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David Murillo
U.S. Bureau of Reclamation

Maria Rea National Marine Fisheries Service

Stu Townsley U.S. Army Corps of Engineers

Michael Villines Central Valley Flood Protection Board

Erik Vink Delta Protection Commission **REVISED AGENDA**

Meeting of the

Board of Directors and Liaison Advisors for the SACRAMENTO-SAN JOAOUIN DELTA CONSERVANCY

Wednesday, September 23, 2015 9:00 am – 12:00 pm

Delta Conservancy Conference Room 1450 Halyard Drive, Suite 6, West Sacramento, CA

- 1. Call to Order and Pledge of Allegiance
- 2. Welcome and Introductions
- 3. Roll Call/Oath of Office
- 4. Public Comments (New Business)
- 5. **Board Elections (Action Item)**
- 6. Consent Calendar (Action Item)
 - June 25, 2015 Meeting Summary and Action Items Board Meeting and Joint Board Meeting (Attachment 1 and 1a)
 - September 2, 2015 Meeting Summary and Action Items (Attachment 2)
- 7. **Executive Officer's Report**, Campbell Ingram
 - Program Update (Attachment 1)
 - June 25, 2015 Board Meeting Directives and Responses
 - FY 2015-16 Budget Update (Attachment 2)
 - Staffing Update
 - Outreach-Delta Meeting Matrix (Attachment 3)
- 8. Program and Policy Subcommittee Update, Shakoora Azimi-Gaylon (Attachment 1)
- 9. **Proposition 1 Grant Program Update**, Campbell Ingram (Attachment 1)
- 10. Request for approval to enter into an interagency agreement in the amount of \$1,100,000 with the San Francisco Estuary Institute-Aquatic Science Center, and run an Invitation for Bid process in the amount of \$250,000 for facilitation services in support of Eco Restore regional planning for the NE Delta, Campbell Ingram (Attachment 1)(Action Item)
- 11. Delta Stewardship Council Delta Plan Update, Cindy Messer
- 12. California Water Fix and Eco Restore Updates, B.G. Heiland and David Okita
- 13. Potential Agenda Items for November 4, 2015 (Attachment 1)
- 14. Public Comments
- 15. ADJOURN





- Attachments and additional information can be found on the Delta Conservancy's website at: http://www.deltaconservancy.ca.gov.
- If you have any questions or need reasonable accommodation due to a disability, please contact Amanda Bohl, Board Liaison, Delta Conservancy (916) 376-4022.
- Public comments are generally limited to three minutes or at the discretion of the Chair.
- The agenda items listed above may be considered in a different order at the Delta Conservancy Board meeting pursuant to the determination of the Board Chair. A the discretion of the Delta Conservancy Board, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated upon and may be subject to action.

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1450 Halyard Drive, Suite 6 West Sacramento, CA 95691 www.deltaconservancy.ca.gov

MEETING SUMMARY AND ACTION ITEMS Board Meeting – June 25, 2015 1450 Halyard Dr., Suite 6, West Sacramento

CALL TO ORDER

Meeting called to order at 9:03 am by Chair Jim Provenza.

ROLL CALL

Roll call was taken and a quorum was established.

Board Members Present: Katherine Miller, Pat Kemp, Don Nottoli, Jim Provenza, Dolly

Sandoval, Karen Mitchoff, Skip Thomson, and Karen Finn.

Ex Officio Member: None

Liaison Advisors Present: Steve Chappell, Sandra O'Roak for Sue Fry, and Erik Vink.

PUBLIC COMMENTS

There were no public comments.

DISCUSSION AND ACTIONS TAKEN

1. Action Item 5 - Consent Calendar

The Board unanimously *approved* the summary of the May 27, 2015 Board Meeting. No other issues were included in the consent calendar.

2. Agenda Item 6 – Executive Officer's Report

The Assistant Executive Officer presented budget and staffing updates. The Board discussed the Conservancy's workload, new positions, and position classifications. There was agreement to move forward with the current staffing and solicitation process. The Board asked the Program and Policy Subcommittee to review the timeline and provide final approval.

3. Agenda Item 7 – Review and Consideration for Approval of Proposition 1 Grant Program Grant Guidelines and Grant Application Packet

The Executive Officer provided an overview of changes to the grant documents over the last several months. Several questions and comments were discussed:

1) Member Finn asked if grant funds will need to be spent during each grant cycle.

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Staff responded that it was their understanding that funds can be carried over from one grant cycle to the next.

- 2) Member Kemp suggested that the positions created for the bond be with the agency for ten years rather than seven.
- 3) Member Provenza shared comments he's received regarding evaluation criteria providing points for the cost share. The cost share could inadvertently disadvantage large grant requests. After much discussion, it was agreed that a sliding scale should be created to provide points ranging from 5 percent to 50 percent cost shares.
- 4) Member Miller recommended that a checklist be developed for the various plans that applicants should reference in applications.
- 5) Member Provenza suggested that a point of contact be identified for each county. Conservancy staff could vet proposals with the point of contact.
- 6) Member Mitchoff recommended that for evaluation of the grant application we need a resolution from the Board of Supervisors. After much discussion, it was agreed that letters of support will be sufficient for concept proposals, but resolutions of support will be required for full proposals.

Member Mitchoff motioned that the grant guidelines and grant application packet be approved with all modifications discussed and with authority to adjust the timeline, as necessary, given to the Program and Policy Subcommittee. Member Sandoval seconded the motion. A roll call vote was taken with all voting members present voting yes.

4. Agenda Item 8 – FY 15-16 Implementation Plan and Three-year Work Plan

The Assistant Executive Officer presented the draft FY 15-16 Implementation Plan. Member Mitchoff asked that staff double check the bond numbers used in the plan in order to ensure consistency. Member Sandoval requested that the Mercury Exposure Reduction Program description on page 13 include language noting the Conservancy's intent to provide public health information in multiple languages.

Member Nottoli motioned to approve the FY 15-16 Implementation Plan with the modifications discussed. Member Miller seconded the motion. A roll call vote was taken with all voting members present voting yes.

BOARD DIRECTIVES TO STAFF

- 1. Staff will present a final grant cycle and staffing update at the July 15, 2015 Program and Policy Subcommittee Meeting.
- 2. Staff will revise the Implementation Plan per the Board's discussion and post the plan on the Conservancy's web site.

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MEETING ADJOURNED by Chair Provenza at 11:15 am

Respectfully submitted on June 30, 2015 by Amanda Bohl, Board Liaison Sacramento-San Joaquin Delta Conservancy

Contact Person:

Amanda Bohl, Board Liaison Sacramento-San Joaquin Delta Conservancy

Phone: (916) 376-4022

Audio files of Board meetings are available on the Board Meeting Materials section of the Delta Conservancy web page at www.DeltaConservancy.ca.gov. Board meetings are typically three hours in length; using the meeting agenda to help locate topics of interest within the audio file is recommended.

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1450 Halyard Drive, Suite 6 West Sacramento, CA 95691 www.deltaconservancy.ca.gov

MEETING SUMMARY AND ACTION ITEMS Joint Board Meeting with the California Coastal Conservancy – June 25, 2015 1001 I Street, Coastal Hearing Room, Sacramento, CA

CALL TO ORDER

Meeting called to order at 1:30 pm by Chair Provenza from the Delta Conservancy and Chair Bosco from the Coastal Conservancy.

ROLL CALL

Roll call was taken and a quorum was established.

Board Members Present: Katherine Miller, Pat Kemp, Don Nottoli, Jim Provenza, Dolly

Sandoval, and Karen Finn. Darla Guenzler joined the meeting in

progress.

Ex Officio Member: Mindy Simmons for Senator Wolk

Liaison Advisors Present: Steve Chappell, Sandra O'Roak for Sue Fry, Erik Vink, and Amy

Hutzel.

PUBLIC COMMENTS

There were no public comments.

DISCUSSION AND ACTIONS TAKEN

1. Welcoming Remarks – Undersecretary Janelle Beland, Natural Resources Agency Ms. Beland welcomed everyone and congratulated the two agencies for their decision to hold a joint meeting and work together. Ms. Beland noted the connections of the two areas of the state and the importance of collaboration. The drought and the effects on the coast and the Bay-Delta system were also noted.

2. Bay/Delta Legislators Discussion – Assemblyman Marc Levine and Mindy Simmons for Senator Wolk.

Assemblyman Levine and Ms. Simmons discussed what they see as the top priorities for the Bay-Delta as well as the importance of following Cap and Trade discussions.

3. State Agency Executives Panel – Director Mark Cowin, Department of Water Resources; Director Charlton Bonham, Department of Fish and Wildlife; David Okita, Eco Restore,

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Natural Resources Agency; Sam Schuchat, State Coastal Conservancy; Campbell Ingram, Sacramento-San Joaquin Delta Conservancy

The agency executives discussed the role that their respective agencies play in the Bay-Delta system, stressing the importance of collaboration and communication and working together closely to achieve shared objectives.

4. Technical Experts – Robin Grossinger and Letitia Grenier, San Francisco Estuary Institute Mr. Grossinger and Ms. Grenier presented their research on the top ecological stressors in the Bay-Delta and ideas for how best to manage the effects and work to reverse and reduce the stressors.

5. Consideration and Adoption of Joint Resolution

Changes were suggested to include additional relevant planning documents that identify issues in the San Francisco-Bay Delta. A motion to approve the resolution with the modifications included was made and seconded. A roll call vote was taken. All members present voted yes.

MEETING ADJOURNED by Chairs Provenza and Bosco at 3:45 p.m.

Respectfully submitted on June 30, 2015 by Amanda Bohl, Board Liaison Sacramento-San Joaquin Delta Conservancy

Contact Person:

Amanda Bohl, Board Liaison Sacramento-San Joaquin Delta Conservancy

Phone: (916) 376-4022

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1450 Halyard Drive, Suite 6 West Sacramento, CA 95691 www.deltaconservancy.ca.gov

MEETING SUMMARY AND ACTION ITEMS Board Meeting – September 2, 2015 1450 Halyard Dr., Suite 6, West Sacramento, CA

CALL TO ORDER

Meeting called to order at 9:00 am by Chair Provenza.

ROLL CALL

Roll call was taken and a quorum was established.

Board Members Present: Mike Eaton (on phone), Darla Guenzler, Todd Ferrara,

Jim Provenza, Dan Taylor (on phone), Eddie Woodruff,

Don Thomas, and Bob Elliott (on phone)

Ex Officio Member: None Liaison Advisors Present: None

PUBLIC COMMENTS

There were no public comments.

DISCUSSION AND ACTIONS TAKEN

1. Action Item 5

Resolution of the Sacramento-San Joaquin Delta Conservancy adopting the Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Arundo Control and Restoration Project in the Cache Slough Complex.

Member Guenzler moved and Member Ferrara seconded approval of the resolution which adopted the Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for Arundo Control and Restoration Project in the Cache Slough Complex and approved implementation of the project. The Board *unanimously approved* the resolution.

MEETING ADJOURNED by Chair Provenza at 9:23 a.m.

Respectfully submitted on September 2, 2015 by Amanda Bohl, Board Liaison Sacramento-San Joaquin Delta Conservancy

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Contact Person:

Amanda Bohl, Board Liaison Sacramento-San Joaquin Delta Conservancy

Phone: (916) 376-4022

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1450 Halyard Drive, Suite 6 West Sacramento, CA 95691 www.deltaconservancy.ca.gov

EXECUTIVE OFFICER'S REPORT September 23, 2015

~ PROGRAM UPDATE ~

Ecosystem Restoration

<u>Proposition 1, Grant Program:</u> The Prop. 1 solicitation opened on August 3rd. The first round of concept proposals was received on September 15th. A staff report listing the number of proposals received, the types of projects and the requested amounts is included in the board packet and will be discussed in Agenda Item 9.

<u>Delta Restoration Network (DRN):</u> The DRN has developed scopes of work to conduct regional restoration planning per the directive in the Governor's Eco Restore Program for both the NE Delta and Cache Slough Complex regions. A staff report with background information and requests for authority to enter into agreements to conduct the work are included in Agenda Item 10.

EcoAtlas – Habitat Restoration Project Tracking: Completed in September, this project significantly expanded EcoAtlas, the state's repository for wetland project data, to include hundreds of habitat protection, enhancement, and restoration projects throughout the Central Valley and San Francisco Bay-Delta regions, including 172 projects in the Delta and Suisun Marsh. Detailed project data, critical for natural resource managers, such as acres of distinct habitat types, species benefitted by project, project progress and status, and funding information, were added to the project tracking database. Additional functionality was added to EcoAtlas to allow for the visual display, querying and extraction of this tabular and spatial project data. As new projects are developed and existing projects enter new phases, information can be expanded and updated through the new data portal that allows project proponents to enter and update information displayed in EcoAtlas. Additional data layers such as modern Delta habitats were added to EcoAtlas to allow users to evaluate projects within the context of existing ecological resources and other landscape characteristics and uses. Going forward, the Conservancy will continue to reach out to project managers and assist in keeping information updated.

<u>Arundo Control and Restoration Project</u>: On September 2nd the Board approved the resolution adopting the Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for Arundo Control and Restoration Project in the Cache Slough Complex and approved implementation of the project. Arundo control work will begin in September 2015. All permit applications have been submitted for the Ulatis Creek restoration site. Due to the timeline to acquire all the necessary permits, restoration at the Ulatis Creek site will not begin until May 2016.

Water Quality

<u>Delta Environmental Data for the Understanding of a California Estuary (DEDUCE)</u>: This project is a component of the Delta Watershed Initiative Network (Delta WIN) and is building on the 2014 Data Summit to improve data

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management. The DEDUCE workgroup met on July 21st to continue working to expand the San Francisco Regional Data Center to include Delta water quality data. The workgroup discussed the status of priority datasets for inclusion into the estuary-wide data repository. The Conservancy is working to upload data to the estuary-wide data repository and ensure data integrity for all collected data. The workgroup will reconvene in November to discuss the state of data processing and uploading.

Economic Development

<u>Delta Awareness Campaign:</u> The Conservancy and the Delta Protection Commission (Commission) continue to partner on the development of a Delta gateway web site and 5-year marketing plan. Much of the summer has been focused on developing content for the website and preparing it for review by the Delta Marketing Team (expected September 2015). Conservancy and Commission staff have also been working with the Marketing Team to develop a focus for the marketing plan and to provide the marketing firm with guidance on the development of the plan.

Education and Outreach

<u>Waterway Cleanup</u>: The International Coastal Cleanup, led by the California Coastal Commission and Ocean Conservancy, is September 19th. The Conservancy is coordinating with the Rio Vista Windsurfing Association and Sherman Island Kiteboarding Organization to host a cleanup on Sherman Island. The Conservancy has also provided logistical support to assist a local cleanup at the San Joaquin Yacht Club on Bethel Island.

Delta Mercury Exposure Reduction Program (MERP): Delta MERP was invited by the Asian Pacific Self Development and Residential Association (APSARA) to participate in a meeting with the residents of Park Village Apartments on August 28th, in Stockton. Park Village, a housing complex known as the epicenter of Stockton's Cambodian community, is a unique model of affordable housing ownership and is a partnership between APSARA and the Rural California Housing Corporation. Conservancy staff provided an overview of the Delta MERP program, with an emphasis on the public health aspects of mercury contamination in fish and the individual and community-level interventions needed to reduce exposure to mercury in fish and the ways the community can partner with the program to disseminate the message and educate affected populations. Over 50 residents and staff attended and engaged in the dialogue that followed the presentation.

The Conservancy is continuing to work closely with three community based organizations which received small grants from the California Department of Public Health Delta MERP small grants program as project implementation begins. Projects include developing educational materials, providing education, and raising awareness about fish contamination issues among South-East Asian communities, WIC clinic providers and other health care providers as well as individuals accessing services at local clinics. The Delta MERP team is nearing the final design for a sign with advisory information about safely consuming fish caught from the Delta. The sign is expected to be ready for posting at fishing access locations in 2016. Translation of Delta MERP materials to Chinese, Khmer, Lao, Russian, Spanish, Vietnamese, Tagalog, and Hmong is set to be complete by early 2016.

Coordination and Collaboration

Invasive Species Coordination (ISC): The ISC work group met for its quarterly meeting on Aug 13th. The

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workgroup reviewed suggested research topics and prioritized the topics using a scoring criteria developed by this workgroup for potential funding opportunities. The next ISC meeting is scheduled in November.

Aquatic Weed Science Symposium: In coordination with the Delta Stewardship Council's Delta Science Program and UC Davis, the Conservancy participated in the planning of a one-day science symposium on Invasive Aquatic Vegetation held on September 15th at U.C. Davis. Presentations explored new developments in surveillance, the monitoring of aquatic vegetation to facilitate management and control, advances in knowledge that could lead to better management and control practices, and advances in risk assessment and reduction. Over 100 participants from state, federal, academic, and private entities attended this workshop.

Land Management Work Group: Conservancy staff with assistance from the Center for Collaborative Policy, has been meeting with stakeholders in the western Delta to discuss near term flood protection, habitat, water quality, water supply reliability, and recreation objectives and opportunities. This information is being used to draft a framework document that identifies a high level vision for the western Delta islands and lists projects that are consistent with that vision. The work group will be meeting again in September to review the current draft of the framework document. This project is linked to the regional planning efforts identified in California Eco Restore.

<u>Delta Dialogues</u>: A sub-group of Delta Dialogues has been meeting regularly to develop a vision for the south Delta that addresses flood protection, ecosystem, and other priorities. The group met on September 27th to review extensive modeling results for analyses of a Paradise Cut bypass expansion. The modeling was conducted in coordination with the development of DWR's San Joaquin Basin Wide Feasibility Study and indicated significant benefits to flood control in the region. For next steps the group will focus on refining the project description and outreach to more local interests. The group discussed the possibility to expand the focus of the group to include more regionally focused planning.

March 25, 2015 - BOARD MEETING DIRECTIVES AND RESPONSES

BOARD DIRECTIVES TO STAFF

1. Staff will present a final grant cycle and staffing update at the July 15, 2015 Program and Policy Subcommittee Meeting.

Staff Response: Staff presented the final grant cycle and staffing update at the July 15, 2015 Program and Policy Subcommittee Meeting. The Subcommittee approved the grant cycle timeline, acknowledging that changes might be made if a large number of concept proposals are received.

2. Staff will revise the Implementation Plan per the Board's discussion and post the plan on the Conservancy's web site.

Staff Response: The Implementation Plan was revised per the Board's discussion and posted on the Conservancy's website.

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DELTA CONSERVANCY BUDGET UPDATE

Agenda Item 7.2: Delta Conservancy FY 2015-16 Budget Plan and Update

STAFFING UPDATE

Staff will provide a verbal up-date during the Board meeting.

OUTREACH-DELTA MEETING MATRIX

Agenda Item 7.3: Outreach-Delta Meeting Matrix including most recent events and key dates of future meetings

Contact Person:

Shakoora Azimi-Gaylon, Assistant Executive Officer Sacramento-San Joaquín Delta Conservancy

Phone: (916) 375-2086

Meeting Date: September 23, 2015

Agenda Item: 7 Attachment: 2



Delta Conservancy FY 2015-16 Budget Update

September 2015- Board Meeting

Source of Funds 2015-2016 Budget	2015-2016 Budget Plan	Purpose of Funds (projects)	Expenditures by August 31, 2015	Available Balance
General Fund	\$1,156,000	Personnel and operating expenses	\$90,677	\$1,065,323
Environmental License Plate Fund	\$77,000	Office Rent	\$11,509	\$65,491
Proposition 1 Grant Program:	\$508,000	Program Delivery	\$325	\$507,675
	\$9,363,000	Competitive Grant: Local Assistance	\$0	\$9,363,000
Federal Reimbursement Budget Plan: \$917,625 (a)				
US EPA 2013 Wetland Development (2013-2015)	\$40,000	EcoAtlas Enhancement Project	\$25,131	\$14,869
US EPA 2014 Wetland Development (2014-2017)	\$186,862	Visualization of Data	\$5,783	\$181,079
US EPA Exchange Network (2014-2017)	\$221,179	Data Standardization	\$12,230	\$208,949
Economic Development Agency (2014-2017)	\$97,753	Delta Branding and Marketing Project	\$20,000	\$77,753
US Bureau of Reclamation (2015-2020)	\$371,831	Environmental Education Project	\$0	\$371,831 ^(b)
State Reimbursement Budget Plan: \$834,037 (a)				
Department of Water Resources (2014-2017)	\$625,000	Arundo Eradication Program	\$18,674	\$606,326
State Water Board (2014-2017)	\$209,037	Mercury Exposure Education Program	\$19,691	\$189,346
Total Reimbursements	\$1,751,662	_	\$101,509	\$1,650,153
Total Budget	\$12,855,662		\$204,020	\$12,651,642

- (a) Additional reimbursement will be requested prior to expenditure of funds
- (b) Proposal in progress

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Outreach – Delta Meeting Matrix							
ACTIVITY	MTG PRES		SUMMARY		CONSERVANCY REPRESENTATIVE		
Aquatic Toxicology Lab – Delta Environmental Data and Understanding of California Estuary (DEDUCE)	Х		Met to discuss potential datasets for inclusion into an estuary-wide data repository.	6/3/2015	Kathryn Kynett		
EcoAtlas – Habitat Restoration Project Tracking Meeting	X		Monthly meeting of project partners to complete tasks under project.	6/4/2015, 7/16/2015, 7/29/2015, 8/7/2015, 8/28/2015	Kristal Davis Fadtke		
Prospect Island and Lindsey Slough Tour	Х		Attended Delta Science Program sponsored tour of restoration projects at Prospect Island and Lindsey Slough.	6/17/2015	Kristal Davis Fadtke		
Eco Restore Meeting	Х		Participated in Eco Restore biweekly meeting.	6/26/2015	Campbell Ingram, Shakoora Azimi-Gaylon		
State Wildlife Action Plan (SWAP) Water Management Development Team Meeting	Х		Participated in the SWAP Water Management Development Team for the development of the SWAP Water Management Companion Plan.	6/26/2015	Kristal Davis Fadtke		
Solano Land Trust (SLT) Meeting	Х		Met with DWR, Department of Fish and Wildlife (DFW) and SLT to coordinate a potential project in the Delta.	6/29/2015	Campbell Ingram, Shakoora Azimi-Gaylon		
Delta Tributaries Mercury Council Meeting	Х	Х	Participated in a panel with the Delta Science Program and DFW to discuss Proposition 1 Grant Program criteria and timeline.	6/29/2015	Shakoora Azimi-Gaylon		
Yolo Resource Conservation District (RCD) Working Waterways Program	Х		Met with Yolo RCD to learn more about their Working Waterways Program and other projects.	7/2/2015	Kristal Davis Fadtke		
Wetland Visualization Project Meeting	Х	Х	Organized and facilitated the data visualization meeting.	7/8/2015	Shakoora Azimi-Gaylon, Kathryn Kynett		
California Estuary Monitoring Workgroup (CEMW) Meeting	Х		Attended the regular meeting of CEMW.	7/8/2015, 9/9/2015	Kristal Davis Fadtke		
California Wetland Monitoring Workgroup Meeting	Х	Х	Participated in CWMW Strategic Planning sessions.	7/10/2015, 8/4/2015	Shakoora Azimi-Gaylon		
Delta Levees and Habitat Advisory Committee (DLHAC) Meeting		Х	Participated in the DLHAC meeting and provided an update on regional planning expectations.	7/10/2015	Campbell Ingram		
Delta Levee Vegetation Workshop	Χ		Attended Delta Levee Vegetation Workshop sponsored by DWR.	7/14/2015	Kristal Davis Fadtke		

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Outreach – Delta Meeting Matrix							
ACTIVITY MTG P		PRES	ES SUMMARY		CONSERVANCY REPRESENTATIVE		
Ulatis Creek Project Site Visit	Х		Visited restoration project site with project partners and National Marine Fisheries Service.	7/16/2015	Kristal Davis Fadtke		
Delta Narratives Meeting	Х		Participated in the final Delta Narratives meeting showcasing the Delta's place in history.	7/16/2015	Amanda Bohl		
Water Education Foundation (WEF) Meeting	Х		Met with WEF staff to discuss the performance of the last project and expectations for the new environmental education projects.	7/16/2015	Shakoora Azimi-Gaylon		
Children's Alliance Meeting	Х		Met to discuss the Delta Mercury Exposure Reduction Program	7/20/2015	Kathryn Kynett		
Delta Restoration Network Meeting	Х		Facilitated the Delta Restoration Network meeting. Received feedback on work plan for NE Delta Regional Planning effort.	7/20/2015	Campbell Ingram, Kristal Davis Fadtke		
Legislative Analyst's Office (LAO) and Department of Finance (DOF) Meeting	Х		Conservancy staff and the Conservancy's DOF Analyst met with Rachel Ehlers, the new LAO to brief her about the Conservancy.	721/2015	Campbell Ingram, Shakoora Azimi-Gaylon		
Aquatic Weed Science Programming Planning Meeting	Х		Participated in a planning meeting with the Delta Science Program, USDA and UC Davis staff for the Aquatic Weed Science Symposium	7/22/2015	Shakoora Azimi Gaylon		
Solano County Regional Plan Overview Meeting	Х		Met with Solano County representatives to discuss potential for a Cache Slough Complex restoration planning effort.	7/23/2015	Campbell Ingram		
Prop 1 Coordination Meeting	Х		Participated in a conference call with the State Coastal Conservancy staff for coordination of monitoring and assessment.	7/30/2015	Shakoora Azimi-Gaylon		
Ulatis Creek Project Site Visit	Х		Visited restoration project site with project partners and DFW.	7/31/2015	Kristal Davis Fadtke		
Delta Science Program Meeting	Χ		Met with Delta Science Program Staff for on-going coordination.	8/6/2015	Shakoora Azimi-Gaylon		
Waterway Cleanup Coordination Meeting	Χ		Met with San Joaquin Yacht Club members about hosting a waterway cleanup.	6/6/2015	Kathryn Kynett		
Prop 1 Solicitation Workshop	Х		Convened and participated the Public Workshop to present the Conservancy Prop 1 Grant and address public questions.	8/12/2015	Campbell Ingram, Shakoora Azimi-Gaylon, Kathryn Kynett		
Invasive Species Coordination Meeting	Х	Х	Convened and participated in an interagency coordination meeting.	8/13/2015	Shakoora Azimi-Gaylon		
Water Hyacinth Management Meeting	Х		Participated in MWD's water hyacinth management coordination meeting.	8/13/2015	Campbell Ingram		
Solano County Water Agency and RD Meeting	Х		Met with Solano County, Solano County Water Agency, local RD and Resources Agency representatives to discuss potential to conduct Cache Slough Complex restoration planning effort.	8/18/2015	Campbell Ingram		
Delta Levees Investment Strategy Meeting	Х		Participated as a member of the Levee Habitat Advisory Group member.	8/19/2015	Campbell Ingram		
Mercury Workshop Planning Meeting	Х		Participated at a meeting with the Delta Science Program, and USGS staff for planning for a mercury workshop.	8/25/2015	Shakoora Azimi-Gaylon		
Delta Agency Science Workgroup Meeting	Х		Participated in the Delta Agency Science Workgroup meeting for discussion involving refinements of the high-impact science actio9n topic areas.	8/26/2015	Shakoora Azimi-Gaylon		

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Outreach – Delta Meeting Matrix								
ACTIVITY	MTG	PRES	SUMMARY	DATE	CONSERVANCY REPRESENTATIVE			
Delta Dialogues South Delta Sub-Group Meeting	Х		Coordinated, facilitated, and hosted Delta Dialogues south Delta sub-group meeting.	8/27/2015	Campbell Ingram			
Coastal Conservancy Prop 1 Meeting	Х	Х	Met with the Coastal Conservancy staff to discuss standardized monitoring and assessment procedures.	8/27/2015	Shakoora Azimi-Gaylon			
Aquatic Weed Science Symposium	Χ		Attended the science symposium on invasive aquatic vegetation in the Delta.	9/15/2015	Shakoora Azimie-Gaylon			
Program and Policy Subcommittee Meeting	X		Attended the Conservancy's Program and Policy Subcommittee Meeting.	9/16/2015	Campbell Ingram, Shakoora Azimi-Gaylon, Amanda Bohl			

Key Events and Upcoming Dates								
Organization	Date							
Strategic Growth Council Meeting	October 15, 2015							
California Water Commission Meeting	October 21, 2015							
Delta Stewardship Council Meeting	September 24, 2015							
Delta Protection Commission Meeting	November 19, 2015							

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PROGRAM AND POLICY SUBCOMMITTEE MEETING SUMMARY REPORT July 15, 2015 and September 16, 2015

This report summarizes two Program and Policy Subcommittee meetings: July 15th and September 16th.

SUMMARY

July 15th meeting: A quorum was established with the following subcommittee members present: Jim Provenza, Dan Taylor, Mike Eaton and Darla Guenzler. Board members Don Thomas, Todd Ferrara, and Erik Vink also attended. The meeting agenda included an update on Conservancy staffing, preparations for the Prop. 1 Grant Program solicitation and timeline, and agenda items for the next Board meeting.

Prop. 1 Grant Program Timeline

Staff presented an update of the Prop. 1 Grant Program delivering, including the timeline for concept and full proposals, and staffing. The subcommittee approved the timeline presented at the previous Board meeting with the understanding that if the Conservancy receives a large number of concept proposals, staff may request that the timeline be extended.

Future Agenda Items

Subcommittee members discussed having the following items on an upcoming Program and Policy Subcommittee agenda:

- A walk through of the northeast Delta restoration plan.
- A full discussion on how ten percent of Prop. 1 Grant Program funds will be used and tracked and used for monitoring requirements.

September 16th meeting: A quorum was established. The following subcommittee members were present: Don Taylor, Darla Guenzler, Steve Chappell, and Erik Vink. Board members Skip Thomson and two members of the public also attended. The meeting agenda included an update on the FY 15-16 Prop. 1 Grant Program.

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Concept Proposal Submissions

Staff presented an overview of the concept proposals received. In summary, 6 applicants requested Category 1 funding and 11 applicants requested Category 2 funding. The total amount requested from the Prop. 1 Grant Program was \$15,648,301. Proposals ranged from \$45,000 to \$2,000,000 and included 7 proposals from the North Delta, 4 proposals from the West Delta, 4 proposals from the South Delta, and 2 proposals from the Central Delta.

Conservancy staff will review the proposals over the next month and present the staff's recommendation at the November 4th Board meeting.

Contact Person:

Shakoora Azimi-Gaylon, Assistant Executive Officer Sacramento-San Joaquin Delta Conservancy Phone: (916) 375-2086



Proposition 1 Grant Program Concept Proposals							
Conservancy #	Project Name	Category	Type of Project	Description	Location	Cost	
Prop 1-Y1 - 2015-001	Investigation of Conservation Farming Practices to Minimize Subsidence of Peat Soils in the Delta	1	Restoration and Enhancement Agricultural Analysis and Investment Strategy	Examines whether implementing conservation agriculture practices on Delta islands can provide multiple benefits, including mitigating subsidence, providing economic stability for farmers, and providing improved terrestrial habitat for avian species.	Twitchell Island	Conservancy - \$45,000 Total - \$85,000	
Prop 1-Y1 - 2015-002	Relating in Real-time the Movements of Juvenile Spring-Run Chinook to Climate- Driven Flows in South Delta for Effective Management	2	Restoration and Enhancement	Monitor migragory movements of Spring-run Chinook to determine survival rates.	South Delta - San Joaqiun County	Conservancy - \$1,231,973 Total - \$1,836,313	
Prop 1-Y1-2015-003	Yolo Bypass Wildlife Area Habitat and Drainage Improvement Project	2	Restoration and Enhancement	Habiat and working landscape enhancements in the Yolo Bypass Wildlife Area.	Yolo County	Conservancy - \$2,000,000 Total - \$2,343,425	
Prop 1-Y1-2015-004	Petersen Ranch Natural Lands Corridor	2	Restoration and Enhancement Water Quality	Purchase of Petersen Ranch in fee and transfer of the 327 acre tidal restoration parcel to a public agency to implement restoration.		Conservancy - \$1,725,500 Total - \$3,291,600	
Prop 1-Y1-2015-005	Fish Friendly Farming Certification Program for the Sacramento-San Joaquin Delta	1	Restoration and Enhancement Water Quality Agricultural Analysis and Investment Strategy	Develop a program for Solano and Yolo counties, specific to the crops grown and water quality concerns in the two counties.	Solano and Yolo counties	Conservancy - \$89,450 Total - \$96,450	
Prop 1-Y1-2015-006	Water Hyacinth Eradication for Beneficial Reuse	2	Restoration and Enhancement Water Quality Agricultural Analysis and Investment Strategy	Investigate opportunities to use Water Hyacinth for beneficial uses such as ecosystem restoration, sustainable farming, and livestock feed.	Upper Jones Tract and Bradford Island	Conservancy - \$2,000,000 Total - \$2,000,000	
Prop 1-Y1-2015-007	Yolo Bypass Agricultural Crossing Improvements Study	1	Restoration and Enhancement Agricultural Analysis and Investment Strategy	Identify areas within the Yolo Bypass where improvements to local agricultural crossings would result in multiple benefits.	Yolo Bypass Widlife Area	Conservancy - \$100,000 Total - \$110,000	
Prop 1-Y1-2015-008	Sherman Island Wetland Restoration Project, Phase III	1	Restoration and Enhancement	Planning and design for the restoration of 1600 acres of palustrine emergent wetlands.	Sherman Island	Conservancy - \$100,000 Total - \$200,000	
Prop 1-Y1-2015-009	Three Creeks Parkway Restoration Project	2	Restoration and Enhancement Water Quality	Convert denuted flood control channel at the confluence of Marsh, Sand, and Deer Creeks into a healthy stream corridor.	Marsh Creek, Brentwood	Conservancy - \$839,458 Total - \$5,855,432	

Prop 1-Y1-2015-010	Paradise Cut Flood and Conservation Easement Acquisition	2	Restoration and Enhancement	Purchase of the flood easements necessary to build a new flood bypass at Paradise Cut.	Lathrop	Conservancy - \$2,000,000 Total - \$2,625,000
Prop 1-Y1-2015-011	San Joaquin River Levee Improvements and Channel Margin Habitat Project	2	Restoration and Enhancement	Phase one of the San Joaquin River Levee Improvements and Channel Margin Habitat Project, specifically construction of a toe berm, setback levee, and channel margin habitat.	Twitchell Island	Conservancy - \$1,498,700 Total - \$9,991,000
Prop 1-Y1-2015-012	Paradise Cut Conservation and Flood Management Plan	1	Restoration and Enhancement	Develop a conservation and flood management plan for Paradise Cut.	Lathrop	Conservancy - \$99,924 Total - \$174,924
Prop 1-Y1-2015-013	Discover the Delta Foundation Wetlands Project	1	Restoration and Enhancement	Prepare plans for the develop of a 4.4-acre wetland display and trail.	Isleton	Conservancy - \$90,300 Total - \$101,300
Prop 1-Y1-2015-014	Habitat Enhancement for Swainson's Hawk at Elliott Ranch	2	Restoration and Enhancement	Restore 300 acres of Swainson's hawk habitat on Elliott Ranch, a 1,000-acre farm in Yolo County.	West Sacramento	Conservancy - \$350,000 Total - \$608,000
Prop 1-Y1-2015-015	RD 2035 and Woodland-Davis Clean Water Agency Joint Intake and Fish Screen	2	Restoration and Enhancement	Replace the existing 400 cfs capacity RD 2035 intake facility.	West Sacramento	Conservancy - \$2,000,000 Total - \$56,483,691
Prop 1-Y1-2015-016	Wildlife Corridors for Flood Escape on the Yolo Bypass Wildlife Area	2	Restoration and Enhancement	Restore up to 5 miles (12 acres) of new, floodway-compatible wildlife and pollinator habitat and provide an exit and transit corridor for wildlife during floods.	Yolo Bypass Wildlife Area	Conservancy - \$661,928 Total - \$687,315
Prop 1-Y1-2015-016	The Use of Excess or Abandoned Highway Right-of-Ways for Waterside Habitat Enhancement	2	Restoration and Enhancement Water Quality Agricultural Analysis and Investment Strategy	Investigate opportunities to use excess Right-of-Way for the development of ntative habitat.	Drexler Tract and Terminous Tract	Conservancy - \$816,068 Total - \$816,068

North Delta - 7 West Delta - 4 South Delta - 4 Central Delta - 2 Restoration and Enhancement - 17
Water Quality - 5
Agricultural Analysis and Investment Strategy - 5

TOTAL REQUESTED \$15,648,301

Category 1 (6) \$524,674 Category 2 (11) \$15,123,627

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1450 Halyard Drive, Suite 6 West Sacramento, CA 95691 www.deltaconservancy.ca.gov

Request for approval to enter into an interagency agreement in the amount of \$1,100,000 with the San Francisco Estuary Institute-Aquatic Science Center, and run an Invitation for Bid process in the amount of \$250,000 for facilitation services in support of Eco Restore regional planning for the NE Delta.

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RECOMMENDATIONS

Staff recommends board authorization for the Executive Officer to enter into an interagency agreement in the amount of \$1,100,000 with the San Francisco Estuary Institute/Aquatic Science Center Staff, and to run an Invitation for Bid process in the amount of \$250,000 for facilitation services in support of Eco Restore regional planning for the NE Delta.

PROJECT DESCRIPTION

California Eco Restore directs the Delta Conservancy to facilitate locally led regional planning processes to identify priority projects in the Cosumnes (NE Delta), Cache Slough, Western and Southern Delta regions. To support this effort, a subset of the Restoration Network has developed a three step framework, to be piloted for the Northeast Delta region. The process aims to engage the best available science for restoration design by connecting science and stakeholder experts to advanced analytical tools in a real-time analysis and decision support environment. The Framework helps scientists, stakeholders, and agencies envision how complex ecosystem restoration alternatives can be integrated with flood protection, the agricultural economy, and heritage values of the Delta. Step 1. Implement Data, Modeling, and Decision-Support Tools. First, the Framework integrates diverse data from physical and ecological processes to economics and demographics within an advanced data analytics and visualization platform. The goal is to produce modeling, data, visualization and decision-support tools that can be used in real-time by stakeholders and system experts alike as alternative futures are deliberated. Step 2. Develop a Vision of Regional Ecological Potential. Second, using the data and modeling tools, the Framework will produce a science-based vision of northeast Delta ecological potential as a guide to assure that individual restoration actions yield high-functioning landscapes in the future. The vision will represent our best data-driven current understanding of ecosystem function and potential while providing an overarching reference tool to guide restoration actions. Step 3. Develop Multi-Benefit Alternatives and Facilitate Decisions. The Framework ultimately supports codevelopment of broadly acceptable landscape restoration strategies using the best available tools and scientific understanding. Moreover, the Framework provides a decision support environment that facilitates clarification of tradeoffs between alternatives to promote informed decisions among all

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stakeholders. The framework will support successful design, selection and implementation of projects eligible for funding through Proposition 1 grant programs.

Steps 1 and 2 will be led the by San Francisco Estuary Institute - Aquatic Science Center. SFEI-ASC is a unique public-service institution established as part of the Comprehensive Conservation and Management Plan (CCMP) for the San Francisco Estuary. Per their founding bylaws, SFEI is a 501(c)(3) nonprofit organization, led by a representational Board of Directors that includes high-level representatives from the EPA, the State Water Board, Regional Water Boards, local flood control agencies, clean water agencies, environmental NGOs, and industry. On behalf of the State of California, SFEI administers a Joint Powers Authority to provide science support to natural resources agencies. The SFEI staff are expert in collaborative processes to develop the ecological potential of a given area and the scientific basis for restoration strategies and individual projects. The cost for completing steps 1 and 2 for the NE Delta will not exceed \$1,100,000. An interagency agreement will be developed between the Conservancy and ASC.

Step 3 will require expert facilitation and administrative support to ensure multiple stakeholders, agency representative and recognized science experts can engage at appropriate times, and efficiently to develop broadly accepted landscape restoration strategies and projects that support those strategies. The Conservancy will run an Invitation for Bid process to obtain qualified facilitation support from one or more contractors. The cost for facilitating the NE Delta processes will not exceed \$250,000.

BACKGROUND

The need for additional regional planning in the Delta is called for in the Delta Plan, has been articulated in the High Impact Science Agenda as approved by the Delta Plan Interagency Implementation Committee, and has been specifically called for in the Governor's Eco Restore Program. The Framework for regional planning has been in development for several years. The Conservancy has worked extensively with the Delta Science Program, SFEI-ASC, The Nature Conservancy and several consultants to develop the Framework. The Framework has been vetted through the Delta Restoration Network which includes all agencies working in the Delta, several NGO organizations and local stakeholders. Additionally, countless meetings with agencies and stakeholders have been conducted to get input on the Framework. There is currently support from agencies and stakeholders to do the regional planning envisioned. A more detailed description of the NE Delta planning effort is attached

BUDGET

The total project cost is \$1,650,000, with the Delta Stewardship Council providing funding to secure time from science experts (Approx. \$150,000), and The Nature Conservancy contributing funding for data acquisition (Approx. \$150,000). Both organizations will fund their components directly. The

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funding to support the Delta Conservancy components of the projects will come from Prop. 1 for the Interagency Agreement with SFEI-ASC and Federal funding through the US Bureau of Reclamation (BOR) will support the Invitation For Bid for facilitation services. Prop. 1 allows for 10% of the Conservancy's allocation to go toward planning and monitoring to ensure successful design, selection and implementation of projects. These funds are not required to be competed through local assistance grant solicitation process. An agreement between the BOR is in the final stages of execution and includes \$450,000 to support the Delta Restoration Network.

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A proposal by the Delta Conservancy, Delta Science Program, and The Nature Conservancy to support Eco Restore

The Delta Conservancy (DC), the Delta Science Program (DSP), The Nature Conservancy (TNC), the San Francisco Estuary Institute-Aquatic Science Center (SFEI-ASC), and the Intelligent Ecosystem Institute (IEI) propose to develop a Northeast Delta Landscape Restoration Framework (Framework). The project responds to the Governor's "EcoRestore" initiative that calls for 30,000 acres of ecosystem restoration in the Delta. The Framework embodies the best available science by integrating advanced analysis tools with stakeholder and science experts. Ultimately, the Framework supports co-development of broadly acceptable landscape restoration strategies integrated with flood protection, the agricultural economy, and heritage values of the Delta as an evolving place.

Summary

The Delta Conservancy (DC), the Delta Science Program (DSP), The Nature Conservancy (TNC), the San Francisco Estuary Institute-Aquatic Science Center (SFEI-ASC), and the Intelligent Ecosystem Institute (IEI) propose to develop a *Northeast Delta Landscape Restoration Framework* (Framework). The region includes the Cosumnes-Mokelumne Confluence, Lower Cosumnes River, Stone Lakes, and near

floodplain corridors. The project responds to the Governor's "Eco Restore" initiative that calls for 30,000 acres of critical Delta restoration. It also addresses the Delta Stewardship Council's call for landscape-scale conceptual models for each of the six priority restoration areas in the Delta Plan. The project leverages recent advances by SFEI-ASC and TNC for envisioning landscape ecological potential and functional metrics of success. Guided by interdisciplinary science experts, stakeholder experts, and key agency representatives, the Framework will deliver three essential restoration services: 1) it will develop key data, visualization, decision support tools; 2) it will propose a vision of the northeast Delta regional ecological potential; and 3) it will host efficient processes both for



creating alternative restoration strategies for the Northeast Delta region and in-turn facilitating decisions on the alternatives. The Framework will demonstrate these services through the development of a refined landscape design for the McCormack-Williamson Project. The McCormack-Williamson Project is an example of how restoration projects at the individual property scale can be advanced while envisioning possibilities for more effective landscape-scale connections in the future.

The North Delta Landscape Restoration Framework aims to engage the best available science for restoration design by connecting science and stakeholder experts to advanced analytical tools in a real-time analysis and decision support environment. The Framework helps scientists, stakeholders, and agencies envision how complex ecosystem restoration alternatives can be integrated with flood protection, the agricultural economy, and heritage values of the Delta as an evolving place. In all, the Framework has three interrelated components (Figure 1):

1. Implement Data Analytics, Decision Support, and Visualization Tools (Task 1). First, the Framework integrates diverse data from physical and ecological processes to economics and demographics within an advanced data analytics and visualization platform. A formal decision support system that can integrate ecosystem responses, land-use patterns, and stakeholder preferences will also be implemented. The goal is to produce data, visualization and decision-

support tools that can be used in real-time by stakeholders and system experts alike as alternative futures are deliberated and shared.

- 2. Develop a Vision of Regional Ecological Potential (Task 2). Second, using the data and visualization tools, the Framework will produce a science-based vision of northeast Delta ecological potential as a guide to assure that individual restoration actions yield high-functioning landscapes in the future. The vision will represent our best data-driven current understanding of ecosystem function and potential in the northeast Delta while providing an overarching reference tool to guide restoration actions. The project will develop a specific landscape-scale conceptual model and define operational landscape units (OLUs). OLUs are conceptual landscape extents and connections that interact to support specific ecological functions and native species resilience.
- 3. Develop Multi-Benefit Alternatives and Facilitate Decisions. The vision of regional ecological potential developed in Task 2 can be used along with best available tools and scientific understanding to support co-development of broadly acceptable landscape restoration strategies for the northeast Delta region. The Framework provides a decision support environment that facilitates clarification of tradeoffs between alternatives to promote informed decisions among all stakeholders. This will require iterative and facilitated collaboration among expert stakeholders, scientists and agency participants to integrate ecosystem restoration with flood protection, water quality, recreation, and Delta agricultural values. The visualization and data analytics tools will support a collaborative decision-making process both between meetings and in real-time. To be successful, the decision support process must be viewed as neutral, credible, capable, and relevant to the needs of all participants. It must be a place where participants can express preferences and understand tradeoffs among alternative futures.

A core team from SFEI-ASC, the DC and the DSP will initiate project tasks by using existing landscape metrics, data analytics, and visualization platforms including EcoAtlas and Palantir. Landscape visions and the decision support framework will be implemented and applied with regular input by a working panel of science and local stakeholder experts along with key agency representatives.

Support for the McCormack-Williamson Project. As a pilot for the Northeast Delta Landscape Restoration Framework, this project will assist in the development of a refined restoration design and research plan for TNC's McCormack-Williamson restoration project. Science experts and stakeholders will utilize the data analytics tools to define and apply the OLU concept to meet target ecological functions. The project will demonstrate how restoration projects at the property-scale can be effective while preserving opportunities for broader landscape connections in the future.

The Northeast Delta Landscape Restoration Framework is adaptive management in action. From these collective efforts will emerge a landscape-scale conceptual model as mandated in the Delta Plan and a process for achieving landscape-scale restoration that can be repeated throughout the Delta.

NORTHEAST DELTA LANDSCAPE RESTORATION FRAMEWORK

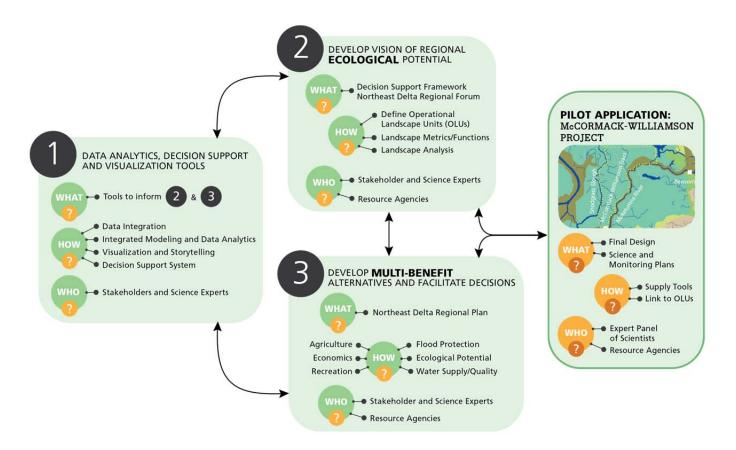


Figure 1

1. Data Analytics, Decision Support, and Visualization Tools

The strength and utility of a Landscape Restoration Framework for the Northeast Delta depends on the underlying data, visualization and decision support tools that support its development and ongoing refinement. Using the Framework in project design and decision-making for ecosystem restoration in the region will require analytical, visualization, and decision support tools to clarify data and modeling outputs for science and stakeholder experts. This component of the project develops a structure for data and model integration, analysis, visualization, and decision support for experts and diverse stakeholders to use in a real-time collaborative environment.

1.1 Data Integration and Analytics Tools

<u>Implementation</u>: Science and stakeholder experts will collaborate to identify readily available data sets relevant to the region or project, including past and present mapping, land use, ecological data, sea level rise projections, flooding scenarios, groundwater depth, and data about organisms, water quality,

hydrology, hydrodynamics, climate, flow, and a variety of other environmental attributes. Data will be prioritized for integration based on expected value to development of the landscape vision and strategy. Data will be accessed from publically available, web-based repositories, or added to specialized, durable storage platforms set up for this project if data has not been provided publically. A dynamic ontology (i.e. a flexible data naming convention) will be developed for this data set so it can be integrated by type and to simplify access and cross-referencing.



<u>Applications</u>: Newly integrated data will enable more refined analytical investigations supporting development of the landscape ecological vision (Task 2) and regional planning and project-specific design (Task 3). The data analytics tools will facilitate data exploration and analysis by expert stakeholders and scientists during meetings and decision making. Data analytics tools will contribute to the conceptual model development and project evaluation. Example analytics include simple filtering of data based on driving variables such as climate and water year type. Analytics could also include custom metrics or predictive process models. Iteration of data analysis will be responsive to the input of the stakeholder and science experts during interactive work sessions.

1.2 Investigate Decision Support Tools

Alternative strategies for the Northeast Delta region will require high-level decision maker input as alternatives are proposed. The Framework will investigate options for a transparent and interactive decision support system to help stakeholders, policy makers, and agency planners weigh in substantively on alternative restoration designs. A formal decision support system will focus design charrettes where stakeholders and decision leaders can test the benefits and tradeoffs of regional restoration strategies and specific project designs (e.g. McCormack-Williamson Tract). Decision support tools will allow real time "what if" questions about restoration phasing, location, design in the context of Delta flood protection and working agriculture in a simulated Delta environment. Built to be interactive, a decision support system will take feedback from the users and then apply iterative learning and solution search methods to define better alternative restoration designs. A key value of modern land-use decision support systems is that they can "learn" about user's resource valuations while users also learn about how the Delta as a whole responds to various actions.

1.3 Visualization and Storytelling

Developing broadly acceptable alternative futures for the Delta will require complex data analytics and modeling to reveal options and tradeoffs. To decide between alternatives, decision makers must be able to visualize the story that each alternative offers for the future of the Delta. Therefore, a critical step is to develop compelling illustrations and maps that depict the essential story of the landscape ecological vision (Task 2) and regional restoration plan (Task 3). The abstract must be made credible and comprehensible through accessible online interactive tools and maps to "tell the story" of the data. The task outputs will ensure that the science behind the shared understanding and decision-making is made transparent to foster stakeholder engagement and decision-maker support. We will develop a variety of visualizations serving the full range of users (e.g. analysts, expert panel, project proponents, stakeholders, and the general public). These visualizations will vary to suit the task, potentially including maps, time series, schematics, and other narrative tools that can be combined into purposeful data stories.

This task will help translate key products for both project participants and public presentations throughout the course of the project. It will also capture the decisions, ideas, and results of the charrettes detailed in *Tasks 2 and 3* below and design the appropriate vehicle for their communication to the outside world. This task will build upon existing investments available through SFEI's EcoAtlas for the Delta, for instance, and other tools. It will also provide the web-based home for project products, providing team and stakeholder access to analyses, maps, descriptions, and meeting support materials.

2. Vision of Regional Ecological Potential

Broadly-supported, science-based regional restoration visions that build individual restoration actions into high-functioning landscapes are needed in order to avoid the risk of implementing many small, disconnected restoration actions that do not effectively restore functional ecosystems (DISB 2013). This component of the project will work closely with the Science Expert Panel to develop a regional ecological vision for one part of the Delta with particular restoration potential: the Northeast Delta, including the Mokelumne-Cosumnes rivers confluence, McCormack-Williamson Tract, Stone Lakes, and

adjacent areas. The end product will include a set of spatially explicit conceptual models describing the current conditions, physical processes, ecological targets and management requirements that can be used to facilitate planning, implementation, monitoring, and adaptive management of restoration projects in the region. The vision will represent our best data-driven current understanding of ecosystem function and potential in this part of the Delta and provide an overarching reference tool to guide restoration actions with particular objectives. The products will also be useful for identifying specific research and long-term monitoring needs. The regional vision process has the following five components:



2.1 Create conceptual models and OLUs

Drawing on the Delta Historical Ecology Investigation (Whipple et al. 2012), contemporary mapping, data assembled in Task 1, and Science Panel input, we will develop initial conceptual models relating physical drivers to ecological function in the Northeast Delta under more natural, historical conditions and under contemporary conditions. These will illustrate major physical drivers and key ecological functions, establishing a shared conceptual foundation for understanding how the system works. These illustrations will be designed as communication products as well. Based on the landscape conceptual models, we will identify the initial spatial extent for one or more operational landscape units (after Verhoeven et al. 2008)). These will be refined during the course of the project based on subsequent analyses of target ecological functions and associated physical processes. This task will also further describe the OLU concept and approach, as applied in the Delta, building on the work of Verhoeven and current applications in SF Bay.

2.2 Landscape metrics analysis

This task will identify the native ecological communities that could be supported within the landscape (as well as non-native and novel ecosystem elements and species that may become appropriate to the region as a result of projected climate change) and quantify realized and potential changes in function and resilience. This information will be drawn from the historical analysis, existing conservation plans and strategies, the Science Panel, and other scientists. Using the emerging Landscape Resilience framework being developed by SFEI-ASC with regional and international scientists (under a separate grant from Google), we will then identify several priority landscape resilience attributes (e.g. riparian connectivity, connected floodplains, tidal transition zone, appropriate sediment supply). We will develop and analyze quantifiable metrics, drawing on the Delta Landscapes project, the data integration and synthesis from Part 1, and the expert panel. GIS analysis will be performed for historical (circa 1850) and contemporary conditions to identify missing attributes for native species support. The landscape metrics analysis will provide a framework for identifying desirable habitat mosaics, connectivity, patch size, and other design parameters and restoration targets. Selected non-GIS metrics will also be identified and developed to the extent data are available.

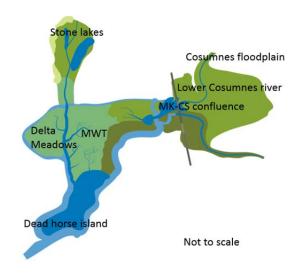
2.3 Evaluate future drivers

Drawing on the landscape scale conceptual models, this task will assess how the key physical drivers (e.g. topography, elevation, soils, floodplain inundation, groundwater levels, hydrograph, and temperature) associated with target ecological functions have changed through time and the general viability of reestablishing resilient, climate-adaptive landscape processes in the OLU. This task will identify the fundamental changes in physical setting that preclude restoration options, as well as persistent or recoverable drivers that contribute to the region's current ecological potential. This analysis will draw on available data and expertise to evaluate physical and ecological potential, rather than detailed engineering or socioeconomic feasibility. Where sufficient data or modeling is not currently available, these needs will be identified. After initial data acquisition and integration has been completed, workshops will be held to involve the expert scientists and stakeholders.

2.4 Create a vision of ecological potential

The Northeast Delta Landscape has the potential to support a wide range of ecological functions along a variety of physical gradients. However, not all functions can be supported in all places at the same time. In this task, we will draw on the expertise of the team, the Science Panel, and analyses conducted using the decision support tools and data developed in Task 1 to create a vision of potential target ecological functions and resilience attributes for different parts of the future OLU, synthesizing the information developed in the previous tasks. The vision will be described as annotated conceptual map graphics and associated documentation of methods and uncertainty. The vision will show spatially how different functions and attributes might be achieved in different settings, the interrelationships between

components, and the associated metrics. For example, different locations in space and time of the OLU might support native fishes during the flood season while supporting upland vegetation and birds during the dry periods of the year. Similarly floodplain wetlands, willow swamps, and oak woodlands would occur along defined gradients. The task will consider the potential environments supported or hindered by physical drivers such as artificially lowered groundwater tables and projected recharge actions as well as constraints from biological stressors such as invasive species.



3. Develop Multi-benefit Alternatives and Facilitate Decisions

The purpose of the North Delta Landscape Restoration Framework is to develop and facilitate durable strategies for ecosystem restoration that work with flood protection, agriculture, and the Delta economy. It responds directly to the Governor's EcoRestore initiative under the California Water Fix. The

Framework will assure that the best available science and a collaborative decision support process is used to envision alternative futures for Northeast Delta region. Alternative futures are comprehensive scenario plans for the region that meet restoration and land use goals under EcoRestore, the coequal goals, applicable HCP/NCCP's and flood protection goals. Alternative future restoration options—at the region or property scale—must benefit native species, enhance natural processes including flood conveyance, and mesh with working Delta landscapes. Thus, the Framework has two primary responsibilities:



First, the Framework supports co-development of broadly acceptable landscape restoration strategies using the best available tools and scientific understanding. Second, the Framework provides a decision support environment that facilitates clarification of the many tradeoffs of each alternative to promote informed decisions among all stakeholders. The Framework also recognizes that any preferred regional plan is a snapshot-in-time that will likely change. The Framework therefore supports an ongoing forum, on neutral ground, for integrating new scientific understanding, new land use opportunities, and changing social preferences. This section describes how the Framework would use modeling and

decision support tools to engage and facilitate stakeholder experts, science experts, and responsible agencies for co-development of multi-benefit alternatives and to facilitate decisions.

3.1 Modeling Support

Envisioning a Delta landscape that works for the Delta economy, society, ecosystem, and water supply calls for tools that can integrate the essential interdependent system components and help clarify decision effects and trade-offs. The consequences of restoration or flood protection options in one area of the Delta will reverberate across the entire Delta system. Therefore, whole-system integrated modeling is an essential analytical step for supporting decisions. In concert with the data analytics tools described in Task 1, expert scientists and stakeholders will test alternative restoration options with deterministic models of system processes like hydrodynamics, transport, and food web dynamics. We expect modeling to be part of the Northeast Delta region vision of ecological potential(Task 2), and regional restoration planning including McCormack-Williamson Tract (Task 3).

Much of the restoration modeling expertise in the Bay-Delta system is in consulting firms. The Framework will contract with these firms for the more complex analyses like regional restoration effects on tidal currents, water levels, residence time, and material transports like sediment and nutrients. Where possible we will also employ parameterized models that can be executed in real time within decision charrettes in response to questions by stakeholder and science experts. All modeling analysis will be scoped and reviewed by science and stakeholder experts where modeling outputs will prompt feedbacks to improve modeling questions. All model outputs will be incorporated into the data analytics platform as a resource for future restoration projects (Task 1).

3.2 DRERIP evaluations for restoration project support

Near-term restoration initiatives need rapid and effective alternative restoration designs that meet both regulatory and CEQA requirements. Project proponents require timely analysis of restoration design alternatives and cumulative impacts analysis suitable for environmental documentation. The established Ecosystem Restoration Program (ERP) Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) process was designed for this task. Established over half a decade, the DRERIP evaluation process includes both conceptual models and a systematic restoration evaluation process. The conceptual models and evaluation process have been peer-reviewed and published in the journal San Francisco Estuary and Watershed Science. The process has been utilized on other restoration projects including Prospect Island and Lower Yolo Ranch. In the short term, the DRERIP evaluation process is the most effective means we have for adaptively applying "best available science" to design and decision support for restoration projects. The data analytics component of the Framework will streamline application of the DRERIP evaluation process and add value by making technical decision support for property-scale projects rapid, effective, and transparent. The Framework will demonstrate the utility of DRERIP evaluations for the science and monitoring design of TNC's McCormack-Williamson Tract restoration project.

3.3 Stakeholder Expert Engagement

Local stakeholder expert knowledge is essential for regional restoration planning success. Planning alternative futures for the northeast Delta region will require iterative collaborations that bring together technology and people in systematic and facilitated processes. The goal is to develop an adaptive roadmap for management of restoration progress in the region. An expert stakeholder group will be established to help produce Northeast Delta regional restoration plan alternatives (Task 2) as well as some aspects of the McCormack-Williamson Tract DRERIP evaluation (Task 3). The group will review all relevant restoration objectives and use the data analytics, modeling, and decision support tools described above. Restoration objectives include the Governor's "EcoRestore" plan, objectives from local HCP/NCCP processes complete or in progress, flood protection system mitigation requirements, and the Delta Plan. With a shared understanding of available tools and objectives, local input will be sought on additional local objectives, data sets, and models that should be considered. The resulting information will be compiled and made available to all participants.

At working meetings of the expert stakeholder group, draft multi-benefit alternative futures for the Northeast Delta region will be developed and presented. At this time it will be possible to collectively and in real time, test assumptions and explore the social, economic, and ecological implications of the alternatives. This process will likely continue over several iterations. The ultimate output of this process will be a multi-benefit regional plan that places individual restoration projects in a landscape context and provides the basis for measuring expected outcomes and progress toward regional objectives.

The process for developing individual restoration project designs (like McCormack-Williamson Tract) will follow a similar pattern to the development of regional multi-benefit alternative futures. A technical group including the project proponent, subject experts, agency staff and analysts will assemble and refine relevant data, models and objectives. Early draft alternatives will be shared with nearby landowners and local stakeholders in workshops as needed to better understand the assumptions, objectives, measures and alternative designs. The Framework will support testing assumptions and exploring impacts of alternatives in real time. With broadly acceptable project alternatives, a science and local expert DRERIP review will be conducted and additional design refinement will occur if necessary. A second local stakeholder workshop will be scheduled to share and receive input on outcomes of the DRERIP review and any subsequent design changes.

The project proponent will determine a preferred alternative and initiate the CEQA environmental review process. This process provides additional opportunity for local stakeholders to comment on project alternatives. Upon the completion of the CEQA process a final design alternative will be selected at which point the project will move forward with final design, permitting and construction. Tasks include recruiting up to six active stakeholders from the Northeast Delta Region, and convening at least four stakeholder meetings over the course of each project.

3.4 Science expert panel

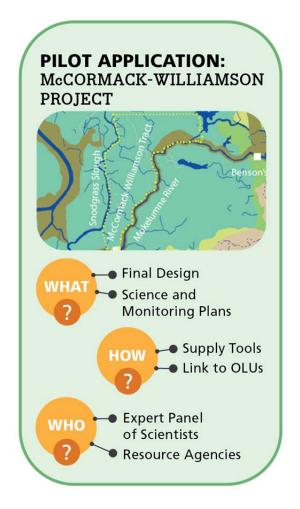
An interdisciplinary panel of science experts will be convened to assist in identifying relevant data and development of data analytics, modeling and decision support tools (Task 1), guide the development of a Northeast Delta vision of ecological potential (Task 2), overall Northeast Delta restoration strategy alternatives, and the restoration science and adaptive management plans for McCormack-Williamson Tract (Task 3). The role of the science expert panel is to help ensure that the best available scientific understanding of Delta processes, species, habitats and stressors is incorporated into each project. The science panelists' expertise will include hydrology, hydrodynamics, modeling, fish biology, aquatic ecology including food web, terrestrial ecology including birds and riparian habitat, and landscape ecology.

3.5 Resource Agency input

Resource and regulatory agency participation is critically important to the success and realization of the envisioned benefits of the Northeast Delta Landscape Vision and Strategy. An agency group will be established to participate in both the development of the regional restoration alternatives (Task 2) and for McCormack-Williamson Tract science and monitoring plan. As previously described, this will involve workgroup sessions where the agency group will interact with science and stakeholder experts to develop the components of the project. This process will be to assure that agency mandates are covered by the regional ecological vision and ultimate restoration project designs.

3.6 Facilitating local, science, and agency expert deliberations

The transformative power of the proposed Framework is dependent on bringing together state-of-the-art data, models and decision making tools with science and stakeholder experts, resource agency staff in a routinely collaborative decision support environment.



To realize the potential, the Framework must be expertly facilitated to ensure the work groups stay on track and focused on relevant issues in priority order. The facilitators will be responsible for working with the groups to identify the relevant questions to be answered in priority order, and to identify the

information to be considered in working through a given task. The facilitator will further be responsible for ensuring that work sessions stay on track and work through the prioritized issues in a timely and focused manner. The facilitator will also assist the analysts in capturing a comprehensive record of decisions and considerations leading to decision points.

Meeting Date: September 23, 2015

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November 4, 2015 PROPOSED AGENDA

Staff is seeking input from the Board regarding additional agenda items for the November 25, 2015 meeting scheduled to be held in the Conservancy offices in West Sacramento, *or* for future Conservancy Board meetings.

Background

A tentative list of agenda items includes:

- Executive Officer's Report
- Proposition 1 Grant Program Update

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