1. Administrative Details

Proposal Name: Encinitas-Solana Beach Coastal Storm Damage Reduction Project Authorization

by Agency: City of Solana Beach and City of Encinitas Beach, CA

Locations: CA

POC Name: 

POC Phone: 

POC Email: 

Date Submitted: 09/22/2015

Confirmation Number: b1f30ca5-dc56-45ac-bf21-f9b916de0a19

Supporting Documents

<table>
<thead>
<tr>
<th>File Name</th>
<th>Date Uploaded</th>
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<tbody>
<tr>
<td>Support Ltr for the LPP 11 10 14.pdf</td>
<td>09/22/2015</td>
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</tbody>
</table>
2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Letter of Support</th>
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</thead>
<tbody>
<tr>
<td>Solana Beach and Encinitas Beach, CA (Primary)</td>
<td>Solana Beach and Encinitas Beach, CA in coordination with the State of California request Congressional authorization of the Encinitas-Solana Beach Coastal Storm Damage Reduction Project.</td>
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</table>

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

[ ] Modification to an Authorized USACE Feasibility Study: Encinitas-Solana Beach Coastal Storm Damage Reduction Project
4. **Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.**

The purpose of the Encinitas-Solana Beach Coastal Storm Damage Reduction Project is to effectively reduce risks to public safety and economic damages associated with bluff and beach erosion along the shorelines of the Cities of Encinitas and Solana Beach. A secondary purpose is to reduce erosion and shoreline narrowing to improve recreational opportunities. The need for the proposed action is that ongoing bluff erosion and storm surge along unprotected shorelines threatens public safety and causes structural damages that include catastrophic damage to occupied buildings; and ongoing beach erosion will also result in reduced recreational use of beaches.

The U.S. Army Corps of Engineers (USACE) recommended plan (Proposed Project) for coastal storm damage reduction in Encinitas includes construction of a 50-foot-wide beach fill along a 7,800-foot-long stretch of shoreline using 340,000 cubic yards of compatible sediment, with renourishment (in the amount of 220,000 cubic yards) every five years on average over a 50-year period of Federal participation, for a total of nine additional nourishments.

The recommended plan for coastal storm damage reduction in Solana Beach includes construction of a 150-foot-wide beach fill along a 7,200-foot-long stretch of shoreline using 700,000 cubic yards of compatible sediment, with renourishment in the amount of 290,000 cubic yards every 10 years on average over a 50-year period of Federal participation, for a total of four additional nourishments.

Material for the beach fill will be dredged from borrow sites located off the coast of San Diego County. Physical monitoring of the performance of the project will be required annually throughout the 50-year period of Federal participation. This plan would provide coastal storm damage reduction throughout the project reach and would maintain the existing recreational beach. A comprehensive mitigation monitoring and reporting plan has been incorporated into the proposed project.
5. **To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.**

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>Non-Federal</th>
<th>Total</th>
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<tbody>
<tr>
<td>Study</td>
<td>$3,800,000</td>
<td>$3,800,000</td>
<td>$7,600,000</td>
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<td>Construction</td>
<td>$87,027,600</td>
<td>$77,864,400</td>
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**Explanation (if necessary)**

The Cities of Encinitas and Solana Beach, together with the State of California, are the non-Federal cost-sharing sponsors for all features of the coastal storm damage reduction project. Based on October 2014 price levels, the estimated total nourishment cost of the plan in Encinitas is $100,184,000, which includes the project first cost of initial construction of $10,975,000 and $89,209,000 for periodic renourishment. The estimated total nourishment cost of the plan in Solana Beach is $64,708,000 which includes the project first cost of initial construction of $19,569,000 and $45,139,000 for periodic renourishment.

The federal share of the project first cost for initial construction of both plans would be $19,853,600 and the non-Federal share would be $10,690,400, which equates to 65 percent federal and 35 percent non-Federal. The Federal share of the total renourishment cost would be $67,174,000 and the non-Federal share would be $67,174,000, which equates to 50 percent Federal and 50 percent non-Federal.

The State of California, State Parks, Division of Boating and Waterways is the local cost share partner and has been so since the project was initiated in 2000. To date, the State has provided more than $4 million in local cost share assistance for the almost completed Feasibility Phase of the project. The State has recently given the Cities $450,000 in grant money to fund the first year of the PED phase of the project and it is anticipated that they will provide a second grant in the same amount once the PED phase of the project is officially initiated. The Cities also anticipate that the State will remain a primary funding partner for the project as beach nourishment is now officially identified as a key strategy, and preferred approach for local cities to improve local coastal resiliency in the face of climate change and rising sea levels. Meetings with key staff and elected officials in Sacramento will be initiated again once the PED phase is initiated.
6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

Based on a 3.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project is estimated to be $2,148,000 in Encinitas and $1,615,000 in Solana Beach, including monitoring. All project costs are allocated to the authorized purpose of coastal storm damage reduction. The selected plan would reduce average annual coastal storm damage by about 41 percent and would leave average annual residual damages estimated at $3,613,000. The equivalent average annual benefits, which include recreational benefits, are estimated to be $2,395,000 in Encinitas and $2,965,000 in Solana Beach or $5,360,000 overall, with net average annual benefits of $247,000 in Encinitas and $1,350,000 in Solana Beach, or $1,597,000 overall. The benefit cost ratio is 1.11 to 1 in Encinitas and 1.84 to 1 in Solana Beach or 1.42 to 1 overall.
7. Does local support exist? If ‘Yes’, describe the local support for the proposal.

[✓] Yes

Local Support Description

The Mayor’s of the Cities of Solana Beach and Encinitas recently testified before the Civil Works Review Board in Washington DC that was held in April 2015 in support of the project. It is well known that the Cities have been steadfast supporters of the project, having worked closely with USACE staff in the Los Angeles District Office, South Pacific Division as well as USACE HQ.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

[✓] Yes
Primary Sponsor Letter of Support

(As uploaded)
Support Ltr for the LPP 11 10 14.pdf
November 10, 2014

Dr. Josephine Axt, Planning Division Chief
Los Angeles District, U.S. Army Corps of Engineers
915 Wilshire Boulevard
Los Angeles, California 90017

Re: Local Support for the Locally Preferred Plan (LPP) for the Encinitas-Solana Beach Coastal Storm Damage Reduction Project

Dear Dr. Axt:

The purpose of this letter is to express our strong support for the Locally Preferred Plan (LPP) over the National Economic Development (NED) plan and to acknowledge the unanimous support for the Consistency Determination received from the California Coastal Commission (CCC) in November 2013. Below is a detailed description of the LPP and an explanation of why the LPP is our preferred option moving forward.

Locally Preferred Plan (LPP) Details: The LPP includes the same elements and design features as the NED plan however the non-Federal sponsors believe that the LPP is a better project because it has been optimized to respond to local conditions and preferences and incorporates a more robust monitoring program that will reduce or avoid potential effects on biological and cultural resources and the need for costly mitigation. In addition, and importantly, the total project cost of the LPP has been reduced relative to the NED which improves the outlook for construction funding opportunities.

Following the inability to gain support for the NED from the CCC, important revisions to the Project were made consistent with other environmental commitments and protection measures already incorporated into the Project. The LPP decreases the project volume by approximately 28% in Encinitas and 16% in Solana Beach. Although the coastal storm damage reduction project benefits of the LPP are reduced, the project costs are also reduced accordingly and the project retains a healthy benefit to cost ratio while reducing the need for potential future costly mitigation.

Like the NED, the LPP will reduce coastal storm damages to property and infrastructure along shoreline and bluff top prior to the need for emergency action/shoreline armoring for a period of 50-years. In addition, like the NED, the LPP will improve public safety by reducing threat of life-threatening bluff failures caused by wave action against the bluff toe and will reduce coastal erosion and shoreline narrowing to improve recreational opportunities for shoreline users.

The LPP is consistent with Statewide and regional shoreline management goals and will help to implement the 2009 San Diego Coastal Regional Sediment Management Plan which recognized the importance of beach restoration along the Solana Beach and Encinitas shorelines as the preferred method of addressing the critical coastal erosion problems caused by a lack of sediment supply.
Coastal erosion is expected to worsen with sea level rise and the project is a recognized adaptation strategy outlined in the "Sea Level Rise Policy Guidance" issued by the CCC in October 2013. Coastal erosion is a very significant problem in both cities and one that threatens key public facilities, public structures, infrastructure and homes in both cities. Implementation of this coastal storm damage reduction project would provide long-term protection for public facilities, public structures, and infrastructure.

In the absence of the LPP, continued armoring of the shoreline would occur with the entire shoreline of both cities expected to become fully armored within the next 50-years. With the LPP, the cities, State and USACE will be providing a viable alternative to continued coastal armoring. Importantly, implementation of this long-term shoreline protection program was a key assumption in the recently certified Solana Beach Local Coastal Program and is the basis for many of the policies addressing coastal hazards and the future need for shoreline protection.

**Non-Federal Sponsors Request:** The Cities of Solana Beach and Encinitas are the non-Federal sponsors for the Feasibility Study. The LPP is strongly supported by the Cities and the State of California because it is a comprehensive program that provides long-term coastal storm damage reduction benefits and will be resilient to future sea level rise conditions.

The California Department of Boating and Waterways (now California State Parks/Division of Boating and Waterways (DBW)) has been a steadfast project supporter. DBW has contributed consistent funding in support of the non-Federal share of the study costs since 2000. The Cities and the State are preparing formal requests for the USACE to proceed with the Design and Construction of the LPP.

Please contact me at 858-720-2431 if you have any questions or need any additional information.

Sincerely,

David Ott
City Manager

cc: Mayor Tom Campbell, City of Solana Beach
    Mayor Theresa Barth, City of Encinitas
    Steve Watanabe, State Parks, Division of Boating and Waterways
    Janelle Beland, Resources Agency
    Chris Potter, Resources Agency
    U.S. Senator Diane Feinstein
    U.S. Senator Barbara Boxer
    Congressman Darrell Issa
    Senator Marty Block
    Senator Mark Wyland
    Assemblymember Toni Atkins