPLAIN RESTORATION PROJECT

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the above referenced project and offers the following comments.

- Any work within the State right-of-way will require an encroachment permit issued from Caltrans. Detailed information such as complete drawings, biological and cultural resource findings, hydraulic calculations, environmental reports, traffic study, etc., may need to be submitted as part of the encroachment permit process.
- B-1
- 2. Following this letter, Caltrans will be providing you specific comments on our environmental mitigation, cultural resource, and project development efforts in this area. Inclusion of these further details in your documentation will assist you in the permit process.

B-2

If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK

Associate Transportation Planner

District 5 Development Review Coordinator

john olejnik@dot.ca.gov

cc: I

Nancy Siepel (D5)

Ken Dostalek (D5)

LETTER B: California Department of Transportation (Caltrans)

- **B-1**: Comment acknowledged. As identified previously, the Causeway Component will undergo additional and separate environmental review as administered by Caltrans. All work within the State right-of-way will be required to adhere to all applicable Caltrans requirements, including but not limited to, preparing detailed design level drawings, preparing additional technical analyses in the format prescribed by Caltrans, and other documentation as may be determined necessary in connection with the encroachment permit process. Environmental review administered by Caltrans may rely on the information contained in this environmental document in accordance with CEQA Guidelines §15152 to the extent determined appropriate by Caltrans
- **B-2**: Comment acknowledged. At the time this report was prepared additional information concerning Caltrans environmental mitigation, cultural resource, and project development efforts in the project area were not available. If that information becomes available in the future, that information will be taken into consideration as part of future environmental review completed in connection with the Causeway Component.

MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY

Planning Department

Mike Novo, AICP, Director of Planning

168 West Alisal Street, 2nd Floor Salinas, CA 93901 (831) 755-5025 Fax: (831) 757-9516

www.co.monterey.ca.us/rma



C-1

C - 3

March 17, 2011

Monterey County Water Resources Agency Attn: William L. Phillips, Deputy General Manager 893 Blanco Circle Salinas, CA 93901-4455

Subject: Re: Carmel River Floodplain Restoration and Environmental Enhancement Project

Dear Mr. Phillips,

Thank you for the opportunity to review the Carmel River Floodplain Restoration and Environmental Enhancement Project Initial Study. The Resource Management Agency - Planning Department (Planning Department) supports the efforts of the Water Resources Agency and the Big Sur Land Trust to restore habitat and alleviate flood hazards in the Carmel River area. Staff at the Planning Department has reviewed the Initial Study and appendices and we offer the following comments for consideration:

- 1. <u>Causeway Design</u>: In considering future plans for replacing a portion of Highway 1 (the Causeway), the Planning Department recommends use of appropriate road structure designs that address aesthetics of Highway 1 as a National Scenic Highway and All American Byway consistent with the Coast Highway Management Plan (CHMP). The CHMP identifies Viaduct or Bridge construction as an effective way to separate the road from waterways. The CHMP also contains design criteria to aid, in preserving the scenic character of Highway 1.
- 2. Biological Mitigation Measure 4.4-4 requires Monterey County review and approval of a River Pond Mitigation, Monitoring, and Reporting Plan. Please clarify which department will be responsible. The Planning Department would be happy to assist with review of the plan.
- 3. <u>Levee Removal Design</u>: Biological Mitigation Measure 4.4-22 requires preparation of a Forest Management Plan. It is recognized that impacts to trees will occur mainly in association of the Levee Removal phase which may be subject to further environmental review. The proposed mitigation measure addresses the Carmel Land Use Plan requirement to prepare a Forest Management Plan but does not address the reasons for the report. The Planning Department recommends that criteria be added to the mitigation to require consideration of the contents of the FMP in designing the "islands" that will remain from the existing levee.

Additionally, the Planning Department would like to encourage consideration of the following project elements based on Carmel Area Land Use Plan (LUP) policies.

- 1. Pursuant to LUP policy 2.2.4.11, to the extent that existing utilities poles need relocation, the Planning Department would encourage consideration of under-grounding utilities where physically appropriate and financially feasible.
- 2. Pursuant to LUP Policy 2.6.3, the Planning Department encourages consideration of applying for a Williamson Act contract to preserve the farmland and its scenic value. Also, related to this, the term agricultural preserve within the Initial Study, can be misleading as it has Williamson Act connotations.
- 3. Pursuant to LUP Policy 4.4.3.F.2.e, public access along the existing levee shall be provided. This requirement is specific to the Odello Property. The project would remove portions of the southern levee potentially conflicting with this policy and impacting recreational resources. Planning staff recommends that alternate recreation trail locations be pursued in coordination with the California Coastal Commission. Recreation in the project area should be passive and controlled to avoid degrading habitat.

The project Initial Study correctly identifies that the project will require approval of Coastal Development Permits as well as State and Federal Permits. The Planning Department looks forward to assisting with these processes. Again, thank you for the opportunity to review the project Initial Study. If you have any questions about these comments feel free to contact me at (831) 755-5233 or at spencerc@co.monterey.ca.us.

Sincerely,

Craig W. Spencer, Associate Planner

County of Monterey RMA – Planning Department

Phone: (831) 755-5233

Email: spencerc@co.monterey.ca.us

LETTER C: Monterey County Resource Management Agency – Planning Department

- C-1: Comment acknowledged. The proposed Causeway Component, which will be required to undergo separate environmental review by the California Department of Transportation, will be required to comply with Caltrans' standards related to the design of the causeway. Aesthetic elements related to the design of the causeway will be taken into consideration as part of Caltrans review. These considerations will include the use of appropriate road structure designs that address the aesthetics of State Route 1 as a National Scenic Highway and All American Byway consistent with the Coast Highway Management Plan.
- C-2: This comment requests clarification regarding Mitigation Measure 4.4-4. Specifically, the MCRMA- Planning has requested that Mitigation Measure 4.4-4 be revised to clarify which County Department will be responsible for reviewing and approving the River Pond Mitigation, Monitoring, and Reporting Plan. In response to this comment Mitigation Measure 4.4-4 has been revised to clarify that the Monterey County Water Resource Agency, as the Lead Agency, will be responsible for the review and approval of the River Pond Mitigation, Monitoring, and Reporting Plan; please see Section 3.0 Revisions to the Draft IS/MND for more information.
- C-3: This comment requests that additional criteria be added to Mitigation Measure 4.4-22, which requires the preparation of a Forest Management Plan pursuant to the Carmel Land Use Plan. In response to this comment Mitigation Measure 4.4-22 has been revised to include specific criteria requiring the consideration of the contents of the Forest Management Plan in replanting or design efforts for the remnant levee; please see Section 3.0 Revisions to the Draft IS/MND for more information.
- C-4: Comment acknowledged. Existing utility poles may be impacted in connection with the Causeway Component; the Causeway will undergo additional and separate environmental review by Caltrans. The Project Study Report (PSR) and Preliminary Environmental Assessment Report (PEAR) prepared in connection with the Causeway identified that existing above ground utility poles would be impacted as part of causeway construction. These facilities would be relocated and/or removed as part of the Causeway Component. The undergrounding of these facilities, to the extent financially feasible and physically appropriate, will be considered by Caltrans at the time the Causeway Component undergoes further review by Caltrans.
- C-5: This comment encourages the project proponent, the Big Sur Land Trust, to consider applying for a Williamson Act contract to preserve on-site farmland and its scenic value. In addition, this comment also identifies that the term agricultural preserve used in the Initial Study has specific connotations as it relates to the Williamson Act. In the context of the proposed project the Agricultural Preserve is a distinct component of the Proposed Project that is not related to the Williamson Act. Comment Acknowledged; no further response is necessary.
- C-6: This comment identifies that Carmel Land Use Plan Policy 4.4.3.F.2.e requires public access along the existing levees. According to the Carmel Area Land Use Plan, the Odello Property is considered a "Special Treatment" area that is governed by site-specific policies; these policies

were identified at a time when the Odello property was considered suitable for residential and visitor serving uses. Carmel Area Land Use Policy 4.4.3.F.2 identifies a series of policies that pertain to the anticipated development of the site. MCRMA – Planning Department has identified that the Project, due to the removal of portions of the existing south bank levee, may potentially conflict with the provisions of Carmel Area Land Use Policy 4.4.3.F.2.e and thereby impact recreational resources. MCRMA – Planning recommends that alternate trail locations be pursued in coordination with the California Coastal Commission to reconcile this potential conflict. The Big Sur Land Trust has actively been involved with the planning, funding, and construction of a network of recreational trails in the project area in connection with the Carmel River Parkway Plan, including the Carmel Hill and River Bicycle Trail, Carmel Valley Bicycle Trail, and trail improvements on the Palo Corona Regional Park with the Monterey Regional Park District. The Big Sur Land Trust will continue to work with the California Coastal Commission and other interested parties in developing a network of trails to meet the recreational needs of the community.



March 17, 2011

William L. Phillips, Deputy General Manager Monterey County Water Resources Agency 893 Blanco Circle Salinas, CA 93901-4455

SUBJECT: Comments on Draft Initial Study for the Carmel River Floodplain Restoration and Environmental Enhancement Project

Dear Mr. Phillips:

This letter is to comment on the "Draft Initial Study for the Big Sur Land Trust Carmel River Floodplain Restoration and Environmental Enhancement Project, February 2011." The review of the Draft Initial Study is confined to work proposed along the Carmel River riparian corridor. In general, the information presented in the study is quite thorough.

We have the following comments:

p. 100 – Proposed riparian habitat mitigation measures for levee removal and grading

MPWMD recommends that a portion of the native willow and cottonwood vegetation that is removed from the levee and areas adjacent to the river should be replanted in the newly graded floodplain areas. Whole rootballs and branch material between approximately one and five inches in diameter should be buried in four to six inches of native soil. MPWMD has had good results with partial burial of salvaged plant material, as long as irrigation is provided during the establishment period. For this site, MPWMD estimates that one to two years of irrigation during the dry season would be sufficient to establish these types of plantings.

D-1

p. 135, first full paragraph

The watershed is located between the Santa Lucia range, which provides most of the rainfall and runoff in the basin, and the Sierra de Salinas. Also, the Tularcitos Creek watershed comprises approximately 20% of the watershed by area, but provides only about 4% of the annual runoff.

D-2

p. 135, second full paragraph

William L. Phillips March 17, 2011 Page 2 of 2

Except in extreme drought years (such as 1976-77), the two main stem reservoirs generally fill and spill after the first few inches of rain and the watershed remains unregulated throughout the winter and well into the spring. The dams and associated reservoirs provide no flood control.

D-3

D-4

Vertical Datum – elevations given in the draft document and in reports and drawings contained in the Appendices are not consistently referenced to a generally accepted datum. For example, Section 1.2.1 "Odello East Component" describes the site as being "...approximately 18 to 55 feet above mean sea level." The U.S. Geological Survey and the Federal Emergency Management Agency phased out references to elevation above sea level (i.e., the mean Sea Level Datum of 1929) beginning in the 1970s and instead, the National Geodetic Vertical Datum (NGVD) of 1929 was widely adopted. Recently, NGVD 1929 has been replaced by the more accurate North American Vertical Datum of 1988 (NAVD 88).

Correctly identifying which datum is being used has important consequences in understanding how this project may affect flood elevations. For example, Figure 1.8 shows that the 50-year flood water surface elevation at Highway 1 is equal to 20.3 feet. No datum is specified and presumably the elevation shown is post-project. The Flood Insurance Study (FIS), Monterey County, Plate 19P, Volume 2 of 3 April 2, 2009 shows that the 50-year water surface profile immediately upstream of Highway 1 is at an elevation of almost 26 feet (NAVD 88). It appears that most of the hydraulic analysis presented in the Appendices and report is tied to NGVD 1929, whereas the FIS is tied to NAVD 88. We recommend clearly identifying which datum is being used on all drawings and references to elevations for this project.

Thank you for the opportunity to comment on this project. For questions, please contact me in the Carmel Valley field office at (831) 659-2543.

Sincerely,

Larry Hampson, Senior Water Resources Engineer

cc: Big Sur Land Trust, Donna Meyers, Conservation Project Director, PO Box 4071, Monterey

LETTER D: Monterey Peninsula Water Management District

- **D-1:** This comment recommends that a portion of the native willow and cotton wood vegetation that will be removed in connection with the Levee Component and Odello East Component should be replanted in the newly graded floodplain areas. As noted on page 100 of the Draft IS/MND, it is anticipated that riparian plant species will re-establish naturally in areas of existing riparian habitat that will be impacted by ground disturbing activities. While it is anticipated that riparian vegetation will come in on its own, the preparation of a monitoring plan and contingency planning is included in mitigation measure 4.4-17 to ensure that no permanent net loss of riparian habitat occurs as a result of the Project. Comment acknowledged; no further response is necessary.
- **D-2**: Comment acknowledged. This comment provides additional information regarding the watershed and the Tularcitos Creek. In response to this comment, revisions have been incorporated to provide additional clarification and incorporate the contents of this comment. Please refer to **Section 3.0 Revisions to the Draft IS/MND** for more information.
- **D-3**: Comment acknowledged. This comment provides additional information regarding the function of the two main stem reservoirs that are located on the Carmel River. In response to this comment, revisions have been incorporated to clarify the function of these reservoirs. Please refer to **Section 3.0 Revisions to the Draft IS/MND** for more information.
- D-4: This comment suggests that additional information be provided regarding the vertical datum used in the Draft IS/MND. The commenter notes that both the U.S. Geological Survey and the Federal Emergency Management Agency (FEMA) phased out references to elevation above sea level in the 1970s and have instead relied on the National Geodetic Vertical Datum (NGVD) 1929 until recently. Recently, the NGVD 1929 was replaced with the North American Vertical Datum of 1988 (NAVD 88). This comment further suggest that the text of the Draft IS/MND be revised to clarify which datum was used. At the time that the supporting technical reports were prepared by Balance Hydrologics, Inc. and Avila and Associates, the NGVD29 datum was the datum used on the FEMA mapping. These reports were prepared using the NGVD29 datum. According to FEMA, the appropriate conversion from NGVD29 to NAVD88 for the Carmel River is the NGVD29 elevation plus 2.82 feet. In response to this comment, the Draft IS/MND has been revised to clearly state the vertical datum and incorporate MPWMD's suggested revisions. Please refer to Section 3.0 Revisions to the Draft IS/MND for more information.

3.0 REVISIONS TO THE DRAFT IS/MND

This following section includes revisions to the text of the Draft Initial Study/Mitigated Negative Declaration, in amendment form. The revisions are listed numerically by page number. All additions to the text are shown <u>underlined</u> and all deletions from the text are shown <u>stricken</u>. In addition, an explanation of the reason for the text revision is provided.

Chapter 1: PROJECT DESCRIPTION

Section 1.1 Introduction, Page 1, second full paragraph, is amended as follows:

The initial Project action, commonly referred to as the Odello East Component in the following Initial Study, consists of 1) grading the existing farmland and access road to create an elevated agricultural preserve on approximately 40 acres on the southern edge of the Odello East site outside of the 100-year floodplain elevation; and 2) grading to restore the site's ecological function as a floodplain by creating the hydrological characteristics necessary to support floodplain restoration activities on approximately 55 acres of existing farmland. A portion of the agricultural preserve would be graded to accommodate future fill material as part of subsequent Project components/action. The second Project action, referred to as the Causeway Component, consists of replacing a portion of the SR 1 roadway embankment with a 520-foot long causeway section. This Project action/component is considered a separate, but related project, for the purposes of CEQA and is included in this analysis to ensure that reasonably foreseeable environmental effects of the Project are disclosed. It is anticipated that this component will undergo separate environmental review by Caltrans. The third Project action, referred to as the Levee Component, consists of 1) removing approximately 2,400 linear feet of non-structural earthen levees on the south side of the Carmel River channel, and (2) grading at the eastern boundary of the Project site on property owned by the Monterey Peninsula Regional Park District in order to encourage flood flows to enter into the south floodplain area at Odello East. A detailed description of each of the proposed actions/components is provided in more detail below.

Section 1.1 Introduction, starting on Page 1, fourth full paragraph, is amended as follows:

For the purposes of CEQA, the following Initial Study evaluates each of the proposed actions/components individually in order to: 1) analyze potential Project effects for each action; and 2) identify corresponding mitigation measures on an individual basis; and, 3) consider the potential adverse environmental effects of the Project in accordance with CEQA Guidelines §15152. The Proposed Project Each component of the Project is also evaluated separately in order to allow each Project component to proceed independently based on available funding and clearly identify which mitigation measures correspond with each Project component. Currently, the Big Sur Land Trust has secured funding for the planning, design and construction of the Odello East Component; additional grant funding, however, is not currently available for the other portions of the Project. These actions/components are, nevertheless, considered in this analysis in order to evaluate the whole of the Project as required under CEQA. Preliminary/conceptual design has been completed for these actions/components, but not to the level of

the Odello East Component. The analysis of these actions/components is based on conceptual Project plans; the analysis of these Project components, particularly the Causeway Component, is provided at a programmatic/planning level. The following analysis includes both a programmatic and project-level analysis since the various Project components represent logical parts in a chain of contemplated actions and are related geographically. This Initial Study considers the broad environmental effects of the entire Project, as required pursuant to CEQA. As noted below, subsequent Project components, including the Causeway and Levee Removal component, will require further CEQA review in the future based on project-level detail. The Causeway will undergo separate environmental review as administered by Caltrans. If the design of the Levee Component does not change substantially from that analyzed in this analysis, additional CEQA review may not be necessary. Nevertheless, this analysis evaluates the whole of the Project in order to avoid potential concerns related to project segmentation as required pursuant to CEQA Guidelines §15003(h) and §15378(a).

The analysis of the Odello East Component is considered a project-level analysis for the purposes of CEQA, whereas the analysis of the Causeway and Levee Components are completed at a programmatic level. A programmatic analysis is based on conceptual design and is typically more general in nature, consisting of a broad discussion of potential impacts and mitigation, whereas a project-level analysis contains specific information concerning potential impacts and mitigation measures. The environmental evaluation contained in the following analysis concerning the Causeway Component is based on currently available information and is provided in order to make reasonable assumptions concerning the extent and nature of potential adverse environmental effects; Caltrans has indicated that separate environmental review will be completed on the Causeway Component in the future. This analysis is consistent with the intent of CEQA Guidelines §15168, which describes when a programmatic-level analysis is appropriate.

The Causeway Component has been identified by Caltrans and is recognized by the County of Monterey as a separate project that will undergo independent environmental review in the future. Although the Causeway Component is considered a separate project warranting further environmental review by Caltrans, it is considered a related project that is a logical part of a chain of actions that are geographically related and therefore requires consideration as part of this CEQA analysis, recognizing that separate review will be completed in the future. The inclusion of this component in the following analysis is important in order to fully disclose the environmental consequences of the entirety of the action to the extent that those effects can be reasonably determined.

The analysis contained in this document evaluates each of the Project components, including the Causeway Component, in order to ensure that the environmental effects of the whole of the action are considered and fully disclosed. The proposed Levee Removal Component and the Causeway Component are related as logical parts of an action; levee removal cannot occur independently without the construction of the causeway. While the Causeway Component is considered a separate project that will undergo separate review by Caltrans, the causeway is related to other project components being evaluated in this document. As noted in this Initial Study, the Odello East Component constitutes a separate project severable from the proposed Causeway; however, the Initial Study appropriately analyzes the entirety of the Project and associated environmental impacts to the extent possible based on currently available information consistent with the requirements of CEQA.

It is the intent of this analysis to provide sufficient information to generally determine the level of potential affects at a programmatic/planning level for the Causeway Component and a project-level for the Odello East Component in order to ensure that the whole of the Project is considered in accordance with CEQA. Separate environmental review of the Causeway Component will be undertaken by Caltrans at the time project funding is available. This Initial Study acknowledges that an agency other than the County has jurisdiction over the Causeway Component; however, consistent with CEQA, does not exclude the future Causeway discussion from the scope of environmental effects analyzed in this Initial Study. By including the discussion of the foreseeable environmental effects of the causeway, the Initial Study is consistent with its purpose of informing the County decision-makers and the public of the full scope of environmental impacts likely to occur in connection with the overall Project.

While the level of analysis of the Levee Removal Component is provided at a more programmatic-level, this Initial Study contains a detailed analysis of that project component based on fairly specific technical information prepared by Balance Hydrologics, Inc.. If, at the time funding is available, the design of these components the Levee Removal Component changes substantially from that considered in this Initial Study additional CEQA review may be necessary. The analysis contained in this Initial Study has been prepared consistent with the intent of CEQA Guidelines §15168. Finally, each component is evaluated separately in order to streamline future environmental review, if determined necessary based on the design of the causeway and levee components. The Causeway Component will undergo separate environmental review as administered by Caltrans.

Section 1.2 Project Location, Page 2, fourth full paragraph, is amended as follows:

The Proposed Project site was historically part of the Carmel River floodplain and provided hydrologic connection with the adjacent floodplain located west of SR 1 before SR 1 was constructed. The construction of SR 1 isolated the Project site from the adjacent floodplain. In addition, the site's hydrologic function was also further diminished when a series of non-structural levees were constructed in the 1930s. Non-structural levees were constructed on the south bank of the Carmel River in order to reduce the frequency of on-site flooding into the farm fields. These factors diminished the site's hydrologic function as part of the Carmel River floodplain. In addition, the reduced frequency of on-site flooding and the conversion to agricultural uses compromised the site's ecological function. Typical habitat types associated with this flooding regime (i.e. riparian and wetland habitat) were significantly impacted and the conversion to agricultural uses resulted in the loss of on-site habitat. In addition, a large amount of fill material was placed near the northern boundary of the site adjacent to the main channel of the Carmel River toward the east end of the Project site; this area is commonly referred to as the "Blister." Approximately 101,500 cubic yards of "Blister" was recently relocated and compacted in 2009 to create an east/west haul road and a pad site on the southeast corner of the site. Excess fill from the Carmel River Lagoon Enhancement Project was also deposited on the southern portion of the site, elevating a portion of the farm field. The Project site was previously considered suitable for residential development and has a residential development capacity of 162 units according to the Carmel Area Land Use Plan. Currently, the Project site is used for agricultural purposes and includes agricultural support structures including existing housing and a barn. Riparian habitat associated with the Carmel River Corridor is located along the Project's northern boundary.

Section 1.2.1 Odello East Component, Page 6, first full paragraph, is amended as follows:

The Odello East Component of the Proposed Project, which includes portions of property owned by the Big Sur Land Trust and Clint and Margaret Eastwood, consists of approximately 95 acres of the 140-acre Project Study area. This component would occur on land east of the existing SR 1 right-of-way. The Odello East Component area consists mainly of existing agricultural land. Riparian habitat associated with the Carmel River Corridor is located along the northern edge of this area. An area commonly referred to as the "Blister, is also located within this component of the site. Approximately 101,500 cubic yards of a total of approximately 130,000 cubic yards of the Blister was previously relocated in 2009. Some portion of this material was used to construct the existing east/west haul road and the fill pad area in the southeast corner of the site. The site's topography consists of flat cultivated agricultural land and slight slopes that gradually rise to the south. The majority of the site ranges in elevation between approximately 18 to 55 feet North American Vertical Datum (1988) above mean sea level. Direct access to this component of the Proposed Project for construction purposes would be provided via SR 1.

Section 1.4 Project Description, Page 12, first full paragraph, is amended as follows:

Overall, the Project would: 1) restore approximately 90 acres of historic coastal wetlands, upland habitat, and/or riparian habitat on existing agricultural land to enhance the site's capacity to function as part of the historical Carmel River floodplain and to provide additional habitat to the lower Carmel River ecosystem; 2) create an approximately 40 acre agricultural preserve to achieve the goal of preserving the agricultural heritage of the Project area in a manner that is compatible with adjacent habitat; 3) replace a segment portion of the existing SR 1 roadway embankment with a 520-foot causeway to improve floodwater conveyance under the highway and reduce flood hazards to SR 1; and 4) remove approximately 2,400 feet of the south bank levee and "Blister" to allow the lateral dispersal of floodwater onto the south overbank area and Project site. Grading and planting of native species would also be completed within the restored floodplain to establish the topographic and riparian habitat diversity that characterizes floodplain environments in similar settings. As described previously, the Proposed Project entails three separate, but related, Project actions/components, as described below.

Section 1.4.1.2 Agricultural Preserve, Page 13, last paragraph, is amended as follows:

An agricultural preserve would be constructed in connection with the Odello East Component; this would entail the creation of an elevated terrace and farm access road where agricultural uses would be consolidated on the southern portion of the site in order to maintain the agricultural heritage of the area. Approximately 40 acres of the site would be set aside for organic farming as shown in **Figure 1.6**. The agricultural preserve would be graded to create a terrace that would be elevated above the existing floodplain to avoid inundation from floods as large as a 100-year flood event. A portion of the proposed preserve would be graded to accommodate future fill material from subsequent Project components/actions, including causeway construction and levee removal. Water use in connection with the agricultural preserve will be provided from The Big Sur Land Trust's existing water entitlement, which consists of 28.8 acre-feet per year (AFY) for irrigation purposes (Permit No. 20905B).

Section 1.4.2 Causeway Component, Page 14, starting with first full paragraph, is amended as follows:

For the purposes of this analysis, the Causeway Component is considered a separate, but related, project in accordance with CEQA Guidelines §15152(b). This component is evaluated in this analysis at a programmatic-level based on currently available information in order to identify reasonably foreseeable environmental effects associated with the causeway. Caltrans has identified that separate environmental review will be completed on the causeway in the future when additional funding is available for this component. The following information consists of a general description of the causeway at the time of this analysis. As proposed, the Causeway Component consists of replacing of a portion of the SR 1 roadway embankment (Route 1, Post Mile 71.9 to 72.3) with a 520-foot long causeway section as depicted in Figure 1.7 1.8. No existing agricultural support structures or existing agricultural housing would be impacted in connection with this component.

According to the Project Study Report, the proposed causeway would consist of a cast-in-place reinforced concrete slab deck on pile extensions, two 12'-wide lanes, and two 8'-wide paved shoulders. Embankment slopes would be improved to satisfy applicable design requirements and ground improvements would also be provided to mitigate potential soil liquefaction and associated lateral spreading. A temporary bypass road would be constructed during project construction to ensure continued access throughout construction of the causeway. The northern end of the proposed causeway would be located approximately 1,150 feet southwest of the Oliver Road and SR 1 intersection, near the city of Carmel in Monterey County. The southern end of the causeway would be located approximately 2,000 feet northeast of the Ribera Road and SR 1 intersection.

Construction-related activities would temporarily disturb a maximum of 26 acres in connection with the removal of a portion of the existing SR 1 embankment and Project grading. Grading would be completed in connection with this component east of SR 1 in order to create the hydrologic characteristics necessary to support floodwater conveyance under SR 1. Approximately 20 acres would be graded to create the topographical features necessary to restore the site's longitudinal connectivity with the Carmel River Lagoon and adjacent floodplain. These areas would subsequently be re-planted to the extent necessary to support native re-colonization. The final design and construction of the proposed causeway will occur once grant funding has been secured for 100% design. The analysis contained in this Initial Study is based on a conceptual/preliminary project design and supporting engineering analyses, including a California Department of Transportation (Caltrans) Project Study Report (PSR) and 2010 Preliminary Environmental Assessment Report (PEAR). If the final project design varies significantly, additional environmental review may be necessary.

Section 1.4.2 Causeway Component, Page 14, third full paragraph, is amended as follows:

Construction of this component of the Proposed Project is anticipated to occur over a 12 to 18 month period from 2012 to approximately 2013. The proposed Causeway Component would include temporary traffic bypass sections, demolition of existing culverts and paving, two phases of utility relocation, ground improvement, pile driving, concrete placement, paving, and the eventual removal of traffic bypass sections, as described above. Materials excavated as part of this component of the Proposed Project

would be stockpiled as needed during construction and may be placed as fill on the proposed terraced agricultural area, located on the Odello property to the east of the causeway location.

Figure 1.8, Preliminary Causeway Design, Page 18, is revised as shown on the following page.

Section 1.5 Project Goals and Objectives, Page 20, third bullet, is amended as follows:

Maintain an active organic agricultural operation with associated support structures including the
 existing barn and agriculture-related housing on a portion of the Project site in order to preserve
 historically important agricultural operations.

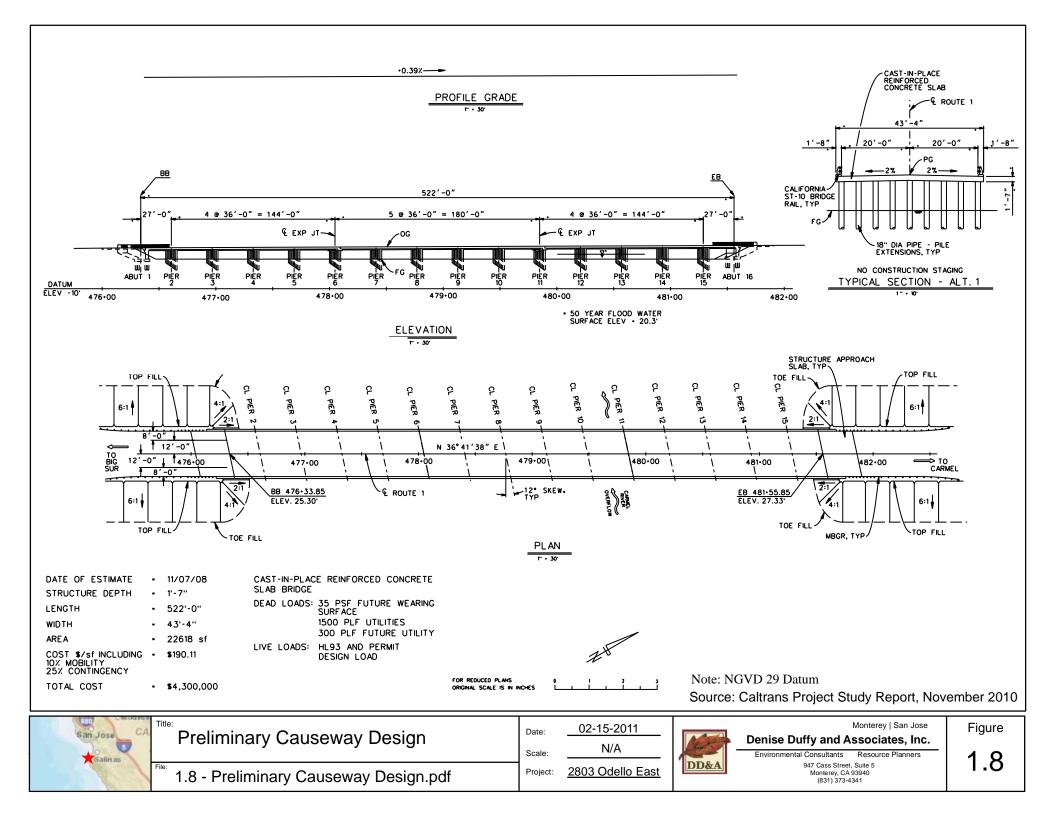
Chapter 4: INITIAL STUDY ENVIRONMENTAL CHECKLIST

Section 4.1 Aesthetics, Page 28, last paragraph, is amended as follows:

The visual character of the Project site is primarily comprised of agricultural land and riparian habitat associated with the Carmel River. Several agricultural support buildings and residences are also located on the southern boundary of the Project site adjacent to the existing farm access road and will remain as part of the agricultural preserve and operation on-site; these structures would be retained on-site and are not proposed for removal. The northern boundary of the site is characterized by riparian habitat, existing man-made levees, and the Carmel River. This portion of the site includes dense riparian vegetation that creates a visual buffer between the site and surrounding developed areas located to the north. Views of Palo Corona Ranch and portions of the Santa Lucia mountains can be viewed looking south and east; views looking west consist primarily of State Park land that was recently restored in connection with the Carmel River Lagoon Enhancement Project.

Section 4.2 Agricultural Resources, Page 39, fourth full paragraph, is amended as follows:

The Proposed Project site and associated barn and agriculture-related housing have has historically been used for agricultural production since the late 19th Century. The existing agricultural support structures, including the barn and support housing, would not be impacted as part of this project and are proposed to be retained as part of the agricultural preserve. According to the California Department of Conservation, the project site includes farmland designated as prime farmland, grazing land, urban land, and other according to the Farmland Mapping and Monitoring Program (FMMP). The Proposed Project area consists of approximately 89 acres of prime farmland, 23 acres of grazing land, 6.4 acres of urban land, 0.1 acre of developed, and 20.5 acres of other. The project site is not included in a Williamson Act contract. **Figure 4.2-1** graphically depicts applicable FMMP farmland designations.



Section 4.4 Biological Resources, Page 97, Mitigation Measure 4.4-4, is amended as follows:

4.4-4 A River Pond Mitigation, Monitoring, and Reporting Plan (plan) shall be prepared and approved by the County of Monterey Water Resource Agency and the Service prior to issuance of a grading permit. The plan will detail the approach and methodology for the expansion and enhancement of the River Pond, preconstruction efforts to remove and relocate any resident frogs, construction-phase monitoring, and post-construction monitoring to assess the re-establishment of wetland, riparian, and aquatic habitat. The plan will include success criteria and adaptive management measures if the criteria are not reached. If, at the end of the monitoring period it has been determined that the success criteria defined in the plan have not been met, adaptive management efforts such as installation of native, locally occuring wetland and riparian plant species will be initiated.

Section 4.4 Biological Resources, Page 101, Mitigation Measure 4.4-17, is amended as follows:

4.4-17 A monitoring plan for the Project shall be prepared and approved by the County of Monterey Water Resource Agency prior to issuance of a grading permit. The plan will detail the approach and methodology for monitoring of the Project site post-construction to assess the reestablishment of wetland and riparian habitat. The plan will include success criteria and adaptive management measures if the criteria are not reached. Success criteria will, at minimum be evaluated, against a "no-net loss" basis of habitat. If, at the end of the monitoring period, it has been determined that the success criteria has not been met, adaptive management efforts such as weed eradication and the installation of native, locally occuring wetland and riparian plant species will be initiated.

Section 4.4 Biological Resources, Page 102, Mitigation Measure 4.4-19, is amended as follows:

4.4-1918. The Project shall avoid all potential jurisdictional waters of the U.S. to the greatest extent feasible.

Section 4.4 Biological Resources, Page 102, Mitigation Measure 4.4-20, is amended as follows:

4.4-2019. Protective fencing shall be placed so as to keep construction vehicles and personnel from impacting waters of the U.S. not scheduled to be filled.

Section 4.4 Biological Resources, Page 102, Mitigation Measure 4.4-21, is amended as follows:

4.4-210. A monitoring plan for the Project shall be prepared and approved by the County prior to issuance of a grading permit as outlined in Mitigation Measure 14 4.4-17 above. The plan will include monitoring protocols, success criteria, and adaptive management planning to ensure that no permanent net loss of state or federal jurisdictional wetlands will result from the Project.

Section 4.4 Biological Resources, Page 103, Mitigation Measure 4.4-22, is amended as follows:

4.4-221 A Forestry Management Plan will be prepared for the proejct and approved by the Monterey County Water Resource Agency prior to the issuance of a grading permit. The report will be prepared by a qualified professional forester from the County's pre-approved list. Consideration of the contents of the FMP shall be considered in any replanting or design efforts associated with the levvee portion of the project.

Section 4.5 Cultural Resources, Page 107, first paragraph, is amended as follows:

Based on the analysis contained in the *Preliminary Archaeological Reconnaissance Report*, this component of the Project does not contain any historic resources listed in the California Inventory of Historical Resources (March 1976), California Historical Landmarks, and the National Register of Historic Places. Existing agricultural support structures, including an existing barn and agricultural-housing will be retained in connection with the operation of the proposed agricultural preserve. These structures are located outside the boundaries of grading activities proposed in connection with this Project component and would not be impacted. This component would not cause a substantial adverse change in the significance of a historical resource.

Section 4.5 Cultural Resources, Page 107, second paragraph, is amended as follows:

SR 1, also known as the Cabrillo Highway, is listed on the California Inventory of Historic Resources and was the first designated State Scenic Highway in California. This Project component/action would directly impact SR 1 in connection with the removal of a portion of the existing embankment and its subsequent replacement with an elevated causeway. The Project Study Report prepared by Caltrans identified that the causeway would address a number of existing deficiencies associated with this portion of SR 1. The causeway is necessary in order to 1) reduce existing flooding hazards to SR 1 under existing conditions, and 2) improve the longitudinal connectivity between the Project site and adjacent floodplain. The replacement of a portion of the existing, deficient, SR 1 embankment with a 520' elevated causeway would not cause a substantial adverse change in the historical significant of SR 1 nor would it constitute a significant adverse impact to the scenic quality of SR 1, an important factor influencing the SR 1 historical designation. The Causeway would be constructed in accordance with all applicable Caltrans standards, including the Big Sur Coast Highway Management Plan. It is anticipated that the proposed causeway will undergo additional environmental review by Caltrans at the time design-level detail and grant funding is available for this Project component. It is anticipated that additional technical supporting documentation, including a Historic Property Survey Report and Archaeological Survey Report would be completed in accordance with Caltrans standards at the time the causeway component is considered by Caltrans. If additional mitigation measures are identified in the course of additional as part of future environmental review completed by Caltrans, the final design and construction of the causeway would be required to comply with those requirements. Moreover, Mitigation Measure 4.10-1, which requires the construction of protective fencing along the southern boundary of the site to minimize potential noise impacts to adjacent residences, including existing farm houses located on the Odello property, would ensure that potential indirect impacts to existing on-site structures would be avoided.

Section 4.5 Cultural Resources, Page 108, Mitigation Measure 4.5-1, is amended as follows:

4.5-1 In order to avoid potential adverse impacts to a historic resource, the Fish Ranch Adobe shall be excluded from the limits of project grading. Exclusionary fencing shall be installed, prior to the issuance of any grading permit, to identify the location of the historic resource and ensure construction activities avoid impacting this resource. Exclusionary fencing shall be installed based on the direction of a qualified archaeologist who shall be present for the installation of said fencing. The qualified archaeologist shall provide specific recommendations regarding appropriate setbacks from the resource and advise construction personnel of the presence of this resource. Exclusionary fencing shall be installed for the duration of Project construction. The final grading plan for activities on the Monterey Peninsula Regional Park District parcel shall be prepared in consultation with a qualified archaeologist. If determined necessary, A qualified archaeologist shall be present during ground disturbing activities that may affect the Fish Ranch Adobe.

Section 4.6 Geology and Soils, Page 112, first paragraph, is amended as follows:

The Project site consists of older floodplain deposits associated with the Carmel River. These deposits were characterized by Kleinfelder as consisting of unconsolidated, heterogeneous, moderately sorted silt and sand with discontinuous and relatively thin lenses of clay and silty clay. Large amounts of gravel may also be present. The Project site also historically contained a large area of imported fill, approximately 130,000 cubic yards, commonly referred to as the "Blister." Roughly 105,000 cubic yards of the Blister was relocated in 2005. Levees on the south bank of the Carmel River extend for approximately 4,100 feet on-site. Portion of these levees would be removed in connection with the Proposed Project. Site topography is relatively flat with the site's elevation ranging between 16 and 34 feet NAVD88.

Section 4.8 Hydrology and Water Quality, Page 135, starting with the first full paragraph, is amended as follows:

The Carmel River Watershed is located within the California Coast Ranges Geomorphic Province. The entire drainage area of the watershed is located on the western slopes of the Sierra De Salinas. The watershed is located between the Santa Lucia Range, which provides most of the rainfall and runoff in the basin, and the Sierra de Salinas. The northwesterly flowing Carmel River originates approximately 35 miles upstream from Carmel Bay at an elevation of 3,500 feet above sea level. The major tributary to the Carmel River is the Tularcitos Creek; the Tularcitos Creek Watershed comprises approximately 20% of the watershed by area, but provides roughly 4% of the annual runoff. Most of the river's watershed (approximately 65%) is upstream of the confluence with this tributary. Its larger tributaries include Garzas Creek, San Clemente Creek, Pine Creek, Danish Creek, Cachagua Creek, and the Miller Fork. The upper reaches of the Carmel River flow northwesterly, generally following the trend of the fault block structure of the Coast Ranges, to a confluence with Tularcitos Creek. The lower reach flows in a more westerly direction through Carmel Valley and into the Pacific Ocean at Carmel Bay. According to the Monterey Peninsula Water Management District (MPWMD), average annual runoff (from 1962 to 2006) is 78,190 acre-feet. Stream flow in the Carmel River is directly attributed to rainfall; average annual precipitation is 18 to 20 inches. Accordingly, River flows are subject to large seasonal and annual variation in terms of total volume and peak discharge.

The Carmel River represents one of the primary sources of water supply for the Monterey Peninsula; the California American Water Company owns and operates two dams, the San Clemente and Los Padres dams, at the headwaters of the Carmel River. These dams regulate winter and summer flows to the lower reaches of the Carmel River. Winter runoff is detained at these locations in order to provide surplus water to accommodate summer demand; excess winter flows are discharged downstream. According to the Monterey Peninsula Water Management District (MPWMD), the two main stem reservoirs generally fill after the first few inches of rain during the winter and subsequently spill. As a result, the watershed remains unregulated throughout the winter and into the spring. These dams, however, provide limited no flood control and are operated primarily for water supply. Despite the Carmel River being regulated by these dams, the river is still subject to large seasonal and annual variations in total and peak discharge. For instance, recorded peak flow during the March 1995 flood, a 20- to 30-year event, was approximately 16,000 cubic feet per second (cfs). This peak flow is equivalent to 65 cfs/square mile and reflects the high rainfall totals in the mountainous upper reaches of the watershed. The 100-year flood event is estimated to be 22,700 cfs by the Federal Emergency Management Agency (FEMA)

Section 4.8 Hydrology and Water Quality, Page 141, last paragraph, is amended as follows:

This component of the Proposed Project would 1) consolidate agricultural activities on approximately 40 acres; and 2) grade 55 acres of farmland to create the hydrologic characteristics necessary to support subsequent floodplain restoration efforts. This component would increase the site's capacity as a natural floodplain while reducing the extent of agricultural activities. This component would increase the site's groundwater recharge capacity by creating the hydrologic characteristics necessary to restore the site as part of the Carmel River floodplain; floodplains promote groundwater recharge by providing additional storage capacity thereby increasing infiltration. Groundwater would, however, continue to be utilized in connection with on-site agricultural activities that would be consolidated on approximately 40 acres. The continued use of a portion of the site for agricultural activities would not increase on-site water use beyond historical levels. The Big Sur Land Trust has an existing water entitlement of 28.14 AFY (Permit No. 20905B), which would be utilized to meet the irrigation demands in connection with the consolidated agricultural activities. Groundwater use for agricultural activities would be reduced based on the reduction of cultivated land. Overall, this component of the Proposed Project would represent a net benefit to groundwater supplies by 1) reducing the extent of on-site agricultural activities, and 2) improving the site's hydrological function as part of the floodplain.