



TO: San Francisco Bay Joint Venture Management Board Members and Alternates
FROM: Beth Huning, Coordinator
DATE: April 17, 2017

The next meeting of the Joint Venture Management Board will take place on **Tuesday, April 25 from 11 am - 2 pm at the Bay Area Metro Center - 375 Beale Street Conference Room 6102 Bay Area, San Francisco.** The building is between Beale and Main Street. Cross streets are Harrison and Folsom.

The Metro Center is one block from the Temporary Transbay Bus Terminal (served by AC Transit, Golden Gate Transit, Greyhound, SamTrans and WestCAT Lynx) and within walking distance from the San Francisco Ferry Building and the Embarcadero BART/Muni Metro Station. Parking in the area is limited though you will find both public and private parking garages as well as limited metered street parking.

Please arrive early to allow time for you to pass through security and find the location of the room. When you arrive, you'll check in at the Security Guard desk on the 1st floor and take the elevator to the 7th Floor. From there you will check-in at the Front Desk Reception area and be redirected to Conference Room-6102 Bay Area (located on the 6th Floor).

Note that the timing of this meeting is different from our previous few meetings. Please be sure to bring your lunch with you, as our break will be brief and we will continue the meeting over lunchtime.

This meeting will primarily be a business meeting with a focus on the following:

- Our four SFBJV Working Committee actions toward the [2017 work plan](#) and Implementation Plan revision;
- Review of the [Implementation Plan Introduction Chapter](#) with the purpose of adoption, at least conditionally and
- A survey of Management Board procedures to more efficiently meet your needs for our meetings.

Please review the briefing packet carefully in advance and prepare any questions you might have so that our discussions can move efficiently. The Coordinator's Report contains some information that will not be discussed at the meeting; so please read it to keep up to date on SFBJV programs and operations.

We hope you will be able to join us for our upcoming Management Board meeting. Please confirm your participation [here](#).

San Francisco Bay Joint Venture Management Board Meeting
Bay Area MetroCenter, 375 Beale Street Conference Room 6102, San Francisco
Tuesday, April 25, 2017, 11 am -2 pm

AGENDA

- 11:00 Welcome and Introductions
- 11:10 Coordinator's Report [Attachment A](#)
- 11:15 Chair's Report and Approval of January 31, 2017 meeting notes
Anne Morkill, US Fish and Wildlife Service [Attachment B](#)
[Action]
- 11:20 Management Board Survey – Polling on Management Board operations and logistics
Beth Huning, Sandra Scoggin, SFBJV staff contractors [Action]
- 11:40 SFBJV Working Committee Reports [Attachments C and D](#)
[Information, Discussion]
- Conservation Delivery Committee, Marc Holmes - Chair
Status of Project Lists
- Science Steering Committee, Renee Spent - Chair
Implementation Plan – Habitat Goals Development
Population and species goals setting
Monitoring and evaluation framework
- 12:30 Break
- 12:40 Working Committee Reports, continued
- Government Affairs Committee, Arthur Feinstein - Chair
Reports from recent DC Hill visits
Climate change policy white paper
- Outreach Committee, Beth Huning for Outreach Coordinator Caroline Warner
Video Short #3 - Redwood Creek with discussion
Climate change and sea level rise messaging [Attachment E](#)
- 1:30 Implementation Plan Update - Sandra Scoggin [Attachment F](#)
Introduction for review and consensus
Next Steps
- 1:50 Announcements, Next Meeting, etc.
- 2:00 Adjourn

ATTACHMENT A

San Francisco Bay Joint Venture Coordinator's Report

TO: SF Bay Joint Venture Management Board and Other Interested Parties
FROM: Beth Huning, Coordinator
DATE: April 17, 2017

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This report is an overview of activities of the Joint Venture and significant developments since the Management Board meeting on January 31, 2017.

A. News of Note from the Joint Venture

- 1. Joint Venture Management Board Meeting, April 25, 2017 from 11 am -2 pm**
Bay MetroCenter, 375 Beale Street, Room 6102 Bay Area, San Francisco
Note the new starting and ending time being tested as a way to help our Management Board members avoid rush hour traffic, particularly those with longer commutes.

Please join us on April 25th for our Management Board meeting at the Bay MetroCenter Room. This meeting will focus on the following:

- We will do a brief poll to elicit your feedback on Management Board procedures. We have made some recent changes to our meeting timing and have received suggestions about altering the way we provide our packet materials. We seek your input and feedback.
- The four SFBJV working committees will report on priority actions in the 2017 work plan and how they are approaching the new Implementation Plan.
- We will discuss and consider adoption of the Introduction Chapter of the Implementation Plan.

2. Background for Discussion, April 25 Management Board Meeting

The following information provides a summary for the items to be discussed at the upcoming meeting.

- **Working Committee Reports** – In addition to briefing you on committee progress toward actions in the [2017 work plan](#), (**Attachment C**) our working committee chairs will also be incorporating JV business pertinent to their committee in their reports, particularly the process for developing content for the Implementation Plan.
- **Implementation Plan Revision Update and [Introduction](#) (Attachment F)** - Our Implementation Plan writer, John Hart, has written the introductory chapter to the Implementation Plan. Prior to the meeting we encourage you to read the introduction and prepare any questions you might want to discuss. We do not plan to edit this by committee, as it has been reviewed by several of our IPT members, rather our goal is to get your response,

particularly considering accuracy and any glaring omissions or comments. At the conclusion of the discussion, it is hoped that the Management Board will consider it for adoption, at least in concept, with the caveat that as work progresses on the plan, a summary section will need to be added as well as likely changes to the content and/or reorganization.

3. SFBJV Implementation Plan Revision Update – [Attachments D, F]

Progress this quarter has focused on confirming Committee Chairs and Co-Chairs for the content work teams. Staff have been working with these leaders to define the approach their team(s) will take on relevant topic areas, compile existing recommendations and plan the initial content. As noted above, some of the teams are actively engaged through the SFBJV in developing content or recommending decisions about the Plan that will be considered as we move forward.

We plan to hire an additional contractor to lead discrete technical discussions and create content specific to habitat goals and monitoring and evaluation. Work has been initiated to establish and/or [update habitat goals \(Attachment D\)](#) and develop a monitoring and evaluation framework. While there is no definitive conclusion or approach established, discussions are being conducted around the processes for establishing species population objectives. (See the Science Steering Committee report below for more detail.)

As noted above, the [introduction \(Attachment F\)](#) is completed and ready for consideration for conditional adoption. It has been circulating for a couple of weeks among the members of the Implementation Plan Team (IPT). Their comments to date have been considered or incorporated. The introduction will serve not only to introduce the plan but will be the basis for an executive summary and other documents used to promote the plan with a variety of audiences.

John Hart has also been contracted for and initiated his next phase of work which will focus on creating introductory sections for the policy, human dimensions, and science sections of the plan. The revision of the SFBJV Implementation Plan will be discussed in more detail at the April 25 meeting.

4. Measure AA Update and Timing

The SFBJV staff has been receiving numerous inquiries with regard to “what’s next” with Measure AA. The Coordinator Report in the October 31, 2016 and January 31, 2017 Management Board packets provided an extensive overview of the process prior to the release of funding. The following summary reflects actions taken by the Restoration Authority (Authority) over the last quarter.

- **Advisory Committee** – The newly re-constituted Advisory Committee met for the first time on February 28 and will meet again on May 12. The size of the Advisory Committee was increased from 25 to 33 members to accommodate a variety of expertise and community interests. SFBJV interests will be well-represented with Coordinator Beth Huning having been appointed to this new Committee along with several Management Board members: John Coleman (Bay Planning Coalition), David Lewis (Save the Bay), Anne Morkill (US Fish and Wildlife Service), Diane Ross-Leech (PG&E), and Bruce Wolfe (Regional Water Quality Control Board). Additionally, many other SFBJV project management or science partners, as well as former Management Board members, have also been appointed. Procedural documents, and member biographies can be found by visiting their [website](#).
- **Grant Guidelines** - Advisory Committee members and other interested parties were invited to review the draft guidelines and Beth was on the team tasked to compile and evaluate revisions for consideration by the Authority at their meeting on April 14. Multiple draft guidelines can be found on their [here](#).

- **Restoration Authority Board meetings** - The Authority is currently meeting bi-monthly, as there is a number of decisions to be made and procedures to be put into place before the first RFP is released and funds are collected and available for distribution. Meetings are now being held in various geographic locations around the Bay and include orientation presentations. Meeting dates, also posted on the SFBJV website, are: April 14 (in Palo Alto), June 9, September 8, November 3. All are invited to attend.

- **Next Steps to Funding Projects** - Once the guidelines are adopted by the Authority, the draft RFP will be developed and finalized. Board policies are also being drafted and adopted. More information will be forthcoming as instructions for input and comment are made available.

- **The project list** is under construction now and will be completed in time for consideration at the Authority's June 9 meeting. The SFBJV is working closely with the Coastal Conservancy to integrate our mutual projects into one list. We encourage all Management Board members to update your projects if you have not already done so. This can be done through the Project Tracker in the [EcoAtlas](#). Go to the "Project Tracker" then follow instructions or contact Sandra Scoggin with any questions at sscoggin@sfbayjv.org or 415-699-3586. Beth will be presenting a webinar in May to share potential projects that Measure AA can fund, date to be determined.

5. Federal Budget and Near Term Prospects for Joint Venture Operating Funds

The best way to describe the federal budget situation right now is a roller coaster. The JV staff and partners will continue to track the budget proposals and their implications for the Joint Venture, our federal partners, and habitat delivery funding sources. The SFBJV Government Affairs Committee will continue to advocate to protect funding, as they did while in Washington DC in late February and through the recent SFBJV sign-on of the Great Waters Coalition letters, described below.

- **FY17 budget**- The Continuing Resolution (CR) will expire on April 28. Congress plans to pass something by the deadline as a "stop gap" for the remainder of the year, possibly another CR or a mini-omnibus bill. However, as of this writing, Congress is on recess, so the window of time to get a budget in place is very tight. There is also a rumor that the Administration wants to start with some budget reductions in FY17 to fund the President's priorities.

- **The FY18 budget** is still in development. The President's "Skinny Budget" proposed last month lacks much detail and the verdict is still out as to whether Congress will support it or not. This administration is planning to build up defense by an additional \$52 billion. As reference, the entire US Fish and Wildlife Service budget is a bit over \$1 billion so no one knows where they will find the funding for that and what will be cut. One possibility is a 10% cut across-the-board. Appropriations Committees are talking about moving FY18 bills in late spring. In the meantime, work on the FY 19 budget will begin this summer.

- **EPA and other partner funding** - While other domestic programs will likely be reduced by 10% overall, EPA is the main target for environmental program and regulatory reductions and eliminations with proposed reductions of 31%. The Skinny Budget specifically calls for eliminating the EPA geographic programs, including the SF Bay Wetland and Water Quality funds. Other geographic programs proposed for elimination include the Great Lakes, Chesapeake Bay, Long Island Sound, South Florida, San Francisco Bay, Lake Champlain, Puget Sound, Gulf of Mexico, and other places. While Congress may salvage some of the other geographic programs, the status of the appropriated but unauthorized SF Bay funds is tenuous.

- **Coalition efforts to protect conservation funding** - Various coalitions are advocating to protect funding for conservation programs in the FY 18 budget. The Great Waters Coalition, of which the SFBJV is a member, is sending multiple letters, as described below. Since their messages are core to the SFBJV we have signed on as “The Non-Federal Partners of the San Francisco Bay Joint Venture”. All letters are available upon request.
 - Senate Appropriations Subcommittee on Agriculture, Rural Development and Food and Drug Administration to protect Farm Bill conservation programs,
 - Senate Appropriations Committee to protect NOAA’s Community Based Restoration Program and Estuary Restoration Program;
 - Senate Appropriations Subcommittee on Energy and Water to protect the Army Corps Ecosystems Restoration programs;
 - Senate Appropriations Subcommittee on Energy, the Environment, and Related Agencies to protect the EPA geographic programs (of which the SF Bay is one), the National Estuary Program (SFEP), the US Fish and Wildlife Service National Coastal Programs and National Fish Passage Program as well as Joint Ventures and the North American Wetlands Conservation Act (NAWCA), the Clean Water Revolving Fund, and Section 319 of the Clean Water Act.

The Cooperative Alliance for Refuge Enhancement (CARE) group, chaired by the National Wildlife Refuge Association, released their comprehensive report requesting Congress and the Administration appropriate \$900 million in annual federal funding to support the National Wildlife Refuge System. The CARE coalition is comprised of 23 wildlife, sporting, scientific, and conservation organizations that span the political spectrum, representing 16 million Americans, who value outdoor recreation and wildlife conservation. CARE was created in 1995 to advocate for robust funding for the Refuge System—lands for Americans across the country to enjoy and where wildlife can thrive. The [2017 report](#) highlights the impact and importance of the Big 6 wildlife-dependent recreational activities on national wildlife refuges and can be found [here](#).

- **Federal government reorganization** - An executive order went out in early March to reorganize the government. All federal agencies will be doing a review of their programs and departments to determine which parts of their programs are no longer needed as a way to seek reductions. More information is sure to follow in the coming months.

6. Flood Control 2.0 Products Now Available

The SFBJV, along with our program partners SFEP, SFEI, BCDC, EPA, and 3 flood control districts, have completed the ambitious 4-year Flood Control 2.0 project. The team produced a number of new tools to provide scientific information and guidance to restoration practitioners, flood control agencies, local municipalities, and others who may consider addressing flood control issues through redesign that more closely mimics natural processes. A new Flood Control 2.0 [website](#) has been established. Tools include:

- historical ecology analysis of streams that currently or once entered the Bay;
- analysis of the regulatory process each project must undergo to receive permits;
- a regulatory guidance document for project managers to reference;
- our new [SediMatch](#) interactive database tool
- economic analyses of the Flood Control 2.0 approach compared to maintaining traditional flood control channels;
- [podcasts](#) about Flood Control 2.0 concepts, the 3 pilot projects (San Francisquito Creek, Novato Creek, Lower Walnut Creek), the values of sediment, SediMatch, the regulatory process, and the tools developed for project managers.

The Flood Control 2.0 team has been doing outreach presentations to flood control districts and regulators and SFBJV staff have been actively coordinating with SFEP to make the tools accessible to partners. Podcasts can be found on the Joint Venture [website](#) or on the [SFEI website](#) where you can also access the reports and other tools.

7. Project Tracker/EcoAtlas

Work this quarter has focused on data entry and cleaning-up SFBJV approximately 200 active projects on the “Tiered Lists”. The goal is to update every active project and produce a current project map and list, expected to be completed in May in time for the June 9 SF Bay Restoration Authority meeting. With the assistance of our temporary contractor, Liz Duffy, a tremendous amount of progress has been made to update the project descriptions, counties, lat-long points, file links and other information. We have also been coordinating with Authority staff to cross-check and cross-populate our list with theirs. We are working collaboratively to develop a strategy to capture and create functions so that the Authority can also track and compile their project lists and data directly from the EcoAtlas/Tracker system. In addition, we’ve initiated a series of meetings with JV partners in April and May to familiarize and train them on use of the system while simultaneously updating their active and completed projects.

8. Upland Transition Zone Mapping Efforts

At the February 16 Science Steering Committee meeting, Brian Fulfroast gave a [presentation](#) on the Estuarine-Terrestrial Transition Zone Decision Support System (DSS). The work was completed in conjunction with SFBBO’s Dave Thomson. The goal of this DSS is to map the distribution of the T-zone for ranking and prioritization, as well as develop a method to track future upland T-zone (UTZ). The report and data are available online at [Climate Commons](#) and Data Basin.

DSS includes a description of the T-zone focusing on indicators of T-zone health, distribution of the T-zone at current tides and at two different SLR scenarios (61 and 167 cm based on NRC projections), and rankings of the T-zone based on metrics of habitat function for the purpose of restoration and enhancement projects. The SFBJV Science Steering Committee (SSC) will be diving into the details and making decisions pertaining to the SSC specific interest in setting a baseline for UTZ habitat and how we intend to track changes over time. See the [Action Plan](#) for tracking change of UTZ habitat for more information.

JV staff have also been ensuring integration of these conversations with a parallel effort led by SFEP and SFEI who are also looking into mapping transition zones, as an action of the CCMP. The primary difference between the two efforts is that while the SSC effort focuses on setting baseline and tracking habitat change in the landscape based on the DSS work, the SFEP/SFEI effort also builds off of Brian’s DSS work, but focuses on aspirational planning - i.e., strives to identify opportunities for landscape planning, restoration projects, and coordination of adaptive management. The final meeting and report for the SFEP/SFEI effort is anticipated this spring.

9. Sixth International Sea Duck Conference (ISDC) - Feb 6-11, 2017

The SFBJV helped to sponsor and host [the 6th ISDC](#) at Tiburon Lodge and Corinthian Yacht Club. Fritz Reid, Susan de la Cruz, and John Takekawa were the local organizers. The theme of the ISDC was “From Bay to Boreal: Challenges of Full Annual Cycle Management of Sea Ducks”. Caroline Warner, assisted at the event and by organizing field trips and other special events and Beth Huning also lead a projects tour in San Pablo Bay for a few international guests.

The conference included plenary talks by leading experts on a wide range of topics including the effects of climate change, harvest management, migration ecology, population modeling, productivity, and wintering ground challenges.

Diving ducks (including sea ducks) are one of the target guilds for the SFBJV. A key take-home message for the SFBJV is that scoter populations have declined precipitously in the past 3 years. Research is still being conducted to determine the cause. What is known is that eelgrass beds have shrunk, the herring fishery has declined and oceans may be warming. We not only need to be alarmed, but we need to strategize and determine what actions can be taken here on the wintering grounds, where we may have the best chances of intervening to help stave off this decline and hopefully reverse it. This will certainly be considered as we develop new strategies for waterfowl as part of the Implementation Plan.

10. SFBJV Letters of Endorsement

The SFBJV sent the following letters since the January 31, 2017 Management Board meeting. All are available to Management Board members upon request:

- February 23, 2017 - Letter to the NOAA Office of Coastal Management in support of Ducks Unlimited's proposal for funding for Chelsea Wetlands.
- March 10, 2017 - Letter to NOAA Restoration Center in support of Ducks Unlimited's proposal for funding for the South Bay Salt Pond Project Phase 2.
- April 5, 2017 - Letter to EPA in support of SFEI's proposal for expansion of the EcoAtlas and associated training.
- April 6, 2017 - Sign on as "non-federal partners of the San Francisco Bay Joint Venture" to four Great Waters Coalition letters intended to protect funding for Farm Bill conservation programs, NOAA Estuary and Community Based Estuary programs, the Army Corps Ecosystem Restoration program, the National Estuary Program, Department of Interior programs such as the US Fish and Wildlife Service Coastal Program, Joint Ventures, NAWCA, and the Clean Water State Revolving Fund, among others.

B. Joint Venture Working Committee Summaries

The following summarizes activities of the SFBJV working committees since the January 31 Management Board meeting.

1. Conservation Delivery Committee-Marc Holmes, Chair

The Conservation Delivery (CD) Committee did not meet this quarter. Committee members instead have taken roles within the Implementation Plan revision and have been meeting with JV staff to help flesh out guidance and production of content and concepts for the plan. A joint meeting of the CD and Science Steering Committee is in the planning stages. Dates will be polled for a time in May. The meeting will address Implementation Plan recommendations to date that are pertinent to both committees. The Tidal Marsh Recovery Plan Team has been meeting and has developed recommendations for members of both committees to consider adopting and incorporating into the new SFBJV Implementation Plan.

2. Science Steering Committee – Renee Spenst, Chair

The Science Steering Committee (SSC) met twice this quarter, on Feb 16 at SFEI in Richmond and on April 7 at USGS in Vallejo.

February 16, 2017 - In attendance: Joy Albertson, US Fish and Wildlife Service; Susan de la Cruz, US Geological Survey; Colin Grant, USFWS Tidal Marsh Recovery; Cristina Grosso, San Francisco Estuary Institute; Nadav Nur, Point Blue Conservation Science; Tom Robinson, Bay Area Open Space Council; Renee Spent, Chair, Ducks Unlimited; Sam Veloz, Point Blue Conservation Science; Isa Woo, US Geological Survey; **SFBJV Staff:** Beth Huning, Brenna Mahoney, Sandra Scoggin
Guests/Presenters: Brian Fulfro, Fulfro and Associates; Micha Salomon, San Francisco Estuary Institute; Stuart Siegel, SF Bay National Estuarine Research Reserve

This was a brief meeting to bring committee members up to date on actions and proposals related to their priority action areas of Net Landscape Change and Species Response to JV actions, with a brief introduction to the role of the SSC in the Implementation Plan revision. Meeting notes are available [here](#).

April 7, 2017 In attendance: Joy Albertson, US Fish and Wildlife Service; Colin Grant, USFWS Tidal Marsh Recovery; Nadav Nur, Point Blue Conservation Science; Tom Robinson, Bay Area Open Space Council; Renee Spent, Chair, Ducks Unlimited; John Takekawa, Audubon California; Mike Vasey, SF Bay National Estuarine Research Reserve; Sam Veloz, Point Blue Conservation Science; Isa Woo, US Geological Survey; **SFBJV Staff:** Beth Huning, Brenna Mahoney, Sandra Scoggin;
Guests: Julian Wood, Point Blue Conservation Science; Stuart Siegel, San Francisco Bay National Estuarine Research Reserve; Kristy Dybala, Point Blue Conservation Science (by phone, for PB presentation only)

The purpose of this meeting was to specify the role of the SCC in developing content for the revised Implementation plan. Specifically, the SSC reviewed the approach used to set the original SFBJV acreage goals for habitat categories and discussed which of these could be included in our new goals, the process for determining potential new habitat categories, as well as justification for any new goals. It was agreed that the approach should be refined and pursued.

The approach to developing a monitoring and evaluation framework for the Implementation Plan was also reviewed along with approaches to developing bird population objectives including a discussion on how to connect habitat restoration objectives to bird and other target species (fish, Threatened and Endangered species, etc). The SSC agreed that the concept should be explored further, and a smaller group will meet to do so. Full meeting notes are available [here](#).

3. Public Outreach – Melissa Pitkin (PRBO Conservation Science), Chair *Report Prepared by Caroline Warner, SFBJV Outreach Coordinator*

Highlights of SFBJV Public Outreach for the first quarter of the 2017 calendar year, in addition to ongoing outreach activities such as content management for our website to keep current on events, jobs, resources, news, funding and new project and partner features; newsletter production and distribution; and social media posts; include the following projects:

• Video Shorts, #WetlandRestoration Is Working

On February 27 we posted a third video about the Redwood Creek restoration project at Muir Beach. You can view all three on our [website](#) if you haven't already, or alternatively on [Facebook](#), [Vimeo](#) and/or [YouTube](#). As of April 17, trackable views of this third video include:

- 22,713 people reached, 11k views and 121 shares on Facebook,
- 336 views on YouTube, and
- just 9 on Vimeo.

While we can see increased “hits” on days when announcements and our newsletter goes out, we are currently unable to track actual video view counts generated by our website and will be moving our web hosting services over to one that supports more detailed tracking. This will take place with no interference to the site, happening behind the scenes.

Our 4th video on Eden Landing is being funded by and produced with the assistance of Ducks Unlimited and the Wildlife Conservation Board. It is due to be completed and released by the end of May.

In the next quarter Caroline will be convening a regional communications team with these goals: expand and improve upon the outreach strategy for the video shorts campaign,

- review and compare our [overall outreach strategy](#) with partner strategies to consider what the hallmarks are of these kinds of plans,
 - further develop a more targeted promotional plan for the video shorts campaign
 - consider what our current outreach goals are/should be. The SFBJV 5-year work plan goal: “70% of target audiences support JV goals” was established in 2012 for the purpose of securing passage of a regional funding measure (Measure AA), and is dated
 - begin a dialog about incorporating outreach and human dimensions in the Implementation Plan revision.
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- **New featured Projects and Partners in the SFBJV Bulletin and on our website**
 - [Lawson’s Landing](#) - A story about the recent retirement of agricultural and development rights on this property as a result of the signing of the conservation easement with NRCS was featured in the March 22 Bulletin.
 - [Flood Control 2.0](#) - In addition to featuring this major effort lead by SFBJV and SFEI in our April 13 Bulletin and on our website, we have also added 4 podcasts to the Flood Control 2.0 series now available on the [SFBJV site](#) as well as on www.yourwetlands.org.
 - [Caitlin Sweeney](#) - Caitlin is our most recent featured partner on the [SFBJV website](#).
 - [Alameda County RCD Wildlife Friendly Pond Restoration Program](#) - This program, designed to provide incentives for prioritizing voluntary wetland restoration within the coastal watersheds of San Francisco Bay on both public and private lands, was our [featured project](#) for the months of February and March with a spotlight on [Leslie Koenig](#), biologist for the Alameda County RCD.
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- **2017 Fact Sheet**

Our [2017 fact sheet](#) was circulated by SFBJV partners in Washington DC this past February and is available online (and in print) for use throughout the year. We share the fact sheeting in packets given to guests on our decision maker tours and with key players at a variety of meetings and events. We invite you to do the same and will provide the materials to you upon request. This year’s fact sheet featured three new projects on the back. The centerfold included a map with active projects that have identified funding needs.
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- **Events**
 - **6th International Sea Duck Conference** (Feb 6-10, 2017) - See “News of Note” #9, above.
 - **San Francisco Bay Flyway Festival** (Feb 10-12) - The SFBJV was represented at this year’s Flyway Festival thanks to past intern, Marina Binsack, who staffed our table both days and made sure all who attended are aware of our video shorts campaign and the underlying message that our efforts to restore SF Bay and surrounding wetlands IS working.

4. Government Affairs Committee – Arthur Feinstein, Chair

SFBJV visits to Washington DC - This quarter the SFBJV and our partners descended upon Washington DC for congressional and agency visits in conjunction with other meetings. The visits culminated the week of February 27 when Joint Ventures, the coastal programs, and the National Estuarine Reserves all held their meetings. This meant that a number of SFBJV partners were there simultaneously and could either join in each others' meetings or reinforce messages through ongoing coordination during the week.

Association of Joint Venture Management Boards (AJVMB) meeting and “Fly-In” - February 28, Washington DC - The AJVMB coordinates the national Joint Venture fly-in. Attending for the SFBJV were Jeff McCreary and Fritz Reid of Ducks Unlimited and Beth Huning. Also participating in Joint Venture meetings were Mark Smith of the Conservation Strategy Group, and Mike Lynes of Audubon California. Geoff Geupel of Point Blue Conservation Science represented the Sonoran JV but attended several SFBJV appointments on our behalf, as did Mike Vasey (SF Bay NERR).

The AJVMB is developing a year-long strategy since it was too early in the new administration to have an audience with incoming officials. The trip report was circulated to the Government Affairs Committee members, utilized for follow-up upon return to the Bay Area, and is available upon request.

Take-home messages from the week were that the administrative transition was in a state of flux, many key appointments had not been made and so our meetings with the Administration were too early. We should plan on returning to DC sometime late spring or in August when the Office of Management and Budget is starting to prepare the FY19 budget. Other lessons learned include the following:

- The SF Bay EPA Water Quality Improvement Program is targeted for elimination. EPA budgets are due to be slashed by 24% (the amount at that point in time), with some regions receiving deeper cuts. The SF Bay Region was targeted for 27%.
- Working through partnerships and on private lands with landowners may be a salvation for some programs such as Joint Ventures.
- There was no direct comment on how the Landscape Conservation Cooperatives will fare, but climate change programs are targeted for reduction or elimination.

Congressmen Mike Thompson and John Garamendi were circulating two separate letters relating to NAWCA and WRDA while we were in DC, for which JV partners actively sought sign-ons. Follow-up upon return confirmed that most delegation members have now signed showing support of renewing NAWCA funding and promoting SF Bay to the Army Corps of Engineers as one of the 10 pilot projects for beneficial re-use under WRDA 2016.

• **White paper on climate change planning and resources** - At the January 31 meeting, the Management Board voted to support the development of a white paper detailing the state of knowledge of sea level rise and climate change planning processes happening in the region or statewide plans that will impact regional actions. Some of the planning process include but are not limited to BCDC policies, Ocean Protection Council Sea Level Rise projections and recommendations that are currently under development, and CHARG. The white paper will enable SFBJV partners to better participate in these and other planning processes by analyzing recommendations and reports. It will recommend policy priorities and offer the Government Affairs Committee/Policy Team recommendations to be considered for the Implementation Plan. A draft scope of work has been developed and is circulating among members of the Government Affairs Committee for their input prior to beginning the work.

C. Major Project Updates

News articles about recent achievements have been posted on the JV website and circulated with the JV news reports. Please refer to prior Coordinator's Reports to review progress on major projects or log into the Project Tracker.

- **South Bay Salt Ponds Phase 2** by John Bourgeois, Executive Project Manager - The next phases of the South Bay Salt Pond Restoration Project are continuing to move forward. Four projects on the USFWS Wildlife Refuge property (including smaller projects in Ponds A19 and A8, and larger efforts in Mountain View and Menlo Park) have submitted regulatory permit applications and are moving further into the design process. We hope to begin construction on all of these projects in the 2018-2020 time frame. The next phase of Eden Landing is also moving ahead, with a public draft CEQA/NEPA document anticipated to be released in Summer 2017. This will include over 2,000 acres of restoration in the southern half of that pond complex. And finally, the Shoreline Study is moving into design and permitting in the hopes of beginning construction on the Pond A12 levee as the first phase. The Shoreline Study is planning for over 4 miles of levee and up to 2,900 acres of tidal restoration in the Alviso area. All of these projects involve multi-agency collaboration with a management team that includes the State Coastal Conservancy, the US Fish and Wildlife Service, the California Department of Fish and Wildlife, the Santa Clara Valley Water District, and the US Army Corps of Engineers.

- **Bolinas Lagoon** by Victoria Pearson, County of Marin - The project goal of the Bolinas Lagoon Wetland Enhancement/Adaptation Plan is to develop and construct a wetland enhancement project for the north end of Bolinas Lagoon that allows for estuarine and riparian wetland enhancement and expansion, and protects access to the town of Bolinas as sea level rises. The objectives of the project are to: 1) improve habitat for shoreline birds, waterfowl, and fish, including special status species; 2) improve tidal flow access to uplands, and connect creeks to their floodplains; 3) allow for the migration of intertidal marshes and enhance transition zones; 4) improve geomorphic processes and hydrologic functions for Wilkins and Lewis Creek; and 5) remove non-native invasive species and enhance wetland and riparian vegetation; and to realign Olema-Bolinas Road, Bolinas-Fairfax Road, and Highway One to allow for sea level rise and to improve traffic management and circulation.

The specific tasks that would be undertaken are as follows: 1) develop and conduct baseline studies of hydrologic, geomorphic, and biologic conditions at the site; 2) evaluate existing cultural and archeological resources and the potential for their discovery within the vicinity; 3) develop an opportunities and constraints analysis with an evaluation of existing and potential site constraints (i.e. environmental, re-location of infrastructure, property ownership); 4) develop three conceptual restoration/SLR adaptation alternatives; 5) evaluate the potential environmental, traffic and circulation impacts associated with removal and replacement of portions of Olema-Bolinas Road, Bolinas-Fairfax Road, and Highway One; 6) conduct environmental review under CEQA/NEPA; and, 7) implement phased construction of the project.

The baseline studies have been done. The conceptual designs have been drafted and will be finalized by this summer. The next steps are securing funding to undertake CEQA and complete the associated studies, develop the construction designs, and implement construction of Phase 1.

- **Tomales Dunes Wetlands (formerly Lawson's Landing)**, by Caroline Warner and Nathan Key - Located at the mouth of Tomales Bay, a US Ramsar site, Lawson's Landing is a well known fishing and boating resort and family-owned campground with a rich clamming history. For a number of years the SFBJV and others sought ways to protect the natural habitat and remediate water quality violations by the landowners. The Natural Resources Conservation Service (NRCS) worked with the Lawson family to acquire a conservation easement on 457 acres of the property through the NRCS Wetlands Reserve Program.

On January 3rd, 2017, the easement closed, resulting in the retirement of development and agricultural rights to the property with limited grazing allowed for weed control. Now, the dune slack wetlands, seasonal wetland, coastal grassland and a unique dune ecosystem have been permanently protected. Over the next several years, NRCS will be providing restoration funding for road removal in one wetland area on the property, fencing along the easement perimeter, and native grass plantings. The work within the conservation easement will complement the other restoration and remediation efforts being undertaken by the Lawson family on adjacent lands. The USFWS is also working with the landowners to protect Western Snowy Plovers on Dillon Beach.

D. Announcements

- 1. David Lewis receives Local Hero Award from Bay Nature Institute** – Congratulations to SFBJV Management Board member, David Lewis, who was presented with Bay Nature’s Local Hero award for his vision and untiring work to pass Measure AA. The award was presented at Bay Nature’s annual event on March 26.
- 2. State of the Estuary Conference October 10-11, 2017** – Mark your calendars now to attend the State of the Estuary Conference that will be held at the Scottish Rite Center in Oakland. More information will be forthcoming as conference plans are publicized.
- 3. Bruener Marsh to be re-named as the Dotson Family Marsh**– The East Bay Regional Parks District will officially change the name of Bruener Marsh to the Dotson Family Marsh at a ceremony on April 22. The marsh is being renamed to honor the efforts of Whitney Dotson who was such a strong activist for its protection over the years and has since joined the board of East Bay Regional Parks District.
- 4. David Loeb to retire as Executive Director of Bay Nature** – At the annual *Bay Nature* event on March 26, David announced his retirement, effective as of June 30. David has been actively engaged with the SFBJV by promoting our programs in the magazine and on their website and helping to provide guidance to SFBJV outreach. We will miss David’s experience and savvy, want to thank him for all he has done for the SFBJV over the many years of his involvement, and wish him well in retirement.

Attachments:

- A. Coordinator’s Report
- B. Meeting notes from Management Board meeting January 31, 2017
- C. 2017 SFBJV Work Plan
- D. Habitat Goals Setting Guidelines
- E. SFBJV Wetland Restoration Sea Level Rise and Climate Changes Messaging
- F. SFBJV Implementation Plan Introduction Chapter

ATTACHMENT B

San Francisco Bay Joint Venture Management Board Meeting
Oro Loma Sanitary District, 2655 Grant Ave, San Lorenzo
Tuesday, January 31 10:30-1:30pm
MEETING NOTES

In attendance: *Anne Morkill (US Fish and Wildlife Service, Chair), Donna Ball (Save The Bay), Arthur Feinstein (Citizens' Committee to Complete the Refuge), Matt Gerhart (State Coastal Conservancy), Steve Goldbeck (BCDC), Marc Holmes (The Bay Institute), Thomas Kendall (US Army Corps of Engineers), Tom Kimball (USGS, call in), Dean Kwansy (Natural Resources Conservation Service), Scott McFarlin (Wildlife Conservation Board) Chindi Peavey (San Mateo Mosquito and Vector Control District), Peter Perrine (Wildlife Conservation Board), Diane Ross –Leech (PG&E), Barbara Salzman (Marin Audubon Society), Korie Schaeffer (NOAA Fisheries), Renee Spenst (Ducks Unlimited), John Takekawa (Audubon California), Julian Wood (Point Blue Conservation Science)*
Guest: Eric Haas-Stapleton (Alameda Co Mosquito and Vector Control District)
SFBJV Staff: *Beth Huning, Brenna Mahoney, Sandra Scoggin, Caroline Warner*

1. Welcome and Introductions

Participants introduced themselves. Anne Morkill thanked The Oro Loma Sanitary District for generously providing the meeting space and for the field trip and tour of the horizontal levee following the meeting.

2. Coordinator's Report – Beth Huning, SFBJV

Beth highlighted a few updates:

- Drakes Estero - The restoration is wrapping up. The National Parks Service (NPS) has been removing 5 miles of plastic debris from the estuary bottom left by the Drakes' Bay oyster farm. The SFBJV helped the NPS develop a fundraising plan for the project and advocated with partners for funds to match an appropriations through the NPS Centennial Fund.
- Cullinan Ranch - The dredger for Richmond Harbor has constructed an offloader. The SFBJV hosted the annual meeting of Joint Venture coordinators, and on a site visit, they were able to board the offloader to see how it operates.
- The EPA hosted a monitoring workshop that was held on January 5th, 2017. Meeting notes will be sent out in the next few days. This workshop as a great opportunity for input on changes in monitoring and permitting.
- The Sonoma Land Trust (SLT) hosted a meeting in Santa Rosa focused on lower Sonoma Creek and prioritizing next projects for the SLT now that Sears Point is wrapping up. This informative meeting discussed groundwater issues, salinity intrusion, and agricultural concerns. Matt Gerhart presented on the Baylands Goals,

and Beth Huning shared the outcomes of both the Climate Adaptation Decision Support models and San Pablo Bay NWR climate adaptation Plans for the region. There might be a reinstatement of the North Bay Working Group of Land Managers.

- [2016 SFBJV Accomplishment Report](#) was submitted to Fish and Wildlife Service and identifies habitat and acreages accomplishments as well as matching funds that helps justify Congressional appropriations to the JV.

3. Chair's Report

Action: The meeting notes from the October 25, 2016 Management Board meeting were reviewed and approved.

4. SFBJV Implementation Plan Revision – Sandra Scoggin, SFBJV

Sandra updated the Management Board on how the Implementation Plan Revision process is going, provided an overview of the work plan, discussed the Project Charter, and presented the structure and composition of proposed Work Teams. The new Project Management Assistant, Brenna Mahoney, was introduced to the group.

Sandra presented the project schedule, including the writing and review processes. The primary writer, John Hart, has produced a draft of the introductory chapter which has gone through one round of review by SFBJV staff and is currently under revision. It is expected that John Hart will use background documents and completed plans to facilitate the writing of many sections of the revised plan.

The Project Charter, which had been reviewed and approved by the Implementation Team Chairs, was discussed by the Management Board. There were some concerns expressed about staff time for this project. Sandra, as the Project Manager, expected that time on the project will vary by week but expected it to be about 1/3 of her staff time. A discussion ensued on what drafts the Management Board will see and comment on and what the process will be if there are changes to proposed Work Team content.

Management Board members requested a few modifications be incorporated into the charter. They requested two opportunities to review the final content. These include: 1) the final draft chapters that have gone through the Implementation Plan Team review and that will allow for comments from the Management Board, 2) the opportunity to review the final document. Additionally, the Board requests review and approval to any major content changes from the approved Table of Contents.

Action: The Implementation Plan Revision Project Charter was approved.

Sandra next presented on the structure and composition of the proposed work teams. The Management Board discussed the need for clear and early communication within and between work teams. Sandra described how work teams will base their work on already existing information. They will update and revise drivers, goals, and strategies. The

expectations of time commitment and content will be clearly laid out to work teams and chairs of work teams.

Currently the Habitats Work Team is one large group, but it is likely that this group will be split up into different habitat types. The Management Board discussed what these categories, which may be as simple as subtidal, intertidal, and uplands with one key goal being identifying any data gaps. There was a concern that riparian uplands category was included. Additional people discussed to be a part of the Habitats Work Team were Peter Baye, Sara Hutto, and representation from BLM, NPS, and the National Marine Sanctuary. The Management Board decided not to edit the work team lists at the meeting but will offer suggestions directly to Sandra.

Action: The Implementation Plan Team will discuss habitat groups, repopulate the proposed work team composition for all work teams and ask Management Board members to review names.

5. SFBJV Working Committee Reports

The committee reports were introduced in the context of the 2017 Work Plan.

Government Affairs Committee – Arthur Feinstein, Chair

Arthur began the committee report by informing the group that the Association of Joint Venture Management Boards will be meeting in Washington on February 27, 2017. This meeting will organize for congressional and administration visits and will provide a better sense of where the Joint Ventures will stand in the new administration.

Arthur Feinstein proposed that the SFBJV write a white paper detailing the state of knowledge of sea level rise and climate change processes and what the approach and priorities are for the SFBJV. The Management Board agreed on the following:

- The report should have clear objectives and specified time frame on approaches since SLR planning processes and projections are ever evolving.
- One goal of this white paper would be to reference the planning processes that are happening in the area including BCDC policies, Ocean Protection Council Sea Level Rise projections and recommendations (in April 2017, OPC will come out with new guidance based on new ice sheet melt projections), BAECC, CHARG, and others,
- It will discuss what is important for the SFBJV and partners to focus on recommend policy priorities in the next few years. This will enable SFBJV partners to better participate in these planning processes and offer the Government Affairs Committee/Policy Team recommendations to be considered for the Implementation Plan.

Arthur offered to establish and chair a committee to discuss, develop proposed content, and write a proposal for the white paper.

Steve Goldbeck mentioned that BCDC will be holding a series of workshops to consider sea level rise policies and encouraged participation of the JV partners in ideas for prioritizing restoration and adaptation projects.

Action: Arthur Feinstein will convene a small work group to develop a scope of work for the white paper proposal and report back to the Management Board.

Peter Perrine reported that the Wildlife Conservation Board is increasing the number of voting members from 3 to 7. Information regarding appointment to these positions can be found on the Governor's webpage. SFBJV staff will distribute more information about this to the Management Board.

Science Steering Committee (SSC) – Renee Spenst, Chair

The Science Steering Committee did not meet last quarter but is planning its next meeting on February 16, 2017. Renee reported that Laura Valoppi has departed both the South Bay Salt Pond Project and the SSC, leaving a vacancy of leadership in the SSC Upland Transition Zone Working Committee. Cristina Grosso has agreed to fill the role. Renee provided an update on the efforts to produce a regional monitoring framework that Stuart Siegel is leading. She noted that the SSC is planning to evaluate sediment science priorities based on a summary of BCDC's sediment science and management workshop.

Outreach Committee – Caroline Warner, SFBJV Outreach Coordinator

The national Joint Venture Communications and Outreach team has produced a storymap on behalf of all JV's. It shows one project in each Joint Venture as represented on a map of the US. The tool will be available and distributed to the JV Coordinators in early February to share in DC and for other education efforts as a way to educate about the scope of the national JV program. This will be spotlighted in the late February SFBJV Bulletin and the link will be available upon request.

Caroline also presented the new video short on San Pablo Bay and encouraged the Management Board to share it on their social media outlets. A publishing guide with tweets and other posting ideas along with images for use can be found on the [SFBJV website](#). The video received a positive response from the Management Board. The next video short is almost complete and will feature the Redwood Creek project.

Conservation Delivery Committee – Marc Holmes, Chair

In addition to referencing the written report in the Management Board packet, Marc focused the discussion on the importance using the new Project Tracker site to report progress of the SFBJV to policy makers and funders and to describe how projects are contributing to regional restoration. Marc stressed that the SFBJV focus on priorities which will include challenging discussions regarding how produce the report and focus priorities with a limited budget and staff time.

6. 2017 Work Plan – Beth Huning, SFBJV

Beth presented the draft 2017 work plan. She noted how staff had incorporated suggested changes to the format in response to recommendations made by Management Board members at the October 25, 2016 meeting. The new format identifies the primary SFBJV working committee associated with each of the goals that implement the 5-year strategic plan. A column to track accomplishments was also added. This will be populated and edited on a continuing basis throughout the year, with links updated to enable tracking of accomplishments. The Management Board requested access to the work plan, which is currently linked in the Board packet materials.

The Committee chairs each highlighted specific projects new to 2017 that were not previously presented at the October 25 meeting. These were presented in the context of budget implications as follows:

Conservation Delivery Committee – Marc Holmes

The Conservation Delivery Committee will continue to support SFBJV partners to achieve project goals (goal 1.1), and this goal will be enhanced by the new project tracking base. Marc stressed the need to focus and prioritize actions rather than being pulled in many different directions. As described above, Marc suggested that the SFBJV prepare an annual report that goes beyond project reporting and that aligns with major plan recommendations, such as BEHGU, to describe progress the SFBJV is making in a narrative way for public interest and for funding opportunities. The Management Board agreed that this report could potentially meld concepts from the proposed sea level rise white paper concept presented by Arthur Feinstein and that this report should be seen as a communications piece.

The Conservation Delivery Committee also prioritized the Implementation Plan revision.

In an updated to goal 1.6 Monitoring and Evaluation, Marc informed the group that Mike Vasey (NERR) has joined the Committee and brings specialty in sediment monitoring. Marc stressed that the SFBJV should consider its role in supporting this monitoring and how to draw public attention to sediment concerns.

Government Affairs Committee – Arthur Feinstein

Arthur Feinstein discussed his proposed sea level rise white paper and agreed to work with the Marc and the Conservation Delivery Committee to formulate a scope of work.

The 2017 committee work plan prioritizes outreach to new and relatively newly elected representatives and delegates. Beth Huning requested that Management Board members let know if any representatives are being engaged in projects, legislation, advocacy so that key messages can be coordinated. Donna Ball informed the group that Save The Bay has a communications piece aimed at Kamala Harris/

Science Steering Committee – Renee Spenst

Priorities for the SSC continue to be “net landscape change” and “species responses to JV conservation actions”. They also continuing to identify related to sediment and monitoring. Transition zone planning and mudflat mapping are also priorities.

Midwinter waterfowl survey - John Takekawa has stepped up to facilitate the group working on the revision of the midwinter waterfowl survey.

Public Outreach Committee – Caroline Warner

Caroline agreed that creating an accomplishments report in some form as an annual report would be a good way to share the valuable information coming from our project database. She also discussed integration with the Government Affairs on who to target and which projects to include for possible tours in spring and/or fall. She noted that the 2017 fact sheet is nearly complete and will be available to SFBJV partners for use during DC visits and other venues targeting decision-makers. The video shorts will be completed on a continuing basis. She hopes to be able to secure funding for a video short each of the 6 SFBJV geographic regions. While the proposed budget includes some money, to keep the series going over time will need rely on partner support.

Action: Caroline will send out links to the completed Video Shorts as well as to the publishing guide on the [SFBJV website](#).

SFBJV Administration – Beth Huning

Beth thanked Point Blue Conservation Science for their continued support as the SFBJV fiscal agent and explained that the SFBJV will consider other fiscal agency options if the increasing overhead becomes a burden to the SFBJV.

Action:

- 1) JV Staff will add link to the Work Plan on the SFBJV website;*
- 2) The Management Board approved adding the production of an annual report as described above to the work plan;*
- 3) The Management Board approved the 2017 plan.*

7. FY16 Budget Report and Proposed FY17 Budget – Beth Huning, Sandra Scoggin

Beth presented a review of the FY16 budget expenses and shared where accounts have or will soon be expended. She explained the large budget carry over in the context of those categories and the lack of expenditures to date on the Implementation Plan revision. Sandra explained the proposed 2017 budget, including a description of completed grants, carry over from FY16 to FY17, contracts, and expenses. A discussion lead by Marc Holmes and Arthur Feinstein revolved around the proposed sea level rise white paper identified in the discretionary account and the new request for an annual report. It was recommended that both papers be adopted and budget be available for both. It was suggested that the report budget be augmented with carryover funding pending a review of the scope of work. It was

also requested that future budget presentations be more straightforward to interpret visually.
Action: The Management Board recommended the line item change to be a SFBJV annual report and approved the SFBJV Work Plan FY17 budget.

8. Adjourn

The meeting adjourned, and members joined the Oro Loma Sanitary District on a tour of the horizontal levee.

ATTACHMENT C

For reference please see the 2017 work plan found [here](#).

ATTACHMENT D

San Francisco Bay Joint Venture Implementation Plan Revision 2017 Updating Habitat Goals

Purpose: To generate habitat goals for the revised San Francisco Bay Joint Venture (SFBJV) Implementation Plan that are modeled somewhat on the goals-setting approach of the original Implementation Plan (2001) as outlined in [Appendix E](#), but modified to incorporate expanded habitat categories and modified geographic scope.

Outcome: A revised table and accompanying descriptive text that identifies and justifies a robust set of new habitat goals for the SFBJV partnership. Revised acreage goals will be the basis for updated strategies and actions so acreage goals should have meaning and be based on the mission and objectives of the SFBJV.

Steps:

- 1) Create a Work Plan describing timeline and cost for developing and carrying out an approach/process to update habitat goals. To be reviewed and approved by JV Staff
- 2) Technical process will be reviewed by a small technical team and by the Implementation Plan team
- 3) Develop draft goals as per process identified in 1 & 2 above; draft of results will be delivered for review by Management Board (with interim reviews as needed)

Content editing: The written descriptive narrative will be edited by John Hart, the writer of the SFBJV Implementation Plan.

Process from the original Implementation Plan

The original Implementation Plan used derived projections of regional wetlands objectives from the Baylands Goals Report as a framework for the wetlands classifications and goals for the Implementation Plan. This required three adaptations of the Goals Project: 1) reduction of its implicit longer-term time frame to a more practical horizon; 2) revision of the geographic scope to accommodate the Joint Venture's geographic boundaries (which excluded the Suisun Marsh and included San Mateo coastal areas); and 3) a simplification of the Goals Project's 14-category classification into the Joint Venture's three habitat categories.

Number 3, above, required a two-step process: 1) translating the Goals Project's habitat categories into the Joint Venture's "tracked habitats" and, in turn, 2) combining these to create three habitat goal categories for the Implementation Strategy. The three goal categories consisted of Bay Habitats, Seasonal Wetlands, and Creeks and Lakes. These categories served as the primary measures of SFBJV in meeting its objectives for wetland acquisition, restoration, and enhancement. [Figure 3-1](#) summarizes this classification process, showing how the Goals Project categories mapped onto the three Joint Venture habitat goals.

Guidance for developing an approach

Changes to the original approach described above should be based on already adopted changes and revisions to our priority habitats, geographic scope and foundational plans (Bayland Goals Science Update, Subtidal Goals, Tidal Marsh Recovery Plan). While we look to replicate a similar approach as described above, we welcome a discussion on how the habitat goals could be revised and described.

Assumptions and thoughts about the process to consider and incorporate:

1. We want to keep as many of our original habitat *categories* as possible (for simplicity and consistency of tracking)

Bay Habitats	Seasonal Wetlands	Creeks and Lakes
Tidal Flat	Diked Wetland	Lake
Tidal Marsh	Grasslands and Associated Wetlands	Creeks and Riparian Zone
Lagoon		
Beach		
Salt Pond		

2. Subregional goals - the original Implementation Plan sets goals for SF Bay region, Suisun, North Bay, Central Bay, and South Bay. Additional regions are the Coast and Russian River. We need to decide if we will set goals for any or all of the JV sub regions.

3. Revisions to seasonal wetlands goals will be incorporated.

The SFBJV revised their [Seasonal Wetland Goals](#) in 2010. Acquisition goals changed from 37,000 to 12,000 acres and Enhancement changed from 23,000 to 11,000 acres. The seasonal wetland (SW) protection (acquisition) goal is the land identified by the public meetings plus the existing amount of SW protected by the SFBJV partner projects. The SW restoration goal remains unchanged. The SW enhancement goals is the original 23,000 acres minus Suisun's 6,000 acres and minus half of the original 12,000 acres for North Bay. The North Bay correction reflects projects that were originally planned as seasonal enhancement and are now planned as tidal restoration.

4. [Subtidal Goals](#) will be included. They can be incorporated as feasible into the acreage goals chart or by acknowledging the adoption of the goals as laid out in the report and linking to it. If the latter, we can consider pulling in just the overarching or most relevant goals and recommendations or again simply referencing them with a link.

5. We recommend that no acreage goals be set for transition zones, but rather that we acknowledge the importance of adjacent uplands that provide refugia and potential for marsh migration. This will

be further fleshed out in the strategies section.

6. Other new or modified habitat categories: Other habitat categories are within the SFBJV region and either don't have current goals, or have goals that need to be re-evaluated. Decisions must be made on how/whether to address and incorporate. These are:

- Coastal habitats - coastal estuaries and riparian (Marin, Sonoma, San Mateo). Do we want to also establish goals for other habitats within the coastal sub-region. Much of the coast is already protected. Coastal goals could be determined through conversations with primary project managers for coastal projects and properties.
- Russian River sub region (Sonoma). Goals could be determined through conversations with primary project managers for projects and properties.
- Creeks and Lakes: As identified in the original Implementation Plan, the creek goals were not based on any original planning document, they were identified by miles of known streams and goals set to 10%, based upon what seemed feasible, given the urban natures of Bay Area streams. It also did not include goals for our Coastal sub-region.
- Stock Ponds. Since the original Implementation Plan, we have added Stock Ponds as a specific subcategory of Lakes (according to criteria) but have not developed specific acreage goals for stock ponds. Is it feasible or desirable to determine acreage goals?

7. From the [Tidal Marsh Recovery Plan](#) and the Refuge, there is an effort to classify "high quality tidal marsh habitat." The Refuge complex has established a process to define "high quality habitat" and has established acre goals for a 10-year time horizon. We should consider how/whether to incorporate this as a category and utilize the same process. This discussion may be more appropriate for defining habitat strategies, but can be considered for goals.

8. Habitat tracking - Goal setting should have our current method of tracking accomplishments in mind. Changes will need to be incorporated into Project Tracker as feasible. It should also inform and be informed by Science Steering Committee Net Landscape Change plans/efforts to map and track habitats.

We recommend

- Review original goals and accomplishments to date.
- Using the tables from the original Implementation Plan, incorporate new habitats and sub-regional geographies to delineate regional and potentially sub-regional goals.
- Review best sources used from the original Implementation Plan for each habitat for the four time representations, if we keep all four - past, present, future, and protected to inform goals for acquisition, restoration and enhancement.
- Identify and consult with the appropriate technical experts as needed.

Additional/more detailed considerations:

- Subtidal
 - Since the original Implementation Plan, the SFBJV has added Subtidal as a broad habitat category, along with the sub categories:
 - Which sub-categories are these? The protection goals for most subtidal categories is no net loss.
 - Acreage goals to follow the above table as adopted goals
 - Restoration acreage goals exist for SAV (eelgrass) and for shellfish beds
 - Goal - increase native eelgrass populations in SF bay within 8,000 acres of suitable subtidal.intertidal area over a 50-year time frame using a phased approach under a program of adaptive management
 - The [Subtidal Goals Report](#) is the guiding document for work on these habitats
- Coastal Sub-region
 - Marin, Sonoma, San Francisco, San Mateo
 - See Number 6 above.
 - Focus on coastal estuaries and riparian/pond habitats (Creeks, Rivers, Lakes, Ponds)
- Russian River sub region
 - See Number 6 above. We recommend following the same process.
 - Note that the Laguna de Santa Rosa has been our main focus in this sub-region but the Sonoma Land Trust has been working on other wetlands such as Pitkin Marsh. NOAA and the Sonoma County Water Agency are working on projects within the Russian River.
- Creeks/Lakes/Ponds/Stock Ponds
 - Creeks and Lakes
 - As identified in the original Implementation Plan, the creek goals were not based on any original planning document, they were identified by miles of known streams and goals set to 10%, based upon what seemed feasible, given the urban natures of Bay Area streams. It also did not include goals for our Coastal sub-region.
 - This warrants a larger discussion on this category, how to update goals, and what documents to use when updating goals
 - Conservation Lands Network - Do we use a subset of their goals? CEMAR - Do we prioritize CEMAR stream/rivers? Please provide a recommendation.
 - Stock Ponds
 - As an updated to the original Implementation Plan, in 2011 we added Stock Ponds as a specific subcategory of Lakes (according to criteria) but have not developed specific acreage goals for stock ponds. Our advice is to not add specific acreage goals for stock ponds since these projects are largely on private land, but rather include goals for stock ponds within the goals for creeks and lakes.

- Transition Zones
 - Subsequent to the 2001 Implementation Plan, we have dedicated resources to classifying and understanding Upland Transition Zones and has made efforts to map and track the location and functions of these “t-zones”. There should be some text in the descriptive section to acknowledge the importance of these habitats.
- Adjacent Uplands? Today’s uplands are tomorrow’s wetlands. (CADS does have conservation actions identified for “migration space” but not acreage targets.) Please recommend whether we should and if so how to establish goals for this category.

Reference material:

- [JV Implementation Plan](#), Restoring the Estuary (2001) sections:
 - [Description of habitat types](#)
 - [Goals-setting worksheet](#) (Appendix E)
 - [Chapter 4, Objectives and Strategies](#)
- [San Francisco Bay Joint Venture Implementation Strategy Update Seasonal Wetlands Opportunity Analysis](#) (2015)
- [BEHGU](#)
 - Change in Baylands Habitat Over Time (page 14)
 - [Appendix B: Change in the Extent of Baylands Habitats](#)
 - Regional Actions to Promote Resilience (page 104-117)
 - <http://baylandsgoals.org/wp-content/uploads/2016/10/Baylands-Chapters-1-2-2016.pdf>
 - [Specific recommendations by subregion and location](#) (page 118-230)
 - Includes considerations and challenges
- Link to relevant actions outlined in [CCMP](#) with SFBJV ownership
- Climate Commons Habitat descriptions (see page 20)
<http://climate.calcommons.org/sites/default/files/basic/Detailed%20Summary.pdf>
- [SFBJV Climate Adaptation Decision Support](#) (CADS) – threats and drivers influence diagrams; strategies for climate change adaptation recommendations; T-Zone chapter developed by B. Fulfroost & D. Thompson for this effort
- Subtidal Goals Report - [Habitat descriptions and Habitat goals](#)
- Relevant [SFBJV Monitoring and Evaluation module\(s\)](#)
- Relevant [Tidal Marsh Recovery Plan](#) information – goals and habitat targets
- [NFWF business plan](#)
- [Stock pond criteria \(for freshwater habitats\)](#)
- The Habitat [Crosswalk](#), which includes habitat classifications from:
 - The original SFBJV Implementation Strategy
 - The new Project Tracker, shared by the SFBJV, CVJV and Delta Conservancy
 - EcoAtlas
 - The BEHGU Science Update
 - The Conservation Lands Network
- [Conservation Lands Network](#)
- SFBJV Project Tracker ([EcoAtlas](#))
- Wetland Restoration and Projected Impacts from Climate Change [white paper](#)
Recommendations: pages 17-21
- Others?

ATTACHMENT E

Wetland restoration, SLR and CC messaging – Outreach Messages (developed in 2012)

- **Healthy, restored wetlands can protect our communities from flooding due to sea level rise and extreme storms during high tides.**
 - Wetlands serve as buffers between open bay waters and our homes, roads and businesses.
 - Wetland restoration offers a natural defense against sea level rise which is already occurring. Scientists predict an additional two-foot rise in sea level over the next 40 years.
 - The sooner we restore wetlands, the sooner they will establish themselves and absorb increasing water levels.
 - Restoring wetlands is a cost-effective way to create resilient coastal and Bay Area communities.

- **Wetlands are important to wildlife and people**
 - Many species of wildlife including both common and endangered birds, fish, and mammals need wetlands to survive. This includes the California Ridgway Rail, salt marsh harvest mouse, herring, salmon, steelhead, and anchovy.
 - Healthy wetlands filter pollution out of the water that drains from our streets and neighborhoods.
 - Healthy wetlands also protect our homes and roads against storms, provide a nursery for young fish, and are places where many of the 7 million people in the Bay Area hike, bike, and watch wildlife.
 - Healthy wetlands take in excess carbon from the atmosphere, helping to reduce future climate change impacts

- **Wildlife need habitat now—and into the future.**
 - Restoring wetlands now will help plants and animals survive as the climate changes and sea levels rise.

WHAT WE/YOU CAN DO, by audience

Community members

- Give money to organizations that are restoring wetlands! For links to a variety of groups visit <http://www.yourwetlands.org/support.php>
- In 2016, voters passed a ballot measure that will directly fund bay area wetland restoration and science. Continue to follow the funding and see where it goes, and support other federal, state and local measures that will generate needed income for ongoing restoration efforts.
- Write your representatives and ask that they support the San Francisco Bay Restoration Act!

- Volunteer to help with a restoration project <http://www.yourwetlands.org/support.php> and stay informed.

The restoration community

- We need to restore wetlands now. Restoring tidal marshes through levee breaches and opening diked areas gives us the best chance at having sustainable marshes in the future.
- Remove levees and other barriers to tidal action now so that marshes can start to recover immediately, giving them a better chance at keeping up with rising sea levels in the future.
- Wherever possible, ensure that there is undeveloped upland habitat available next to existing marshes to enable marshes to migrate upslope as sea levels rise.
- Investigate placement of non-polluted bay mud from harbors and boat channels) at subsided or at-risk sites to raise wetland elevations and/or enhance local sediment supplies.
- Use available sea level rise planning tools to pinpoint important uplands that could become marsh and identify and remove barriers to marsh migration.
- Plan restorations with climate change in mind.
- Join the BAECCC listserv to get latest information –email: andy@cemar.org (Andrew Gunther)

Science community

- Bring the message home – show how your science findings relate to people locally
- Use these messages when you talk to the media or write a press release, etc.
- Learn from the [Baylands Goals Update \(2012-2015\)](#).
- Share your findings with other scientists
- Make yourself aware of the questions facing natural resource managers and landowners so that your research and analysis informs public decision-making
- Wetland ecologists should work with economists to quantify the value of the ecosystem services provided by wetlands
- Be aware of and use the latest tools available (climate commons link)
 - [“Future San Francisco Bay Tidal Marshes – a Climate Smart Planning Tool” \(PRBO\)](#)
 - [NOAA viewer](#)
 - [OCOEF - our coasts our future](#)
 - [CADS](#)
- Contribute your work to existing data portals
 - [CALADAPT](#)
 - [CA Commons](#)
 - [Pt Blue Avian Data Center](#)
 - [EcoAtlas Wetland Tracker](#)

Elected officials

- Funding of scientific research and monitoring has been a vital role of government, with great potential dividends where planning for sea level rise and creating resilient communities is concerned.
- The SF Bay Joint Venture and partners have a plan to restore wetlands for the near and long term.
- Restoration projects that have the best chance of success as climate changes have been prioritized.
- Help us conserve and restore wetlands as sea level rises by:
 - Expediting permitting processes for restoration projects
 - Continuing to protect open spaces and undeveloped areas around the Bay
 - Supporting early regional planning for sea level rise
 - Supporting funding for federal and state agencies that restore and manage wetlands
 - Helping to facilitate the re-use of dredge materials in the Bay

What does it take to restore wetlands in the SF Bay Area? (or What makes restoration work in SF Bay?)

- Funding from public and private sources
- Smooth permitting processes for restoration and enhancement
- Availability of non-polluted dirt/sediment from harbors and flood-control channels, or from construction sites, for use in restoration projects. These sediments are needed at the Bay shoreline and we should not pay to take them to landfills or dump them in the ocean. This requires permits and systems that make re-use easy and possible.
- We need to capture the available mud essential to restoring marshes now and is already in the system, since established marshes have a better chance of adapting to sea level rise in the future.
- Equipment sharing between large projects and small projects. Often, small projects can't afford to restore on their own.
- Sedimatch/Flood Control 2.0 – learn about the outcomes of this effort to bring the dredging community with those who need mud for wetland restoration and innovative and cost-saving channel re-design projects.
- Community support through volunteerism or school involvement in restoration.
- SPEAK UP! - write a letter to your representative and demand funding for wetland restoration!

www.yourwetlands.org has a support page with links to partners that have climate change info by subject, or visit the Bay Area Ecosystems Climate Change Consortium <http://baeccc.org/links.php>

ATTACHMENT F

Intro/Background/Setting the Scene. Third draft 3-21-17, John Hart

Purpose of SBJV, mission [1A]

“Let them be left, wildness and wet,” wrote poet Gerard Manley Hopkins more than a century ago. The San Francisco Bay Joint Venture might be seen as a response to his plea. It exists to protect, restore, and enhance the wetlands, and wetland-dependent birds and wildlife, of an extraordinary region.

One of 22 North American Habitat Joint Ventures formed under international agreement, this consortium has a unique territory. It is the smallest among all the JV domains, the most urbanized, and arguably the most valuable, acre for acre, to species of interest and concern. This is a place of concentrated richness, concentrated promise, and concentrated threat.

The partners that make up the Joint Venture have accomplished a lot of wetland conservation under their first *Implementation Plan*, adopted in 2001. This second *Implementation Plan* maps out the next leg of the journey, reflecting progress made and lessons learned. It also responds to new urgency as the list of stresses on wildlife grows. Alongside familiar challenges—the spread of exotic species, the loss of habitat to cities and conversion of habitat for agriculture, and direct disturbance by human beings—we must now respond to the manifest effects of climate change.

Purpose of the plan [1B]. Brief historical setting/context. Foundations of JVs. North American Waterfowl Management Plan (NAWMP) and other bird plans. “Why are we doing SFBJV?”

The child of local groups determined to stem and reverse the loss of wetland habitats, the Joint Venture has two federal godparents: an international bird pact, and a national clean water law.

In the 1980s, the populations of migratory ducks, geese, and swans across North America showed a disturbing decline. In 1986, the U.S. and Canada signed on to the North American Waterfowl Management Plan, with the goal of restoring the flocks to the levels seen a decade earlier. (Mexico would join in 1994.) Though the causes of the losses were complex, different from species to species, and sometimes simply unknown, the parties made a reasonable assumption: that improving bird *habitats* would improve bird *numbers* over time. Thirty-four regions of breeding or wintering habitat, including San Francisco Bay, were flagged as “of major concern.” The plan called for the creation of public-private “migratory bird joint ventures” to take the lead in these regions. A Central Valley Joint Venture, including the

Sacramento-San Joaquin Delta, was established immediately; but in the Bay Area a different process took precedence.

In 1987, in amendments to the fifteen-year-old Clean Water Act, Congress created a National Estuary Program singling out certain wildlife-friendly bays and river-mouths for special attention. San Francisco Bay, together with its inland vestibule, the Sacramento-San Joaquin River Delta, was on the list. In each such area, a “management conference” was to prepare a plan to “restore and maintain the chemical, physical, and biological integrity of [its] estuary, including restoration and maintenance of water quality, a balanced indigenous population of shellfish, fish and wildlife, and recreational activities.” Our region’s conference was the San Francisco Estuary Project (later Partnership); its product would be titled the *Comprehensive Conservation and Management Plan*.

In 1993, the first *CCMP* was published. Of its many recommendations, one was especially dramatic: that vast tracts of former marshland around the margins of the Bay, diked off but not filled in or urbanized, be reconnected to the tide, with multiple benefits to habitat, and to human beings as well.

To make this notion more than a fantasy, two things were required: a detailed, nuts-and-bolts plan, and an implementing body. In 1995, the Bay Area Wetlands Ecosystem Goals Project, a task force of some one hundred scientists from many agencies and groups, began to map out the possibilities in detail, shoreline segment by shoreline segment.

For implementation, advocates picked up the tool offered in the North American Waterfowl Management Plan. In 1996, the San Francisco Bay Joint Venture was born. A Management Board convened, and members got busy putting together the machinery to carry out the Baylands goals. The State Coastal Conservancy initially funded a small--one-person!-- staff.

Three years later, the Baylands Ecosystem Goals Project scientists completed their effort and delivered a blueprint for action called *Baylands Ecosystem Habitat Goals*, laying out the types, amounts, and locations of wetlands to be protected, enhanced, or restored. These ideas flowed directly into the SF Bay Joint Venture’s *Implementation Plan* of 2001, entitled, *Restoring the Estuary*. When this document was accepted by the overarching North American Waterfowl Management Plan Committee, the SF Bay Joint Venture received federal recognition, joined the national family of habitat Joint Ventures, and began getting modest funding through the Fish and Wildlife Service.

No big bureaucracy, the SF Bay Joint Venture is rather an agile facilitator for its varied partners: environmental groups, resource and regulatory agencies, land managers, and businesses. It provides coordination and support for biological planning, habitat project design, project implementation, and monitoring and evaluation. It makes connections and helps in the never-ending quest for grants. Government is by the participants. Twenty-five

different organizations and agencies have a seat on the Management Board, and nearly a hundred in all take part in working committees.

Expanding the reach: geography

Despite its strong focus on San Francisco Bay, the Joint Venture's mission was never limited to those shores. From the beginning, it covered coastal areas in San Francisco and San Mateo County; after publication of the first *Implementation Plan*, coastal Marin and Sonoma were added. Though the wetlands opportunities in these regions are smaller, some are quite significant. Pescadero Marsh is San Mateo's largest. The Laguna de Santa Rosa in Sonoma County and Bolinas Lagoon and Tomales Bay in Marin County join San Francisco Bay on the list of Wetlands of International Importance under the Convention on Wetlands (Ramsar Convention). These are four of the ten Ramsar sites in the entire state of California.

Expanding the reach: species

The North American Waterfowl Management Plan directs the SF Bay Joint Venture's attention to four or five species in particular: the Northern Pintail, as an indicator species for the success of the dabbling ducks; the Canvasback, representing the diving ducks; and the Surf Scoter and Scaup (Greater and Lesser) as important sea ducks. For all these birds, the Bay Area is a winter retreat, not a breeding ground. The region's contribution is to provide food and refuge for the birds it supports and send them north in good condition for their breeding season.

Nothing prevents Joint Ventures from widening their scope beyond waterfowl, and the SFBJV has gone farther than most of its peers in doing so. From the beginning, it was a wetland habitat Joint Venture and resolved to take account of all bird as well as wetland-dependent species. It has also taken on organisms identified under the state and federal Endangered Species Acts. The San Francisco Bay Joint Venture area has the highest density of listed threatened and endangered species in the continental United States. These include such familiar characters as the salt marsh harvest mouse, the California red-legged frog, and the tiger salamander. Less publicized are such plants as the soft bird's-beak, a gray-fuzzed marsh inhabitant.

This broadened focus gives the San Francisco Bay Joint Venture some overlaps with other efforts. One of these is the *Riparian Bird Conservation Plan* of the California chapter of Partners in Flight (a federal land bird conservation initiative). A second is the National Audubon Society's *Pacific Americas Shorebird Conservation Strategy*. A third is the *Southern Pacific Shorebird Conservation Plan*, authored by Point Blue Conservation Science. The San Francisco Bay Joint Venture, more regionally focused and hands-on than such peers, swaps information with them and applies the tools they have developed. Point Blue has been part of the Joint Venture from the start.

Coordination of another kind is needed between the SFBJV and its older inland counterpart, the Central Valley Joint Venture. Given the way the Bay blends into the Delta and the inland rivers, any boundary between the two is somewhat arbitrary. The jurisdictions have been adjusted several times, most recently in 2016. While a clear demarcation is necessary for some purposes, a certain fuzziness persists. The two Joint Ventures recognize the Suisun region as vital to both and have shared responsibilities in the area. In eastern Contra Costa and Alameda Counties, SF Bay Joint Venture partners are undertaking projects on either side of the mapped line. [A map will be inserted here or in the appendix.]

In this century, plans for San Francisco Bay and its environs have been refined, reflecting growing knowledge and new tools like geographical information systems (GIS). In the stream of studies, authors and lead agencies shift, but the SF Bay Joint Venture is always present. The *Subtidal Habitat Goals Report* of 2010 turned attention to the scientifically neglected world of underwater habitats, especially eelgrass beds and native oyster reefs. In 2011, PRBO (Point Reyes Bird Observatory, now known as Point Blue Conservation Science) and the Joint Venture published *The State of the Birds, San Francisco Bay*, a data summary tracking the fortunes of different species and calling attention especially to the decline of birds dependent on grassland and coastal scrub. The *Bay Area Aquatic Resource Inventory*, first published by the San Francisco Estuary Institute in 2013, filled in a missing piece on riparian habitats. That same year, the U.S. Fish and Wildlife Service offered its *Recovery Plan For Tidal Marsh Ecosystems of Central and Northern California*, focusing on five endangered plant and animal species.

Baylands Ecosystem Habitat Goals, the pioneering restoration blueprint for bay-fringing marshes, was updated in 2015 under a title reflecting new urgency about global warming and sea level rise: *The Baylands and Climate Change—What We Can Do*. Its key message: To hold their own against rising tides, new bayside marshes need to be established *soon*. The June 2016 vote on Regional Measure AA created a parcel tax to fund accelerated restoration work for 20 years.

The most recent guidance comes from the third edition of the *San Francisco Estuary Comprehensive Conservation and Management Plan*, adopted in 2016. SF Bay Joint Venture staff worked on the writing, and of 32 tasks laid out in the *CCMP*, the SF Bay Joint Venture has an “ownership” role in approximately half.

The SF Bay Joint Venture has adopted the goals of each of these documents, and set up a system for tracking progress toward implementation. As the SF Bay Joint Venture’s expertise and experience in grew in bringing together the many players in the restoration community it developed criteria and guidelines for identifying acquisition and restoration projects that deserved regionwide support. This list of projects is weighed seriously by agencies and funders when scarce funds are being allocated. All these plans, goals and efforts will, in effect, be utilized in this revision of the *2001 Implementation Plan*.

That plan, much patched and altered, has served well. Now it is time for another synthesis, with all the threads, old and new, woven into a fabric good for another fifteen years.

Strategic Habitat Conservation [1D]. Briefly explain each element and SHC as a feedback loop.

In habitat restoration, as in anything else, we learn by doing—but only if we pay careful attention to results and profit from the lessons they contain. This common-sense insight has been systematized under the label, “Adaptive Management”. The SF Bay Joint Venture favors the terminology used by the Fish and Wildlife Service: the Strategic Habitat Conservation Cycle. This encompasses the entire round of biological planning, restoration design, habitat delivery, monitoring, evaluation, and planning again. In the last fifteen years this wheel has been seen turning in many locations. This Implementation Plan marks its first full revolution on a regional scale.

One subject of rapid learning has been the role of water-borne sediment in tidal marsh restoration. Because soils that formed underwater oxidize when exposed to the air, many once-and-future marshes lost several feet of elevation during their years as farmland or military installations. Restoring them requires not just water but also soil, which must be of the proper grain size. It adds to the challenge that Bay waters have become clearer recently, less prone to deposit sediment where it is wanted. The SF Bay Joint Venture has grown adept at finding partners with extra material on their hands. In partnership with the Bay Conservation and Development Commission and others, it helped develop a program called *SediMatch* that helps bring sediment from dredging projects (for example removing mud to keep shipping channels deep) to wetland restoration sites.

Goals and objectives. [1E] More detail in Section 3 below. [Beth: This can wait.]

Item: Habitat goals

Item: Policy goal

Item: Communications goal

Achievement and accomplishments. [1F] A broad-brush description not a bulleted list. Narrative, no tables or charts. Could link to tracking database or bar graphs. [Beth: Can be written now. Draw on November 2016 report.]

JH note: For consistency, I am still relying on stats from 2015, see 15yrSFBJVGoals_charts1.12.15(003), which we will want to update throughout.

Revised acreage goals need to be inserted as available.

Measuring progress: Acreage goals

The goal of the Joint Venture is to bring back ecological function and help in the recovery or maintenance of species, beginning with migratory waterfowl. To measure progress along the way, there is a traditional proxy yardstick: habitat acreage.

Joint Ventures nationally are required by the U.S. Fish and Wildlife Service to report not only population trend accomplishments but also acreages reaching a desired state. The original *Baylands Ecosystem Habitat Goals* estimated acres needed to recover the endangered Ridgway's Rail; the 2001 SF Bay Joint Venture *Implementation Plan* stated its goals in acreage terms.

Tracking acres is complicated by the way that SF Bay Joint Venture boundaries have changed in the interim with the addition of North Coast areas and parts of eastern Alameda and Contra Costa Counties but deleting much of Suisun Marsh. Still, a record emerges. It shows great strides in tideland restoration, while work on other habitats somewhat lags.

In the early years, the emphasis was especially focused on protecting lands and waters so that habitat work could go forward. "Protection," at first, meant largely public acquisition, but in recent years the a new tool known as "easements" has become useful. A conservation easement leaves basic ownership in private hands but with legal constraints on development and management requirements identified in the easement agreement. Of 82,000 acres targeted for protection, over 52,000 acres, or 70%, had been protected by 2015. Almost half of this total came in the purchase of salt ponds in the South Bay and along the northern rim of San Pablo Bay: lands that food giant Cargill no longer needed as it streamlined its salt production process. Elsewhere, non-governmental organizations protected key properties, as did the taxpayer funded East Bay Regional Park District.

The restoration of these newly acquired salt marshes and related habitats, including some salt ponds repurposed for the benefit of waterfowl and waterbirds, has reached more than a third of its target: some 13,000 acres of 37,000 have been transformed. In other cases, existing wetlands just need some help to function properly; this "enhancement" may involve removing exotic species or moving earth to unclog the channels that are the circulatory system of a healthy marsh. Progress here has been slower, with 5,000-plus acres treated of 35,000 targeted.

The 2001 *Implementation Plan* proposed ambitious targets for seasonal wetlands: low spots that hold fresh water in the season of rains and bird migrations (technically defined by the presence of certain soil types or special status species). The original goals have been reduced due to boundary changes and for other reasons and now stand at 12,000 new acres to be protected, 7,000 acres to be restored, and 11,000 acres to be enhanced. Progress is approaching the one quarter mark.

A third major wetlands category consists of riparian habitats, lakes, and ponds. Streams and their banks are critical for many birds as well as, obviously, for fish. More surprising is the role of the artificial stock ponds found on agricultural lands, which replace lost original habitats for listed species like the California red-legged frog and tiger salamander. As freshwater refuges in arid summers, they also serve birds. There are over a thousand of these ponds in Alameda County alone.

The 2001 plan foresaw protection, restoration or enhancement of some 27,000 acres of riparian areas and ponds. Reported progress in acreage terms has been minimal—only 154 acres. This surely understates what has been accomplished. The many small projects involved are hard to track, and acreage is often a less appropriate measure than length of stream and streambank treated.

Not mentioned in the 2001 *Implementation Plan* were the habitats on the floor of the Bay, described systematically for the first time in the *Subtidal Habitat Goals Report* of 2010. This study focused attention on two restricted but ecologically important substrates. One was native clam beds or reefs; the authors called for repopulating or increasing production on 8,000 acres. The second was eelgrass beds, important, for example, as substrates for herring roe and thus as a food source for scoters; the report called for protecting 3,700 acres and establishing the grass on another 8,000 acres. These numbers have now become Joint Venture targets.

Examples

Behind these raw numbers are distinctive places. Marsh restoration is bringing back expanses of cordgrass and pickleweed at Bair Island at Redwood City, the largest undeveloped island along the Bay, and at Hamilton Field in Novato, where sediment dredged out of Port of Oakland channels was piped and barged to the site to replace subsided soils. Around the South Bay, the first 2,200 acres of salt ponds have been reconfigured, some as nascent tidal marsh, and some as improved still water habitat, not so salty as before and dotted with refuge islands.

A notable marsh restoration in the coastal sub-region of the SF Bay Joint Venture territory is the Giacomini Marsh at the head of Tomales Bay in Marin County, where Lagunitas Creek feeds into one of the cleanest coastal estuaries. The National Park Service purchased the Giacomini dairy ranch in 2000 and, after years of planning, broke the last of the dikes in 2008. Habitat development has been rapid, as has species response.

A prime example of tidal marsh enhancement is found at Sonoma Creek alongside Highway 37 in Sonoma and Napa Counties. This is part of a wetland strip formed a century ago as a great pulse of sediment dislodged by hydraulic mining in the Sierra Nevada moved into the Bay. The new marsh accreted rapidly and did not develop the intricate channel network that

is normal; lacking good circulation, this “centennial” marsh bred more mosquitoes than birds or fish. In the Sonoma Creek pilot project, simply adding a large new tidal breach appears to have triggered channel development—and caused the reappearance of the salt marsh harvest mouse and the Ridgway’s Rail.

A distinctive seasonal wetland is the Laguna de Santa Rosa, a stream feeding the Russian River that swells from creek to lake in normal winters; it is the seventh largest seasonal wetland complex on the continent and a Ramsar Convention site. Encroachment from adjacent cities has largely been halted; work to reverse a century of impairments is getting under way.

In eastern Contra Costa and Alameda Counties, the East Bay Regional Park District has been acquiring alkali seasonal wetlands, a rare type with uniquely adapted plant species.

Stream rehabilitation is notably advanced in Napa County. The Napa River Flood Control Project within and south of the City of Napa, along with restorations upstream, is softening hardened banks, allowing the river to meander, and improving conditions for steelhead and coho salmon, as well as waterfowl. Another key theater is Alameda Creek and its sprawling tributaries, where dozens of local projects aim to ease the path of spawning steelhead trout. Here a dam is removed or a fish ladder added; there a water intake is screened; in another place a culvert is redesigned or an eroding streambank vegetated.

The SF Bay Joint Venture’s work on stock ponds, especially numerous in the East Bay, is building on lessons learned by the Alameda Resource Conservation District. Species requirements vary. What favors the red-legged frog may or may not help the tiger salamander or the western pond turtle. Larger ponds may be modified to meet several sets of needs.

Population goals

How much progress has this Joint Venture, together with its peers, been making toward the larger goal of population recovery for migratory waterfowl and other birds, animals, and plants of special concern?

Since the signing of the North American Waterfowl Management Plan, the worrisome decline in populations has been reversed for many species. It is difficult to tie the improvement to specific actions or regions—these birds, by definition, move around—but the SFBJV can point to favorable trends within its boundaries. Populations of Pintails and Canvasback are on the rise as the birds are using the restored sites. One class of birds, by contrast, is faring poorly: the sea ducks. Local counts of scaup and scoters have recently plunged. Scientists are trying to figure out causes, which seem likelier to lie in the limited winter habitats than in the very dispersed boreal forest breeding grounds. As for solutions, expansion of eelgrass beds-- which harbor the herring roe on which the ducks preferentially feed--is thought to be one key.

Besides these wintering species, some listed threatened and endangered migratory birds — notably the Western Snowy Plover and the California Least Tern—do breed in the Bay Area. Terns nest on Alameda Island, on an open site once part of a runway for the Alameda Naval Air Station, now owned by the US Veterans Administration but managed by the Fish and Wildlife Service. Plovers nest on Marin County beaches and on salty expanses both small (the evaporative basins within salt marshes, known as pannes) and large (dried-up artificial salt ponds) in the South and North Bay.

It is easiest to track the performance of species that spend their whole lives here. One marshland species, the Ridgway's Rail (originally called the California Clapper Rail), has long been in decline. One stressor was the spread of the invasive smooth cordgrass (*Spartina alterniflora*) and its hybrids which turned varied edge habitats into featureless marsh plains. As a ten-year campaign to eliminate the exotics winds down, rail numbers appear to be rebounding. Another benchmark creature, the endangered salt marsh harvest mouse, seems to be gaining numbers in direct proportion to the habitat restored.

It has been an eventful seventeen years since the first *Implementation Plan* was published. There have been droughts and floods, triumphs and setbacks, ceremonial dike breakings, startling research results, and finally a successful regional election to fund restoration. All the while the slow powers of nature have been at work to generate new richness, wherever and whenever they are given the chance. Their human partners, in the next decade, must labor even harder, especially in the face of climate change and sea level rise, to keep those opportunities alive.

SUMMARY PARAGRAPH to be written when Implementation Plan is nearing completion: Where do we go from here, possible summary of key recommendations, how this Implementation Plan will be used.