2022 Annual Report

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

Report Dated: May 20, 2022

Introduction

This annual report reviews the activities and performance of the Bay Restoration Regulatory Integration Team (BRRIT), from its inception in August 2019 through April 2022, and incorporates relevant information from previous performance reports[1] provided to the San Francisco Bay Restoration Authority (SFBRA) Governing Board.

The BRRIT was formed to improve the permitting process for multi-benefit habitat restoration projects and associated flood management and public access infrastructure in the San Francisco Bay and along the shoreline of the nine Bay Area counties (excluding the Delta Primary Zone). 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). The U.S. Environmental Protection Agency (EPA) participates on the BRRIT 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 and PMC Progress Overview

The BRRIT continues to make progress permitting multi-benefit habitat restoration projects and improving the permitting process. We conducted outreach to the restoration community to raise awareness on the BRRIT's purpose and solicited feedback on how we can improve the permitting process for project proponents. We responded to feedback by tailoring BRRIT response and meeting processes, as well as developing Resources and Tools for the general public, available on our website. We also supported project proponents by collaborating with groups, within and among our respective agencies and with stakeholders, to improve our understanding of important scientific and regulatory issues related to innovative restoration projects in San Francisco Bay.

Projects. Figure 1 below shows the 23 multi-benefit restoration projects the BRRIT is working on. These projects are distributed around the nine Bay Area counties and will contribute toward achieving voter-approved Measure AA priorities.

The Lower Walnut Creek (LWC) Restoration Project levee breach ceremony, attended by members of the BRRIT and the PMC on October 29, 2021, highlights the progress made in constructing restoration projects. This project restores and enhances over 300 acres of tidal marsh habitat occupied by federally listed and state

[1] The BRRIT completed two previous performance reports, found at the links below:
Memorandum: Bay Restoration Regulatory Integration Team Performance to Date (May 8, 2020):
https://www.sfbayrestore.org/sites/default/files/2020-05/BRRIT%20Performance%20Memo%2005.08.2020.pdf
The 2021 Annual Report (May 19, 2021):
https://www.sfbayrestore.org/sites/default/files/2021-06/Item%2018_BRRIT%20Annual%20Report.pdf

fully protected species and improves connectivity along four miles of creek channel while providing sustainable flood protection and opportunities for public access. This project was one of the first permitted by the BRRIT and has one of the largest restoration footprints.

Performance. The BRRIT continues to improve and streamline the pre-application and permitting process for multi-benefit habitat restoration projects. Project proponents have benefitted from the pre-application process by working out key issues (such as avoidance and minimization measures, sea level rise, and public access concerns) earlier in the design phase, rather than after submitting permit applications. With many of these potential issues resolved through pre-application discussions, permit applications are more complete upon submittal. In addition, many project proponents are providing draft application materials before submitting applications to solicit feedback, further reducing the need for agencies to request additional information.

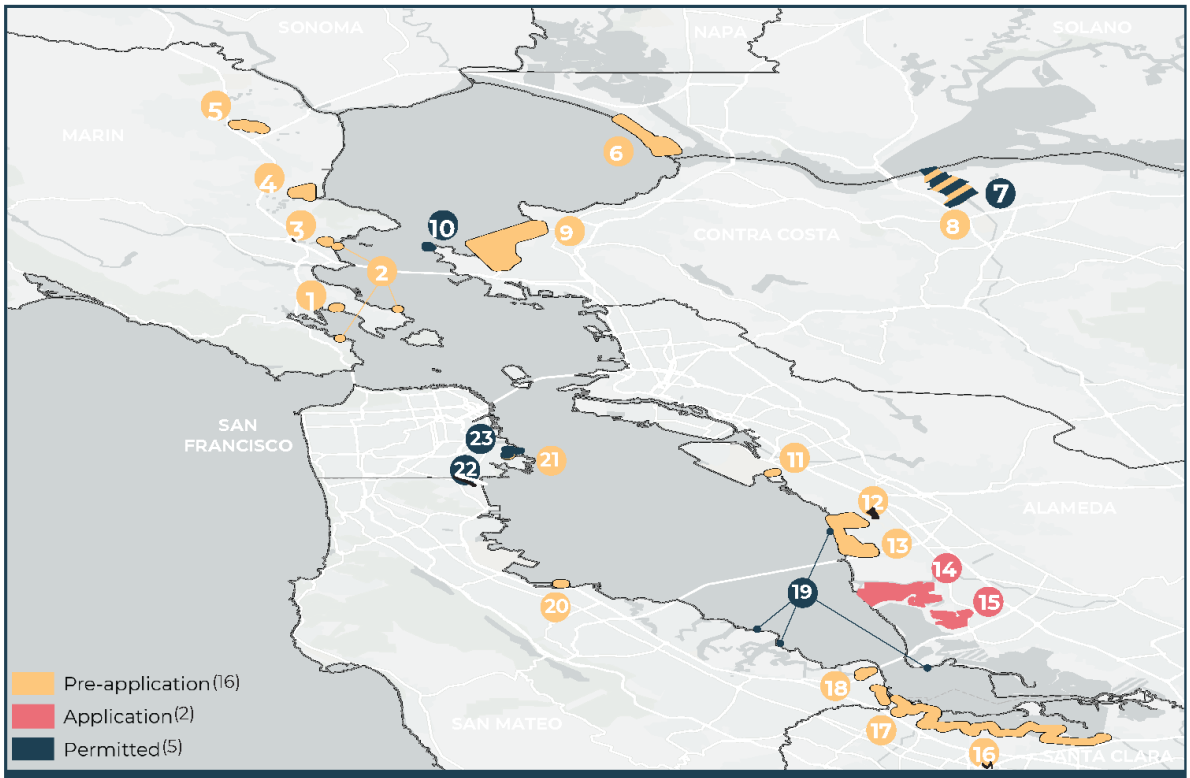
Breaching the levee at the Lower Walnut Creek Restoration Project, Oct. 2021

The section entitled "BRRIT Performance" below describes the BRRIT's key performance metrics. The BRRIT provided timely guidance to project proponents during the pre-application phase (84% of responses within 30 days), and the Corps initiated consultations within 15 days of receiving applications 86% of the time. BRRIT representatives consistently met their agency-specific timelines for issuing permits and consultations (100% for all agencies) and issued permits in time to meet project proponents' construction schedules. Furthermore, the BRRIT continues to receive overall positive feedback from project proponents based on our satisfaction survey results.

Outreach. The BRRIT continues to engage with the restoration community. During this performance period, the BRRIT participated in outreach presentations;

maintained and updated the BRRIT website with information on the BRRIT process as well as resources for project proponents; and solicited feedback through satisfaction surveys regarding the pre-application and permitting process.

Policy/Process. The PMC supports and collaborates with the BRRIT on project-specific challenges, policy, and administrative and process issues. This report provides an overview of the PMC's work this last year, including work on the Permit and Policy Improvement List and protocols for issue resolution and elevation.



HABITAT RESTORATION, PROTECTION, OR ENHANCEMENT PROGRAMS AND PRIORITIES

	Project	Safe, Clean Water and Pollution Prevention	Vital Fish, Bird, and Wildlife Habitat	Integrated Flood Protection	Shoreline Public Access
1	**Greenwood Gravel Beach Design Project***		●	●	●
2	Reef Design Innovations for Living Shorelines		●		
3	**Tiscornia Marsh Restoration and Sea Level Rise Adaptation***	●	●	●	●
4	**McInnis Marsh Habitat Restoration***	●	●	●	●
5	**Novato Deer Island Tidal Wetlands Restoration***		●	●	●
6	Mare Island Tidal Marsh Enhancement†	●	●	●	●
7	**Lower Walnut Creek (LWC) Restoration Project***		●	●	●
8	Pacheco Marsh (LWC North Reach) Public Access Improvements				●
9	**North Richmond Shoreline Living Levee***		●	●	●
10	**Terminal 4 Wharf, Warehouse, and Pilings Removal Project***	●	●	●	
11	**San Leandro Treatment Wetland Project***	●	●	●	●
12	EBDA First Mile Horizontal Levee	●	●	●	●
13	**Restore Hayward Marsh Project**		●		●
14	**South Bay Salt Pond Phase 2 at Eden Landing***		●	●	●
15	**Coyote Hills Regional Park - Restoration and Public Access Project***	●	●		●
16	**South San Francisco Bay Shoreline Project: Phase II***		●	●	●
17	Palo Alto Horizontal Levee Pilot Project	●	●	●	●
18	Strategy to Advance Flood Protection, Ecosystems and Recreation (SAFER)		●	●	●
19	**Invasive Spartina Project - High Tide Refuge Islands***		●		
20	**Shoreline Park - Burlingame***	●	●		●
21	India Basin Shoreline Park, Phase 3				●
22	**900 Innes Remediation Project***	●	●		
23	**Heron's Head Park Shoreline Resilience Project***		●		●

***Bolded** projects have been awarded funding by the SFBRA Governing Board or will be recommended by SFBRA staff for funding in the near future.
† This project was withdrawn in January 2022 and is not currently engaging with the BRRIT, but may re-engage with the BRRIT in the future.

Figure 1. Multi-benefit restoration project locations, permitting status, and SFBRA programs and priorities.

Improvements to the BRRIT Process

The BRRIT continues to encourage project proponents to engage in the pre-application process described in detail in previous annual and performance reports referenced above. The BRRIT pre-application process focuses on inter-agency coordination amongst BRRIT staff and collaboration with project proponents to identify and resolve issues early in project planning, provide guidance on regulatory policies and requirements, and identify specific information needed to avoid delays in permitting. During this reporting period, the BRRIT implemented some operational changes to further improve the pre-application and permitting process, including:

- Extending the duration of pre-application meetings (in response to feedback from project proponents);
- Increasing weekly collaboration time amongst BRRIT members to better understand projects, resolve conflicting guidance in a timely manner, and ensure we provide consistent feedback to project proponents;
- Increasing collaboration with scientific experts on complex topics such as siting of horizontal/ecotone levees and public access/wildlife conflicts; and
- Utilizing the newly developed Issue Resolution/Elevation document, as needed.

The benefits of the pre-application process are notable. Project proponents are increasing coordination, providing updates, and engaging in discussions of targeted complex issues and project conservation measures in advance of application submittal. For example, public access requirements can be complicated by the presence of sensitive species habitat. The BRRIT representatives coordinated with internal agency specialists to provide feedback for the Pacheco Marsh (LWC North Reach) Public Access Improvements Project, to balance the need for public access with protection of sensitive species.

Project proponents are increasingly considering and incorporating BRRIT feedback into subsequent pre-application discussions and updated designs. The permit applications submitted to the BRRIT reflect this increased coordination, with appropriate conservation measures incorporated in the project design and thorough analysis and quantification of project impacts and restoration benefits relevant to each agency.

Although the BRRIT has operated virtually due to ongoing COVID-19 restrictions since mid-March 2020, this has not negatively impacted our productivity. The BRRIT intends to resume in-person meetings in summer 2022.

The BRRIT continues to update the Resources and Tools previously described in the 2021 Annual Report to better clarify for project proponents each agencies' policies, regulations, and permitting requirements, as well as to provide guidance on topics related to sea level rise adaptation, monitoring, species conservation, and environmental justice.

BRRIT Projects

The BRRIT Project List includes 23 projects. The BRRIT completed consultations and permitting for five projects. Of the remaining 18 projects, two projects are currently in the application phase and 16 projects are in the pre-application phase[2]. The majority of BRRIT projects have been awarded funding by the SFBRA Governing Board or will be recommended by SFBRA staff for funding in the near future (16 projects, Figure 1).

Figure 2 notes cumulative BRRIT achievements at a glance, notably that 36 agency permits and authorizations were issued for five multi-benefit restoration projects.

Figure 2. A brief summary of the BRRIT's achievements to date.

Since the last annual report, BRRIT met with five new project teams, including Reef Design Innovations for Living Shorelines; First Mile Horizontal Levee Project; North Richmond Shoreline Living Levee; Pacheco Marsh (LWC Restoration North Reach) Public Access Improvements; and Mare Island Tidal Marsh Enhancement.

Permitted Projects. The BRRIT permitted five multi-benefit restoration projects since its inception in 2019 (shown in dark blue in Figure 3 below). Permitted projects include the 900 Innes Remediation Project, Invasive Spartina Project – High Tide Refuge Islands, Lower Walnut Creek Restoration Project, Heron's Head Park Shoreline Resilience Project, and Terminal Four Wharf, Warehouse, and Pilings Removal Project. Authorizations for the Terminal Four Wharf, Warehouse, and Pilings Removal Project were issued during this reporting period. Progress updates for these projects since permit issuance include:

- The Lower Walnut Creek Restoration Project is now in the monitoring phase of its restoration and enhancement of tidal and non-tidal waters and wetlands, and the subsequent phase to provide public access (Pacheco Marsh Public Access Improvements Project) is preparing to submit permit applications soon.

[2] The Mare Island Tidal Marsh Enhancement project was recently withdrawn due to potential contamination issues and is no longer engaging with the BRRIT at this time. The project team may re-engage with the BRRIT in the future.

- Heron's Head Park Shoreline Resilience Project completed planting the federally endangered California seablite and plants are establishing successfully; construction of the beach and oyster reef habitat elements of the project is upcoming.
- The 900 Innes Remediation Project is nearly complete, with debris and most contaminated materials removed from the project site.
- All 20 of the proposed islands for the ISP High Tide Refuge Islands Project were constructed and monitoring will begin soon.
- The Terminal Four Wharf, Warehouse and Pilings Removal Project plans to begin construction in August 2022.

The BRRIT continues to coordinate with project proponents after permit issuance, as needed. During this performance period, the BRRIT reviewed post-permitting submittals from the Lower Walnut Creek Restoration Project, Heron's Head Park Shoreline Resilience Project, and 900 Innes Remediation Project. Implementation of these five multi-benefit restoration projects moves the San Francisco Bay community closer toward the collective goals of a healthier Bay, increased fish and wildlife habitat, improved flood protection, and public access.

Application Phase. Two projects (South Bay Salt Pond Restoration, Phase 2 at Eden Landing and Coyote Hills Restoration and Public Access) are currently in the application phase (shown in red in Figure 3 below). Construction for both projects are anticipated to start this year and the BRRIT is coordinating closely with project proponents to meet target timelines.

Pre-application Phase. The majority of projects are in the pre-application phase (shown in gold in Figure 3 below). Mare Island Tidal Marsh Enhancement met twice with the BRRIT but subsequently withdrew from pre-application coordination due to potential onsite contamination issues.

Figure 3 shows project schedules (pre-application to construction) for all BRRIT projects since August 2019. The length of the pre-application process and amount of pre-application coordination varies considerably and can depend on many factors outside of BRRIT's control, including project complexity, funding constraints, and coordination with multiple stakeholder groups. Notable milestones include:

- Nine projects began, or are scheduled to begin, construction by the end of 2022;
- Eight projects plan to submit permit applications in 2022 with target permit issuance dates in 2022/2023; and
- By the end of 2025, 18 projects plan to start construction providing multi-benefit functions around the Bay.

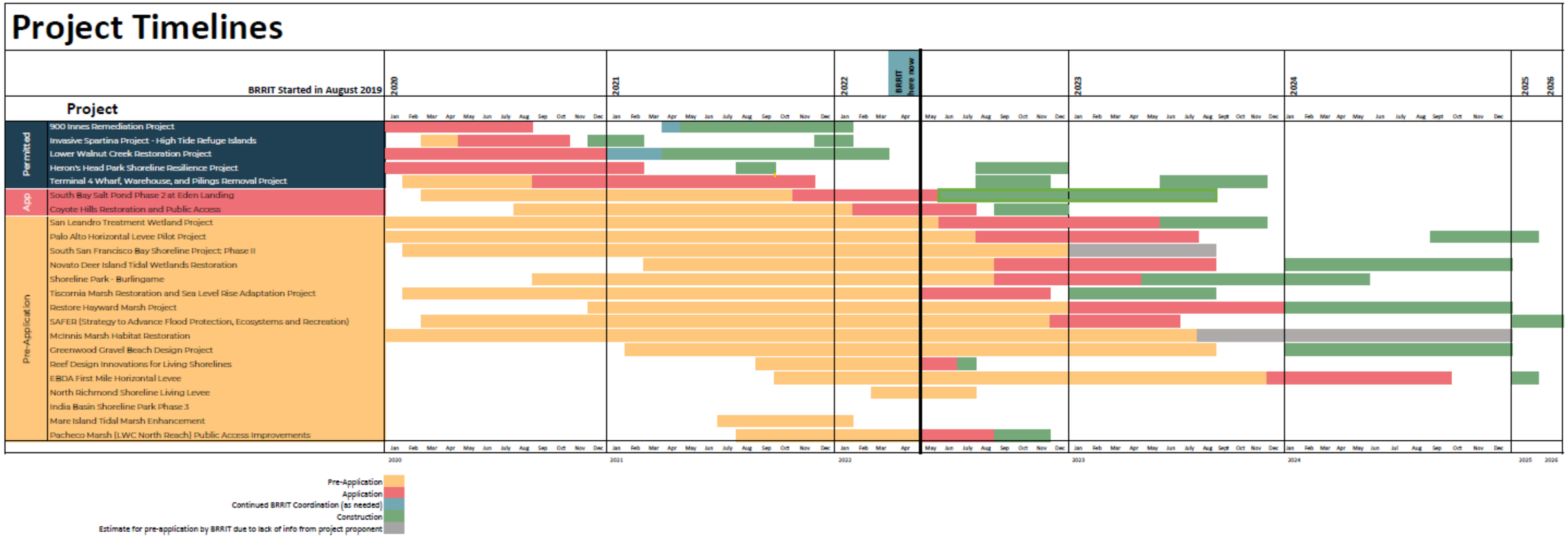


Figure 3. Estimated timelines for pre-application coordination, permit application review and issuance, and construction. Estimated schedules are based on the most recent information provided by project proponents and are subject to change.

BRRIT Performance

The BRRIT improves the permitting process for restoration projects by providing guidance in advance of application submittal and by responding to project proponents in a timely manner throughout the pre-application and permit application phase. Table 1 below includes performance metrics identified in the BRRIT Memorandum of Understanding (MOU)[3] and agency-specific permitting timelines.

Key Takeaways

- The BRRIT consistently provided agency-coordinated, timely guidance and feedback to project proponents (84% of responses within 30 days). Responses that required additional coordination due to project complexity or the need to coordinate with agency staff or organizations outside of the BRRIT delayed a few responses beyond 30 days.
- The BRRIT consistently met their agency-specific timelines for completing Federal Endangered Species Act consultations and issuing permits (100% for all agencies).
- The BRRIT did not issue all agency permits within 120/210 days (for simple/complex projects respectively) of application submittal. However, of the five projects permitted, three did not engage in the pre-application process and the agencies needed additional information before they could issue permits. For the remaining two projects that did engage in the pre-application process, the major factor that delayed permit issuance was late submittal of application fees.

[3] April 2020 Memorandum of Understanding among the San Francisco Bay Conservation and Development Commission, California Department of fish and Wildlife, San Francisco Regional Water Quality Control Board, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, and National Marine Fisheries Service Implementing the Bay Restoration Regulatory Integration Team (BRRIT).

- **Although the BRRIT was not able to issue all permits within the 120/210-day MOU metric, the BRRIT worked closely with project proponents to issue permits/authorizations in time to meet project construction schedules.**

BRRIT Performance Metrics (August 2019 - April 2022)			
Metric	**Description**	**Goal**	**Percentage Acheived**
Pre-Application Meeting Response	BRRIT provides pre-application meeting comments within 30 days	N/A	84%
Projects Engaging in Pre-Application Process	Permitted projects that engaged in the pre-application process	N/A	40% (2 of 5)
USACE initiate Consultation within 15 days	Response within 15 days	90%	86% (6 of 7)
USFWS confirm within 15 days	Response within 15 days	90%	100% (7 of 7)
NOAA Fisheries confirm within 15 days	Response within 15 days	90%	100% (9 of 9)
Simple Projects*	Percentage of permits issued within 120 days of application submittal (only includes projects that participated in pre-application)	80%	0% (0 of 1)
Complex Projects*	All permits issued within 210 days of application submittal (only includes projects that participated in pre-application)	80%	0% (0 of 1)
Succesful Timing of Permit Issuance	All permits issued in time to meet project construction schedule	N/A	100%
Individual Agency Mandates to Issue Permits/Consultations (August 2019 - April 2022)			
Agency	**Time to issue after application considered complete**		**Percentage Acheived**
USACE	Permits issued within 60 days (Nationwide Permits) or 120 days (Individual Permits)		100%
NOAA Fisheries	Consultations issued within 30 days (Letter of Concurrence) or 135 days (Biological Opinion)		100%
USFWS	Consultations issued within 30 days (Letter of Concurrence) or 135 days (Biological Opinion)		100%
BCDC	Permits issued within 90 days		100%
CDFW	Streambed Alteration Agreements issued within 60 days (Draft) or 30 days (Final)		100%
Water Board	Permits Issued within 60 days		100%
** Complex projects are those that require an Environmental Impact Report-level of CEQA review, a NEPA Environmental Assessment or Environmental Impact Statement, and/or may affect: federal or state threatened or endangered species. All other projects are simple.*			

Table 1. Summary of BRRIT performance to date, based on metrics identified in the MOU and agency-specific permitting timelines.

Satisfaction Survey Results. Project proponents for five projects completed satisfaction surveys since the BRRIT's inception. Two of these projects did not participate in the pre-application process. Results from the satisfaction surveys are overwhelmingly positive. Most notably, survey respondents commented:

- The pre-application process met their expectations and helped them prepare for their permit application submittal.
- The BRRIT was receptive to concerns regarding past regulatory conflicts and discussing more efficient permitting approaches.
- Specific appreciation for the BRRIT's assistance with permitting and consultations for geotechnical investigations and for their willingness to safely navigate COVID-19 travel protocols to attend site visits.
- More detailed information presented at the pre-application meeting resulted in more detailed and helpful comments provided by the BRRIT after the meeting.
- Example comment: "I appreciated the clear list of requested project information for us to provide ahead of time, and the thoughtful pre-application meeting to discuss the project scale and approach in context with regulatory considerations. We highlighted several suggestions at that meeting for efficiency based on four years of successful prior construction, and these were all incorporated into the efficient permitting timing and approach."

The BRRIT responded to suggestions from project proponents to improve the pre-application process:

Comment: Recommend increasing the meeting time to allow for longer presentations.

Response: BRRIT implemented this suggested change.

Comment: Recommend providing species lists and seasonal work windows early in the pre-application phase.

Response: BRRIT now provides lists and work windows in response following pre-application meetings, and also provides access to previous biological opinions along with links to additional information on the BRRIT website.

Meeting Project Timelines. Project timelines shift and the BRRIT pivots workload to meet the needs of projects with the most urgent timing constraints. The BRRIT works closely with project proponents to ensure project timelines are met. For instance, submittal of permit applications for the Terminal 4 Wharf, Warehouse, and Pilings Removal Project was delayed but the BRRIT issued permits in time to meet their construction schedule.

Challenges and Recommendations

Permitting multi-benefit restoration projects is complex and the BRRIT's primary role is to help project proponents navigate the permitting process. Below we identify challenges common to many projects and provide recommendations to avoid delays in the permit review process.

Technical Uncertainty with Project Outcomes. Most BRRIT projects are implementing nature-based adaptation measures such as ecotone/horizontal levees, coarse beaches, and nearshore reefs to increase shoreline resilience to sea level rise. These restoration methods have not been tested on a large scale, leading to some uncertainty with project outcomes. The BRRIT is consulting with technical experts to better understand the purpose, function, and design of these innovative restoration methods.

Construction of the Invasive Spartina Project - High Tide Refugia Island. Jan, 2022.

Recommendation: We recommend that project proponents provide information on the project-specific ecosystem functions and benefits these nature-based adaptation measures will provide and evaluate the short-term and long-term impacts and benefits to physical processes, habitats, and species under reasonably foreseeable climate change conditions. This information will support permitting decisions by helping regulatory agencies evaluate the tradeoffs between short-term impacts from project construction and long-term benefits of restoration.

Monitoring. The agencies require monitoring to evaluate project success in meeting restoration goals, manage uncertainty, and inform future restoration design. This information is particularly valuable when projects are using innovative or untested restoration methods. Often, project proponents develop their monitoring plans later in the permitting process which can delay submittal of a complete permit application.

Recommendation: We recommend that project proponents develop monitoring plans earlier, in parallel with development of project designs, to avoid delaying

permit applications. Developing monitoring plans earlier will also help projects determine the funding needed for monitoring earlier in their planning process and to obtain funding accordingly. For example, Measure AA provides grant funding for project monitoring and evaluation, in addition to providing grant funding for design and permitting.

Collaborative efforts, like the Wetland Regional Monitoring Program (WRMP), are developing robust monitoring standards that will allow project proponents to measure project success and satisfy agency regulatory requirements while supporting a regional network of data collection that improves bay restoration implementation and management.

Other Collaborative Initiatives

In this reporting period, the BRRIT participated in multiple collaborations with other agency staff, outside agencies, and members of the restoration community, including:

- Provided technical assistance on the final draft of the Aquatic Resource Type Conversion Framework (with EPA);
- Participated in the Wetland Regional Monitoring Program (WRMP) Technical Advisory Committee and the WRMP Fish and Fish Habitat (FFH) Subgroup;
- Worked collaboratively with stakeholders to draft initial FFH monitoring recommendations for the WRMP to support future BRRIT projects;
- Explored programmatic permitting for living shorelines projects with the State Coastal Conservancy and other stakeholders;
- Collaborated with the State Coastal Conservancy to discuss how to provide opportunities for early engagement with Native American groups in the Bay Area; and
- Organized a workshop with scientific experts to discuss the ecosystem functions and benefits of ecotone and horizontal levees and develop guidance to support permitting decisions associated with these project elements.

In addition to these collaborative efforts, BRRIT members attended seven workshops and online conferences that provided important opportunities to learn from the restoration community and to promote the benefits of the BRRIT process.

Policy and Management Committee

The Policy and Management Committee (PMC) sets the BRRIT's roles and responsibilities, works with SFBRA staff on budget and governing documents, and collaborates on process and policy improvements. The PMC meets monthly with the BRRIT to discuss specific projects, provide guidance on overarching policy issues, and resolve administrative and process concerns. Members of the PMC participate in outreach to partners and restoration practitioners and provide updates to the SFBRA Oversight Committee. The PMC also participates in the Cutting the Green

Tape initiative and other regional, state and federal collaboration efforts, to share lessons learned and best practices from the BRRIT formation and implementation.

Permit and Policy Improvements

The PMC is tasked with identifying and resolving policy issues and conflicts that may arise during the project review and permitting. This process also identifies overarching issues that may require procedure development, coordination and direction from management, and elevation within and amongst agencies.

The PMC prioritizes policy issues based on the significance of the issue to the review process, the overall benefit to the program, the benefit to the regional restoration goals, and the capacity of the BRRIT and PMC. Rankings are not prescriptive and are intended to categorize issues to identify opportunities.

The Permit and Policy Improvement (PPI) list is provided as an Appendix to the Annual Report and is updated to track progress on initiatives and accomplishments, and identify new policy issues that the PMC is tracking for engagement. In 2021, the PMC finalized two items on the PPI: 1) Issue Resolution and Elevation Process, and 2) Development of an Aquatic Resource Type Conversion Framework for assessing projects that convert one type of aquatic resource to another.

> ***The Issue Resolution and Evaluation Process*** is a stepwise process for resolving issues that may negatively impact review and permitting. This process encourages the timely resolution of issues by BRRIT members working together and within their respective agencies. If an issue on a specific project cannot be resolved after engaging the appropriate BRRIT agency, the issue will be elevated to the PMC for resolution and the PMC will determine if further elevation is warranted. The elevation process document is publicly available on the BRRIT webpage.
>
> ***The Aquatic Resource Type Conversion Framework*** was developed as a tool to assist BRRIT and agency staff in considering the holistic impacts and tradeoffs of aquatic resource conversion during the restoration project review and permitting process. The tool supports agency technical and regulatory discretion to ensure that projects are permittable and environmentally beneficial. The framework development was funded by a USEPA Region 9 contract to the Southern California Coastal Water Research Project, and was piloted by BRRIT at the McInnis Marsh Habitat Restoration Project. Feedback from the BRRIT was used to improve the tool and produce Version 2.0 of the Aquatic Resource Type Conversion Evaluation Framework. In the coming year, the PMC and agency staff will conduct outreach and training on the tool to assist restoration practitioners and regulators in using the framework and applying the results to the permitting process.

Funding

The original budget for the BRRIT was $1,250,000 per year (with annual increases for inflation) with just over $6.5 million secured for five years. Funders are the SFBRA ($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/Valley Water ($200,000 for the years one and two and reasonable efforts to provide $200,000 annually for the remaining three 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.

The actual expenditures for the BRRIT for the first 2.5 years from July 2019 to April 2022 totaled approximately $1.8 million. This reduced cost for the first 2.5 years of operation is primarily due to an initial delay with executing agreements with USACE and the Water Board and reduced travel and office space expenses for the BRRIT members due to COVID-19 restrictions. Additionally, some agencies (e.g., USACE) billed less than budgeted due to most projects being in the less time intensive "pre-application" phase and State agency staff had 9.23% salary reductions in 2020 and 2021. The annual estimated budget once all six of the agencies are under agreement and salary cuts are over is $1,050,000 - $1,250,000.

Based on the cost savings to date, and potentially reduced annual costs going forward, there are no anticipated issues with funding the BRRIT for the planned five years. Most likely, there will be enough funds remaining for a sixth year of the BRRIT.

Heron's Head Shoreline Resilience Project Area. Nov. 2020

Moving Forward

This is an important time for the San Francisco Bay as the restoration community and regulatory agencies work collaboratively to achieve our shared goals of restoring habitat, and equitably improving flood protection, public access, and shoreline resilience to sea level rise. In its third year of facilitating permitting for multi-benefit restoration projects, the BRRIT anticipates significant progress towards achieving these goals, as a number of projects are planned to receive permits and start construction in the next few years. Despite a global pandemic and other challenges, the BRRIT continues to move forward with improving the permitting process for projects aimed at protecting natural resources in a way that safeguards our communities.

Appendix

Permit and Policy Improvement List

SAN FRANCISCO BAY COORDINATED PERMITTING APPROACH
Policy and Management Committee
May 2022

SAN FRANCISCO BAY COORDINATED PERMITTING APPROACH

Policy and Management Committee

Permit and Policy Improvement List

Updated May 2022

The Policy and Management Committee (PMC) is part of the coordinated permitting approach agreement, which includes the Bay Restoration Regulatory Integration Team (BRRIT), and whose responsibilities are described in an interagency memorandum of understanding. The PMC is tasked with creating a system to identify and resolve policy issues and conflicts, and to identify a process for elevating issues that require agency policy shifts.

The policy issues are prioritized based on the significance of the issue to the review process, the overall benefit to the program, and benefit to regional restoration goals, and the capacity of the BRRIT and PMC to resolve the issue in the short term. Rankings are not prescriptive and are intended to categorize issues to identify opportunities. Prioritization is currently in progress and will be revised as issues are added and removed from the list.

1. **Benefit to process**: impact upon the decision-making timeline. 1 = the issue does not normally hold up review process. 5 = creates delays in the permit review process.
2. **Frequency**: it is a policy issue that comes up over and over. 1 = important consideration to permit decision process but seldom comes up. 5 = important to decision making process and comes up often.
3. **Benefits to regional restoration goals**: Does it result in projects getting in the ground faster and more efficiently? 1 = Does little to effect implementation. 5 = large impacts to implementation for multiple projects.
4. **Capacity**: can be accomplished in the next 3-4 years with projected resources and staffing. 1 = not likely within next 3-4 years. 5 = likely can get done

The permit and policy improvement list identifies the status of priority issues identified to date and a timeline for addressing the issues in the four categories below with a commitment to implement at least one initiative annually.

1. Issues that are **being addressed** during the current calendar year (initiatives currently underway, with an anticipated completion date in 2022).
2. Issues that **will be addressed** in the next one to three years (initiatives currently under way, with an anticipated completion date that may extend beyond 2022)
3. Issues and initiatives that **require further development** (no identified initiatives under way, or initial work has begun, but will not be completed until after 2022)
4. **Accomplished**

As the PMC begins to work, achieves some success, and faces anticipated challenges (e.g., collaborative decision making among agencies), this list and prioritization will be revised. New issues will be considered as they are brought to the PMC by the BRRIT and stakeholders, and the list will be revised at least annually.

POLICY ISSUE: Fill for Habitat

Date initiated: **Priority:**

Agency and/or Legislative Fix? Agency fix.

POC: Sahrye Cohen, EPA **Status:** Being Addressed

Why is this an issue? The creation of Habitat Transition Zones (i.e., ecotones or horizontal levees) via the import of fill material causes conflict with Bay fill policies, which can vary by agency. For example, BCDC asks projects to use the minimum fill required to achieve the project goals, while the RWQCB might ask a project to build in more resilience to the transition zone.

- There is little empirical data to support optimal design
- Agency conflicts are challenging to resolve.
- This is a Sand in the Gears issue.

Initiatives: BCDC's San Francisco Bay Plan was amended to allow greater amounts of fill for habitat restoration and pilot projects. The Water Board recently completed grant-funded work to look at policies that may lead to Basin Plan amendments; BCDC amendment to the San Francisco Bay Plan.

Updates 2020 and prior:

- July 20, 2017, BCDC approved consideration of an amendment to the San Francisco Bay Plan to allow additional fill policies for habitat projects. Water Board, EPA, and USACE representative participation is intended to facilitate crosswalk policy discussions between BCDC and these agencies, specifically Clean Water Act Section 401 and 404 permitting.
- The Bay Plan amendment process was completed on October 3, 2019.
- On December 27, 2019, BCDC's San Francisco Bay Plan was amended to add policies to a variety of policy sections and allow greater amounts of fill for habitat restoration and pilot projects.

Updates 2022: Agency representatives identified for workgroup.

Further discussion needed?

- Coordination with the PMC would assist in creating permit review consistency.

POLICY ISSUE: Lack of collaborative decision-making among agencies	
Date initiated:	**Priority**:
Agency and/or Legislative Fix: Agency fix.	
POC: Luisa V., EPA	**Status**: Being addressed
Why is this an issue? Applicants tend to find the permitting process for restoration projects extremely confusing when it appears agency requirements are redundant or mutually exclusive to each other. Examples raised: • differing risk tolerances occur between different agencies • differing level of design needed to acquire a permit • additional requirements beyond those required by the agency that is primarily responsible for a specific resource. • The Sand in the Gears document touches on this at items 6, 7, and 8.	
Initiatives: BRRIT outreach pre and post surveys to applicants.	
Updates 2020 and prior to: BRRIT outreach surveys	
Updates 2021: BRRIT outreach surveys	
Further discussion needed? Based on the BRRIT outreach surveys have the following action items to improve collaborative decision making among the agencies are:	

POLICY ISSUE: Fully Protected Species

Date initiated: **Priority**:

Agency and/or Legislative fix? Agency fix and Legislative fix

POC: Craig W., CDFW **Status**: Being addressed

Why is this an issue? For restoration projects CDFW can issue permits to take FPS under a Natural Community Conservation Plan (NCCP), for necessary scientific research, or via development of an internal MOU. CDFW is unable to issue permits to take or possess a fully protected species (FPS) as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

- permitting pathways are unclear for restoration projects when FPS are involved. This is a common complaint amongst the restoration community.
- 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 and under the State Fish and Game Code CDFW may be slow or unable to issue permits for take of FPS.

Initiatives:

- BRRIT assisting applicants by advising avoidance of FPS with conservation measures or in instances where that would not be cost effective or timeline feasible, by identifying mechanisms that CDFW uses to issue permits to take FPS (i.e., a NCCP or MOU).
- CDFW will work with restoration projects to ensure recovery efforts for fully protected species are included in the restoration project.
- Legislative fix is being explored outside of BRRIT and PMC to create a more time-effective permitting pathways with more certainty under certain circumstances for restoration projects.

Updates 2021: Work with restoration projects to ensure recovery efforts for fully protected species are included in the restoration project.

Updates 2022: Peggy McNutt to initiate legislative fix. Peggy M. will remain engaged with the PMC to request additional information as needed or to provide updates.

Further discussion needed? Estimate legislative policy fix – discussion target 2023.

POLICY ISSUE: Develop Guidance for Project Applicants	
Date initiated:	**Priority**:
Agency and/or Legislative Fix? Agency fix.	
POC: Jana A., USFWS	**Status**: Being addressed

Why is this an issue? Restoration projects often have similar issues and, while knowledge may reside in particular project proponents or consultants, many applicants tend to become confused by the numerous information, data, mapping requirements of federal and state regulatory and wildlife agencies.

- This issue can result in time consuming delays.

Initiatives: There is an opportunity to facilitate project development and permitting by completing FAQs and providing other guidance, such as typically approved management practices.

Updates 2020 and prior:

- Create resources and tools for applicants that could include a recommended checklist of items and information needed for a complete application
- Create FAQs and a flow chart

Updates 2021:

- Create resources and tools for applicants that could include a recommended checklist of items and information needed for a complete application
- Provide a link to the USFWS's Environmental Conservation Online System (ECOS) to view example Biological Opinions or to construct a Biological Assessment through the Consultation Package Builder. General avoidance and minimization measures can be obtained through these example BiOps.

Further discussion needed?

- Provide a link to the USFWS's Environmental Conservation Online System (ECOS) to view example Biological Opinions or to construct a Biological Assessment through the Consultation Package Builder. General avoidance and minimization measures can be obtained through these example BiOps.
- Guidance documents can be shared publicly as they are available.

POLICY ISSUE: Monitoring

Date initiated: 2020 **Priority**:

Agency and/or Legislative Fix? Agency fix.

POC: Keith L., Water Board **Status**: Requires further development

Why is this an issue? The cost of monitoring requirements can be extensive and associated funding is difficult to obtain. A desire for regionally relevant monitoring is sometimes in conflict with the site-specific needs, resulting in additional monitoring burden for applicants.

- Monitoring is particularly challenging to fund, and therefore it would be helpful if mandated monitoring requirements were limited to the minimum required for the regulatory agencies to ascertain their regulations are being followed.
- Project proponents are typically unable to sustain significant monitoring programs on their own, therefore monitoring should be targeted to actionable information.
- The cost of additional monitoring for specific species and habitats or if broader questions need to be addressed should be shared through a regional monitoring program or similar arrangement.
- Uncertainty associated with climate change and sediment availability exacerbates the challenges of evaluating project success.
- This is a Sand in the Gears issue.

Initiatives:

- The Wetlands Regional Monitoring Project (**WRMP**) will implement regional-scale monitoring to evaluate wetland restoration project success and inform science-based decision-making.
- The San Francisco Estuary Partnership developed a tidal wetland regional monitoring plan for the Bay Area that will help local, regional, state, and federal authorities evaluate the effectiveness of efforts to sustain healthy aquatic habitats and resources
- **NMFS Fisheries Monitoring Framework**, NMFS is the Fisheries Technical Advisory Committee (Fish TAC) to develop wetland monitoring framework for fisheries in the greater SF Bay region
- Wetland Habitat Assessment Team (**WHAT**). BCDC's internal habitat and restoration science and policy working group evaluates projects and monitoring reports and seeks regulatory program improvements.

Updates 2020 and prior: The San Francisco Estuary Partnership developed a tidal wetland regional monitoring plan for the Bay Area that will help local, regional, state, and federal authorities evaluate the effectiveness of efforts to sustain healthy aquatic habitats and resources. Using an EPA grant and stakeholder input, the plan was completed in April 2020.

Updates 2021: SFEP will continued to develop an implementation plan that describes a funding and governance structure, and a data management plan. SFEP hosted two agency-focused workshops to introduce the WRMP to regional, state, and federal agencies. Additional workshops in 2021 included the restoration practitioner and planning communities.

Updates 2022: UC Davis, NMFS, and the Water board launched the WRMP Fish and Fish Habitat Workgroups (FFH) Workgroup in 2021 to develop fish and fish habitat monitoring recommendations and standard operating procedures for wetlands in the greater SF Bay region. The FFH includes participation from multiple agencies and stakeholders and anticipates completion of initial Draft Recommendations in spring of 2022.
Further discussion needed?

POLICY ISSUE: Wetland Habitat Type Conversion

Date initiated: 2020 **Priority**:

Agency and/or Legislative Fix? Agency fix.

POC: Jen Siu, EPA **Status**: ACCOMPLISHED; Being Addressed

Why is this an issue? To accomplish regional wetland restoration goals, it is necessary to convert one type of wetland habitat to another. For example, currently diked baylands or seasonal wetlands may be converted to tidal baylands.

- When wetland-to-wetland conversion occurs in the process of restoring a site, some permitting agencies require compensatory mitigation while other agencies do not.
- There are inconsistent approaches as regulators analyze projects and make mitigation decisions.
- Regulatory decisions need to be supported by robust technical frameworks to avoid additional project costs, lack of regulatory certainty, conflicting requirements, and project delays.
-

Initiatives: A multi-agency project is underway to develop a science-based framework for assessing habitat type conversion actions in the SF Bay Region and elsewhere. This framework would facilitate consistent and more transparent decision making. EPA/Corps are leading the effort with funding and staff while the other agencies are providing staff time. The PMC's goal was to use this effort to agree on a common decision-making approach by the end of 2019.

Updates 2020 and prior: The final framework was distributed to agency partners on February 14, 2020. Pilot implementation of the final framework was planned for a project under the BRRIT's purview in 2020.

Updates 2021: Pilot Project Conducted; Tool revisions based on pilot

Updates 2022: Aquatic Resource Type Conversion Evaluation Framework v.2 finalized and published.
http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1110_ConversionFramework.pdf

Next Steps 2022: Outreach, adoption, and implementation

- Outreach to agencies (Corps, Waterboards, etc.)
- Article in wetlands journals
- Presentation at JASM

Further discussion needed? Outreach, Implementation, and Adoption planning. Additional peer review from Corps/ERDC.

POLICY ISSUE: Siting Public access within multi-benefit habitat restoration projects	
Date initiated:	**Priority**:
Agency and/or Legislative Fix? Agency	
POC: Anniken L., BCDC	**Status**: Requires further development
Why is this an issue? BCDC is the only regulatory resource agency that includes public access requirements in its permits. Other agencies may require minimization of public access to protect habitat value. These potentially conflicting mandates create uncertainty for project applicants in designing a permittable restoration project and can result in project design delays.	
Initiatives: In 2012 BCDC amended the Bay Plan Public Access policies.	
Further discussion needed? Coordination between PMC members need to research current reports, science, and recreation trends and coordinate with the agency point of contact to discuss potential solutions to assist BCDC in their approach to amending the Bay Plan.	

POLICY ISSUE: Upland Alternatives to Fill for Habitat	
Date initiated:	**Priority**:
Agency and/or Legislative Fix? Agency	
POC: Keith L., Water Board	**Status**: Requires further development
Why is this an issue? Do we always have to fill the Bay to create habitat? What are the instances when we want to consider Bay-adjacent uplands as part of that equation, and how? Both federal and state regulations require consideration of upland fill before consideration of bay fill.	
Initiatives: Improve coordination with the Corps/EPA/water board on alternatives for 404(b)(1) analysis.	
Further discussion needed?	

POLICY ISSUE: Protecting Single Species in the Context of Larger, Holistic Restoration Goals	
Date initiated:	**Priority**:
Agency and/or Legislative Fix? Agency	
POC: Jana Affonso	**Status**: Requires further development
Why is this an issue? Legal requirements for a single protected species can preclude actions that are deemed beneficial to the larger system by all other agencies. Examples: • Snowy Plover habitat needs can preclude tidal restoration in certain areas, and concerns over fish entrapment can prevent certain types and locations of habitat connectivity. • In an urban estuary, multi-objective projects intended to achieve a balance between a range of habitat improvements for individual special-status species and a wide range of general habitat enhancements over a broad area may require some trade-offs.	
Initiatives:	
Further discussion needed?	

POLICY ISSUE: Short-term impacts of wetland restoration activities vs. long-term benefits of the overall wetland restoration	
Date initiated:	**Priority**:
Agency or Legislative Fix?	
POC:	**Status**: Requires further development
Why is this an issue? Agencies necessarily and appropriately require careful analysis and disclosure of construction impacts and even short-term habitat losses that must be weighed against the magnitude, timing, and certainty of long-term benefits. Arguably, however, it is inefficient to treat the short-term impacts from implementing a voluntary restoration project in the same way as a project that would not bring the same significant long-term benefits. This is particularly true for noise- and other short-term disturbance effects (less so for actual habitat changes like excavating a channel through the marsh to connect the slough with a pond interior).	
Initiatives:	
Updates 2021: The USFWS identified this policy issue and their guidance is to consider long-term benefits and encourage proven, demonstrated restoration methods that benefit listed species.	

Further discussion needed?

POLICY ISSUE: Improving Consultations with other non-BRRIT agencies – i.e. SHPO, Tribes, State Lands Commission	
Date initiated:	**Priority**:
POC:	**Status**: Requires further development
Why is this an issue? Consultation with certain agencies, groups such as SHPO, area Tribes, State Lands Commission have added review timeline uncertainty (Lower Walnut Creek Project, India Basin Project, etc).	
Initiatives: BRRIT member agencies could develop procedures for more efficient and coordinated outreach to benefit permitting process.	
Further discussion needed?	

POLICY ISSUE: General Programmatic Efforts (E.g., Programmatic permits/guidance for applicants regarding piling removal).	
Date initiated:	**Priority**:
Agency and/or Legislative Fix? Agency fix.	
POC: Jana A., USFWS	**Status**: Requires further development
Why is this an issue? Programmatic approaches to permitting can enable a shorter permitting timeline for certain types of actions, but must be weighed against the time and effort to initially establish the programmatic approach	
Initiatives: • potential utilization/adoption of State of Washington's guidelines for pile removal • NMFS and USFWS Programmatic Biological Opinions for restoration projects • potential RGP for living shoreline projects • Sustainable Conservation programmatic section 7 consultations	
Updates 2022: Identified initiatives.	
Further discussion needed?	

POLICY ISSUE: Elevation and Resolution of Issues	
Date initiated: 2019	**Status:** Completed 2020
Agency and/or Legislative Fix? Agency	
POC: N/A	**Status**: **ACCOMPLISHED**
An agreed-upon process for resolving issues elevated to the PMC from the BRRIT. The elevation process considers each agency's law, policies, and authority with a decision-making process prior to elevating issues.	

TOPICS FOR FUTURE DISCUSSION
Outreach to tribal communities and environmental justice communities for BRRIT projects
Restoring Watershed to Bay Connection to Improve Sediment Supply to Baylands