SAN FRANCISCO BAY
RESTORATION AUTHORITY

MEMORANDUM

DATE: May 8, 2020

TO: Governing Board, San Francisco Bay Restoration Authority

FROM: Amy Hutzel, Deputy Executive Officer, San Francisco Bay Restoration Authority

SUBJECT: **Bay Restoration Regulatory Integration Team (BRRIT) Performance to Date**

This memo serves as a report on the activities and performance of the Bay Restoration Regulatory Integration Team (BRRIT) from late August 2019 to early April 2020. The San Francisco Bay Restoration Authority (Authority) Board will receive annual reports after this initial report. The BRRIT was fully staffed and had their kick-off training in late August 2019. The establishing document for the BRRIT, "San Francisco Bay Coordinated Permitting Approach, Agency Agreements, and Performance Measures," is attached (Attachment 1).

The BRRIT consists of representatives from the U.S. Army Corps of Engineers (USACE); U.S. Fish and Wildlife Service (USFWS); NOAA's National Marine Fisheries Service (NOAA Fisheries); San Francisco Bay Regional Water Quality Control Board (Water Board); California Department of Fish and Wildlife (CDFW); and San Francisco Bay Conservation and Development Commission (BCDC). USEPA participates on the BRITT on an *ad hoc* basis. All seven agencies have agency managers on the Policy and Management Committee (PMC), which works closely with the BRRIT to collaboratively identify and resolve policy issues and conflicts.

BRRIT Progress Overview

The BRRIT is showing significant promise for improving the permitting process for multi-benefit wetland restoration projects in San Francisco Bay. In the initial months following the BRRIT's formation, the team took on two roles: initiating the BRRIT permitting process for several wetland restoration projects (itemized below) and, concurrently, completing seven independent administrative tasks related to its startup. The BRRIT is actively engaged with thirteen projects and convening additional meetings to discuss core policy issues with the restoration community. The three initial projects that have been through the BRRIT permitting process thus far have had varied results in terms of permitting timeframes, but have benefited from a dedicated team of regulatory staff who meet with the permit applicants together and work through issues in consultation with the PMC. The BRRIT recently permitted one of these, the 900 Innes Remediation Project, a project led by the San Francisco Recreation and Parks Department that will remove contaminated soils and sediment to support future habitat restoration, recreational access, and improved water quality. The other two projects that

submitted permit applications in late 2019, without the benefit of the pre-application process with the BRRIT, have not yet been fully permitted.

At this point, it is challenging to assess the BRRIT on the performance measures given that the first three projects that submitted permit application did not go through the pre-application consultation. Starting with the next performance memo to the Authority Board in 2021, staff will provide a quantitative assessment of the BRRIT's ability to meet the performance measures. Going forward, the BRRIT is currently working on a large number of projects in the pre-application phase and those projects are expected to provide a truer test of the BRRIT's ability to improve permitting timeframes and address permitting hurdles. Even in the face of the challenges presented over the past two months due to the COVID-19 shelter-in-place orders, the BRRIT's ongoing remote coordination and collaboration is expected to expedite permitting for future projects.

The PMC has also demonstrated significant benefit to increasing the pace and scale of restoration in San Francisco Bay by identifying and addressing policy and process issues that impact multiple projects. This has been done in collaboration with the BRRIT, elevating issues common among restoration projects for further consideration.

Funding

The budget for the BRRIT is approximately $1,250,000 per year (with anticipated annual increases for inflation). Funding has been provided from the Authority ($600,000 per year for five years, with increases annually for inflation), State Coastal Conservancy ($250,000 per year for five years), Santa Clara Valley Water District ($200,000 for the first year and reasonable efforts to provide $200,000 annually for the remaining four years), East Bay Regional Park District ($75,000 per year for five years), and Bay Area Toll Authority ($100,000 per year for five years, subject to availability of funds in annual budgets after the first year). In addition, the Water Board is providing in-kind office space for the BRRIT to work and meet.

Authority staff will assess BRRIT expenditures at the end of the first year, in August of 2020. It is likely that there will need to be some adjustments to the budget among agencies for the second year, but it is not expected that the total annual cost will increase beyond any increase due to inflation. Due to delays in executing funding agreements with two of the agencies, there may be some initial cost savings. All of the agencies, regardless of the delay of executing funding agreements, assigned staff to the BRRIT team as of August 2019.

Policy and Management Committee

The PMC, made up of agency managers from USACE, USFWS, NOAA Fisheries, the Water Board, CDFW, BCDC, and USEPA, has been working since 2018 to establish the BRRIT and set roles, responsibilities, and processes. With the formation of the BRRIT, the PMC has continued to play a critical role, meeting monthly with the BRRIT to discuss specific projects as well as overarching policy issues and administrative and process issues. The PMC also uses the monthly meetings to obtain information on restoration issues, including those on the Permit and Policy Improvement List and approaches for mosquito control, and to complete actions such as review and approval of the BRRIT agency MOU.

Permit and Policy Improvements

Prior to standing up the BRRIT in August 2019, the PMC developed a Permit and Policy Improvement List, which was provided to the Authority Board in February 2019 and updated in spring 2020 to reflect completed work and newly-identified projects (Attachments 2 and 3). Prior to finalizing the list, the PMC sought input from a number of restoration practitioners who have significant experience with permitting restoration projects in the San Francisco Bay. The PMC will implement at least one of the policy initiatives on the list each year.

The following projects on the Permit and Policy Improvement List have been completed or have work underway:

- **Fill for habitat.** Tidal restoration projects can result in beneficial fill for habitat, including ecotone transition levees and other habitat features, such as nesting bird islands. Previously BCDC's Bay Plan potentially limited such features. BCDC approved a Bay Plan amendment on October 3, 2019, that provides more flexibility and certainty for the use of fill for beneficial purposes in restoration. The Water Board also completed an internal review of policies around fill for restoration and determined that existing policies have substantial flexibility for beneficial fill for habitat associated with restoration projects. This was shown, for example, in the Water Board's action on the South Bay Shoreline Project, where the Board, in authorizing ecotone levee fill, took into account the effects of projected sea level rise to reduce estimated fill impacts.

- **Type conversion framework.** Accomplishing regional wetland restoration goals can require conversion of one type of habitat into another (e.g., salt ponds to tidal wetlands). USEPA led a multi-agency effort to develop a consistent framework for analyzing type conversion proposals, taking into account the substantial work that has been completed around the Bay Area, such as the Baylands Habitat Ecosystem Goals reports. USEPA distributed a final framework in February 2020, and the BRRIT intends to pilot its use in 2020 for a project under the BRRIT's purview.

- **Fully Protected Species Memoranda of Understanding (MOUs) for Restoration Projects.** Restoration projects may have long-term benefits to special-status species, but project construction and establishment can have the potential to result in significant short-term impacts. Under the State Fish and Game Code, CDFW is unable to issue permits to take or possess a fully protected species. However, CDFW may authorize the taking of a fully protected species for necessary scientific research, including efforts to recover fully protected species. Working with the Lower Walnut Creek Restoration Project, CDFW has initiated consultation with the intent to issue a fully protected species permit if the project can demonstrate that the restoration will contribute to the recovery of the fully protected salt marsh harvest mouse. Through this effort, CDFW is developing guidance to assist other large-scale restoration projects that may cause take of fully protected species during restoration activities.

- **Guidance for project proponents.** The similar Bay margin locations and construction methods of many restoration projects means they can result in similar construction-stage impacts. The BRRIT has initiated a project to provide on the BRRIT's website organized lists of common impacts and mitigation measures, along with examples of recent biological assessments and biological opinions that could be used to guide evaluations and submittals by restoration project proponents. The project will add

information incrementally during 2020, with the goal of having a finalized set of guidance by the end of the year.

- **Restoration project monitoring.** Regulatory agencies often include requirements in their authorizations to evaluate project success. These are typically implemented on the individual project scale and are not coordinated on a regional scale, meaning the intended regional benefits of large-scale restoration implementation may not be well-characterized by existing monitoring. To address this problem and generally improve linkages between project-scale and landscape-scale monitoring, work funded by USEPA to develop a Wetlands Regional Monitoring Program (WRMP) is underway and expected to continue through 2021, led by the San Francisco Estuary Partnership. The WRMP scientific framework was completed in early 2020, and program elements to be developed through 2021 include an implementation plan that describes a funding and governance structure, and a data management plan.

Formation of the BRRIT

The BRRIT formally began with kick-off meetings on August 21-23, 2019. The team, PMC, and agency partners received a charge from Supervisor Dave Pine to begin the work of improving the efficiency of permitting wetland restoration projects. The kick-off meeting time was used to discuss the Memorandum of Understanding (MOU), which describes the formation and roles of the BRRIT and PMC and associated performance standards, BRRIT objectives, agency perspectives on challenges to permitting in the San Francisco Bay, site visits to existing restoration projects, and logistics of BRRIT formation.

The BRRIT is comprised of the following staff:

- Frances Malamud-Roam – USACE;
- Valary Bloom – USFWS;
- Alison Weber-Stover – NOAA Fisheries;
- Tami Schane – CDFW;
- Anniken Lydon – BCDC; and
- Agnes Farres – Water Board.

Since its inception, the BRRIT has met between one and three days per week at the Water Board's offices in Oakland, to discuss projects and conduct pre-application meetings. The BRRIT has met at other locations for site visits or when applicants request alternative meeting locations. Team members have also interacted regularly with one another and project proponents via video conference, phone, and email. On March 16, 2020, in-person interactions between the BRRIT members were interrupted by COVID-19 public health orders to shelter in place. While the orders were in place, the BRRIT continued to integrate its work remotely.

BRRIT Operations and Outreach

In the initial months following the formation of the BRRIT, the team completed tasks related to operations and outreach, including:

- Contacted all 17 project proponents on the Priority Project List and scheduled pre-application meetings and site visits with 14 of them;
- Developed a standard operating procedures document;

- Developed a SharePoint site for storing and sharing files, facilitating coordination of work products, and implementing a BRRIT group calendar;
- Developed Project Tracking and BRRIT performance tracking spreadsheets;
- Developed a pre-application initial email to project proponents;
- Developed the following outreach materials, which were posted on the Authority's website and can be shared at conferences and other meetings:
    - Description of the BRRIT pre-application process;
    - Pre-application meeting guidance;
    - BRRIT process flow chart;
    - One-page handout on BRRIT; and
    - A frequently asked questions document.
- Began development of a Tools tab on the BRRIT website to include resources to help applicants develop complete application packages.

Priority Project List

Authority staff maintain a list of priority projects for the BRRIT. This list was initially developed in June 2019. Authority staff conducted an email call for projects and received ten project submittals. A second call for projects was conducted in December 2019 and an additional seven projects were added to the list. Authority staff intend to conduct calls for additional projects every six months. Projects are screened for inclusion on the project list for BRRIT review by Authority staff, using the eligibility criteria for Authority funding, as described in Measure AA and associated Requests for Proposals.

The project priority list is divided into three categories:

- Category 1: Permit Application Review. There are currently five projects applying for and seeking permits from the BRRIT. Current Category 1 projects are:
    - 900 Innes Remediation Project;
    - Lower Walnut Creek Restoration Project;
    - Heron's Head Park Shoreline Resilience Project;
    - Invasive Spartina Project High Tide Refuge Islands; and
    - Terminal 4 Wharf, Warehouse, and Pilings Removal Project.
- Category 2: Pre-Permit Application Consultation. There are eight projects for which the BRRIT has conducted pre-application meetings and is conducting site visits in order to provide recommendations that will expedite permitting and identify potential interagency conflicts and propose solutions. Current Category 2 Projects are:
    - McInnis Marsh Restoration Project;
    - Multi-Benefit Treatment Wetland along the San Leandro Shoreline for Contaminant Removal and Sea Level Rise Adaptation;
    - South Bay Salt Ponds Phase 2 at Eden Landing;
    - South San Francisco Bay Shoreline Project Phase II;
    - Strategy to Advance Flood Protection, Ecosystems and Recreation along San Francisco Bay (SAFER Bay);
    - Palo Alto Horizontal Levee Pilot Project;
    - Novato Deer Island Tidal Wetlands Restoration; and
    - Tiscornia Marsh Restoration Project.

- Category 3: Other. There are four projects that need other services from the BRRIT. These range from requests for a jurisdictional determination, assistance with an environmental review strategy, and discussion of general permitting requirements. Current Category 3 projects are:
    - Coyote Hills Regional Park - Restoration and Public Access Project;
    - Sonoma Creek Baylands Strategy;
    - Native and Invasive Spartina; and
    - Living Shorelines/Subtidal and Intertidal Habitat Restoration Projects.

Permitting Timelines

The three Category 1 projects that have submitted permit applications to date are Heron's Head Shoreline Resilience Project, 900 Innes Remediation Project, and Lower Walnut Creek Restoration Project.

Heron's Head Shoreline Resilience Project

The USACE received an application for Heron's Head Shoreline Resilience Project on October 1, 2019. The BRRIT met with the applicant for a site visit and meeting in November 2019, then the project applicant suspended activity on their project for redesign. They recently reengaged for an April follow-up meeting.

India Basin/900 Innes Remediation Project

The India Basin/900 Innes Remediation Project has been permitted. This project will remediate upland soils and excavate a subtidal area to prepare the area for restoration and use by the public as a park. The permit application and request for an Individual Permit was received by the USACE on August 2, 2019. Based on feedback from the BRRIT, the applicant subsequently withdrew the request for an Individual Permit and requested a Nationwide Permit 38 authorization on December 16, 2019. The federal lead agency for this project is USEPA.

Lower Walnut Creek Restoration Project

The Lower Walnut Creek Restoration Project would restore nearly 100 acres of tidal marsh along the Suisun Bay shoreline. The project is complex, with multiple special status species issues and overlapping jurisdictional issues with pipeline work associated with the Bureau of Reclamation. The PMC is working in tandem with BRRIT to identify permitting solutions to this project's multiple permitting hurdles. This project exemplifies the ambitious and bold restoration actions needed in the San Francisco Bay. The USACE received an application for this project on September 13, 2019. Although this project did not benefit from the robust pre-application coordination the BRRIT is intended to provide, the resolution of challenges provides the opportunity to inform similarly complex restoration projects in the future.

Pre-Permit Application Coordination

Below is a list of BRRIT meetings and site visits with projects. Subsequent to participating in pre-application meetings, the BRRIT provided written guidance to applicants within two weeks of the meeting.

Project	**Purpose of Meeting**	**Date**
McInnis Marsh Restoration Project	Pre-application	December 4, 2019

Palo Alto Horizontal Levee Pilot Project	Pre-application	December 4, 2019
San Leandro Shoreline	Pre-application	January 8, 2020
South San Francisco Bay Shoreline Phase II	Interagency Corps Meeting	January 14, 2020
South San Francisco Bay Shoreline Phase II	Pre-application	February 5, 2020
Tiscornia Marsh Restoration	Pre-application	February 5, 2020
Terminal 4 Wharf, Warehouse, and Pilings Removal Project	Pre-application	February 12, 2020
South Bay Salt Pond, Eden Landing Phase II	Pre-application	March 4, 2020
SAFER Bay	Pre-application	March 4, 2020
Invasive Spartina High Tide Islands	Pre-application	March 11, 2020

Note: Novato Deer Island Tidal Wetlands Restoration Project is a Category 2 project. However, the applicant has not yet approached the BRRIT for a pre-application meeting.

Other Projects

USACE provided guidance to the Coyote Hills Regional Park Restoration and Public Access Project on their jurisdictional delineation. Additionally, the BRRIT reached out to the Sonoma Creek Baylands Strategy, but the project proponent requested to delay coordination.

Collaborative Learning

In an effort to obtain knowledge on relevant policy issues directly associated with San Francisco Bay restoration projects, the BRRIT met with scientific experts and others on or at the following topics and events:

- Wetland Habitat Type Conversion Framework webinar—learning about the tool/framework. USFWS and BCDC provided comments on multiple iterations of the draft framework. The team is planning to implement the completed framework for a pilot project this year, in coordination with USEPA;
- State of the Estuary conference;
- San Francisco Bay Sediment Workshop (San Francisco Estuary Institute);
- Beneficial Reuse of Dredged Materials Workshop;
- Presentation to BRRIT by BCDC Planning Staff on their effort to assess their mitigation policies and any need for amendment thereof;
- Use of Remote Sensing for Vegetation Monitoring and Mapping;
- Fish Monitoring in Restoration Projects;
- Estuarine Connectivity Symposium;
- Overview of Living Shoreline benefits and Subtidal Habitat Goals guidance (California Coastal Conservancy); and
- Ecology of Marsh Mosquitoes and Design Implications. Presentation to the BRRIT and PMC by Karl Malamud-Roam, Vector Control Consultants, and Wes Maffei, Napa County Mosquito Abatement District.

Lessons Learned

- **Continued outreach and communication on the benefits of early coordination is key.** For the first eight months, the BRRIT served applicants in any stage of the permitting process to accommodate ongoing project schedules. However, without the benefit of pre-application coordination, the BRRIT encountered challenges to rapidly permitting a complex project. Moving forward, the BRRIT expects to be most useful when it can engage with applicants during the pre-application phase.

- **Recognizing ongoing challenges for the restoration community.** The following challenges have been raised by project applicants:
    - Monitoring requirements;
    - Mechanism for providing incidental take coverage for fully protected species;
    - Difficulty addressing concerns/modifying design of the project after a certain level of design;
    - Desire for timely coordination and an easier regulatory process for restoration projects;
    - Agency guidance on avoidance and minimization measures to include in the project;
    - Perceived inconsistencies between the protection measures required among projects Bay-wide;
    - Physical conditions (e.g., shallow depth, high turbidity, strong currents, site access constraints) are more challenging and construction is considerably more expensive in the Bay Area than other parts of the state; and
    - Permitting long-term adaptive management and maintenance.

- **Applying lessons learned.**
    - The BRRIT strives to address the challenges of the restoration community and is actively responding by working toward developing standardized monitoring requirements where appropriate, developing protocols and resources, and elevating issues to the PMC as needed.
    - The BRRIT benefitted from the collaborative learning sessions it arranged and incorporated the following elements in its meetings with applicants:
        - Wetland restoration projects can result in a need to control mosquitoes. The BRRIT is advising project applicants to coordinate with local Mosquito Abatement Districts on project design. Additionally, the BRRIT has requested that local Mosquito Abatement Districts provide best management practices to project applicants, as needed.
        - There is an urgent need to restore habitats now to prepare for the future. Consideration of fill for habitat, timeframe of benefits, given the latest sea level rise projections and anticipated natural evolution and loss of habitat if no management action is taken.
        - Encourage green infrastructure (living shorelines) solutions where appropriate, recognizing some projects may require a solution on the green to grey spectrum.

Challenges

Balancing expedited review with restoration project quality and environmental protection. The BRRIT's primary purpose is to expedite permitting of restoration projects by collaboratively integrating project review, recognizing that the quality of restoration projects is paramount. The greatest ecosystem benefits are achieved when restoration projects are designed and reviewed, based on sound science, by interdisciplinary teams with expertise in the ecosystems being restored. Projects have the potential for significant environmental impacts in the absence of appropriate design approaches, approved construction methods, and post-construction impact mitigation measures. As such, projects must still comply with each agency's regulations and policies, and that supports their beneficial outcomes. The BRRIT continues to work toward expediting the permit process for projects while these issues are being resolved:

- **CDFW fully protected species.** There is no existing mechanism for CDFW to provide incidental take for fully protected species outside of scientific research, including efforts to recover the species. As noted above, CDFW is piloting an effort intended to result in a transparent, repeatable authorization process for Bay margin restoration projects (see Fully Protected Species MOUs for Restoration Projects in the PMC section).
- **Tools for Writing Permit Applications.** Tools, such as a Biological Assessment Builder, example Biological Opinions, example permit conditions, and a palette of avoidance and minimization measures, would be helpful to project proponents in putting together complete application packages and information for all agencies. The BRRIT is working to develop the tools with the goal of making them available on the BRRIT website in 2020 (see Guidance for Project Proponents in the PMC section).
- **USACE Nationwide Permit 27 (Restoration) vs. Individual Permits.** Project proponents need guidance on the appropriate permit pathway. Nationwide Permit 27 is an existing programmatic authorization for restoration projects, but is limited in terms of its scope. For example, it doesn't include authorization for long-term adaptive management strategies. By contrast, individual permits can take longer to get, but can be tailored to individual project needs.
- **Permit Timelines.** Permitting timelines depend on both agency and applicant responsiveness. While the BRRIT can facilitate timely communication, applicants may be working through a range of issues (e.g., land acquisition, CEQA development, project redesign) separate from BRRIT permitting work, which can delay their ability to respond to BRRIT requests.
- **Monitoring.** Currently, there is no coordinated monitoring program to inform key uncertainties related to restoration actions and anticipated species outcomes. Monitoring associated with restoration projects often needs to occur on a project-by-project basis, which can burden small restoration projects (see Restoration Project Monitoring item under the Permit and Policy Improvements section).
- **Project outcomes (e.g., establishment of habitat) can be uncertain** due to issues such as regular variations in weather and climate, the use of innovative or experimental restoration methods, and changes to conditions in the Bay (e.g., sea level rise, sediment supply).

Opportunities

In addition to the projects described above, the BRRIT will consider the following for development over time, as allowed by available resources.

- **Programmatic Approvals**. Consider incentives for restoration projects, similar to those that exist for other projects in the San Francisco Bay (e.g., LTMS programmatic biological opinion for navigational dredging, which allows projects that comply to not go through an individual Section 7 consultation). Ideas to implement this could include streamlined Section 7 consultations for restoration projects that are designed to contribute to recovery of listed species.
- **Anticipating Adaptive Management**. Encouraging project proponents to anticipate with some detail the long-term adaptive management actions that may be necessary for their project, so that authorization for that work can be included in the project's up-front permitting.