

NOTICE AND AGENDA

Regular Meeting

Board of Directors Aquatic Science Center

> To Be Held March 3, 2011 11:30am-2:30pm

San Francisco Estuary Institute 7770 Pardee Lane First Floor Conference Room

> Oakland, CA 94621 Phone (510) 746-7334

The Business Meeting will be preceded by an informational discussion session with the SFEI Board of Directors at 11:30, followed by lunch at 12:30pm

- 1. Call to Order (5 minutes)
- 2. Public Comments (5 minutes)
- 3. Consent Items (5 minutes)
 - a) Approval of Agenda
 - b) Approval of December 2, 2010, Meeting Minutes (Attachment 1)
- 4. Review of Action Items from December meeting (5 minutes)
- 5. Action Items (15 minutes)
 - a) Approve Program Plan Update (Attachment 2)
- 6. Information and Discussion Items
 - a) Director's Report (Attachment 3) 15 minutes
 - b) Update on Exposure Reduction Project 15 minutes

7770 Pardee Lane Second floor Oakland, CA 94621 p: 510-746-7334 f: 510-746-7300

BOARD MEMBERS

David Williams WCE-CHARGEORETARY Pamela Creedon TREASURER Frank Leung EXECUTIVE DIRECTOR Rainer Hoenicke **Bruce Wolfe**

Darrin Polhemus Mike Connor Kirsten Struve Alexis Strauss



- c) Strategic Plan Development Next Steps and Critical Decision Points between March and June (Attachment 4)
 - 50 minutes
- 7. Future Meeting Agenda Items
- 8. Adjournment

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BOARD MEMBERS

CHAIR David Williams

vice-ONANISECRETARY Pamela Creedon

> TREASURER Frank Leung

EXECUTIVE DIBECTOR

Rainer Hoenicke

Bruce Wolfe
Darrin Polhemus

Mike Connor

Kirsten Struve

Alexis Strauss

Attachment 1

DRAFT Minutes of the Aquatic Science Center Board of Directors December 2, 2010

Members Present:

Darrin Polhemus State Water Resources Control Board
Pamela Creedon, Central Valley Regional Water Quality Control Board
David Williams, Bay Area Clean Water Agencies
Kirsten Struve, Bay Area Clean Water Agencies
Mike Connor, Bay Area Clean Water Agencies
Alexis Strauss, U.S. Environmental Protection Agency, Region 9
Dyan Whyte (Alternate), San Francisco Bay Regional Water Quality Control Board
Amy Chastain (Alternate), Bay Area Clean Water Agencies
Rainer Hoenicke, San Francisco Estuary Institute

Others Present:

Stephanie Seto, San Francisco Estuary Institute Trish Mulvey, SFEI Board and CLEAN South Bay Marc Beyeler, Marc Beyeler Associates Page Nelson, Marc Beyeler Associates Letitia Grenier, San Francisco Estuary Institute

1. Call to Order

Mr. Williams, Board Chair, called the meeting to order at 1:00 p.m.

2. Public Comments

None

3. Consent Items

Mr. Williams made a motion to approve all consent items, including the agenda and September 2, 2010 meeting minutes. The motion was seconded by Ms. Strauss and passed unanimously.

4. Review of Action Items from September Meeting

Mr. Williams reviewed and approved all completed action items.

5. Action Items

Mr. Williams made a motion to approve the strategic planning schedule and budget (Attachment 2). The motion was seconded and passed unanimously. There was discussion to modify the proposed vision, mission, goals and objectives (Attachment 3).

Strategic Planning Process (Revised): Arrow from Program Evaluation should point back to Goals.

Vision Statement (Revised): Protect and enhance aquatic ecosystems supported by unbiased science.

Mission Statement (Revised): Provide scientific support tools for public decision-making and communication through collaborative efforts.

Goal 1 (Revised):

Goal 2 (Revised): Expand data and information synthesis by developing tools and systems.

Goals 3 and 4: Switch the order

Goal 3 (Revised): Provide an independent and accessible forum to improve and communicate with a wide variety of stakeholders and decision-makers.

Goal 4 (Revised): Maximize the use of public resources by providing scientific, information management, and administrative support.

Action item:

 Dr. Hoenicke will work with Mr. Beyeler and Mr. Nelson to revise the vision and mission statements, goals and flowchart in time for the January Planning Subcommittee conference call.

6. Information and Discussion Items

Dr. Hoenicke reviewed the Executive Director's Report and revised Program Plan. He discussed next steps regarding the water quality monitoring proposal from Dr. Cloern. There was also discussion regarding implications of new ASC goals and objectives (relationships to SFEI, broader representation on Board of Directors, possible administrative infrastructure requirements. Dr. Hoenicke welcomed any questions, concerns, and/or advice from all Board Members. He will forward a copy of the draft matrix to all Board members following the Planning Subcommittee conference call in January 2011.

Action items:

- Ms. Seto will schedule a meeting for the next Planning Subcommittee conference call in January 2011.
- Dr. Hoenicke will forward a copy of the draft matrix to all Board members following the Planning Subcommittee conference call.
- Dr. Hoenicke will contact Ms. Webster to request her attendance at the meeting in March.

Future board meetings for 2011 are scheduled for March 3 (joint meeting with SFEI), June 2 (full-day retreat), September 1 (joint meeting with SFEI), and December 1 (joint meeting with SFEI). Future discussion topics include preparation for the full-day retreat in June; results of the risks, opportunities, and results of the environmental scan; how the governance of this organization needs to change slightly based on the new mission, vision, and goals (challenges, types of stakeholders to invite).

7. Adjournment The meeting is adjourned at 2:35 p.m.	
Respectfully submitted,	
Pamela Creedon, Board Secretary	Date

Action Item	Who? When?	Status
1) Dr. Hoenicke will work with Mr. Beyeler and Mr. Nelson to revise the vision and mission statements, goals and flowchart in time for the January Planning Subcommittee conference call.	Dr. Hoenicke, Mr. Beyeler, Mr. Nelson	Done
2) Ms. Seto will schedule a meeting for the next Planning Subcommittee conference call in January 2011.	Ms. Seto	Done
3) Dr. Hoenicke will forward a copy of the draft matrix to all Board members following the Planning Subcommittee conference call.	Dr. Hoenicke	Done
4) Dr. Hoenicke will contact Ms. Webster to request her attendance at the meeting in March.	Dr. Hoenicke	Done

Attachment 2

Staff Summary

TO: Board of Directors

FROM: Rainer Hoenicke, Executive Director

Date: March 3, 2011

SUBJECT: 2010/11 Program Plan Amendment

Although the current ASC Program Plan includes three project line items related to scientific support for wetland and riparian area protection efforts (see Program Plan excerpts below), a potentially significant project is in the initial scoping phase now, led by the State Water Board 401 Certification Unit, that involves two key elements for which the Water Board has requested ASC involvement. This proposed effort would go beyond the broad topic outlines in the current Program Plan related to:

- 9) Scientific Assistance to State Water Board for development of a statewide riparian and wetland system protection policy and implementation guidance. \$250,000-\$450,000
- 10) Developing California capacity to assess the performance of wetland protection policies, programs, and projects in a watershed context. \$300,000-\$450,000
- 11) Development and implementation of a standardized set of assessment and tracking tools for California wetlands and riparian areas. \$1.5- 2M

The California High Speed Rail Authority is required to obtain a joint 404 permit from EPA and the Corps of Engineers, and 401 certification by the State Water Board, in addition to obtaining a stormwater NPDES permit under Section 402 of the CWA, before beginning construction on their six high-speed rail segments between Sacramento, San Francisco and Los Angeles, plus associated infrastructure, such as terminals, parking areas, maintenance yards, and other developments that could impact aquatic resources, alter pre-development hydrology, and contribute to additional degradation of receiving waters through polluted runoff. The Water Board does not have the staff resources to conduct the necessary permit coordination and development and has approached the HSRA to place a qualified, limited-term staff member via an interagency personnel agreement or similar mechanism at the permitting agency. The ASC was proposed as the fiduciary agent. In addition, the Water Board desires to evaluate the types of aquatic resources that may be impacted by the HSRA construction activities, assess their condition before any impacts may occur and use this information to determine mitigation ratios in case adverse impacts cannot be avoided. The ASC was requested to provide the science support for technical transfer of a standardized set of assessment and tracking tools, enhance the GIS-based aquatic resource inventory data where necessary for identification of potential impacts and their possible avoidance, and to assist with restoration and mitigation designs based on the methodology developed in by our Historical Ecology team. Over the years, this project could have a price tag exceeding \$1M.

In addition, ASC services are requested by the Bay Conservation and Development Commission to assist them with: (1) analysis and considering amendments to the San Francisco Waterfront Special Area Plan; (2) amendments to the Commission's San Francisco Bay Plan regarding climate change; and (3) providing workshop logistics and institutional development support to the Commission's work on the Regional Airport Planning Committee.

Both projects require contractual support for their existing agency staff, either fully, as in the case of BCDC, or partially, as in the case of the Water Board, to meet goals that the agencies currently cannot meet on their own, given the state budget crisis and inability to hire limited-term staff through the Department of Personnel Administration.

The third project involves assistance to the Santa Clara Valley Water District (SCVWD) and local stakeholders to document historical conditions in the vicinity of Almaden Lake and the confluence of Alamitos and Guadalupe Creeks through engaging, accessible visual and technical materials. These materials would provide context for evaluating various options considered by the Water District to re-engineer water infrastructure in the vicinity of the Alamitos Creek/Guadalupe Creek confluence (near the intersection of Almaden Expy and Coleman Rd). The re-engineering plan includes the possible draining of the artificial Almaden Lake. Some percolation ponds and SCVWD buildings immediately up- and downstream of the confluence are also included in the study area. The goal of this project is to present stakeholders with an array of historical maps, aerial photos and narrative descriptions illustrating how the study area has changed over time.

Amendment to 2009/10 ASC Program Plan

March 3, 2011

Additional Projects to Be Included in Plan:

- 1) Aquatic Resource Protection and Mitigation Planning Support for the California High Speed Rail Authority Permitting Consortium (\$1-2M)
- 2) Logistics and Planning Support for the Bay Conservation Development Commission (\$50,000)
- 3) Documenting Historical Conditions and Change at The Confluence of Alamitos and Guadalupe Creeks Including The Current Site of Almaden Lake (\$10,000)





AQUATIC SCIENCE CENTER and the SAN FRANCISCO ESTUARY INSTITUTE

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Program Plan Update

Q1 • 2011

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Introduction and Financial Health Indicators Summary

Our new project planning, tracking, and accounting software package has now experienced almost a full year of use. Its fairly complex features caused a fairly long transition period before all features became fully utilized. All Project Managers, in addition to our Controller and Contract Manager are now fully familiar with the system, and we are learning how to fine-tune the planning module to bring our work-load forecasts into tighter agreement with actual hours billed. We closed the 2010 fiscal year with a small surplus of \$79,000. Our first month of 2011 showed a sizeable loss, primarily due to a mix of proposal-writing activities and higher-thannormal expenses based on our consultant contracts and first-quarter insurance expenditures (e.g. workman's compensation). Figure 1 represents a summary of our financial health and operational effectiveness indicators that provide management with an easy view for required course corrections. Table 1 highlights the number of months that projects already on the books or in the negotiation pipeline can sustain planned expenses, while Figure 2 shows in graphic form how expiring projects are being replaced with new revenue coming in, and how anticipated no-cost time extensions may bring the monthly revenue projections in line with anticipated expenditures. Our fourth-quarter revenue in 2010 was, as usual, considerably lower than expenses due to vacations and holidays, but also due to higher than forecasted consultant costs (see Figure 3). Asset and liability trends are depicted in Figure 4, with our unrestricted cash reserve largely stabilized following the re-activation of suspended projects that caused us to dip into our accumulated reserve following the bond-funded project suspension during the first half of 2009. I expect the reserve to steadily grow in 2011 based on our revenue projections.

Financial Health Indicators

Table 1 "Dashboard" – Financial and Operational Effectiveness

target achieved slightly below target significantly below target

ITEM #	METRIC	IMPOR- TANCE (1-10)	TOLERANCE	TARGET	JAN PERFOR- MANCE	DEC PERFOR- MANCE	NOV PERFORMANCE	NOTES/CORRECTIVE ACTION
	Income							
1	Billable percentage	6	66-69%= yellow	72%	66.7%	63.7%	62.6%	Historically low due to end of the year
2	Hours billed (rolling target)	6	4850-4975= yellow	5100	4713	4479	4382	unbillable projects e.g. performance reviews)
3	Billed revenue (rolling target)	8	\$400k-420k=yellow	\$420,000	\$368,821	\$284,478	\$350,099	
4	Net Current Assets	8	75-100% target= yellow	\$1,500,000	\$1,260,064	\$1,373,306	\$1,294,828	
5	Unrestricted Cash Reserve	10	\$400k-500k= yellow	\$1,200,000	\$383,259	\$379,702	\$482,038	
6	Days of funding in reserve	10	45-90= yellow	90	22	25	32	Playing catchup
7	Monthly surplus	8	\$0-10k= yellow	\$20,000	\$(71,440)	\$(45,310)	\$(38,869)	Historically a \$20-30k deficit in January; higher benefits this month than in years' past (institute conversion to HSA account); high controllables due to operational consultants ~\$30k; higher than usual overhead time spent on new hires.
8	Target yearly surplus (rolling target)	10	0-50% target= yellow	\$180,000	\$(71,440)	\$79,460	\$124,770	

EXPENSES

9	Total (rolling target)	10	\$0-10k current mth labor + \$87k= yellow	Current mth labor + \$87k	\$440,094	\$378,272	\$386,099	Higher payroll taxes in January as usual, high operational consultants cost
	Labor	2		No target	\$354,599	\$302,725	\$316,979	
10	All expenses except labor	5	\$65k-70k=yellow	\$60,000	\$85,495	\$75,547	\$69,120	Operational consultants - \$30K
11	Controllables	4	\$30k-35k=yellow	\$27,223	\$44,070	\$33,356	\$25,193	Operational consultants - \$30K

OPERATIONAL **EFFECTIVENESS**

12	Projected hours vs actual hours	9	95-100%=yellow	within 5%	81%	76%	73%	Still fine tuning planned hours on accounting system
13	Ratio of Projected monthly labor revenue to actual labor revenue	7	130-140%=yellow	120%	150%	164%	159%	Workload still heavy
14	A/R > 90 days	6	\$100-150k= yellow	\$120,000	\$235,974	\$91,822	\$124,775	\$141k from WRMP (collected in February)
15	Invoices returned within 10 days	3	70-80%=yellow	80%	62%	66%	72%	
16	Business days all time sheets in	4	3-5= yellow	3	3	6	6	

Fundraising

17	Contracted Monthly equivalent	10	20-24= yellow	24	26	29	28	
18	Proposals funded (rolling target)	9	75-90% target= yellow	\$3,360,000	\$176,330	\$2,086,621	\$2,054,740	Not necessarily a problem with existing workload.



Figure 1 Projected Revenue & Expense Feb 2011 - Dec 2013



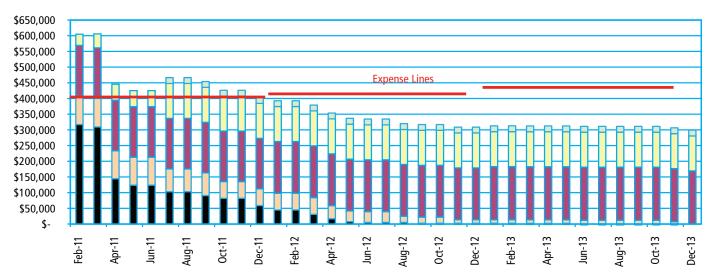


Figure 2 Revenue and Expense

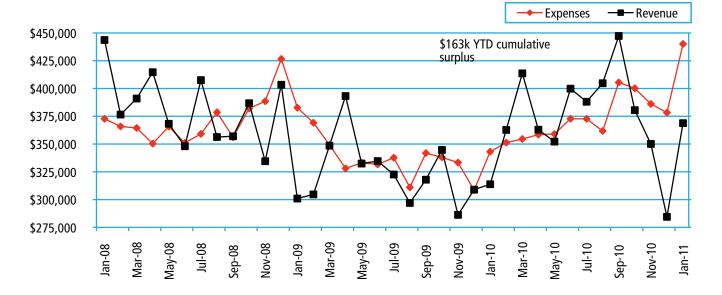


Table 2

Type of Funding	Amount		Expens	ses/Mth	Month Equivalent	
Contracted Labor Balance	\$	4,875,147	\$	400,000		12
In Negotiations	\$	3,573,915	\$	400,000		9
Proposals (discounted)	\$	555,871	\$	400,000		1
2012 Additional RMP Labor	\$	1,635,410	\$	420,000		4
	•			TOTAL		26

Table 3-5 Proposals submitted, awarded proposals in contractual negotiations, and contracts signed since last reporting period

Budget Updates

Table 3 Proposals Submitted

SFEI ASC

PROPOSALS SUBMITTED	TOTAL AMOUNT SUBMITTED	AMOUNT TO SFEI	PERCENT PROB- ABILITY OF FUNDING	DISCOUNTED ESTIMATED PROBABILITY	FUNDING SOURCE/ PARTNERS	ANTICIPATED NOTICE OF AWARD	ANTICIPATED DURATION	SOLICATED S, COMPETITIVE C, RENEWAL R	LAST UPDATED
Exploring Change Over Time	\$18,200	\$18,200	40%	\$7,280	Institute of Museum and Library Services/San Diego History Center	Jul-11		С	2/10/2011
A toxicoge- nomic ap- proach for the quantification of contaminant bioavailability in remediated sediments	\$82,132	\$82,132	50%	\$41,066	U of Mass Boston	Sep-11	3 years	С	2/9/2011
OMC - Reconstruction of Histori- cal Oakland Landscape	\$29,500	\$29,500	70%	\$20,650	Oakland Museum	Mar-11	6 months	S	1/12/2011
High Speed Rail Authority Mitigation Planning and Permitting	\$600,000	\$300,000	60%	\$180,000	HSRA			S	2/14/2011
TOTAL SFEI:	\$129,832	\$129,832	53%	\$68,996					
TOTAL ASC:	\$600,000	\$300,000	60%	\$180,000					
GRAND TOTAL:	\$729,832	\$429,832	58%	\$248,996					

Budget Updates

Table 4 Awarded Proposals

SFEI ASC

AWARDED IPROPOSALS IN CONTRACTUAL NEGOTIATIONS	AMOUNT SUBMITTED	AMOUNT AWARDED	AMT TO SFEI/ ASC LABOR	FUNDING SOURCE/ PARTNERS	ANTICIPATED START DATE	ANTICIPATED DURATION DATE	S,C,R	LAST UPDATED
Misc. CRAM Training for Mitigation As- sessment	\$20,000	\$20,000	\$20,000	CalTrans/DWR	Mar-11	6 months	R	2/14/2011
Fremont Roads Ret- rofit LID for Cleaner Stormwater	\$203,095	\$203,095	\$93,328	EPA/SFEP	May-11	Aug-11	С	2/14/2011
T-Sheet Geodatabase & Workshop Prep	\$8,500	\$8,500	\$8,500	SCC	Mar-11	?	S	2/10/2011
T-Sheet Atlas Review	\$5,000	\$5,000	\$5,000	SCC	Mar-11	?	S	2/10/2011
Ventura Historical Ecology Study	\$36,000	\$36,000	\$36,000	SCC	Feb-11	3 months	R	2/7/2011
Wetlands Protec- tion Development — CRAM	\$44,250	\$44,250	\$44,250	EPA/SJSURF/CCWG/ SCCWRP	Feb-11	2 years		1/12/2011
Online 401 2011	\$80,000	\$80,000	\$80,000	EPA/SWRCB	Feb-11	1 year	S	1/28/2011
TOTAL SFEI:	\$316,845	\$316,845	\$207,078					
TOTAL ASC:	\$80,000	\$80,000	\$80,000					
GRAND TOTAL:	\$396,845	\$396,845	\$287,078					

Table 5

SFEI ASC

CONTRACTS SIGNED	AMOUNT SUBMITTED	AMOUNT OF AWARD	AMOUNT TO SFEI	FUNDING SOURCE / PARTNERS	ASSIGNED PROJECT #	SOLICITED S, COMPETITIVE C,, OR RENEWAL R	LAST UPDATED
My Water Quality Wetlands Portal Improvements	\$30,500	\$30,500	\$30,500	SWRCB/SJSURF	1066.2	R	2/7/2011
Selenium in Bay Area Effluent	\$23,800	\$23,800	\$15,500	BACWA	1090		1/31/2011
Senador Creek Watershed Restoration	\$79,547	\$38,253	\$36,352	Santa Clara County Park District/URS	5077	S	1/19/2011
Flood Marker Art Piece at Trancas Crossing Park	\$14,850	\$14,850	\$1,250	City of Napa/Brews- ter Design Arts	7078	S	1/3/2011
GIS Support for RWQCB	\$15,000	\$15,000	\$15,000	RWQCB	8602	S	2/23/2011
Delta Water Quality	\$200,000	\$197,260	\$123,228	EPA/Brock Bernstein	8104	С	1/3/2011
TOTAL SFEI:	\$148,697	\$107,403	\$83,602				
TOTAL ASC:	\$215,000	\$212,260	\$138,228				
GRAND TOTAL:	\$363,697	\$319,663	\$221,830				

Staffing Updates



New Staff Members and Employment Offers Accepted and in Progress

Deputy Director: Kelleen Griffin began working on February 16, 2010. Her bio is included in the introduction to the Executive Director's Report.

Environmental Scientist: Dr. Chris Eckley conditionally accepted the offer to join Lester McKee's team and will likely begin work at SFEI in May. Chris has been researching the influence of urbanization on watershed transport and transformation of mercury and a variety of other contaminants and is leaving a position as Visiting Fellow at Environment Canada in Vancouver.

Senior Scientist: We are in the process of negotiating an offer to an experienced bio-geochemist with a Ph.D. in Civil and Environmental Engineering from MIT with broad experience working with interdisciplinary teams in a variety of environmental settings (Gulf of Mexico, Zambezi River Basin, Swiss lakes) and a keen interest in integrated water resources management.



Table 10 Training and Development

NAME	CONFERENCES & SYMPOSIUMS'	TECHNICAL INSTRUCTIONS	PROJECT MANAGEMENT	BUSINESS-FOCUSED TRAINING PROGRAMS
Allen				
Askevold				
Beagle				
Beller				
Bezalel				
Cabling				
Cayce	1			
Clark	·			
Collins				
David				1
Davis				•
Featherston				
Franz		1		
Frontiera		1		
Gilbreath		•		
Gluchowski				
Greenfield	1	1		
Grenier	'	'		
Grosso				
Grossinger				
Hoenicke				
Hunt				
Jabusch				
Kass				
Klatt				
Klosterhaus				
Lent				
Leung, F				
Leung, L				
Lowe				
May				
Melwani				
McKee				
Pearce				
Ross		1		
Russio		1		
Salomon				
Sedlak				
Seto				
Stanford				
Striplen	1			
Wanczyk	ı			
Whipple				
Williams	1			
	ı			
Wong	2			
Yee	2	4	0	1
Total:	2	4	0	1

AQUATIC SCIENCE CENTER

Project Title

Online 401 2011

PROJECT CODE

8602

START DATE

February 1, 2011

ANTICIPATED COMPLETION

March 31, 2012

TOTAL FUNDING

\$80,000

FUNDING FOR SFEI LABOR

\$80,000

FUNDING FOR 2011 SFEI LABOR

\$75,000

STATUS

In Negotiations

DIRECT CLIENT

SWRCB

PRIMARY CLIENT

EPA

LEAD SCIENTIST

Mike May

PROJECT MANAGER

Mike May

Project Description

This contract provides rollout support, including training workshops and 2011 technical support, for the online application for wetland dredge/fill project certification. The online application was created under a previous EPA contract to the ASC, and provides a more efficient, automated, and standardized application and project tracking process. The new contract also provides some funds for additional feature development based on feedback from Regional and State Board staff. .

Work Products

- 4 training workshops held
- Augmented online help system
- Augmented application features, including PDF download,

export to CIWQS, and pre-submittal application check

Plans for 2011

All work is planned for 2011, however, support services will extend for 12 months from funding date, and therefore into the first half of 2012

Recent Findings and Publications

Project not started

Project Status

New contract

SAN FRANCISCO ESTUARY INSTITUTE

Project Title

Wetlands Protection Development – CRAM

PROJECT CODE

40xx

START DATE

February 1, 2011

ANTICIPATED COMPLETION

January 31, 2013

TOTAL FUNDING

\$44,250

FUNDING FOR SFEI LABOR

\$44,250

FUNDING FOR 2011 SFEI LABOR

\$14,750

STATUS

In Negotiations

DIRECT CLIENT

EPA / SJSURF

LEAD SCIENTIST

Josh Collins

PROJECT MANAGER

Cristina Grosso

COLLABORATORS

CCWG / SCCWRP

Project Description

A crucial component of a comprehensive statewide wetland assessment program is the development of a process to support the additional development and refinement of all validated CRAM modules. This core element of the assessment toolkit is urgently needed to facilitate the on-going development of wetland assessment programs and smooth implementation of existing statewide programs. To accomplish this, the following activities are proposed: project administration and reporting; annual standardization of CRAM materials; coordination of CRAM training materials across the State; and manage the QA process and support biannual events for CRAM development team. Tasks will be shared among several collaborators in each region, with CCWG taking the lead on project administration and technical coordination.

Work Products

Work products include:

- Formal CRAM manual independent of field books
- expanded descriptions and definitions necessary for standardized scoring of CRAM attributes and metrics for all validated modules
- annually updated CRAM manual and field books for three modules
- annual minor updates to eCRAM for three modules
- annually updated CRAM plant list
- continuously updated CRAM website
- standardized set of CRAM training powerpoints for three modules
- annual update of CRAM training powerpoints based on manual and field book updates
- 3 CRAM module photo inventories of common plants and indicators useful for the scoring of CRAM attributes and metrics for three main regions of the State
- 9 field verification/audits sites for each training region of the State (36 total) to assist in practitioner training/testing

Plans for 2011

The project's plans for 2011 include updating the quality assurance project plan (QAPP), incorporating major updates to CRAM manual, expanding CRAM descriptions and definitions, incorporating updates to the CRAM manual and field bookslist, and the CRAM website, and will take part in the regional team meetings to be held twice annually., eCRAM, and plant list on an annual basis, updating the CRAM website as needed, preparing a standardized set of CRAM training powerpoints that will be updated on an annual basis, compiling regional photo inventories of common plants and indicators, conducting field verification/audits sites for each region of the State, and holding biannual meetings of the CRAM PI team. SFEI staff will assist in the updating of eCRAM, the eCRAM plant

Recent Findings and Publications

California Wetlands Monitoring Workgroup (CWMW). 2009. Using CRAM (California Rapid Assessment Method) to Assess Wetland Projects as an Element of Regulatory and Management Programs. 46 pp.

Sutula, M., J. Collins, A. Wiskind, C. Roberts, C. Solek, S. Pearce, R. Clark, A.E. Fetscher, C. Grosso, K. O'Connor, A. Robinson, C. Clark, K. Rey, S. Morrissette, A. Eicher, R. Pasquinelli, M. May and K. Ritter. 2008. Status of Perennial Estuarine Wetlands in the State of California. Final Report to

Project Status

Contract in negotiation.

Project Title

Fremont Roads Retrofit LID for Cleaner Stormwater

PROJECT CODE

5069

START DATE

May 1, 2011

ANTICIPATED COMPLETION

June 30, 2012

TOTAL FUNDING

\$203,095

FUNDING FOR SFEI LABOR

\$98,328

FUNDING FOR 2011 SFEI LABOR

\$30,000

STATUS

In negotiation

DIRECT CLIENT

ABAG/SFEP

PRIMARY CLIENT

EPA

LEAD SCIENTIST

Lester McKee

PROJECT MANAGER

Jennifer Hunt

COLLABORATORS

RiverMetrics (Rand Eads)

Project Description

The Fremont Low Impact Development (LID) Tree Well Filter (TWF) pilot project aims to retrofit moderate density urban feeder streets with green stormwater infrastructure to improve city aesthetics and treat urban runoff to remove PCBs, mercury, copper and trash as specified in San Francisco Bay Basin Water Quality Control Plan TMDLs and SSOs. The City of Fremont tree well system incorporates landscape beautification elements, water quality treatment, and trash capture and is proposed as a suitable system to achieve these aims. The City intends to build 14 TWF systems over the next few years and install interpretive outreach signage and conduct student tours to boost public and city employee awareness and promote further implementation.

In the context of the EPA grant funding framework, achieving these aims and intentions constitutes tangible outputs. In addition to implementation of 14 TWF systems, the City plans to carry out direct observation, maintenance, and water quality monitoring to determine maintenance methods, costs, and schedule, trash capture rate, and pollutant removal capability. In the context of the EPA grant, the intended outcomes of the pilot project include:

Work Products

Roster of instructors and trainees, teaching materials, course evaluation forms, and a synopsis of the effort overall

Project Title

BASMAA Assistance MRP Database Development

PROJECT CODE

50xx

START DATE

Unknown

ANTICIPATED COMPLETION

Unknown

TOTAL FUNDING

\$50,000

FUNDING FOR SFEI LABOR

\$50,000

FUNDING FOR 2011 SFEI LABOR

Unknown

STATUS

Proposal – 90% probability

DIRECT CLIENT

BASMAA

PRIMARY CLIENT

BASMAA

LEAD SCIENTIST

Lester McKee

PROJECT MANAGER

Cristina Grosso

Project Description

The Bay Area Stormwater Management Agencies Association (BASMAA) was started by local governments in response to the National Pollutant Discharge Elimination System (NPDES) permitting program for storm water in an effort to promote

Project Descriptions

regional consistency and to facilitate efficient use of public resources. The organization focuses on regional challenges and opportunities to improving the quality of storm water runoff to the San Francisco Bay and Delta.

A Municipal Regional Stormwater NPDES Permit (MRP) was adopted by the Water Board in October 2009. The MRP covers stormwater discharges from municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo. This project will assist BASMAA in developing a database for MRP data that is coordinated with the State's data management efforts, such as SWAMP and CEDEN.

Work Products

Work products include assisting BASMAA in developing a database for MRP data that is coordinated with the State's data management efforts, such as SWAMP and CEDEN.

Plans for 2011

Unknown

Recent Findings and Publications

Municipal Regional Stormwater NPDES Permit (MRP) documents are located at http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/stormwater/mrp.shtml

Project Status

Proposal pending - 90% probability

Project Title

Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities

(IRWMP Prop 84 Flood Infrastructure & DAC)

PROJECT CODE

Unknown

START DATE

October 2011

ANTICIPATED COMPLETION

September 2014

TOTAL FUNDING

\$2,082,026

FUNDING FOR SFEI LABOR

\$656,550

FUNDING FOR 2011 SFEI LABOR

\$150,000

STATUS

Proposal - 80% probability

DIRECT CLIENT

DWR

PRIMARY CLIENT

DWR

LEAD SCIENTIST

Josh Collins

PROJECT MANAGER

Kristen Cayce

COLLABORATORS

Clean Water Action (CWA)

Environmental Justice Coalition for Water (EJCW)

Bay Area Flood Protection Agencies Association (BAFPAA)

Bay Area Watershed Network (BAWN)

Project Description

Lester McKee and Letitia Grenier were part of an expert The ultimate goal of this Program is to allow local agencies to better serve low-lying, disadvantaged or underserved communities in ways that address critical water quality issues caused by flooding and stormwater discharges into the community the exacerbating impacts of climate change from sea-level rise, modification in rain patterns, reductions in habitat, and increased greenhouse gasses. The Program intends to compensate for the imbalance in financial and informational resources among the IRWMP functional areas by serving watershed groups and partnerships through the Bay Area Watershed Network in order to increase watershed restoration technical assistance and participation in the IRWMP.

As part of this project SFEI will gather, compile and standardize existing flood infrastructure data into a Geographic Information System (GIS) database, with an emphasis on identifying flood prone areas in low-lying disadvantaged communities (DAC) which are particularly vulnerable to the impacts of flooding on water quality and to the impacts of future sea level rise.

Project Objectives:

- Compile existing flood infrastructure data into a regional Geographic Information System (GIS) dataset to identify infrastructure or data gaps, assist in regional planning, and provide information for coordination among managers.
- Integrate the flood infrastructure mapping with Bay Area

Project Descriptions

Aquatic Resource Inventory (BAARI) a regional dataset of streams, ditches, stormdrains, and tidal and non-tidal wetlands (Prop 50 funded, to be completed March 2011) that can be used for hydrologic modeling and watershed characterization.

- Produce a web-based interactive map of regional flood infrastructure assets to assist flood agencies in regional planning and coordinate management efforts.
- Tailor statewide definitions of DACs to SF Bay Area and use to identify geographic areas not currently typified as DAC.
- Understand the flood risk to DACs, using the outcome of the San Francisco Bay Area definition and the flood infrastructure maps.

Work Products

Standardized, regional GIS datasets of flood infrastructure data and associated information Interactive web mapping site to access and store regional infrastructure data and information. Integration of the Bay Point DAC pilot project data into the interactive web map

Plans for 2011

Preliminary compilation of existing datasets.

Project Title

Selenium in Bay Area Effluent

PROJECT CODE

1090

START DATE

January 1, 2011

ANTICIPATED COMPLETION

March 1, 2012

TOTAL FUNDING

\$23,800

FUNDING FOR SFEI LABOR

\$15,500

STATUS

Active

DIRECT CLIENT

BACWA

PRIMARY CLIENT

BACWA

LEAD SCIENTIST

Meg Sedlak

PROJECT MANAGER

Meg Sedlak

Project Description

The Conceptual Model of Selenium in North San Francisco Bay developed (Tetra Tech 2008) for the Se TMDL highlights a number of key pathways for understanding the fate of Se in the Bay, including the speciation of Se detected in the water column. Although Se chemical species can be altered through abiotic and biological processes in the Bay, understanding the speciation of Se loads is important to understand their magnitudes relative to in-Bay transformation and uptake processes.

Previous work on San Francisco Bay characterized ambient concentrations of various Se species as well as those of major inputs to the system including refineries and municipal wastewater treatment plant dischargers (Cutter and San Diego-McGlone 1990). In that work, selenate in municipal wastewater effluent was frequently 70 to 90 percent of the total dissolved Se, selenite was 10 to 20 percent, and all other species (primarily organo selenides) typically comprising 0-10% of dissolved Se. However, there were many exceptions, with instances where effluents were not dominantly selenate, including cases of 100 percent selenite, >50 percent organoselenides, and others less extreme. Total Se concentrations in that work ranged from approximately 3 to 28 $\mu g/L$.

]A recent survey of North Bay dischargers for the period 2008 to 2009 observed effluent concentrations much lower, more typically <1 $\mu g/L$, suggesting overall decreases in total Se discharges (BACWA, unpublished data). The typical distribution of Se species in current effluent discharges is unknown and represents a data gap for understanding the current sources of Se to biota (from the dissolved phase to phytoplankton and bacteria), and once in particulate forms (including phytoplankton and organic detritus) to zooplankton, bivalves, and higher trophic organisms.

This project will sample effluent from six wastewater facilities to characterize dissolved Se species. The facilities will be sample four times in 2011 (two wet season and two dry season sampling events).

Work Products

The San Francisco Estuary Institute will provide a short memorandum highlighting the findings which will include a summary table of results and appendix with the data reported by the laboratory. Based on one month lab turnaround, we anticipate the summary memorandum could be completed in the fourth quarter of 2011 (e.g. by sampling in January, April, July, and September).

12

Project Title

My Water Quality Wetlands Portal Improvements

PROJECT CODE

1066.2

START DATE

February 1, 2011

ANTICIPATED COMPLETION

March 31, 2011

TOTAL FUNDING

\$30,500

FUNDING FOR SFEI LABOR

\$30,500

FUNDING FOR 2011 SFEI LABOR

\$30,500

STATUS

Active

DIRECT CLIENT

San Jose State University Research Foundation

PRIMARY CLIENT

SWRCB

LEAD SCIENTIST

Jay Davis

PROJECT MANAGER

Cristina Grosso

COLLABORATORS

MLML

Project Description

SFEI originally incorporated the Wetland Tracker into a California Water Quality Monitoring Council's (CWQMC) My Water Quality (MWQ) portal in 2010. SFEI has now been requested by the SWRCB to make several improvements to this portal. Tasks include migrating the key questions content from http://www.californiawetlands.net/tracker/ to a new MWQ portal (health/wetlands); improving content on question pages under direction of the Wetlands Monitoring Work Group (WMWG) and making all content consistent with the latest MWQ portal guidelines; integrating regional maps to create a single statewide map (CARI) with regional summary information; and providing project management and statewide coordination.

Work Products

The final work product for this project is an improved California Wetlands Portal that incorporates the new content from the WMWG.

Plans for 2011

All tasks outlined in the Project Description will be performed in 2011.

Recent Findings and Publications

None at this time.

Project Status

In progress



Executive Director's Quarterly Report



2011 • Quarter 1

Following a well-deserved holiday break for staff, 2011 started with a bang. The first internal draft of SFEI's updated strategic plan has been circulated for initial comments from staff and our Board, a potentially very significant project in support of assessing mitigation success in a watershed context is in the initial exploratory stages with the State Water Board, USEPA, the Army Corps of Engineers, and the High Speed Rail Authority, and we attracted a new Deputy Director.

Kelleen Griffin's primary role as Deputy Director is to lead all operational and people-development aspects of the organization to support the Institute's strategic directions. She has a strong foundation of practical experience. Kelleen was most recently the acting Chief of Staff for the CEO of Port Blakely Companies in Seattle, a 150 year old family-owned tree farming and forestry company whose mission is to sustain and steward the land in their trust. Kelleen acted as advisor and liaison for the CEO in balancing strategic and human resource initiatives. A student of the human side of enterprise, Kelleen has been acknowledged as a gifted teacher, speaker, and mentor. She has been lauded for her ability to balance the practical realities of business with the authenticity of the human spirit. Since 2008, Kelleen has been a Lecturer at the Center for Innovation and Entrepreneurship at University of Washington's Foster's School of Business. In 2011, she extended her people development teaching and mentoring to Bainbridge Graduate Institute, best known for its MBA in sustainability. Kelleen's work with sustainability-focused organizations combined with her commitment to creating workplaces that support human growth found a ready home with the faculty at BGI. Also in 2011, Kelleen began lecturing at Seattle University in their Entrepreneurship program.

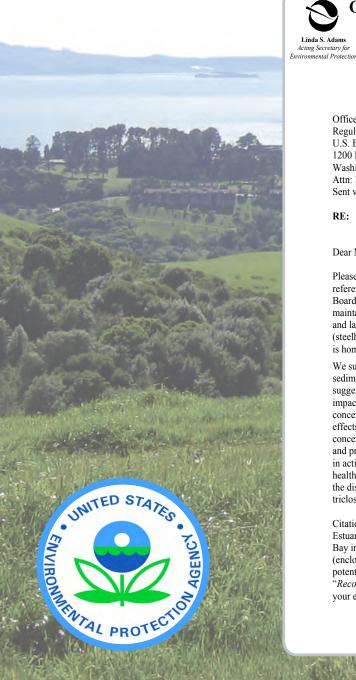
Before she made the Pacific Northwest her home, Kelleen was Senior Director at the Corporate Executive Board, a best practices research firm in Washington D.C. There, she functioned as an international consultant, speaker, and executive coach for her clients around the globe. On the operations side, Kelleen has been the VP of Finance and Administration for a Virginia-based technology company. Prior to this, Kelleen worked on Wall Street and co-led the team that privatized the air traffic control in Canada, as well as working on financing transactions all over the world. A former CPA, Kelleen began her career as an accountant and worked for both Deloitte and Coopers as an auditor. Kelleen completed her Master of Science degree in Organizational Counseling at The Johns Hopkins University in Baltimore, Maryland in 2003. She also holds an MBA from Columbia Graduate School of Business in New York City and a Bachelor of Business Administration from Saint Mary's College of Notre Dame in Indiana. Kelleen believes in the spirit of generosity and the power of creativity. She is committed to working tirelessly to fulfill the vision of a "new" workplace - an energized Community of Purpose that is sustained, healthy, and prosperous.

We all are looking forward to many years of Kellen's active participation in the next phase of the Institute's development.

FEB 3

Regional Board Requests RMP Report to Support Reconsideration of Triclosan Uses

A report prepared by the RMP was recently submitted to the U.S. Environmental Protection Agency, Office of Pesticide Programs (OPP) by the San Francisco Regional Water Quality Control Board (SFRWQCB) to inform their consideration of a petition for the regulation of triclosan. The report, written by **Susan Klosterhaus**, **Rachel Allen**, and **Jay Davis** in 2010, summarizes the current state of knowledge regarding the use, occurrence, fate, and toxicity of triclosan and triclocarban, chemicals commonly used as antimicrobials in liquid and bar soaps. The report also includes recently collected occurrence data for these chemicals in San Francisco Bay and provides information regarding the potential impacts on Bay wildlife. Because triclosan has been detected in Bay sediments and studies by other researchers have suggested that triclosan may cause endocrine disruption and impact the structure and function of algal communities at environmentally relevant concentrations, the SFRWQCB is concerned about the discharge of triclosan into the environment and requested use of the RMP report in their support for reconsideration of the allowed uses of triclosan.



California Regional Water Quality Control Board San Francisco Bay Region

1515 Clay Street, Suite 1400, Oakland, California 94612 (510) 622-2300 • Fax (510) 622-2460 http://www.waterboards.ca.gov/sanfranciscobay Edmund G. Brown, Jr

Date: February 3, 2011

Office of Pesticide Programs (OPP)
Regulatory Public Docket (7502P)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460-0001
Attn: Docket ID Number EPA-HQ-OPP-2010-0548

Sent via email to Timothy F. McMahon at mcmahon.tim@epa.gov

RE: Petition for a Ban on Triclosan, Docket Number EPA-HQ-OPP-2010-0548 Federal Register, December 8, 2010, page 76461

Dear Mr. McMahon:

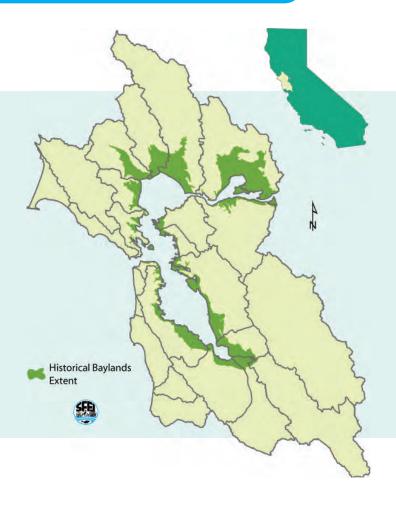
Please accept the enclosed information into the docket for the petition for a ban on triclosan, as referenced above. I represent the San Francisco Regional Water Quality Control Board (Water Board), which is the State of California's regional office with responsibility for enhancing and maintaining the water quality of the San Francisco Estuary and many hundreds of rivers, creeks, and lakes. Many of these water bodies still support rare and endangered anadromous fish (steelhead trout, Chinook and Coho salmon) and other species, and the San Francisco Bay Area is home to more than 7 million people.

We support reconsideration of the allowed uses of triclosan, which we has been measured in sediment in the Bay, both at sewage treatment plant outfalls and in ambient waters. Studies have suggested that triclosan causes endocrine disruption in fish, mammals and amphibians, and may impact the structure and function of algal communities, at environmentally relevant concentrations. Additional concerns of triclosan exposure include the potential for indirect effects on algal and aquatic plant grazers due to toxicity to algae at environmentally relevant concentrations, the development of widespread antibiotic resistance due to the ubiquitous use and presence of triclosan in the environment, and the potential toxicity to microbial communities in activated sludge and biosolids, which could adversely impact aquatic environments and the health and fertility of agricultural soils amended with biosolids. Thus, we are concerned about the discharge of triclosan into the environment, and support considering limiting the uses of triclosan as the most cost-effective means of source control.

Citations for the studies referred to above are in a recent report prepared by the San Francisco Estuary Institute (SFEI). SFEI conducts monitoring and research related to the San Francisco Bay in support of the Water Board and in partnership with other Bay Area entities. SFEI's report (enclosed) includes data on triclosan's use, fate and occurrence in the environment, toxicity, and potential impacts in San Francisco Bay. The report is in draft form because SFEI intends to add a "Recommended Next Steps" section in the near future. We believe this profile will be useful in your efforts regarding the petition for a ban on triclosan.

Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 60 years





FEB

BAARI Outreach Efforts

The GIS team did extensive outreach for the Bay Area Aquatic Resources Inventory (BAARI) base map.

Presentations were made to the San Francisco Bay Joint Venture, the Santa Clara Valley Water District, Friends of the Estuary, North Bay GIS community, and to students at UC Berkeley's Geospatial Innovation Facility. The new map is becoming highly anticipated by the region's GIS community. Efforts will continue to engage planners and ecosystem managers to transfer the maps. You can view the base map for Coyote Creek Watershed at http://www.sfei.org/baari.





FEB 16

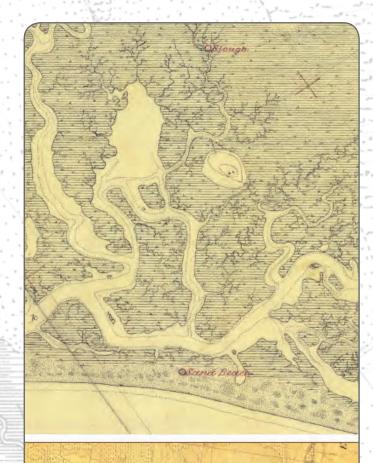
T-sheet Atlas and Website Launch

The Historical Ecology and Environmental Data, Information and Technology teams have completed the T-sheet Atlas and launched the complementary interactive website. The T-sheet Atlas, titled Historical Wetlands of the Southern California Coast was developed under the direction of Robin Grossinger. The study was the first regional assessment of the relative distribution and abundance of different wetland habitat types along the historical Southern California coastline and will inform management efforts in the region. The T-sheet Atlas describes interpretation and the findings of an initial regional analysis of 26 T-sheets (historical maps of the United States Coast Survey) for the South Coast. It also presents images of these T-sheets with corresponding habitat information overlaid on aerial photography. The Atlas team included; Ruth Askevold (graphics and layout), Kristen Cayce and Alison Whipple (map interpretation and GIS content), and Bronwen Stanford (text revisions).

The T-sheet website was developed by Kristen Cayce, Patty Frontiera, Linda Wanczyk, and Jeff Mueller. It allows users to zoom in and out of the T-sheets themselves, overlay the GIS habitat map, and view these datasets over contemporary aerial imagery. It also provides access to the GIS data, the Atlas, and supporting documentation

The access point for these data is: http://www.caltsheets.org

The project was a collaborative effort of SFEI, SCCWRP, and CSUN, with funding from the State Coastal Conservancy, US Fish and Wildlife Service, and the Los Angeles Regional Water Quality Control Board.



U.S. COAST SURVEY MAPS OF CALIFORNIA

Under the direction of some of the leading American scientists of the 19th century, the United States Coast Survey (USCS) created exceptionally accurate and detailed maps of the country's coastline. These surveys (commonly referred to understanding the physical and ecological characteristics of the US shoreline prior to Euro-American modification. Their development are valuable tools for coastal zone planning and estuary management.









projects/SoCalTSheets. (Bottom) Homepage of the U.S. Coast Survey Maps of California. The URL for this site is:

(Top) Images from the cover of

Historical Wetlands of the Southern

California Coast. This report can be found at: http://www.sfei.org/

http://www.caltsheets.org

CEDEN. CALFORNIA ENVIRONMENTAL DATA EXCHANGE NETWORK

JAN-FEB

CEDEN Update

First quarter CEDEN highlights include the hiring of a Program Manager and the availability of tissue monitoring data through CEDEN's data access tool. Dr. Steven Steinberg joined the CEDEN team in February. He comes from Humboldt State University in Arcata, where he was a professor of geospatial sciences. As Program Manager, he will oversee and provide cohesive leadership for the Regional Data Centers and other partners, including federal, local, and state governmental agencies, NGOs, and academia. He will also work on expanding the CEDEN information management system, developing visualization and analysis tools to better serve the statewide user community, and developing a long-term sustainable funding plan for CEDEN.

SFEI staff had a productive meeting on February 8th with Steve Steinberg and Steve Weisberg from SCCWRP. The meeting was held at SFEI to discuss future improvements to CEDEN, clarify the need for CEDEN, and introduce Dr. Steinberg to SFEI and its capabilities. Presentations were made on our EDIT program, Regional Data Center, web portals and development, and GIS and IT capabilities.

Tissue monitoring data were made available through CEDEN's on-line advance query tool in February. SFEI manages several tissue datasets from various projects that are available through CEDEN, including the RMP (triennial sportfish data from 1997-2009, and effects and exposure bird data from 2002-2007), Fish Mercury Project

(fish data from the Bay-Delta watershed from 2005-2007), SWAMP (historic bioaccumulation data generated under three historic State Board programs and other major studies from 1970-2005), and Coastal Fish Contamination Program (fish and shellfish from 1998-2003).

The main objectives for the second quarter include working with State and Regional Board staff to determine high priority projects, programs, and water quality data sets from the San Francisco Bay region to target for inclusion in CEDEN, making improvements to the Wetlands Portal, coordinating with other RDCs to maintain a standard data vocabulary, and adding new datasets to SFEI's SWAMP database.



FEB 10

Aquatic Science Center to assist USEPA's Comprehensive review of Delta Water Quality issues



On February 10, USEPA Region released an Advanced Notice of Proposed Rulemaking (ANPR) seeking public input on the effectiveness of current water quality programs influencing the health of the San Francisco Bay Delta Estuary, with focus on the Delta-Suisun Bay ecosystem. The ANPR identifies pivotal water quality issues affecting

fisheries and other aquatic resources, describes regulatory measures currently underway, and initiates an information-gathering process on how the EPA and the State of California can achieve water quality and aquatic resource protection goals in one of the West Coast's most ecologically diverse and important aquatic habitats. The ANPR identifies specific issues for which the EPA has regulatory responsibility and solicits comment on topics related to EPA's regulatory responsibility, such as potential site-specific water quality standards and site-specific changes to pesticide regulation. Aquatic Science Center has been contracted to prepare a summary of public input, develop a follow-up process, and developing an approach for assessing beneficial use attainments. The project will be closely coordinated with the development of the Delta Regional Monitoring Program. For more information, contact **Thomas** Jabusch (thomasj@aquaticsciencecenter.org, 510-746-7340)or Erin Foresman (Foresman.Erin@epamail.epa.gov).

FEB 1

California Water Quality Monitoring Collaboration Network Webinar -Demonstration of the Central Valley Monitoring Directory

Central Valley Regional Water Board staff provided a demonstration of Aquatic Science Center's Central Valley Monitoring Directory. The monitoring directory is a web-based tool developed to help improve the coordination and integration of existing surface water monitoring efforts. The monitoring directory provides access to program details and metadata for current water quality monitoring efforts in the Central Valley watershed (Delta, San Joaquin River, Sacramento River and Tulare Lake Basins). Currently, the monitoring directory has information on 31 programs monitoring at 1,088 sites. A demonstration to the California Water Quality Monitoring Council is planned for the Council's April meeting and there is interest to use the tool statewide.



In the News

DEC 2010

San Francisco Estuary

SFEI Staff interviewed for San Francisco Estuary Project short film

Jerry Kay Productions made a short film called Cut the Curbs to Claim the Rain, focusing on the El Cerrito San Pablo Avenue rain gardens. Lester McKee and Sarah Pearce have short cameos in the 9 minute film, which is currently featured on the San Francisco Estuary Partnership website. SFEI is monitoring the gardens this winter and next winter to provide data on the effectiveness of the gardens in reducing

contaminants that run off from the urban landscape. The project is funded by the State Water Quality Control Board, and SFEI is working with Lisa Owens-Vianni from ABAG/SFEP. The movie was released in mid December. The project extends from Summer 2010 to Summer 2012. The project falls under the watersheds program umbrella, but is

really a LID (low impact development) project.

Our monitoring will provide more data for effectiveness of Bay Area LID projects, and will also assist ABAG and El Cerrito in showcasing this pilot project, and may lead to implementation of more rain gardens in other cities.



View the short film at: http://www.sfestuary.org/podcast/

FEB

The Future of Shark Park, Pacifica

Removing the golf course and creating a public park is considered the least costly, best option. This report by the Center for Biological Diversity was peer-reviewed by SFEI scientists, **Erin Beller** and **Robin Grossinger**.



(Above) Report is titled Conceptual Ecosystem Restoration Plan and Feasibility Assessment: Laguna Salada, Pacifica, California. To view report go to: http://www.biologicaldiversity.org/news/press_releases/2011/sharp-park-02-10-2011.html



communications Documents and Reports

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Journal Articles

Bioaccumulation Oversight Group. 2011. Sampling and Analysis Plan for a Screening Study of Bioaccumulation in California Rivers and Streams. Surface Water Ambient Monitoring Program, California State Water Resources Control Board, Sacramento, CA.

Bingemann, D., Allen, R. M., and Olesen, S. W. 2011. Single Molecules Reveal the Dynamics of Heterogeneities in a Polymer at the Glass Transition. The Journal of Chemical Physics. Volume 134. Issue 2.

Gehrke, G. E., Blum, J. D., Marvin-DiPasquale, M. 2011. Sources of Mercury to San Francisco Bay Surface sediment as revealed by mercury stable isotopes. Geochimica et Cosmochimica Acta. Volume 75. Issue 3. pp 691-705.

Gehrke, G. E., Blum, J. D., Slotton, D. G., Greenfield, B. K. 2011. Mercury Isotopes Link Mercury in San Francisco Bay Forage Fish to Surface Sediments. Environmental Science and Technology.

Whipple, A., Grossinger, R. M., Davis, F.W. 2011. Shifting Baselines in a California Oak Savanna: Nineteenth Century Data to Inform Restoration Scenarios. Restoration Ecology. Volume 19. Issue 101. pp 88-101.

Reports

2010

Collins, J. N., Williams, M., Lowe, S. 2010. Third Summary Report Montezuma Wetlands Restoration Project Technical Review Team. . SFEI Contribution 624. San Francisco Estuary Institute, Oakland, CA.

Klosterhaus, S. 2010. Procedures for the Collection and Storage of Environmental Samples in the RMP Specimen Bank. SFEI Contribution 628. San Francisco Estuary Institute, Oakland, CA.

McKee, L. J., Hunt, J. A., Greenfield, B. K. 2010. Concentrations and Loads of Mercury Species in the Guadalupe River, San Jose, California: Water Year 2010. Technical Report. . SFEI Contribution 625. San Francisco Estuary Institute, Oakland, CA.

Werme, C., Hunt, J. A., Beller, E. E., Cayce, K., Klatt, M., Melwani, A. R., Polson, E., Grossinger, R. M. 2011. Removal of Creosote-Treated Pilings and Structures from San Francisco Bay. SFEI Technical Report. . SFEI Contribution 605. San Francisco Estuary Institute, Oakland, CA.

FEB 2011

Grossinger, R. M., Stein E. D., Cayce K., Dark S., Askevold R., and Whipple A., 2011. Historical Wetlands of the Southern California Coast: An Atlas of US Coast Survey T-sheets, 1851-1889. SFEI Contribution 586. San Francisco Estuary Institute, Oakland, CA.

San Francisco Estuary Institute. 2011. RMP Annual Monitoring Results 2009. SFEI Contribution 629. San Francisco Estuary Institute, Oakland, CA.

(see below, right)

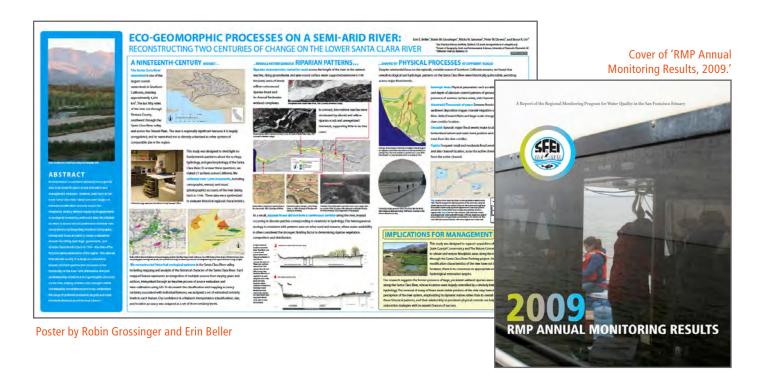
Reviews

Robin Grossinger and Erin Beller reviewed a paper for The Journal of Landscape Ecology titled, "Wetland cover change in the Swiss lowlands since 1850: extent, spatial patterns and ecological consequences."

Posters

Grossinger, R. and Beller, E. 2011. Ecogeomorphic Processes on a Semiarid River: Reconstructing Two Centuries of Change on the Lower Santa Clara River. Presented at the 2010 AGU Fall Meeting, December 16, 2010.

(see below, left)



communications Events, Appearances and Presentations

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Spotlight

2010

DEC 15

RMP Technical Review Committee Meeting.
The TRC was updated

The TRC was updated on RMP projects from 2010, and approved the detailed workplan for 2011.

2011

FEB 7

RMP Steering Committee Master Plan Workshop.

The Steering Committee discussed the long-term plan for the RMP from a manager's perspective, and provided guidance to the Special Studies for 2012 and beyond.

FEB 10

Rachel Allen gave a presentation at the LTMS Programmatic EFH Consultation For Maintenance Dredging, Sediment Contaminant Issues Meeting. Her presentation was titled, "Regional Monitoring Program Status and Trends Monitoring Design". Topics included the design for the RMP Status and Trends sediment monitoring program, in order to inform a discussion of the definition of ambient conditions in the Bay and how to set thresholds for the evaluation of dredged material between NOAA NMFS and the USEPA.



FEB 15-16

Jay Davis organized the fifth annual Review Panel Meeting for SWAMP's Bioaccumulation Oversight Group. The meeting included discussion of results of the coordinated survey of contaminants in

sport fish on the California coast conducted in 2009, and combining the efforts and resources of the SWAMP, the RMP, and SCCWRP's Bight Monitoring Program. Other topics for discussion included the sampling plan for the 2011 survey of contaminants in sport fish in California Rivers and Streams, and longer term plans for SWAMP bioaccumulation monitoring.

FEB 23



Alison Whipple gave a presentation at the East Bay CNPS Membership Meeting titled," Exploring components of the historical landscape: From oak woodlands to freshwater tidal wetlands." Topics discussed included historical habitats and how it relates them to the greater Bay Area landscape.

FEB 23-24

Susan Klosterhaus attended the 'Second Research Workshop on Microplastic Debris' in Tacoma, WA.

FEB 24

California Academy
of Sciences
Docent Visit.
SFEI will host
the California
Academy of the
Sciences docents.
Docents will learn
about SFEI's work
with a focus on the
Wetland Science Program



FEB 28

Presentation on Contaminants of Emerging Concern in SF Bay.

Susan Klosterhaus discussing
'Contaminants of Emerging Concern in San Francisco Bay' at the California Water Environment Association's 38th Annual Pretreatment, Pollution Prevention, and Stormwater Training Conference. This invited presentation is part of the Emerging Contaminants

session, which was held from 1:45-4:45 PM on Monday, February 28th at the

Hyatt Regency in Santa Clara, CA.

Visit
www.sfei.org
for more info
on these and other
events

Upcoming Events

MAR 23

RMP Technical Review Committee Meeting.



APR 19

Historical Ecology of Highly Modified Landscapes: using history to re-imagine future landscape potential. Robin Grossinger

and Erin Beller of the Historical Ecology program, along with Jeanine Rhemtulla at McGill University, are convening a special symposium at the 2011 International Association for Landscape Ecology conference in Portland, Oregon.

The symposium will focus on historical ecological research conducted in areas heavily shaped by anthropogenic factors, exploring how these ecosystems historically functioned, how they have been affected by people, and how they can be creatively re-established as functional, climate-adaptive ecological systems.

Ten researchers from all over the country are participating in the session.

APR 19

RMP Technical Review Committee Meeting.

MAY 6

Seminar at San Francisco State University on Contaminants of Emerging Concern. Susan Klosterhaus will be giving a presentation on 'Contaminants of Emerging Concern in San Francisco Bay' as part of San Francisco State University's Department of Chemistry Seminar Series.



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FEB 15 Brian Fulfrost

DCE Planning

Using remote sensing to map the evolution of marsh vegetation in the south bay of San Francisco: methods and results for 2009-10

The South Bay Salt Pond (SBSP) Restoration Project is the largest Federal restoration effort outside of the Everglades. The accretion of sediment and subsequent colonization of vegetation by endemic marsh vegetation is crucial to the restoration effort. Classic field mapping of this large project area would be time

consuming and costly. In our three year pilot project (2009-11), we have implemented a semi-automated approach to annually map vegetation and sediment using supervised classification (maximum likelihood) of 1 meter Ikonos multispectral imagery. This has been accompanied by an extensive two-step ground truthing process using sub meter GPS. First we characterize vegetation associations found in salt, brackish and fresh water marshes to identify image training sites. We then return to the field to calibrate and validate classification results. In order to normalize annual images to provide effective habitat classification throughout this three year process, we utilize both histogram matching and an iterative review of classification results to modify training sites. Significant effort was taken to accurately characterize the spatial and taxonomic range of vegetation in our habitat classifications so that they meet project needs but are also spectrally and spatially distinct enough to be accurately classified. This semi-automated remote sensing model has great potential to track changes to marsh vegetation with 80% or more accuracy at scales relevant to the larger SBSP adaptive restoration effort.

Wetland Regional Monitoring Program

Brown Bag Series

SFEI is nearing completion of a 3 1/2 year Prop 50 project to apply a three level monitoring toolkit to the aquatic resources of the Bay Area. A series of Brown Bag lunches has been organized to share results of the project.



Jan 10 Bay Area Aquatic Resources Inventory (BAARI): Level 1 Mapping

Upcoming Brownbag Seminars

MAR 7 Kristen Cayce and Andy Richardson

Bay Area Aquatic Resources Inventory: LEVEL 1 Mapping

As part of the BAARI mapping effort, we developed a geospatial model that calculates functional riparian areas based on several data inputs. These data represent the physical processes that contribute to that riparian function. Currently, the model maps two functional riparian areas, vegetation and hillslope.

MAR 14 Sarah Pearce

Geomorphic Protocols: LEVEL 3

The California Water Quality Monitoring Council calls for standardization of water quality monitoring methods. Stream geomorphology is a fundamental determinant of stream beneficial uses and stream water quality. Here we've identified suitable protocols for future geomorphic data collection and reporting for Bay Area streams with the goal of recommending standardized protocols to RB2. Sarah Pearce will present the outcomes of a workshop conducted with regional (through the Bay Area Watershed Network) and state geomorphologists to vet possible protocols. The talk will focus on standardizing geomorphic data collection, specifically channel cross sections, the most widely collected geomorphic data.

APR 4 Letitia Grenier

Riparian Biosentinels: LEVEL 3

As part of the 1-2-3 monitoring framework, we developed a new biosentinel for monitoring methylmercury bioaccumulation in riparian areas along Bay Area streams. With the assistance of a Science Advisory Group, the Song Sparrow was selected as the biosentinel to test. We found that Song Sparrow blood mercury concentrations reflected a range of conditions in conjunction with our conceptual model of how total mercury and methylation potential interact to influence bioaccumulation in riparian food webs.

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Spotlight

THE PULSE OF THE DELTA

MONITORING AND MANAGING WATER QUALITY IN THE SACRAMENTO – SAN JOAQUIN DELTA

FEB

Aquatic Science Center and Water Boards publish first edition of the Pulse of the Delta in March 2011

The State and Central Valley Regional Water Boards, assisted by Aquatic Science Center, have initiated a process for developing the Delta Regional Monitoring Program (RMP). The Delta RMP will address the need for more comprehensive information on the Delta's condition by better defining water quality issues of regional concern and working to improve the quality and efficiency of water quality monitoring information. The Pulse of the Delta intends to help the Delta RMP fulfill this goal by communicating current, relevant water quality information to advance awareness and consideration of the issues and to support informed decisions that lead to an effectively managed Delta ecosystem that is healthy, sustainable, and productive. The vision for the Pulse of the Delta is to make the wealth of available information on water quality in the Delta accessible to water quality managers, decision-makers, scientists, and the public. By targeting such a diverse audience and focusing on water quality, this report fills a previously unoccupied niche and will complement existing reporting products published by other programs. The report format and design are modeled after its successful sister publication, the San Francisco Bay RMP's Pulse of the Estuary. The theme for the first edition is "re-thinking water quality monitoring." Edition one includes articles on the role of contaminants in the pelagic organism decline, the Delta RMP's initiative for "re-thinking the monitoring system" to improve its capacity for comprehensive regional assessments, rising concerns over ammonia, how Delta studies have shaped our understanding of pyrethroids, and assessing and managing the risks posed by contaminants of emerging concern.

For more information, contact Thomas Jabusch (thomasj@aquaticsciencecenter.org, 510-746-7340)

For comments or corrections, please email Design and Visual Communications, (lindaw@sfei.org and joannec@sfei.org). AQUATIC SCIENCE CENTER
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ESTUARY INSTITUTE

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Attachment 4

Next Steps and Critical Decision Points

1. SFEI and ASC Planning Coordination

Currently both the SFEI and the ASC Executive Staff and Boards of Directors are conducting strategic planning exercises with the goal of each organization having an approved Strategic Planning document in 2011. SFEI staff, which serves as the executive, program and administrative staff of the ASC, is coordinating separate, but coordinated and parallel, processes.

Two consultant teams are currently assisting the Executive Staff of SFEI in undertaking the two strategic planning efforts, the team of Santalynda Marrero and Maria Hernandez are assisting with the SFEI effort, and Marc Beyeler and Page Nelson of MBA are assisting with the ASC strategic planning effort.

The two parallel processes are being closely coordinated, because ASC depends on the SFEI Staff for full support and ASC-related activities take up an increasing amount of time from the SFEI executive, professional, and administrative staff. Staff, consultants, and Board members are fully aware of the need for close coordination, transparency, and consistency.

Both planning processes are employing a variation of the "continuous improvement" model (See Figure 1). This model allows for both feedback and improvements to be built into the strategic planning process, so that plans are periodically updated and modified to account for changes in baseline and environmental conditions. In addition, this model allows for plan performance to be monitored and adaptive program elements to be incorporated into implementation efforts. In this context, each strategic planning effort is focused on producing quantifiable and measurable objectives and milestones, with accompanying strategies to achieve success.

A joint meeting of the respective planning committees is proposed to be held in the spring in advance of the June strategic planning retreats to insure efficient use of consultant resources and staff time in preparation for the two full-day Board retreats.

2. Are Institutional Changes Needed?

The emerging mission and goals of the ASC suggest that it may be beneficial to expand the Board of Directors and to establish a basic level of sustained funding that would allow the organization to respond more flexibly to coordination and planning needs (e.g., requests for assistance in coordinating field studies with multiple participants).

3. ASC Identity and Follow-up to SWOT and Environmental Scan Results

As results from the forthcoming interviews of Board Members, staff, and stakeholders are evaluated, it may become apparent that the Center's current operating model may need to be adjusted to give it it's own, unique identity and a

broader geographic activity area than SFEI that has roots in USEPA's National Estuary Program and a close connection with the San Francisco Estuary Partnership. A variety of operational models outside the status quo of shared staff resources may emerge prior to the June retreat that both Boards will want to evaluate and consider.

Figure 1. Process Diagram

Strategic Planning and the Continuous Improvement Model



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ASC Proposed Vision, Mission, Goals and Objectives

FROM ASC BOARD DISCUSSION 12/2/10
FROM SFEI SENIOR STAFF DISCUSSION 12/09/10
FROM ASC SP SUBCOMM DISCUSSION 2/2/11

DRAFT REVISED 02/21/11

Vision:

Aquatic ecosystems are being protected and enhanced, supported by unbiased science.

Mission:

Provide scientific support and tools for public decision-making and communication through collaborative efforts.

Goal 1:

Provide science support services, including the development of new science, focused on connecting science to policy and decision-making.

Objective 1.1

Provide science support to other public agencies involved in environmental protection, planning, and decision-making

(JPA Purpose 1b. 5)

Goal 2:

Expand data and information synthesis by developing appropriate tools and systems.

Objective 2.1

Strengthen the integration of Regional Monitoring information

(Purposes 1b. 3 and 4)

Objective 2.2

Integrate Data and Information with Management and Policy Options and Responses (Purpose 1b. 1)

Goal 3:

Provide an independent, accessible forum to improve science and policy integration and communicate with a wide variety of stakeholders and decision-makers.

Objective 3.1

Develop improved communication tools, including trainings, workshops and webbased offerings

(Purposes 1b. 2, 3 and 5)

Objective 3.2

Develop improved environmental management, reporting, permitting and protection tools

Goal 4:

Maximize the *value and use* of public financial resources by providing efficient scientific, information-management, and administrative support.

Objective. 4.1

Continue to streamline contracts and grants administration role

(Purpose 1b. inclusive)

ASC Proposed Strategic Planning Key Informants List REVISED 02/21/11

•Water and Wastewater Providers, including dischargers

BACWA Dave Williams
East Bay Dischargers Authority Mike Connor

CVCWA

CASQA Geoff Brosseau (Bay Area Storm Water Agencies)

Assn of CWA Timothy Quinn; Randi Fiorini

North Delta Reclamation Districts Topper van Loen Sels

Sonoma County Water Agency Grant Davis Sac Regional Linda Dorn

Beneficial Use/Commons Advocates/Environmental Orgs

Bay Institute Gary Bobker
PRBO Ellie Cohen
California CoastKeepers Alliance
SF BayKeeper Deb Self
Save the Bay David Lewis

Scientific and Academic Experts

SCCWRP Steve Weisberg + rep. from member agency

Bob Ghirelli (Orange Co. San. District)

Mas Dojiri (City of LA)

UC Davis/Delta Science Panel Jeffrey Mount

UC Merced

CA OST Skylie McAfee

Delta Science Program Cliff Dahm.; Lauren Hastings

IEP Lead Scientist Anke Mueller-Solger

SFCWA Val Connor

Government/Regulatory Agencies

CVRWQCB Pamela Creedon

SWRCB Vicky Whitney; Darrin Polhemus; John Marshack

USEPA 9
SFRWQCB
NCRWQCB
CA DWR
CANRA/Oceans/OPC/Wetlands
Alexis Strauss
Bruce; Diane
Cat Kuhlman
Marc Hoshovsky
John Laird; A. Mace

Contra Costa County DPW Mitch Avalon

Cities

Central Valley City-W. Sacramento Christopher Cabaldon

Delta City-Tracy/Stockton

Counties

Central Valley County-Sacto Co. Don Nottoli

Public Members

Delta Stewardship Council Felicia Marcus

ASC Proposed Key Informant Questions

DRAFT

REVISED 02/2111

Suggested Questions for Non-ASC Board/Agency Staff as part of Environmental Scan

Identifying and Understanding Need for ASC

- Are you aware of the activities of the Aquatic Science Center?
- If so, what is your understanding of why ASC was established?
- What needs do you see for more targeted science engagement to:
 - o inform environmental management and policy questions,
 - o help frame informed discussion among stakeholders, and
 - build tools that agency staff can use to evaluate various alternatives?

(Please Explain)

- Do you see an increasing role or roles for external, independent science organizations to assist government agencies to fill capacity gaps?
 - o If so, what would these roles be?

(If aware of ASC, continue with questions below)

ASC Success to Date and Current Assessment

- What do you see as the unique strengths and attributes of ASC?
- What do you feel are ASC's important successes to date?
- What works well now?
- What are the issues that you're most concerned with i.e. those that most need to be understood and resolved to ensure future program success? (What could work better?)

Going Forward

- Are there activities ASC should be doing that it is not currently?
- What, if any, changes need to be made re: program structure/organization in order to guide ASC towards achieving its goals? (including changes in your and others' roles and responsibilities)
- Who else should we be talking with? (Besides ASC/SFEI BODs/Staff?)
- What other key questions should we be asking?

Suggested Questions for ASC Board/Staff as part of SWOT

Draft Revised 2/21/11

Current Links to/Role in ASC

- Describe your current position/org and your current org. link with/to ASC.
- What other people/groups do you interface with regarding ASC, and what are their roles as you understand them?

ASC Mission, Purposes and Goals

- What are ASC's organizational mission, purposes, and goals, as you understand them?
- How successful do you think ASC has been in achieving these goals?

ASC Success to Date and Current Assessment

- What do you see as the unique strengths and attributes of ASC?
- What do you feel are ASC's important successes to date?
- What best practices that ASC emulates are essential to its success?
- What works well now?
- What are the issues that you're most concerned with i.e. those that most need to be understood and resolved to ensure future program success? (What could work better?)
- What are road blocks or impediments to success of ASC?

Research Needs

What needs do you see for more targeted science engagement to:

- o inform environmental management and policy questions,
- o help frame informed discussion among stakeholders, and
- build tools that agency staff can use to evaluate various alternatives?

(Please Explain)

- Do you see an increasing role or roles for external, independent science organizations to assist government agencies to fill capacity gaps?
- If so, what would these roles be?

Going Forward

- Are there activities ASC should be doing that it is not currently?
- What, if any, changes need to be made re: program structure/organization in order to guide ASC towards achieving its goals? (including changes in your and others' roles and responsibilities)
- Who else should we be talking with? (Besides ASC/SFEI BODs/Staff?)
- What other key questions should we be asking?

The Future of ASC

- From your perspective, what does ASC program success look like in next two years to five years?
- What sort of timeline and process do you want to see for making decisions about ASC's future organizational development?

Updated ASC Strategic Planning Critical Milestones March-September 2011

March

BOD Quarterly Meeting

SP Update from ED/SP Subcommittee

Review Revised Draft Vision, Mission, Goals and Objectives

Review Key Informant Information

Review Environmental Scan Information

Review SWOT Survey (interim results)

Review/Approve Agenda for June Planning Meeting

April

BOD SP Subcommittee Teleconference Call

SWOT Survey Tabulation and Analysis

Draft Strategies

Draft Milestones/Targets

Draft Key Performance Indicators

Agenda Topics for May Teleconference Call

May

BOD SP Subcommittee Teleconference Call

Draft Strategies

Draft Milestones/Targets

Draft Key Performance Indicators

Final Agenda Topics for June BOD SP Meeting

SFEI Planning Committee-ASC SP Subcommittee Coordination Meeting

June

BOD Quarterly Meeting

Hold Strategic Planning Meeting (Full Day)

July

BOD SP Subcommittee Teleconference Call

Draft Strategic Plan document

Agenda Topics for August Teleconference Call

August

BOD SP Subcommittee Teleconference Call

Final Draft Strategic Plan document

Final Agenda Topics for September BOD SP Review and Adoption

September

BOD Quarterly Meeting

Review and Adopt 2010-2015 Strategic Plan

ASC BOD Strategic Planning Meeting June 2011

2/2/11

DRAFT

REVISED 02/22/11

Draft Meeting Agenda

0.00 0.15	Assemble
9:00-9:15	Assemble
9:15-9:30	Overview of Strategic Planning Session
9:30-10:00	Review Final Draft Vision and Mission Statements
10:00-10:15	Geographic Scope
10:15-10:45	Review Final Draft Goals
10:45-11:00	Board Composition
11:00-11:15	Break
11:15-12:00	Review Final Draft Objectives
12:00-12:30	Review Environmental Scan/Key Informant Information
12:30-1:00	Lunch Break
1:00-1:30	Review SWOT Survey Information
1:30-2:00	Review Final Draft Strategies
2:00-2:30	Priorities (focused on Process for Prioritization)
2:30-3:00	Review Final Draft Milestones/Targets
3:00-3:15	Break
3:15-3:45	Final Draft Key Performance Indicators
3:45-4:00	Final Draft Strategic Plan document contents
4:00-4:15	Next (Final) Steps: Final Agenda Topics for September BOD Strategic Plan Review and Adoption
4:15	Adjourn