

**COUNTY OF SAN LUIS OBISPO BOARD OF SUPERVISORS  
AGENDA ITEM TRANSMITTAL**

(1) DEPARTMENT Public Works	(2) MEETING DATE 11/13/2012	(3) CONTACT/PHONE Mark Hutchinson, Environmental Division Manager (805) 781-5458	
(4) SUBJECT Presentation of a Status Report on Oceano Flood Mitigation and Winter Storm Preparation Efforts and a request to approve a \$50,680 amendment to an existing agreement for engineering consulting services with Environmental Service Associates / Phillip Williams Associates for the Arroyo Grande Creek Interim Sandbar Management Program for a total contract amount not to exceed \$118,750. District 4.			
(5) RECOMMENDED ACTION It is our recommendation that your Honorable Board acting as the Board of Supervisors of the San Luis Obispo County Flood Control and Water Conservation District: <ol style="list-style-type: none"> <li>1. Receive and consider the Status Report on Oceano Flood Mitigation and Winter Storm Preparation Efforts; and</li> <li>2. Approve Amendment No. 1 to the Agreement with Environmental Service Associates / Phillip Williams Associates in an amount not to exceed \$50,680 for the Arroyo Grande Creek Interim Sandbar Management Program, for a total contract amount of \$118,750; and</li> <li>3. Authorize the Public Works Director, to approve written amendments for a total amount not to exceed \$20,000.</li> </ol>			
(6) FUNDING SOURCE(S) Zone 1/1A	(7) CURRENT YEAR FINANCIAL IMPACT \$70,680.00	(8) ANNUAL FINANCIAL IMPACT N/A	(9) BUDGETED? Yes
(10) AGENDA PLACEMENT { } Consent { } Presentation { } Hearing (Time Est. _____) <b>{X}</b> Board Business (Time Est. 45 min.)			
(11) EXECUTED DOCUMENTS { } Resolutions <b>{X}</b> Contracts { } Ordinances { } N/A			
(12) OUTLINE AGREEMENT REQUISITION NUMBER (OAR) N/A		(13) BUDGET ADJUSTMENT REQUIRED? BAR ID Number: { } 4/5th's Vote Required <b>{X}</b> N/A	
(14) LOCATION MAP  Attached	(15) BUSINESS IMPACT STATEMENT?  No	(16) AGENDA ITEM HISTORY  { } N/A Date: 9/13/11, F-1; 10/25/11, #9; 12/6/11, #15	
(17) ADMINISTRATIVE OFFICE REVIEW  <i>Nikki J. Schmidt</i>			
(18) SUPERVISOR DISTRICT(S) District 4 -			

Reference: 12NOV13-BB-1

# County of San Luis Obispo



TO: Board of Supervisors

FROM: Public Works

Mark Hutchinson, Environmental Division Manager

Jill Ogren, Hydraulic Planning Engineer

VIA: Paavo Ogren, Director of Public Works

DATE: 11/13/2012

SUBJECT: Presentation of a Status Report on Oceano Flood Mitigation and Winter Storm Preparation Efforts and a request to approve a \$50,680 amendment to an existing agreement for engineering consulting services with Environmental Service Associates / Phillip Williams Associates for the Arroyo Grande Creek Interim Sandbar Management Program for a total contract amount not to exceed \$118,750. District 4.

## **RECOMMENDATION**

It is our recommendation that your Honorable Board acting as the Board of Supervisors of the San Luis Obispo County Flood Control and Water Conservation District:

1. Receive and consider the Status Report on Oceano Flood Mitigation and Winter Storm Preparation Efforts; and
2. Approve Amendment No. 1 to the Agreement with Environmental Service Associates / Phillip Williams Associates in an amount not to exceed \$50,680 for the Arroyo Grande Creek Interim Sandbar Management Program, for a total contract amount of \$118,750; and
3. Authorize the Public Works Director, to approve written amendments for a total amount not to exceed \$20,000.

## **DISCUSSION**

In December of 2010 flood water damaged numerous residences and public facilities in neighborhoods bordering the Meadow Creek Lagoon in Oceano. Since that event, the Flood Control District has implemented numerous actions and initiated several priorities focused on reducing the frequency and severity of flooding in Oceano. Actions to date have included:

- Raised the north and south levees on Arroyo Grande Creek West of the railroad.
- Installed temporary levee protection downstream of Highway 1 on a seasonal basis.
- Recontoured land adjacent to Arroyo Grande Creek to protect adjacent neighborhoods.
- Reduced vegetation restrictions in Arroyo Grande Creek Channel through annual maintenance contracts.

- Inspected and cleaned culverts throughout the area.
- Raised Delta Street to direct high flows away from low-lying areas.
- Thinned bullrush reeds in Meadow Creek lagoon's main channels.

A detailed summary of flood mitigation and winter storm preparation and future project efforts began this past year is contained in Attachment "A". In conjunction with these efforts, Public Works staff continues to monitor water levels in the lagoons as well as stream flow in Arroyo Grande Creek and the configuration and elevation of the sandbar at Arroyo Grande Creek.

Recommendation to approve an amendment Agreement with Environmental Science Associates / Phillip Williams Associates

In October of 2011 your Board approved a contract with Environmental Science Associates / Phillip Williams Associates to prepare an Interim Sandbar Management Plan for Arroyo Grande Creek. The intent of the work specified in that contract was to develop a plan on how to manage the sandbar to reduce the likelihood and frequency of flooding that would otherwise occur in neighborhoods bordering the Meadow Creek Lagoon. The Plan would necessarily need to develop technical information to describe the hydraulic and hydrologic processes that control the interaction between the Arroyo Grande Creek Lagoon at the beach in Oceano and the adjacent Meadow Creek Lagoon, which flooded adjacent properties in the winter of 2010. In the event that future conditions in the two adjacent lagoons threaten to result in an avoidable flooding incident, the information developed by the consultant could be used to both support a determination that action to lower the sandbar at the mouth of Arroyo Grande Creek is necessary, and support the required regulatory and land owner approvals from State and Federal agencies.

To date, the consultant has conducted surface and bathymetric surveying of the Arroyo Grande Creek lagoon and portions of the Meadow Creek Lagoon, developed a preliminary hydraulic model of the system, utilized the model to establish a clear connection between the height of the sandbar and the potential for flooding events, and identified critical sandbar elevations to reduce the risk of flooding from the Oceano Lagoon/ Meadow Creek.

The work completed to date also shows that additional work needs to be done to refine the technical information necessary to support sandbar management actions. Additional refinements to the hydraulic model should provide a higher level of confidence to predict impacts from various magnitudes of rain events. And, because the system of three water level gauges that measure changes in elevation in the two lagoons has only been fully in place for one full wet season, a set of parallel gages will be installed this fall to more rapidly calibrate and verify the gages' response and performance.

This amendment No. 1 to the Agreement with the Consultant will provide funding to:

- Install, verify and analyze data collected from the parallel gage system to ensure the accuracy of field information needed to calibrate the models
- Refine the hydrologic model and improve the accuracy of the hydraulic model to be able to predict when and to what degree sandbar management is needed
- Integrate the additional information into the sandbar management plan so that agency approvals can be rapidly processed and approved

## **OTHER AGENCY INVOLVEMENT/IMPACT**

The majority of the Arroyo Grande Creek and Meadow Creek Lagoon systems together with the sandbar at the mouth of Arroyo Grande Creek are located within the Oceano Dunes State Vehicular Recreation Area, which is owned and managed by the California Department of Parks and Recreation. Current surveys and limited maintenance work is being conducted under a right-of-entry permit; additional agreements with State Parks may be required if more extensive work is done in these areas. Also, environmental regulatory permits from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game, California Regional Water Quality Control Board, and the California Coastal Commission (2 permits) would likely be required for any work in the creeks, lagoons, or beach areas.

On other related efforts, in early October 2012 the California Department of Parks and Recreation issued a proposed Mitigated Negative Declaration for drainage maintenance efforts in the Oceano Dunes District that are intended to (in part) “speed drainage of creeks to the Pacific Ocean and Oceano Lagoon”. The Department of Public Works submitted comments (Attachment “D”) to the State expressing concerns that the proposed project does not include any maintenance to restore flow through the Meadow Creek (Oceano) Lagoon and could exacerbate flooding in the lagoon area.

## **FINANCIAL CONSIDERATIONS**

The proposed amendment with Environmental Science Associates / Phillip Williams Associates is for \$50,680. The original agreement was for \$68,070, for a total compensation amount of \$118,750. A contingency amount of \$20,000 is also recommended, bringing the total cost to \$138,750.

On October 25, 2011 your Board increased the appropriation to Flood Control Zone 1/1A, from Flood Control District Reserves by \$785,000 in order to fund actions to address various Zone 1/1A flooding issues. No additional budget adjustments are necessary to fund the proposed agreement amendment.

## **RESULTS**

Approval of the agreement amendment will further current efforts to provide a livable and safe community.

File: CF 340.80.01

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## **ATTACHMENTS**

1. Vicinity Map
2. A - Flood Mitigation and Winter Storm Preparation Efforts 2012 - 2013
3. B - Original “Agreement for Professional Engineering Services, Arroyo Grande Creek Interim Sandbar Management Program”
4. C - Preliminary Meadow Creek - Arroyo Grande Creek Hydrologic and Hydraulic Analyses
5. D - Comments on the Proposed Mitigated Negative Declaration for Routine Riparian Maintenance, Oceano Dunes District, SCH# 2012101012
6. Amendment No. 1 to “Agreement for Professional Engineering Services, Arroyo Grande Creek Interim Sandbar Management Program”