

# HASPA Sea Level Rise Scoping Study

## Proposal for Services

Prepared for | **HASPA** Hayward Area Shoreline  
Planning Agency

Prepared by | **PWA**  
Philip Williams & Associates, Ltd.  
550 Kearny Street, Suite 900  
San Francisco, CA 94108

Contact | Jeremy Lowe  
415 262.2304

PWA Ref. #: P10-066

June 14, 2010

## TABLE OF CONTENTS

<b>PROJECT UNDERSTANDING</b>	<b>1</b>
<b>SCOPE OF SERVICES</b>	<b>2</b>
TASK 1.    IDENTIFY STAKEHOLDERS	2
TASK 2.    STAKEHOLDER MEETINGS	3
TASK 3.    STAKEHOLDER WRITE-UP	3
TASK 4.    DRAFT REPORT	3
TASK 5.    FINAL REPORT	4
<b>BUDGET</b>	<b>4</b>
<b>SCHEDULE</b>	<b>4</b>

# PROJECT UNDERSTANDING

## Background

Philip Williams & Associates, Ltd. (PWA) is pleased to provide a scope of work, schedule, and budget estimate to conduct a scoping study for a sea-level rise vulnerability study of the resources of the Hayward shoreline. The Hayward Area Shoreline Planning Agency (HASPA) is currently studying the implications of sea level rise on the management of their shoreline. Over the next 50 years there is the potential for accelerated sea-level rise to expose the currently buffered reaches of the shoreline to wave action and potential flooding.

HASPA has recently undertaken a preliminary assessment of the vulnerabilities and adaptation strategies to manage the effects of sea-level rise (PWA, 2010). Various adaptation strategies, regulatory requirements, costs, funding resources and governance structures have been explored which would facilitate the development and implementation of a Shore Realignment Master Plan. Next steps are pending funding and include a shore management master plan; changes to governance to allow implementation of projects and representation of all property owners; interim maintenance of levees; and demonstration projects. These actions will take time and there is a need to make progress while funding for the remainder of the work is being pursued. The question that arises is:

“What facilities are at a level of risk requiring action now or in the near future?”

This could be answered by an assessment of the vulnerability to sea level rise, in terms of likelihood of damage and severity of damage, for the fixed infrastructure in the HASPA area. This will allow the identification of priorities in terms of near-term high-risk facilities and those that require long lead times for funding and protection or realignment.

## This Proposal

PWA proposes a Scoping Study to gather information to properly scope a Vulnerability Assessment and to gauge interest in the development of a Shore Realignment Master Plan. The Vulnerability Assessment would focus on infrastructure. Each facility would be evaluated for vulnerability in concert with their owners and regulators. The overall vulnerability would be described by itemizing each facility and its relative vulnerability. Relative vulnerability would be prioritized in terms of likely cost over a range of time horizons. California State guidance would be used for the sea level rise scenarios.

The Scoping Study is an important intermediate step to try to build partnerships and find funding for the Vulnerability Assessment. The Scoping Study will take the form of a series of meetings between stakeholders, HASPA and PWA to identify owners, regulators, operators, location, function, and possible damage modes for each facility and function along the Hayward Shoreline.

A report will be written that will summarize the information derived from the meetings together with a detailed scope for the proposed Vulnerability Analysis and recommendations for the future governance structure for HASPA.

## SCOPE OF SERVICES

### TASK 1. IDENTIFY STAKEHOLDERS

A kick off meeting will be held between HASPA and PWA to confirm the facilities and functions of the Hayward shoreline to be addressed and the stakeholders who will be contacted in the course of this study. A provisional list of facilities and functions and stakeholders is shown below:

Facility/Function	Stakeholder
Water treatment facilities	Oro Loma Sanitary District (OLSD) City of Hayward East Bay Dischargers Authority (EBDA)
Stormwater drainage	Alameda County Flood Control and Water Conservation District (ACFCWCD)
Closed land fills	Alameda County Flood Control and Water Conservation District (ACFCWCD) Waste Management of Alameda County (WMAC) City of Hayward
Trails	San Francisco Bay Trail Project
Electrical utilities	PGE
Railroad	Union Pacific
Russell City Energy Center	Calpine
Telecommunications	
HP Gas line	
Tidal and treatment wetlands	East Bay Regional Park District (EBRPD) Hayward Area Recreation District (HARD) State Lands Commission (SLC) State Wildlife Conservation Board (WCB)

PWA will provide HASPA with drafts of a letter to be sent by HASPA to each stakeholder three weeks before meeting with them. This letter will request a meeting, detail the purpose of the meeting, a draft agenda, background information on the sea level rise study to provide context, the information that the study is seeking to obtain from the stakeholder and a set of technical topics for discussion (see example list in Task 2). Each letter will be tailored to the stakeholder and their facility or function.

*Deliverable:* Kick-off meeting. Draft copies of the HASPA letter will be written by PWA for each of up to 15 stakeholders.

## **TASK 2. STAKEHOLDER MEETINGS**

A two-hour meeting is planned for each stakeholder to discuss their facility or function as it relates to the Hayward shoreline and how it might be vulnerable to sea level rise. The meeting will include at least one representative from HASPA who will introduce the study and one representative from PWA who will address technical topics and make notes on the discussion. Examples of the technical topics for discussion could be:

- A description of the facility and its operation
- What are their future plans for the facility in terms of capital improvement?
- Does their planning include adaptation to sea level rise?
- Possible damage modes – is the facility vulnerable to inundation, erosion, rising groundwater etc?
- Are they interested in joining a Hayward shoreline planning initiative?
- What are the opportunities they see in the future from such a shoreline planning initiative?
- What are the constraints (including regulatory) which might inhibit the initiative?

It is desirable that the stakeholder's representative be familiar with the operation and management of the facility or function. The meeting will follow the agenda developed in Task 1. An allowance has been made for up to 15 meetings.

*Deliverable:* Up to 15 stakeholder meetings.

## **TASK 3. STAKEHOLDER WRITE-UP**

Each meeting will be written up in a 2-3 page memo addressing the technical topics outlined above. Figures and graphics provided by the stakeholder will be included as appropriate. A copy of the draft write up will be sent to the stakeholder and to HASPA representatives for review to ensure that the information is correct. The memos will be combined into a single appendix to be included in the Scoping Study Report.

*Deliverable:* Appendix of up to 15 memos.

## **TASK 4. DRAFT REPORT**

A report will be written that will summarize the information derived from the meetings. Based on this information, a detailed scope for the proposed Vulnerability Analysis will be written that will include schedule and costs. Following discussion with HASPA representatives, PWA will present the draft report to HASPA. Recommendations for the future governance of HASPA will be made including the addition of stakeholders and other parties, the organizational structure and the geographical extent.

*Deliverable:* Draft report for review by HASPA. All copies will be electronic. A presentation of the draft report will be made to HASPA.

## TASK 5. FINAL REPORT

The Scoping Study report will be finalized following receipt of comments from HASPA.

*Deliverable:* Final report for HASPA. All copies will be electronic.

## BUDGET

The attached Scoping Study budget table provides PWA's estimated budget for each of the tasks described above. As it is difficult to estimate the level of effort required for this scope, we recommend compensation on a time and materials basis, not to exceed the total estimate budget of \$44,354 without prior authorization. Please note that actual distribution of charges will differ from the estimate provided in the attached budget tables.

PWA will invoice monthly for actual time and materials according to our standard rate schedule in effect at the time the work is performed (see attached tables). We have used a rate schedule for work that we anticipate would be completed in 2010.

## SCHEDULE

We anticipate that the study will take approximately 13 weeks.

Task 1 Identify Stakeholders	Week 1
Task 2 Stakeholder Meetings	Weeks 3 to 6
Task 3 Stakeholder Write ups	Weeks 4 to 7
Task 4 Draft Report submitted	Week 9
Task 4 Presentation of draft report to HASPA	Week 11
Task 5 Final Report submitted	Week 13



**Project Name:** HASPA Scoping Study - Assumes 15 Stakeholder Meetings

**PWA #:** 10-066

**ESTIMATED PROJECT BUDGET SUMMARY**

Staff Labor

Task 1	Identify stakeholders	\$	1,990.00
Task 2	Stakeholder meetings	\$	12,000.00
Task 3	Stakeholder write-up	\$	20,775.00
Task 4	Draft Report	\$	5,540.00
Task 5	Final Report	\$	3,550.00
		\$	-
		\$	-

Total Estimated Labor Fee \$ 43,855.00

Reimbursable Expenses: \$ 499.10

Sub-Consultant(s) Fees & Expenses: \$ -

**TOTAL ESTIMATED PROJECT BUDGET** **\$ 44,354.10**



Project

Name: HASPA Scoping Study - Assumes 15 Stakeholder Meetings

PWA #: 10-066

**ESTIMATED LABOR FEES**

NO.	NAME / DESCRIPTION	TASK					Sub-Total Labor Hours per Task	Sub-Total Labor Fee per Task	
		Bob Battalio	Jeremy Lowe	Associate	Graphics / CAD Production	Desktop Publishing			
1	Identify stakeholders	2	8				10	\$ 1,990.00	
2	Stakeholder meetings	15	45				60	\$ 12,000.00	
3	Stakeholder write-up	15	90				105	\$ 20,775.00	
4	Draft Report	4	24				28	\$ 5,540.00	
5	Final Report	2	16				18	\$ 3,550.00	
							-	\$ -	
							-	\$ -	
<b>Subtotal Labor Hours</b>		40	192	-	-	-	221		
<b>TOTAL ESTIMATED LABOR FEES</b>									<b>\$ 43,855.00</b>

\*Unless expressly provided for within the contract, rates are subject to increase annually on January 1 of each year



**ESTIMATED REIMBURSABLE EXPENSES BUDGET**

Mileage	400 miles @	0.585	per mile	\$	234.00
Airfare	trip(s)		per trip	\$	-
Car Rental	day(s)		per day	\$	-
* Lodging & Meals	day(s)		per day	\$	-
Misc. travel expenses (BART)	5 trip(s)	10.00	per trip	\$	50.00
Per diem	day(s)		per day	\$	-
** Copying / Reproduction				\$	50.00
Photo Documentation (Allowance)				\$	-
Courier / Delivery (Allowance)				\$	-
*** Field Equipment Rental					
Field vehicle	day(s)		per day	\$	-
Total station	day(s)		per day	\$	-
Canoe	day(s)		per day	\$	-
Tide Gages	day(s)		per month	\$	-
Misc. Supplies / Expenses				\$	-
Dedicated Computer Time	hrs. @		per hour	\$	-
Archiving / Documentation				\$	<u>100.00</u>
<b>Sub-Total Reimbursable Expenses</b>				\$	434.00
<b>Administrative Charge</b>				\$	<u>65.10</u>
<b>TOTAL ESTIMATED REIMBURSABLE EXPENSES</b>				<b>\$</b>	<b><u><u>499.10</u></u></b>