



June 29, 2011

Jim Browne
Alameda County Public Works
399 Elmhurst St # 113
Hayward, CA 94544-1395

Dear Jim,

I am pleased to submit a proposed scope of work for the work described during our June 14th meeting related to Alameda Creek and the Eden Canyon projects.

This scope considers the information we've mutually discussed, as well as permitting requirements discussed for these projects, based on our collective experience with similar projects and our understanding of available information to date. I'm sure that this will be refined as we engage the project in more detail, but it should provide a good starting approach. We look forward to your approval to proceed.

At this time, we are not providing a scope or budget for the wetland delineation or clapper rail protocol surveys. BioMaAS is unable to provide these services, and we are seeking other resources. We will provide these separately as soon as possible. We anticipate approximately \$7-10,000 for the Clapper Rail Survey and about \$12-18,000 for the two wetland delineations.

Our scope and budget would benefit from the BA and BO documents for the railroad site on Alameda Creek, as they would give us an indication of the biological survey requirements. We were unable to find these documents on the FTP site.

Please contact me with any questions, revisions or other thoughts. I can be reached at (510) 927-2099 or at mike@soundwatershed.com.

Sincerely,

Mike Liquori
Principal
Sound Watershed

Cc: Jana Sokale, Steve Powell

SCOPE OF WORK FOR PERMITS AND BIOLOGICAL ASSESSMENTS FOR ALAMEDA DESILTING PROJECT

1. BACKGROUND DOCUMENT AND CONSTRUCTION PLAN REVIEW

The Sound Watershed Team will compile a data request of information and documents relevant to the project, including maps, preferred concept report/project description, CEQA documents, technical reports and other materials to determine additional information needs and potential permitting issues.

Products: Information Request Memo

Meetings: 1 Staff Meeting

Project Kick-off

The Sound Watershed Team proposes to have a kick-off meeting with staff immediately following completion of contracting and our review of documents provided by the County in the task described above to review, discuss, strategize and/or coordinate: (a) project history and description (b) field surveys (c) our assumptions regarding CEQA documentation, issues to address, species of significance, etc., and (d) project permitting. Following the kick-off meeting, we will prepare a memo summarizing the discussions, decisions and actions items resulting from the meeting and distribute to staff and the project team.

Products: Meeting Minutes

Meetings: 1 Staff Meeting

2. BIOLOGICAL ASSESSMENT

The Sound Watershed Team will prepare a Biological Assessment (BA) for Central California Coast Ecologically Significant Unit (ESU) Steelhead (*Oncorhynchus mykiss*) and other species protected under the U.S. Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) and known to occur within the Alameda Creek project area. The desilting project is proposed to occur in two phases that extend approximately 3.5 miles from Union City Boulevard to Alvarado Boulevard. The BA will follow the guidelines set by the NOAA Fisheries for steelhead and the US Fish and Wildlife Service (USFWS) and

will include as necessary supportive documentation to determine the presence of these two listed species, an analysis of all potential effects to these species, and a determination of the proposed actions effects on these species. This BA scope does not include protocol surveys for these species except as listed. For purposes of this project species presence is assumed until site visits have been completed by BioMaAS.

Initial Surveys within Potential ESA Species Habitat

After a thorough search of the CNDDDB and associated references, BioMaAS will conduct an initial special species vertebrate and plant survey. This initial survey will not attempt to photograph and/or capture such species (unless such an opportunity exists), but instead will be concentrated on identifying potential acceptable habitat situations where these occur. In particular we will focus on potential habitat for

- Salt Marsh Harvest Mouse (SMHM),
- California Clapper rail (CCR),
- Burrowing Owl (BO) and
- California red-legged frog (CRLF).

Clear side pools will also be visually surveyed by Sound Watershed and/or BioMaAS for the possible presence of Steelhead smolts that may use the lower reaches of Alameda Creek as a staging area before migration to San Francisco Bay with the onset of the fall rains. The information obtained through these initial species surveys will inform the development of the BA.

If there is acceptable habitat for the SMHM near the western terminus of the project site, a SMHM protocol survey will be conducted. It will consist of trapping with Sherman #2 live traps, baited with birdseed and walnut scraps, set at the intersections of a 100-meter grid for five nights over a seven-day period. Traps will be baited and opened during two hours before sundown and checked and closed during the two hours after sunrise. SMHM will be identified using the method described by Dr. Howard Shellhammer, San Jose State University. If the SMHM is found, the BioMaAS draft report will suggest options for species protection during the project activities.

The Sound Watershed Team will develop a project history, project description and environmental setting for the proposed actions. The BA will describe the phenologies of the listed species; determine direct, indirect and cumulative effects on the species; and list conservation measures and a monitoring program. To meet NOAA Fisheries and USFWS Guidelines, the BA will also contain a determination of effect. The Sound Watershed Team will prepare one Draft BA submittal and one Final BA incorporating approved comments from others.

The Sound Watershed Team will coordinate review of BA by USFWS and NOAA Fisheries. The Sound Watershed Team will attend one site visit with the regulatory agencies to respond to questions regarding verification of the wetland delineation and BA.

Products: Biological Assessment and Habitat and Species Survey Report

Meetings: 2 Staff Meetings, 1 Site Visit with Regulatory Agencies and Initial Habitat and Species Surveys

3. WETLAND DELINEATION

A scope and budget for this task will be provided separately.

4. PERMITS

The Sound Watershed Team will review the construction plans, environmental conditions at the project site, impacts identified in the CEQA documents, and meet with County staff, as needed, to develop the project history and description. We will identify what additional supporting documents (wetland delineation, biological assessment, soil studies, etc.) and mitigation and monitoring would be required to expedite permit approval.

The Sound Watershed Team will prepare and submit three draft permit applications for staff review. Permit applications will be submitted to:

- US Army Corps of Engineers (USACOE)
- Regional Water Quality Control Board (RWQCB)
- California Department of Fish and Game (CDFG)

The Sound Watershed Team will meet with the County staff to review draft permit applications. After receiving the County's concurrence on the project description, impact assessments, avoidance and minimization measures and mitigation and monitoring efforts, the Sound Watershed Team will finalize the permits for submission to the regulatory agencies.

If it is determined that listed species occur on the site and may be impacted by the project, consultations may be needed with US Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Marine Fisheries Service (NOAA Fisheries) and California Department of Fish and Game (CDFG). Submission of a USACE permit application will trigger an internal consultation with the federal resource agencies under Section 7 of the Endangered Species Act. Submission of a Streambed Alteration Agreement application will trigger a consultation with the CDFG. However, it will be important to have the USFWS and CDFG involved from the beginning in order to facilitate these consultations should they be necessary. The Sound Watershed Team will support County staff with consultations, if needed.

The Sound Watershed Team will provide these agencies with Biological Assessments for endangered or threatened species potentially or actually impacted by the project. Agencies will provide direction on the mitigation/avoidance measures required to reduce impacts to the species to non-significance, which will be adopted by the team. The resource agencies will ultimately provide a Biological Opinion to the USACE and CDFG.

Products: USACOE Permit Application, RWQCB Certification Application and CDFG Streambed Alteration Agreement Application

Meetings: 2 Staff Meeting, 2 Agency Meetings or Site Visits

5. USFWS PROTOCOL SURVEYS FOR CALIFORNIA CLAPPER RAILS

A scope and budget for this task will be provided separately.

California clapper rail surveys will be conducted between January 15 and April 15 of 2012 along Alameda Creek in the vicinity of Union City Boulevard at the edge of potentially suitable habitat for this species. Four separate surveys will be conducted following the transect method described in the USFWS protocol. Surveys will be conducted during low to moderate tides within 1.5 hours of dawn or dusk. Calls of rails will be categorized to call-type, other birds and potential rail predators will also be noted.

SCOPE OF WORK FOR PERMITS AND BIOLOGICAL ASSESSMENTS FOR EDEN CANYON PROJECT

1. BACKGROUND DOCUMENT AND CONSTRUCTION PLAN REVIEW

The Sound Watershed Team will compile a data request of information and documents relevant to the project, including maps, preferred concept report/project description, CEQA documents, technical reports and other materials to determine additional information needs and potential permitting issues.

Products: Information Request Memo

Meetings: 1 Staff Meeting

Project Kick-off

The Sound Watershed Team proposes to have a kick-off meeting with staff immediately following completion of contracting to review, discuss, strategize and/or coordinate: (a) project history and description (b) field surveys (c) our assumptions regarding CEQA documentation, issues to address, species of significance, etc., and (d) project permitting. Following the kick-off meeting, we will prepare a memo summarizing the discussions, decisions and actions items resulting from the meeting and distribute to staff and the project team.

Products: Meeting Minutes

Meetings: 1 Staff Meeting

2. BIOLOGICAL ASSESSMENT

The Sound Watershed Team will prepare a Biological Assessment (BA) for California red-legged frog (CRLF) (*Rana aurora draytonii*), and other species protected under the U.S. Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) and known to occur within the Eden Canyon project area. The desilting project is proposed to occur in a single phase that extends approximately 1000 feet immediately below and just upstream and downstream of the box culvert beneath Eden Canyon Road. The BA will follow the guidelines set by the US Fish and Wildlife Service (USFWS) for CRLF and will include as necessary supportive documentation to determine the presence of these this listed species, an analysis of all potential effects to this species, and a determination of the proposed actions effects on this species. This BA will also address other listed species with the potential to occur in the area including the Alameda whipsnake *Masticophis lateralis*).

California Red-legged Frog (CRLF) Surveys

BioMaAS will conduct surveys for the CRLF at sites along the creek course may result in (A) discovery of a breeding population represented by larvae, metamorphs, and adults, (B) occasional sighting of single CRLFs moving along the creek course corridor, or (C) no sightings of any CRLF life forms, including egg masses in late winter. However, in order to make a negative declaration statement, one still needs undertake presence/absence survey in the summer/fall survey period.

BioMaAS will conduct weekly two hour visual surveys at the proposed project site and 100 meters up and down stream from it between July 1 and October 31, 2011. This time frame is the most productive, since it spans the latter period of larval development and metamorph dispersal. If tadpoles are present, we will seine several and examine and photograph the eye position on the head to determine that they are indeed CRLFs not

those of the Pacific Chorus Frog. Individual CRLFs will also be photographed when possible so as to determine if we are seeing the same frog(s) again or new frogs during later surveys. Most surveys will be conducted during the mid-morning hours on warm days, but one survey per month will be done at night with a spotlight.

At the conclusion of the fieldwork, a draft report will be prepared and submitted to Sound Watershed on/or before November 15, 2011. If no life forms of the CRLF are detected throughout the study, the report will contain a negative declaration for this threatened species at this site. If, on the other hand, CRLFs are found on or immediately adjacent to the project site, the report will suggest proactive measures for implementation during project work period and habitat enhancement after completion of work.

The Sound Watershed Team will develop a project history, project description and environmental setting for the proposed actions. The BA will describe the phenologies of the listed species; determine direct, indirect and cumulative effects on the species; and list conservation measures and a monitoring program. To meet NOAA Fisheries and USFWS Guidelines, the BA will also contain a determination of effect. The Sound Watershed Team will prepare one Draft BA submittal and one Final BA incorporating approved comments from others.

The Sound Watershed Team will coordinate review of BA by USFWS and NOAA Fisheries. The Sound Watershed Team will attend one site visit with the regulatory agencies to respond to questions regarding verification of the wetland delineation and BA.

Products: Biological Assessment and Protocol Surveys for California Red-legged Frog (CRLF) and Report

Meetings: 2 Staff Meetings, 1 Site Visit with Regulatory Agencies and CRLF Surveys

3. WETLAND DELINEATION

A scope and budget for this task will be provided separately.

4. PERMITS

The Sound Watershed Team will review the construction plans, environmental conditions at the project site, impacts identified in the CEQA documents, and meet with County staff, as needed, to develop the project history and description. We will identify what additional supporting documents (wetland delineation, biological assessment, soil studies, etc.) and mitigation and monitoring would be required to expedite permit approval.

The Sound Watershed Team will prepare and submit three draft permit applications for staff review. Permit applications will be submitted to:

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If it is determined that listed species occur on the site and may be impacted by the project, consultations may be needed with US Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). Submission of a USACE permit application will trigger an internal consultation with the federal resource agencies under Section 7 of the Endangered Species Act. Submission of a Streambed Alteration Agreement application will trigger a consultation with the CDFG. However, it will be important to have the USFWS and CDFG involved from the beginning in order to facilitate these consultations should they be necessary. The Sound Watershed Team will support County staff with consultations, if needed.

The Sound Watershed Team will provide these agencies with Biological Assessments for endangered or threatened species potentially or actually impacted by the project. Agencies will provide direction on the mitigation/avoidance measures required to reduce impacts to the species to non-significance, which will be adopted by the team. The resource agencies will ultimately provide a Biological Opinion to the USACE and CDFG.

Products: USACOE Permit Application, RWQCB Certification Application and CDFG Streambed Alteration Agreement Application

Meetings: 2 Staff Meeting, 2 Agency Meetings or Site Visits



Budget - Phase 1		Sound Watershed			BioMaAS			Total Hours	Fee
		Mike Liquori \$128	Jessica Albiets \$104	Jana Sokale \$143	Hodge, Powell, \$132	McGinnis \$132	Sandra Etchell \$143		
s	Task	Estimated Hours							
	Alameda Creek Desilting Project								
1	Background Document and Construction Plan Review	8	12	8	8		36	\$ 4,472	
1.1	Project Kick-off	4	4	4	4		20	\$ 2,600	
2	Biological Assessment & Species Surveys						0	\$ -	
2.1	Executive Summary	1		4			5	\$ 700	
2.2	Introduction	1		4			5	\$ 700	
2.3	Project History	1		6			7	\$ 986	
2.4	Project Description	2	4	16			22	\$ 2,960	
2.5	Environmental Setting	1		4			5	\$ 700	
2.6	Listed Species Review	1		4			17	\$ 2,416	
2.7	Field Surveys						0	\$ -	
2.7.1	Conduct Initial Survey for Suitable Habitat	2	4	8	100		114	\$ 15,016	
2.8	Impact Assessments - Direct, Indirect and Cumulative	2		4			22	\$ 3,116	
2.9	Conservation Measures	2		2			16	\$ 2,258	
2.10	Monitoring	4		2			14	\$ 1,942	
2.11	Determination of Effect	2		4			14	\$ 1,972	
2.12	Literature Cited			4			8	\$ 1,144	
2.13	Reporting and Graphics	8	16	16		8	60	\$ 7,748	
2.14	Meetings	8	8	16		8	48	\$ 6,344	
2.15	Respond to Comments and Finalize BA	4	4	12		8	40	\$ 5,416	
3	Wetland Delineation						0	\$ -	
3.1	Conduct Wetland Delineation Fieldwork						0	\$ -	
3.2	Prepare Report						0	\$ -	
3.3	Prepare Mapping						0	\$ -	
3.4	Respond to Comments and Finalize Delineation						0	\$ -	
3.5	Attend Verification Meeting with USACE						0	\$ -	
4	Permits						0	\$ -	
3.1	USACE - 404 Nationwide Permit	2	12	4			18	\$ 2,076	
3.2	DFG - Streambed Alteration Agreement	2	12	4			18	\$ 2,076	
3.3	RWQCB - 401 Certification	2	12	4			18	\$ 2,076	
3.4	Create Maps, Exhibits and Graphics	8	16	2			26	\$ 2,974	
3.5	Attend Meeting to Review Permit Applications and Discuss Permitting Issues	4	4	4	4		16	\$ 2,028	
3.6	Respond to Agency Comments	4	8		4		16	\$ 1,872	
3.7	Attend Site Visit with Agencies	4	4	4	4		16	\$ 2,028	
5	Clapper Rail Protocol Level Surveys						0	\$ -	
5.1	Conduct Field Surveys						0	\$ -	
5.2	Prepare Report						0	\$ -	
	Expenses (mileage, printing costs, etc)						0	\$ 1,800	
	Tota Alameda Ck Desilting Project Fee	77	120	140	124	24	581	\$ 77,420	

Budget - Phase 1		Sound Watershed		BioMaAS			Total Hours	Fee
		Mike Liquori	Jessica Albietz	Jana Sokale	Hodge, Powell,	McGinnis		
Eden Canyon Project								
1	Background Document and Construction Plan Review	4	8	8			20	\$ 2,488
1.1	Project Kick-off	4	4	4	4		20	\$ 2,600
2	Biological Assessment & Species Surveys						0	\$ -
2.1	Executive Summary	1		4			5	\$ 700
2.2	Introduction	1		4			5	\$ 700
2.3	Project History	1		4			5	\$ 700
2.4	Project Description	2		8			10	\$ 1,400
2.5	Environmental Setting	2		4			6	\$ 828
2.6	Listed Species Review	1		2		8	11	\$ 1,558
2.7	Field Surveys for Red-legged Frog	1		4	48		53	\$ 7,036
2.8	Impact Assessments - Direct, Indirect and Cumulative	1		4		12	17	\$ 2,416
2.9	Conservation Measures	1		2		8	11	\$ 1,558
2.1	Monitoring	2		2		10	14	\$ 1,972
2.11	Determination of Effect			6		6	12	\$ 1,716
2.12	Literature Cited			4		4	8	\$ 1,144
2.13	Reporting and Graphics	6	12	8	12	10	48	\$ 6,174
2.14	Meetings	8	8	16	8	8	48	\$ 6,344
2.15	Respond to Comments and Finalize BA			8	4	8	20	\$ 2,816
3	Wetland Delineation						0	\$ -
3.1	Conduct Wetland Delineation Fieldwork						0	\$ -
3.2	Prepare Report						0	\$ -
3.3	Prepare Mapping						0	\$ -
3.4	Respond to Comments and Finalize Delineation						0	\$ -
3.5	Attend Verification Meeting with USACE						0	\$ -
4	Permits						0	\$ -
4.1	USACE - 404 Nationwide Permit	2	12	4			18	\$ 2,076
4.2	DFG - Streambed Alteration Agreement	2	12	4			18	\$ 2,076
4.3	RWQCB - 401 Certification	2	12	4			18	\$ 2,076
4.4	Create Maps, Exhibits and Graphics	6	12				18	\$ 2,016
4.5	Attend Meeting to Review Permit Applications and Discuss Permitting Issues	4	4	4	4		16	\$ 2,028
4.6	Respond to Agency Comments	8	8	4	8		28	\$ 3,484
4.7	Attend Site Visit with Agencies	4	4	4	4		16	\$ 2,028
	Expenses (mileage, printing costs, etc)						0	\$ -
							0	\$ 1,200
	Total Eden Canyon Project Fee	63	96	116	4	88	445	\$ 59,134
	Total Fee	140	216	256	128	112	1026	\$ 136,554