2025 Annual Report

Bay Restoration Regulatory Integration Team (BRRIT)

October 2025

Photo: Goat Island Tidal Marsh Restoration Project, Suisun Marsh, November 2024.

Introduction

This annual report reviews the cumulative activities and performance of the Bay Restoration Regulatory Integration Team (BRRIT) from its inception in August 2019 through April 2025 and highlights achievements over the May 2024 to April 2025 reporting period.

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 (U.S. 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.

The BRRIT has made significant progress in improving permitting for multi-benefit habitat restoration projects. To make the permitting process more efficient, the BRRIT has helped projects to take advantage of available restoration permitting tools, facilitated coordination and communication between project proponents and utilities to resolve potential conflicts, and continued to provide guidance on appropriate avoidance and minimization measures. This close coordination between the BRRIT and project proponents results in the timely issuance of permits.

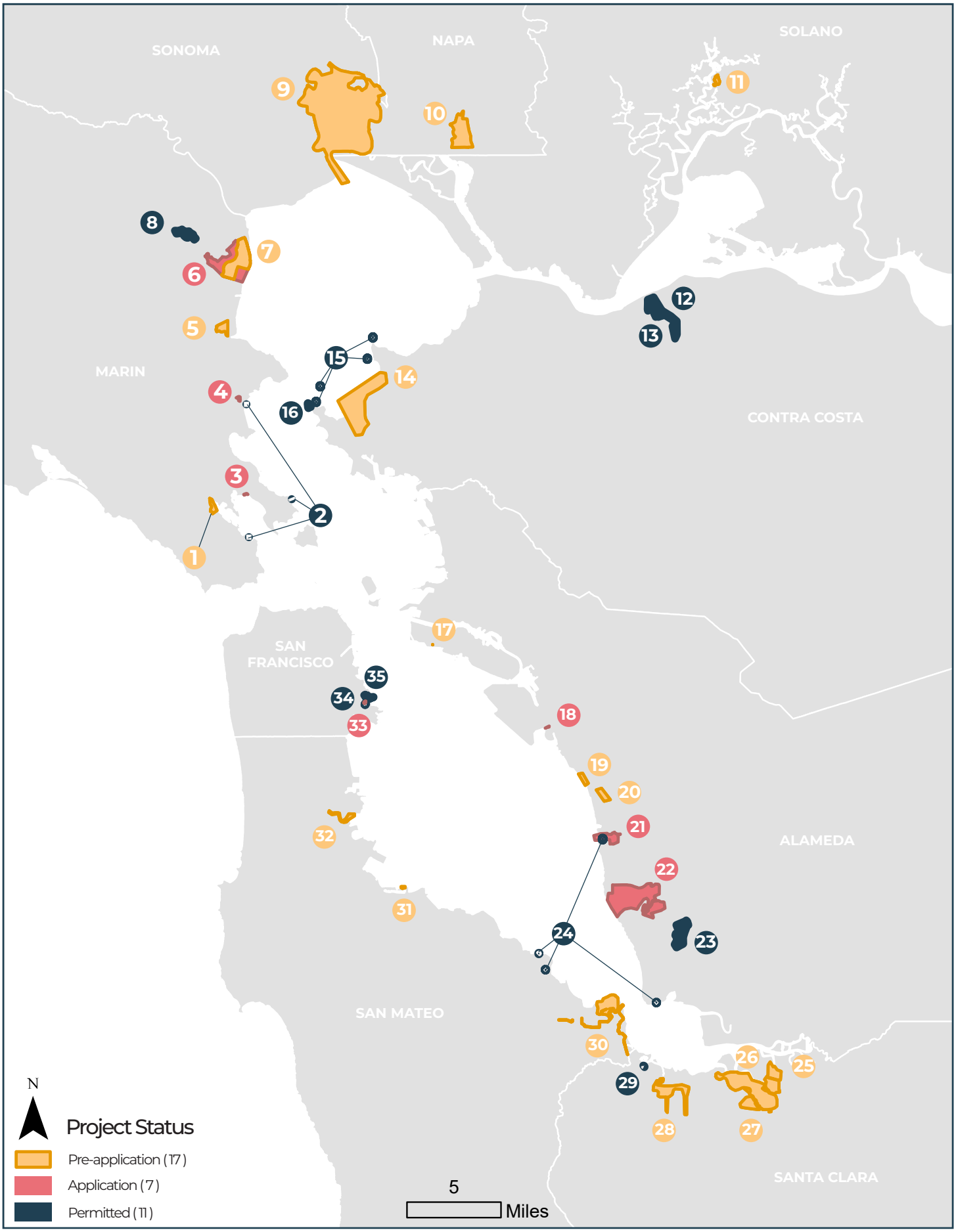
Projects. Figure 1 below shows the BRRIT's 35 multi-benefit restoration projects distributed around the 9 Bay Area counties. BRRIT projects must qualify for the 2016 San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure (Measure AA) funding and be entered into EcoAtlas. The San Francisco Bay Restoration Authority (SFBRA) reviews requests from restoration projects to participate in the BRRIT pre-application and permitting process and determines whether projects are eligible for BRRIT review. Of the 35 projects on the BRRIT Project List, 17 projects are in the pre-application phase, 7 projects are in the application phase, 11 projects are fully permitted, and 8 projects completed construction. Implementation of these projects will contribute toward achieving voter-approved Measure AA priorities.

Performance. The BRRIT consistently met their agency-specific timelines for issuing permits and consultations (100% for all agencies) and issued all permits in time to meet project construction schedules. The BRRIT continues to receive positive feedback overall from project proponents. Based on results from this year's surveys, most respondents thought that using the BRRIT resulted in a better project that was more beneficial for species and habitat, recreation, flood protection, and water quality.

Outreach. The BRRIT continues to engage with the restoration community and maintains the BRRIT website with information on the BRRIT process as well as resources and tools for project proponents. The SFBRA continues to solicit feedback through surveys and interviews regarding the BRRIT's pre-application and permitting process.

Policy/Process. The Policy and Management Committee (PMC) 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 reporting period on the Permit and Policy Improvement List, including progress on artificial reefs, improving coordination with non-agency entities, fill for habitat and sea level rise, monitoring, and upland alternatives to fill for habitat.

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



Project locations and extents displayed on the map are approximate and are based on data from Ecoatlas, where it was available. In some cases, these may not reflect actual project locations and extents. For more information about these projects, visit https://www.sfbayrestore.org/brrit-project-list.

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

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	Bothin Marsh Evolving Shorelines Project*	●	●	●	●
2	Reef Design Innovations for Living Shorelines		●		
3	Greenwood Gravel Beach Design Project*		●	●	
4	Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project*		●	●	●
5	McInnis Marsh Habitat Restoration*	●	●	●	●
6	Bel Marin Keys Unit V Wetland Restoration Phase 1 Adaptive Management	●	●	●	
7	Bel Marin Keys Unit V Wetland Restoration Phase 2	●	●	●	●
8	Novato Deer Island Tidal Wetlands Restoration*		●	●	●
9	Sonoma Creek Baylands Restoration Project	●	●	●	
10	City of American Canyon Wetlands Restoration Project*	●	●	●	●
11	Goat Island Restoration and Public Access Project*		●		●
12	Lower Walnut Creek (LWC) Restoration Project*		●	●	●
13	Pacheco Marsh (LWC North Reach) Public Access Improvements				●
14	North Richmond Shoreline Living Levee*		●	●	●
15	Assessing Ocean Acidification in SF Bay Oyster and Eelgrass Beds		●		
16	Terminal 4 Wharf, Warehouse, and Pilings Removal Project*	●	●		
17	City of Alameda De-Pave Park*		●	●	●
18	San Leandro Treatment Wetland Project*	●	●	●	
19	Long Beach Shoreline Restoration Project*		●	●	●
20	EBDA First Mile Horizontal Levee	●	●	●	●
21	Restore Hayward Marsh Project*		●		●
22	South Bay Salt Pond Phase 2 at Eden Landing*		●	●	●
23	Coyote Hills Regional Park - Restoration and Public Access Project*	●	●		●
24	Invasive Spartina Project - High Tide Refuge Islands*		●		
25	Beneficial Reuse of BART Silicon Valley Phase II Tunnel Excavated Material in Marsh Restoration at Former Salt Ponds	●	●	●	
26	Valley Water Calabazas and San Tomas Aquino Creek Marsh Connection Project*	●	●	●	●
27	Pond A4 Resilient Habitat Restoration Project		●	●	●
28	South San Francisco Bay Shoreline (Sunnyvale) Project, Permanente Creek to Guadalupe River	●	●	●	●
29	Palo Alto Horizontal Levee Pilot Project	●	●	●	●
30	Strategy to Advance Flood Protection, Ecosystems and Recreation (SAFER) Bay Project*	●	●	●	●
31	Bay Rise Park*	●	●		●
32	Colma Creek Restoration and Adaptation Project*	●	●	●	●
33	India Basin Shoreline Park, Phase 3	●	●		●
34	900 Innes Remediation Project*	●	●		
35	Heron's Head Park Shoreline Resilience Project*		●		●

*Denotes projects that have been awarded funding by the SFBRA Governing Board or will be recommended by SFBRA staff for funding in the near future.

Project Status

- Pre-application (17)
- Application (7)
- Permitted (11)

Benefits of the BRRIT Process

The BRRIT process provides several key benefits to project proponents, including a consistent working relationship and focused attention of dedicated agency staff who work closely to evaluate projects from initial planning through permitting and construction. The BRRIT also helps coordinate with other relevant agency staff and non-agency stakeholders as needed. For example, BRRIT staff have been facilitating communication between the Marin Audubon Society (MAS) and Pacific Gas & Electric (PG&E) to resolve potential conflicts between their projects.

BRRIT staff provide consolidated and consistent feedback and recommendations on complex projects in a timely manner. For example, through regular advanced coordination with Santa Clara Valley Transportation Authority, Valley Water, and USFWS Don Edwards National Wildlife Refuge, the BRRIT provided clear guidance on potential night-time work, sediment transport methods and infrastructure, options for managing turbidity during sediment placement, and bioassay testing requirements for beneficial reuse for the Beneficial Reuse of BART Silicon Valley Phase II Tunnel Excavated Material in Marsh Restoration at Former Salt Ponds Project.

BRRIT staff are readily available to meet with project proponents on short notice as a group or on an individual basis as needed. They can pivot quickly and assist project proponents in finding potential solutions when issues or conflicts arise. For example, BRRIT staff participated in several internal and interagency meetings to develop a permitting strategy for an urgent levee repair associated with CDFW's South Bay Salt Pond Phase 2 at Eden Landing Project.

The BRRIT encourages project proponents to submit draft documents (e.g., basis of design reports, biological assessments, public access plans, monitoring and adaptive management plans, etc.) during the pre-application phase for consolidated early feedback that informs project designs, avoidance and minimization measures, and consistency with agency policies and regulations. Participation in the BRRIT process has proven beneficial because it helps project proponents prepare more complete applications, reduces permitting challenges, maximizes consistency among agency permit measures, and results in the more timely issuance of permits.

Permitting Tools

The BRRIT maintains a Resources and Tools feature on its website for project proponents and the public that clarifies each agency's policies, regulations, and permitting requirements, and provides guidance on topics related to sea level rise adaptation, monitoring, species conservation, environmental justice, and available restoration permitting tools[1]. BRRIT staff prioritize helping project proponents understand and use these tools wherever possible. During this reporting period, two projects used one or more of the restoration permitting tools (see footnote 1) - India Basin Shoreline Park Phase 3 (eLOC, NOAA Fisheries) and Novato Deer

[1] Restoration permitting and consultation tools available to eligible projects include: USFWS's Programmatic Biological and Conference Opinion on the California Statewide Programmatic Restoration Effort (Restoration PBO); State Water Resources Control Board's Statewide Restoration General Order (SRGO); State Water Resources Control Board's General Water Quality Certification for Small Habitat Restoration Projects; CDFW's Restoration Management Permit (RMP) and the Statutory Exemption for Restoration Projects (SERP) for streamlining the California Environmental Quality Act; Expedited Letter of Concurrence (eLOC) and condensed Biological Opinions (cBiOp) for NOAA Fisheries Section 7 informal consultations; and USACE South Pacific Division's Letter of Permission for projects that would have minimal or less than significant impacts on human environment, such as restoration projects that utilize nature-based design concepts.

Island Tidal Wetlands Restoration (SRGO, Water Board; RMP, CDFW; and Restoration PBO, USFWS).

To further enhance and facilitate the permitting of multi-benefit projects in San Francisco Bay, BRRIT partners are also advancing efforts within their agencies. For example, BCDC is working to develop a regionwide permit for small restoration projects and to modify regulations to broaden the type and scale of restoration and nature-based solutions projects that qualify for an administrative (minor) permit. In 2024, NOAA Fisheries developed an information template for action agencies that would allow a project to qualify for an expedited informal consultation. NOAA Fisheries also developed internal strategies to advance the use of condensed biological opinions to make the formal consultation process more efficient and is currently developing a template for these formal consultations.

BRRIT Projects

The BRRIT completed permitting for the Novato Deer Island Tidal Wetlands Restoration Project during this reporting period, bringing the cumulative total to 11 multi-benefit restoration projects fully permitted and 8 projects constructed since 2019. Of the remaining 24 projects on the BRRIT Project List, 7 are in the application phase and 17 are in the pre-application phase. Figure 2 (below) presents cumulative BRRIT achievements, including permits and authorizations issued, pre-application meetings, site visits, and outreach efforts.

New projects added to the BRRIT Project List this reporting period include:

- Goat Island Restoration and Public Access Project, which would restore tidal action to 70 acres of diked wetland habitat, enhance habitats through invasive species control, promote resilience to long-term sea level rise, and provide improved public access.
- Bel Marin Keys Unit V Wetland Restoration Phase 2, which would restore 900 acres of tidal wetlands, as well as upland, subtidal, and non-tidal wetland habitats.
- Sonoma Creek Baylands Restoration Project, a 7,500-acre project area just north of San Pablo Bay which would restore and enhance a mosaic of habitats including subtidal, mudflat, tidal marsh and upland-wetland transition habitats.

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

Project Highlights 2024-2025

Greenwood Gravel Beach (Marin Public Works). The proposed gravel beach will use a nature-based living shoreline approach to address shoreline erosion and adapt to sea level rise. The project will beneficially reuse material to restore and expand lost beach and salt marsh habitat to improve shoreline and intertidal habitat for fish and wildlife. Construction of the gravel beach along an eroding shoreline is anticipated in 2026.

Photo 1. Existing conditions at Greenwood Gravel Beach (photo taken from pre-application presentation, February 2021).

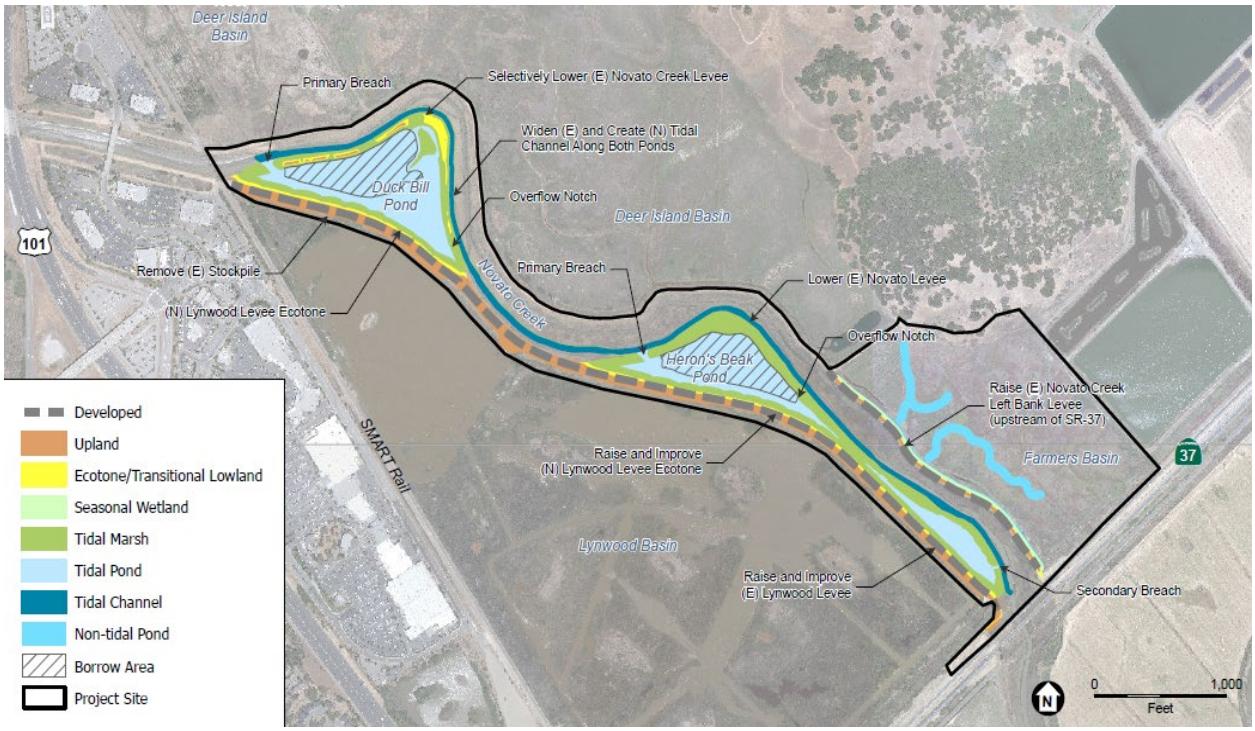


Figure 3. Bird Ponds restoration plan (figure taken from application materials, August 2023).

Novato Deer Island Tidal Wetlands Restoration (Marin Public Works). The project will widen Novato Creek to restore connectivity between Novato Creek and the surrounding floodplain and lower existing levees to restore tidal connectivity to the Bird Ponds shown in Figure 3. The project will also dredge a portion of Novato Creek and beneficially reuse this material to create ecotone slopes in the Bird Ponds. This project was permitted in the summer of 2024, and construction is planned to begin by the summer of 2026.

Restore Hayward Marsh Project (East Bay Regional Park District). This project will restore former wastewater treatment facilities to provide wildlife habitat and resilience to sea level rise, while reducing the need for pond maintenance. The project will beneficially reuse material to support tidal restoration and create habitat transition zones for marsh transgression and includes shoreline stabilization elements to protect existing tidal marsh. Of particular importance, the project would expand and enhance nesting islands for the state and federally-protected California least tern, as the Hayward Marsh has one of the important breeding populations in the state. This project is in the application phase and plans to begin construction in late 2025.

Photo 2. California least tern. Photo credit: Rick Lewis, Bay Nature.

BRRIT Project Estimated Timelines

Figure 4 shows estimated timelines (pre-application to construction) for all projects since the BRRIT's inception in August 2019.

The **pre-application** phase (shown in yellow) varies considerably in length as it is determined by project proponents. Factors that influence the length of the pre-application phase may include project complexity, funding constraints, and challenges associated with coordinating with multiple interested groups such as landowners, public utilities, and flood control agencies.

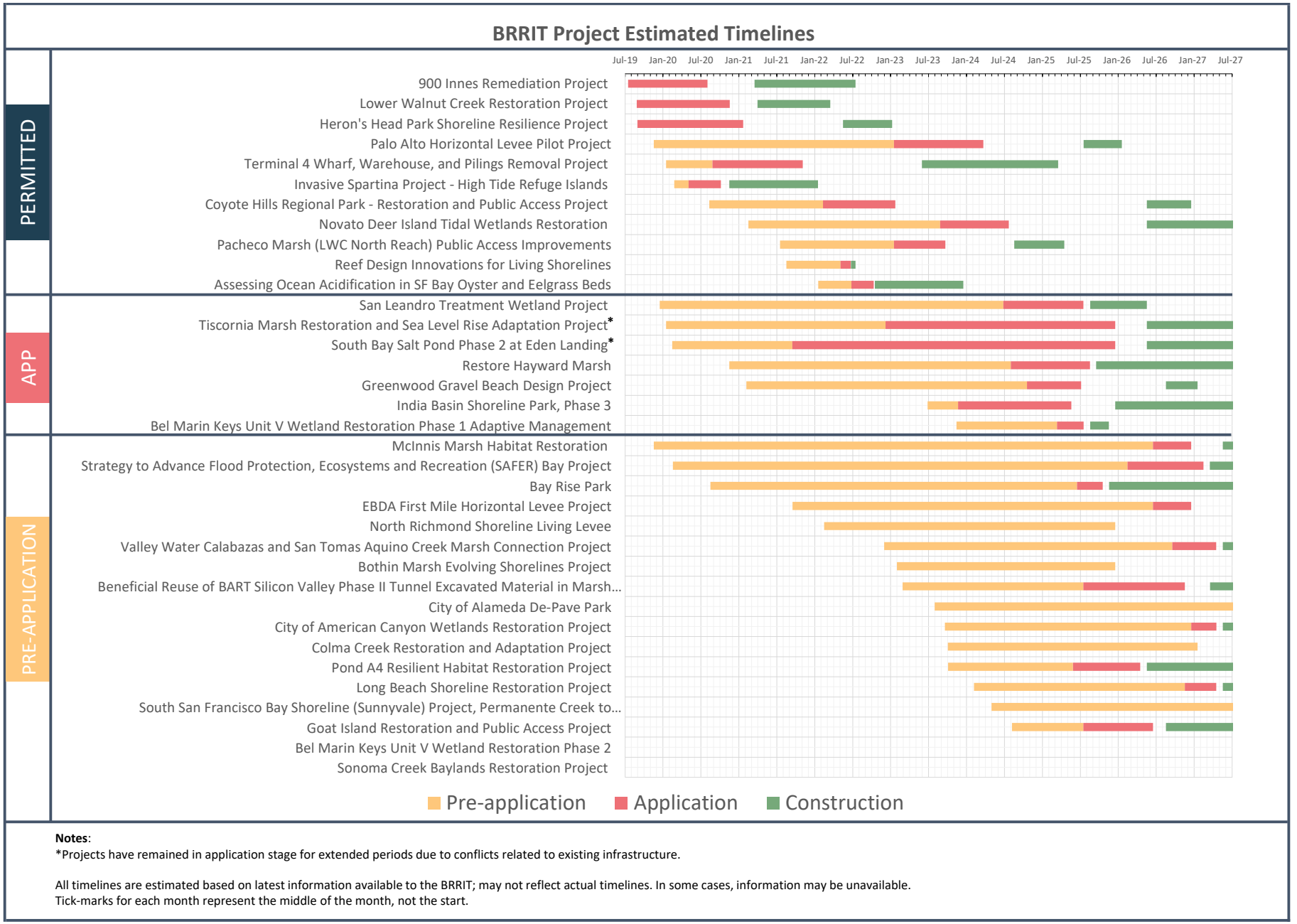
Similarly, the duration of the **application** phase (shown in pink) also varies considerably. The BRRIT does not determine when a project proponent should submit their applications and similar factors that influence pre-application timelines can also affect the length of application time. Additional details on factors that can delay permitting are provided in the BRRIT Performance section below, but for some projects, such as the Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project and the South Bay Salt Ponds Phase 2 at Eden Landing, conflicts with existing infrastructure significantly delayed advancing their project permits.

The BRRIT also coordinates with project proponents after permit issuance as needed, including during the construction phase (shown in green) and post-construction (not shown in the figure).

Based on current information, the BRRIT anticipates the following notable milestones in the upcoming year (between May 1, 2025, and April 30, 2026):

- 5 projects plan to submit permit applications.
- 9 more projects could be fully permitted.
- 5 projects plan to start construction.
- 2 projects plan to complete construction.

Current and future implementation of these 35 multi-benefit restoration projects will help move the San Francisco Bay community closer toward the collective goals of a healthier Bay, increased fish and wildlife habitat, improved flood protection, and increased and more equitable public access.



Notes:
*Projects have remained in application stage for extended periods due to conflicts related to existing infrastructure.

All timelines are estimated based on latest information available to the BRRIT; may not reflect actual timelines. In some cases, information may be unavailable.
Tick-marks for each month represent the middle of the month, not the start.

Figure 4. BRRIT Project Estimated Timelines

BRRIT Performance

The BRRIT's performance metrics from August 2019 through April 2025 are shown in Table 1 and include metrics identified in the BRRIT Memorandum of Understanding (MOU) and agency-specific permitting timelines. The BRRIT improves the permitting process for restoration projects by providing guidance in advance of permit application submittal and by responding to project proponents in a timely manner throughout the pre-application and application phases. As in previous years, project timelines shift and the BRRIT pivots workload to meet the needs of projects with the most urgent timing constraints.

Key Takeaways

- The BRRIT consistently provided agency-coordinated guidance and feedback to project proponents in a timely manner following pre-application meetings, with 76% of responses sent within 30 days (the target timeframe set by the BRRIT). Twenty-four percent of responses were delayed slightly beyond 30 days, due to the need for additional coordination among BRRIT agency staff or with external organizations. Early feedback from the BRRIT has helped to inform design modifications to further avoid and minimize impacts to aquatic habitat, avoid conflicts with public access components, and incorporate appropriate avoidance and minimization measures.
- The BRRIT has been responsive and met the MOU criteria to notify project proponents of permit application completeness or incompleteness within 30 days of receipt (100% for all agencies).
- Overall, the pre-application process has resulted in more complete permit applications submitted to the BRRIT, thereby improving the timeliness of permit issuance. With 11 projects fully permitted and a total of 107 permits and other authorizations issued, the BRRIT completed Federal Endangered Species Act consultations and issued all permits within their agency-specific statutory timelines and in time to meet project proponents' construction schedules.
- Permit issuance timelines exceeded MOU targets for 6 projects due to delays in submittal of key application materials (including permit application fees, property interest documentation, and local discretionary approvals); delays in completing the Section 106 National Historic Preservation Act consultation process; a request from one project proponent to delay permit issuance; late modifications to CEQA documentation; and the need for Endangered Species Act consultations to address expected changes to the listing of special status species. In addition, permitting can be more challenging and take longer for projects that don't fully participate in the BRRIT's pre-application process. Therefore, the BRRIT did not meet the MOU performance metric of issuing at least 80% of agency permits within 120 or 210 days of permit application submittal (for simple and complex projects, respectively). The BRRIT and PMC are considering revising this MOU metric in the future to account for external factors outside BRRIT agency control that can delay the submittal of complete permit applications.

BRRIT Performance Metrics (August 2019 - April 2025)			
Metric	**Description**	**MOU Target**	**Percentage Achieved**
Pre-Application Meeting Response	BRRIT provides pre-application meeting comments within 30 days	N/A	76%
Permit Application Response	BRRIT notifies project proponent of application completeness/incompleteness within 30 days	N/A	100% (18 of 18)
USACE Requests USFWS/NOAA Fisheries Consultation*	USACE requests ESA consultation with USFWS and NOAA Fisheries within 15 days of permit application submittal	90%	86% (24 of 28)
USFWS Response to Consultation Request	USFWS responds within 15 days of receiving consultation request	N/A	100% (17 of 17)
NOAA Fisheries Response to Consultation Request	NOAA Fisheries responds within 15 days of receiving consultation request	N/A	89% (17 of 19)
Permit Issuance for Simple Projects**	Projects with all BRRIT permits issued within 120 days of application submittal (only includes projects that participated in pre-application)	80%	50% (2 of 4)
Permit Issuance for Complex Projects**	Projects with all permits issued within 210 days of application submittal (only includes projects that participated in pre-application)	80%	0% (0 of 4)
Successful Timing of Permit Issuance	Projects with all permits issued within 120/210 days and/or in time to meet project construction schedule	N/A	100% (11 of 11)
Individual Agency Mandates to Issue Permits/Consultations (August 2019 - April 2025)			
Agency	**Time to issue after application considered complete**		**Percentage Achieved**
USACE	Permits issued within 60 days (Nationwide Permits) or 120 days (Individual Permits)		100%
NOAA Fisheries	Consultations issued within 60 days (Letter of Concurrence) or 135 days (Biological Opinion)		100%
USFWS	Consultations issued within 60 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%
**Total numbers of consultations differ between agencies as consultations do not always involve all three agencies and may not be initiated at the same time. Other consultations were initiated more than once.*			
***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, including metrics identified in the MOU and agency-specific permitting timelines.*

Project Proponent Feedback

In June 2024, the SFBRA, BRRIT and PMC developed a new online survey tool to request feedback from project proponents going through the BRRIT pre-application and permitting process. The survey is available for all project proponents to provide their anonymous feedback on a rolling basis at any point during or after the pre-application and permitting phases. Projects are also invited to participate in one-on-one interviews with the SFBRA. The response to the online survey to date has been limited with only 9 respondents.

The majority of survey respondents thought that using the BRRIT resulted in a better project that was more beneficial for species and habitat, recreation, flood protection, and water quality

(6 of 8 responses). Most respondents found the BRRIT responded in a timely manner, BRRIT comments were helpful and clearly communicated information needs and permitting requirements, and respondents agreed that the website was helpful for preparing permit applications. Most respondents also agreed that the BRRIT issued permits in time to meet planned construction schedules (6 of 7 responses). Overall, project proponents appreciated the additional coordination and engagement with the BRRIT. Respondents particularly noted the benefit of having one BRRIT representative as a designated point of contact, which facilitated communication and coordination.

However, only half of respondents agreed that permitting requirements, efficiencies, and strategies for multi-benefit restoration projects were well-communicated by the BRRIT (4 of 8 responses) or that the BRRIT effectively elevated permitting issues to the PMC (2 of 4 responses). This feedback highlights the complexity of BRRIT projects which often have competing goals and objectives (e.g., wildlife habitat and public access), propose innovative restoration methods that have greater uncertainty of outcomes and success (e.g., oyster reef restoration, horizontal levees, thin-lift sediment placement), and involve multiple stakeholders with conflicting interests.

These surveys provide valuable feedback that informs the BRRIT on what is working well and the areas for improvement. The concerns that respondents noted in the surveys are identified in the PMC's Permit and Policy Improvement List and the BRRIT and PMC are working closely together to address them (see PMC section below).

Other Collaboration and Outreach

The BRRIT engages in outreach and collaborates with other agencies and members of the restoration community. Collaboration and outreach efforts include the following:

- The BRRIT continues to support the Wetland Regional Monitoring Program's (WRMP) initiatives as active team members on the Technical Advisory Committee and the Steering Committee. Funding from the U.S. EPA allowed initial monitoring to begin in 2025.
- The BRRIT and PMC members are collaborating with the San Francisco Estuary Partnership's Regulatory Pathways for Nature Based Solutions effort.
- The BRRIT is coordinating with BCDC's Regional Shoreline Adaptation Plan (RSAP) to provide input on permitting restoration projects and interagency coordination. The RSAP was developed because of Senate Bill 272 (SB 272), which required BCDC to create guidelines for Bay Area local governments to follow when planning for the impacts of sea level rise. The RSAP aims to provide a coordinated, actionable plan for how the Bay Area can adapt to rising seas and ensure the long-term resilience of its communities, infrastructure, and ecosystems.
- Members of the BRRIT and PMC attended the California State Assembly Select Committee on Permitting Reform meeting and project tour to share lessons learned on improving permitting.
- The Water Board participated in a webinar panel organized by the Transforming Shorelines Collaborative. The panel discussion focused on regulatory pathways for nature-based solutions.
- NOAA Fisheries is working with the NOAA Restoration Center to improve communication and share funding opportunities with restoration partners.

Policy and Management Committee

The Policy and Management Committee (PMC) 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 that may arise during project review and permitting and identifying 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 and overall benefit to the permitting process, the benefit to regional restoration goals, and the capacity of the BRRIT and PMC.

The Permit and Policy Improvement List (PPIL) 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. Between 2024 and 2025 there were several accomplishments and noteworthy progress made in resolving items on the PPIL. Major highlights are identified below.

Accomplishments and Progress

- **Improving Coordination with Non-Agency Entities.** A continuing challenge is project proponents' ability to timely coordinate on their project designs with utilities and other infrastructure entities. Late coordination can result in delays and costly changes to project designs. PMC and PG&E representatives identified a lead PG&E contact for project coordination. This contact was beneficial in resolving conflict between PG&E and the Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project.

  In 2024, the PMC identified coordination with external entities as an issue to be prioritized on the PPIL. The PMC is currently developing a strategic plan to improve coordination with non-agency entities and ultimately improving habitat restoration efforts in the Bay. In addition to the strategic plan, the PMC began coordinating with BCDC on the Regional Shoreline Adaptation Plan (RSAP) on how the RSAP process may facilitate coordination with non-agency asset holders. BCDC is encouraging local governments to engage non-agency asset holders in the development of plans.

- **Fill for Habitat.**

  Artificial Reefs. In late 2024, a subgroup of PMC and BRRIT members collaborated on the development of an Interim Artificial Reef Project Review Framework to help guide applicants when creating artificial reefs. The framework provides consistency in responding to artificial reef project consultation and permitting requests prior to the adoption of a California Artificial Reef Program (CARP) Plan.

  Nature-based Adaptation Measures**.** In October 2024, U.S. EPA and USACE hosted a joint Clean Water Act (CWA) Regulatory Analysis for Multi-benefit projects workshop for federal CWA staff and managers. This workshop provided technical and regulatory resources, case studies, and discussion on CWA 404 issues and requirements for fill for

habitat projects. Additional information needs identified were limited initial site-specific data, level of data needed for effects analysis, beneficial outcomes for ecological resiliency, risk/uncertainty with adaptation outcomes, public access, and flood risk.

On June 12, 2024, the Water Board approved the proposed (non-regulatory) Basin Plan Amendment on Climate Change and Aquatic Habitat Protection, Management, and Restoration. The State Water Board approved the amendment on December 18, 2024. The amendment includes language on adapting to rising tides, references the Wetlands Regional Monitoring Program and Adaptation Atlas, and identifies instances where the discharge of fill to waters may be needed and even desirable to adapt to rising tides.

- **Monitoring.** In the coming year, the Water Board and NOAA Fisheries will collaborate with agencies including the USACE and BCDC to identify opportunities to use WRMP monitoring to achieve project-specific monitoring goals. The Water Board will work to develop coordinated expectations for agency use to frame the role of WRMP monitoring with respect to individual projects, with the goal of implementing them as part of BRRIT project authorization.
- **Upland Alternatives to Fill for Habitat.** BCDC has incorporated goals into its RSAP process that include ecosystem health and resilience. The RSAP process recognizes the need to and benefit of protecting, restoring, and enhancing Baylands ecosystems, and prioritizing nature-based solutions where possible. The Water Board, USACE, U.S. EPA, and BCDC expect to coordinate going forward as part of BCDC's RSAP process to ensure that entities developing shoreline adaptation plans are aware of the ecosystem health and resilience goal and the allied expectations as part of CWA Section 404(b)(1) alternatives analyses and similar expectations under California law and regulation, and are thus able to incorporate those expectations into their climate change planning.

Funding

The original budget for the BRRIT was $1,250,000 per year (with annual increases for inflation) with just over $14.2 million secured for the first and second five-year funding periods. Funders are the SFBRA ($650,000 per year with increases annually for inflation for first five years, plus $2,500,000 for an additional five years), State Coastal Conservancy ($250,000 per year plus $559,000 one-time augmentation for first five years plus $1,500,000 for an additional five years), U.S. EPA ($3,400,000 for five years), Santa Clara Valley Water District/Valley Water ($200,000 per year for ten years), East Bay Regional Park District ($75,000 per year for five years), and Bay Area Toll Authority ($100,000 per year for ten years, subject to availability of funds in annual budgets after June 30, 2028). In addition, the Water Board provides in-kind office space for the BRRIT to work and meet.

The actual expenditures for the BRRIT for the first 5.5 years from July 2019 to April 2025 totaled approximately $5.8 million. The annual budget for the first five years, once all six of the agencies were under agreement and salary cuts were over, was $1,200,000 - $1,700,000.

Fundraising for the second five-year funding period is complete with a total of $8,900,000 secured from the State Coastal Conservancy, SFBRA, U.S. EPA, Valley Water, and the Bay Area Toll Authority. The annual estimated budget for the next five years is approximately $1,800,000, which includes salary increases and an expanded scope to include more tribal engagement and better progress tracking.

Appendix 1
Permit and Policy Improvement List

BRRIT

SAN FRANCISCO BAY COORDINATED PERMITTING APPROACH

Policy and Management Committee

Permit and Policy Improvement List
Updated July 2025

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.

Prioritization will be based on the following criteria:

- **Benefit to review process and overall program**: impact upon the decision-making timeline.
- **Frequency of the issue**: it is a policy issue that comes up over and over.
- **Benefits to regional restoration goals**: Does it result in projects getting in the ground faster and more efficiently?
- **Capacity of BRRIT and PMC**: can be accomplished in the next 3-4 years with projected resources and staffing.

The permit and policy improvement list describes the status of priority issues with a commitment to make progress on and 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 2025).
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 2026)
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 2026)
4. **Accomplished,** indicates issues that have been resolved.

The list will be revised annually for items and prioritization. New items will be considered as identified by the PMC, or brought to the PMC by the BRRIT or stakeholders.

POLICY ISSUE: Improving Coordination with Non-Agency Entities	
Date initiated: 2024	**Priority**: 2025
Agency and/or Legislative Fix? Agency fix	
POC: Keith Lichten, Water Board	**Status**: Being Addressed
Why is this an issue? Utilities, flood control districts, railroads, and other entities with easements can increase the complexity of project design, and coordination with them may result in delays to project authorization and construction. There is an opportunity to improve the timing and quality of communication to facilitate restoration project design and construction.	
Initiatives: BRRIT member agencies could develop procedures for more efficient and coordinated outreach to benefit permitting process. In the coming year, the BRRIT and PMC will work with PG&E to improve coordination and clarify the specifics of PG&E's engagement on projects. This could be, for example, by identifying a role for them in the pre-application process for affected projects.	
Update 2024 PMC and PG&E representatives identified a lead PG&E contact and the BRRIT is facilitating his coordination of and participation in restoration project design, authorization, and implementation. On the Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project, BRRIT members organized a meeting with PG&E and the applicant to successfully resolve a complicated issue related to proposed levee lowering, which would impact PG&E's ability to access its towers for maintenance.	
Further discussion needed? In the coming year, the BRRIT and PMC will work with PG&E to improve coordination and clarify the specifics of PG&E's engagement on projects. This could be, for example, by identifying a role for them in the pre-application process for affected projects. Identify additional entities, such as flood control districts, where there would be mutual benefit from coordinated outreach and engagement, and collaborate to identify a framework for engagement.	

POLICY ISSUE: Fill for Habitat	
Date initiated: 2022	**Priority:** 2026
Agency and/or Legislative Fix? Agency fix	
POC: Sahrye Cohen, EPA	**Status:** Will be addressed

Why is this an issue? Nature-based adaptation measures, such as ecotone levees, horizontal levees, habitat transition zones and artificial oyster reefs, can result in the placement of fill material in aquatic habitat. The placement of fill material may be in conflict with core regulatory language requiring minimal fill. Project proposals may require additional site-specific information to analyze aquatic resource impacts and policy and guidance changes to permit projects with substantial amounts of fill.

Identified issues include:

- Site-specific information/data needs
- Applicability of regional and landscape scale information to specific site designs
- Assessing practicability of marsh migration space/fill placement on inboard levee
- Monitoring requirements
- Whether compensatory mitigation is required
- Applicability of artificial reef design and permitting requirements to Bay projects.
- Application of the Aquatic Resource Type Conversion Evaluation Framework v.2 to fill for habitat and nature-based solution projects
- Risk and uncertainty with adaptation outcomes

Initiatives: The PMC/BRRIT nature-based solutions subcommittee meets regularly (approximately every 2 months) to discuss resources, identified issues, and complimentary initiatives specific to fill for habitat and nature-based solutions with an emphasis on ecotone and horizontal levees.

In 2025 CDFW began development of the California Artificial Reef Program (CARP), expected to be completed by the end of 2026. Continued engagement from CDFW Marine Region will be needed to determine how the guidance in the CARP may impact Bay project permitting.

Update 2024: In October 2024, EPA and USACE hosted a joint Clean Water Act Regulatory Analysis for Multi-benefit projects workshop for federal CWA staff and managers. This workshop provided technical and regulatory resources, case studies, and discussion on CWA 404 issues and requirements for fill for habitat projects. Additional information needs identified were limited initial site-specific data, level of data needed for affects analysis, beneficial outcomes for ecological resiliency; risk/uncertainty with adaptation outcomes, public access, flood risk.

EPA presented an overview of the Aquatic Resource Type Conversion Framework to BCDC on June 9, 2025, and will present and in-depth training September 2025. BCDC is assessing using

POLICY ISSUE: Fill for Habitat	
Date initiated: 2022	**Priority:** 2026
Agency and/or Legislative Fix? Agency fix	
POC: Sahrye Cohen, EPA	**Status:** Will be addressed

the Aquatic Resource Type Conversion Framework in regulations as part of a larger amendment of BCDC's regulations.

The NBS subcommittee reviewed the Regulatory Pathways for Nature Based Solutions White Paper https://www.sfestuary.org/regulatory-pathways-for-nbs/ and identified items in the draft conceptual workplan that are in alignment with PMC/BRRIT initiatives and will be included in PPIL issues.

On June 12, 2024, the Water Board approved the proposed (non-regulatory) Basin Plan Amendment on Climate Change and Aquatic Habitat Protection, Management, and Restoration. The State Water Board approved the amendment on Dec. 18, 2024. The amendment includes language on adapting to rising tides, including referencing the Wetlands Regional Monitoring Program and Adaptation Atlas, and identifying instances where the discharge of fill to waters may be needed and even desirable to adapt to rising tides.

Updates 2023: EPA met with the Corps to discuss how fill impacts are evaluated under Clean Water Act Section 404.

The Water Board adopted a non-regulatory Basin Plan Amendment on Climate Change and Aquatic Habitat Protection, Management, and Restoration to incorporate climate change information in its Basin Plan and provide information on how the Water Board permits dredge or fill activities associated with climate adaptation projects.

Artificial Reefs. Representatives of CDFW's Marine Region joined the PMC to work collaboratively with the State Coastal Conservancy, Water Board, and BCDC to identify interim measures to avoid permitting delays until a Statewide Plan is developed.

Fill for habitat workgroup meeting to discuss how fill impacts are evaluated for ecotone and horizontal levees.

Updates 2022: Agency representatives identified for workgroup to discuss how similar impacts can be evaluated under federal regulations.

Accomplished 2019: BCDC's San Francisco Bay Plan was amended to allow greater amounts of fill for habitat restoration and pilot projects.

POLICY ISSUE: Fully Protected Species	
Date initiated: 2021	**Priority**: 2025
Agency and/or Legislative fix? Agency fix and Legislative fix	
POC: Craig Weightman, 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 fixes are 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 2024: Governor Newsom signed the Restoration Management Permit Act (Assembly Bill (AB) 1581) on September 27, 2024, adding Chapter 6.7 to the California Fish and Game Code. The Restoration Management Permit can provide fully protected species permitting for a qualifying restoration project that has the primary purpose of restoring native fish, wildlife, plants, or their habitat and that would result in a substantial net benefit to native fish, native wildlife, native plants and the habitat of native fish, native wildlife, or native plants. Importantly, a qualifying restoration project may also have secondary or incidental benefits, including, but not limited to, flood risk reduction, recreation, or groundwater recharge.

Updates 2023: Under the State of California's Cutting the Green Tape Initiative to increase the pace and scale of environmental restoration, CDFW has developed several restoration permitting tools under CDFW's Cutting the Green Tape Program. Such tools include a Restoration Management Permit (RMP) that consolidates "take" authorizations for restoration projects under a single streamlined permit. The RMP can authorize take of CESA-listed as well as state fully protected species.

In addition, SB-147 was approved and filed with the State on July 10, 2023, as part of the governor's California Infrastructure Trailer Bill package. SB-147 authorizes CDFW to issue a

POLICY ISSUE: Fully Protected Species	
Date initiated: 2021	**Priority**: 2025
Agency and/or Legislative fix? Agency fix and Legislative fix	
permit under CESA to authorize take of fully protected species for certain types of infrastructure projects with mitigation. Note that the list of project types included in the trailer bill does not include restoration projects. Peggy McNutt to initiate legislative fix. Peggy M. will remain engaged with the PMC to request additional information as needed or to provide updates.	
Updates 2021: Work with restoration projects to ensure recovery efforts for fully protected species are included in the restoration project.	
Further discussion needed? The PMC and EPA will follow up with Resources Legacy Fund to determine the status of their legislative efforts.	

POLICY ISSUE:
Develop Guidance for Project Applicants

Date initiated: 2021 **Priority**: 2023, ongoing

Agency and/or Legislative Fix? Agency fix

POC: Jana Affonso, 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, and 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 providing FAQs and other guidance, such as typically approved management practices and conservation measures.

Updates 2024:

- NMFS developed and shared a template for information needed for a project to qualify for an expedited letter of concurrence (ELOC)
- Has been utilizing condensed biological opinions for qualifying consultations
- Is working on additional tools to support project applicants
- Updated resources and tools on the BRRIT website for applicants to have access to Nature-Based Solutions Resources
- Added guidance on how to submit a complete resume approval request to USFWS or CDFW (resources and tools page)
- BCDC's mission-based review was completed. BCDC redesigned their website and rewrote permit application guidance in plain language for it to be easier to understand by the public. Additionally, pages providing guidance on difficult policies are in development, including policies such as public access, climate change, and community engagement.

Updates 2023:

- BCDC Permitting for a Resilient Shoreline. BCDC is working to make improvements to its regulatory program as part of its overall efforts to implement the Bay Adapt Joint Platform. Action 7 of the Joint Platform called for refining and accelerating regulatory approvals for resilient shoreline adaptation projects that align with regional goals. The effort includes work to make BCDC permitting faster and more efficient, make the BCDC regulatory program easier to navigate, accelerate effective nature-based adaptation, work together with regulatory partners, and consider the role of BCDC's regulatory program in achieving desired adaptation outcomes. This effort is funded by a grant from the State Coastal Conservancy.
- BCDC is also receiving assistance to improve its regulatory program from the CA Department of Finance, through its Mission-Based Review (MBR) process. The goal of

POLICY ISSUE: Develop Guidance for Project Applicants	
Date initiated: 2021	**Priority**: 2023, ongoing
Agency and/or Legislative Fix? Agency fix	
MBRs is to improve governmental programs through: analyzing the key requirements that drive the program's core mission; prioritizing limited resources to get the biggest return on investment; streamlining or eliminating functions within the program(s) that are not needed to support the core mission; and analyzing regional approaches to program delivery to eliminate or minimize disparities in staffing, standards, and levels of service. This will be an approximately 6-month process, which started in mid-2023.	
Updates 2022: • More items were added under the Resources and Tools tab on the BRRIT website, including the "Permit application checklist", "Helpful Links", and a link to "Box" website for delivering large files to the BRRIT. Some examples of "Helpful Links" include links to regulatory overview websites for each agency, streamlined permitting tools, relevant recovery plans, sea level rise guidance, and the WRMP. • NMFS is developing a checklist for expedited informal consultation that will be available for regional use in SF Bay Area.	
Accomplished 2021: • Created resources and tools for applicants that could include a recommended checklist of items and information needed for a complete application. • Provided 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. • Reorganized BRRIT website to provide more clarity on the permitting process and how the BRRIT can help. The website now includes tabs for BRRIT Process, BRRIT Projects, BRRIT Eligibility, Resources and Tools, Policy and Management Committee, and FAQs. • Added, under the BRRIT Process tab, a flow chart explaining the pre-application process.	
Further discussion needed? • Guidance documents can be shared publicly as they are available.	

POLICY ISSUE:

Short-term impacts of wetland restoration activities vs. long-term benefits of the overall wetland restoration

Date initiated: 2023 **Priority**: 2023-2026

Agency or Legislative Fix: Agency fix

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

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).

This issue has substantial overlap with **Fill for Habitat and Nature Based Solutions** issue.

Initiatives:

- The USFWS and NMFS's guidance is to incorporate measures into project descriptions to avoid and minimize short-term impacts as much as possible while recognizing the value of long-term benefits and encouraging proven, demonstrated restoration methods that benefit listed species.
- EPA Region 9 developed training materials for multi-benefit restoration projects that provide Clean Water Act 404 specific technical and regulatory resources, regulatory analogues (e.g. USACE Regulatory Guidance letter 18-01), and case studies on fill for habitat and nature-based solutions.

Update 2024: In October 2024, EPA and USACE hosted a joint Clean Water Act Regulatory Analysis for Multi-benefit projects workshop for federal CWA staff and managers. This workshop provided technical and regulatory resources, case studies, and discussion on CWA 404 issues and requirements for project. Additional information needs identified were limited initial site-specific data, level of data needed for affects analysis, beneficial outcomes for ecological resiliency; risk/uncertainty with adaptation outcomes, public access, flood risk.

Updates 2021 thru 2023: The USFWS and NMFS worked with applicants in pre-application meetings to front-load avoidance and minimization measures into project descriptions and subsequently incorporated the benefits of restoration into Section 7 consultation documents.

Further discussion needed?

POLICY ISSUE:
Monitoring

Date initiated: 2020 **Priority**: 2026

Agency and/or Legislative Fix? Agency fix

POC: Keith Lichten, Water Board **Status**: Will be addressed

Why is this an issue? Monitoring requirements can be a significant project cost and associated funding can be difficult to obtain, as some grants may not fund or may limit expenditures for monitoring. Regionally relevant monitoring that advances tidal wetland restoration does not fully address site-specific monitoring needs, which can increase the overall monitoring burden for applicants. Scientifically robust and meaningful monitoring is expensive and may be deprioritized when compared to the project proponent's primary goal of enhancing habitat conditions. Monitoring costs are an expense for multi-benefit restoration projects and nature-based solutions that traditional grey infrastructure projects do not have to bear.

- Monitoring is challenging to fund, and therefore project proponents can support limiting mandated monitoring requirements 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.
- Individual projects are not necessarily well positioned to answer broader landscape-scale questions, such as those about specific species and habitats. Those broader questions are better considered through a regional monitoring program or similar arrangement.
- Uncertainty associated with climate change and sediment availability exacerbates the challenges of evaluating project success, and site-specific monitoring can be at too small a scale to capture this issue.
- This is a Sand in the Gears issue.

Initiatives:

- The Wetlands Regional Monitoring Project (**WRMP**) will develop a regional-scale monitoring program to evaluate wetland restoration project success and inform science-based decision-making. NMFS is working collaboratively to advance the fish monitoring component of this program. https://www.wrmp.org/
- Adding additional supportive materials to the BRRIT monitoring page that identify common monitoring expectations and provide examples to help project proponents with planning and expectations (e.g., typical revegetation monitoring, maintenance and reporting needs; monitoring that should be included in pilot living shoreline projects).

Updates 2023: The WRMP FFH Workgroup finished the draft monitoring recommendations and SOPs. The WRMP approved the Site Monitoring Network.

Agencies discussed the general information needed from applicants in order to determine if permits are needed for installation of monitoring equipment on a case-by-case basis.

POLICY ISSUE: Monitoring	
Date initiated: 2020	**Priority**: 2026
Agency and/or Legislative Fix? Agency fix	
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 (SOPs) 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.	
Updates 2021: SFEP continued to develop an implementation plan that describes 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 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.	
Further discussion needed?	

POLICY ISSUE: Siting Public access within multi-benefit habitat restoration projects	
Date initiated: 2023	**Priority**: 2026
Agency and/or Legislative Fix: Agency fix	
POC: Julie Garren, BCDC	**Status**: Will be addressed
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: Reduce friction with applicants and agencies over the placement of public access improvements by creating guidelines or best management practices for BCDC to use to minimize impacts to species and habitat.	
Update 2024: BCDC published a new page on their website providing guidance on incorporating public access into projects that is written in plain language to support applicants in developing public access improvements in their projects. Additional pages on meaningful community engagement and environmental justice are in development. BCDC is reaching out to discuss the issue with each agency to determine guiderails around how best to minimize impacts caused by public access.	
Update 2023: The BRRIT has been successfully working among the member agencies and with applicants to reduce potential impacts from public access through appropriate siting, design, and management of public access areas and improvements. Examples include siting trails in appropriate areas to minimize wildlife impacts, using appropriate signage, implementing seasonal trail closures near sensitive areas, using "screening" vegetation to limit noise and visual impacts, and measures to avoid or minimize addition of predator perches when new structures are proposed. Example projects for which these measures will be used (all of which are currently in application or pre-application phase as of 8/9/2023) include: Greenwood Gravel Beach, Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project, Palo Alto Horizontal Levee Pilot Project, and Pacheco Marsh Public Access Improvements Project.	
Further discussion needed?	

POLICY ISSUE: Upland Alternatives to Fill for Habitat	
Date initiated: 2023	**Priority**: 2026
Agency and/or Legislative Fix: Agency fix	
POC: Keith Lichten, Water Board	**Status**: Will be developed

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.

Update 2024

BCDC has incorporated into its Regional Shoreline Adaptation Planning (RSAP) process goals that include ecosystem health and resilience. The RSAP process recognizes the need to and benefit of protecting, restoring, and enhancing Baylands ecosystems, and prioritizing nature-based solutions where possible.

The Water Board, Corps, U.S. EPA, and BCDC expect to coordinate going forward as part of BCDC's RSAP process to ensure that entities developing shoreline adaptation plans are aware of the ecosystem health and resilience goal and the allied expectations as part of Clean Water Act Section 404(b)(1) alternatives analyses and similar expectations under California law and regulation, and are thus able to incorporate those expectations into their climate change planning.

POLICY ISSUE:
General Programmatic Efforts

Date initiated: 2023 **Priority**: 2023, ongoing

Agency and/or Legislative Fix? Agency fix

POC: Jana Affonso, USFWS **Status**: Partially accomplished

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 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.
- Potential RWP for restoration projects

Updates 2024

NMFS is working with the NOAA Restoration Center on an update to the Restoration Programmatic Biological Opinion to include San Francisco Bay.

NMFS is continuing to work on a programmatic permit for the restoration program.

The USFWS Restoration PBO was updated to include additional species, including longfin smelt which occurs in the SF Bay

Governor Newsom signed the Restoration Management Permit Act (Assembly Bill (AB) 1581) on September 27, 2024, adding Chapter 6.7 to the Fish and Game Code. AB 1581 consolidates five of the most common CDFW authorizations typically needed for restoration projects into the RMP, which is a single, streamlined permit.

Updates 2023:

Identify projects that are on the BRRIT list and also part of larger statewide efforts (USFWS Restoration PBO, SRGO, CDFW Cutting the Green Tape's Restoration Management Permit, etc). Evaluate how those state-wide initiatives interact with the BRRIT process in general.

NMFS initiated a restoration programmatic permit for SF Bay.

Accomplished 2022: The USFWS' Programmatic Biological and Conference Opinion on the California Statewide Programmatic Restoration Effort (Restoration PBO) was completed.

State Water Board State-Wide Restoration General Order (SRGO; August 2022)

Further discussion needed?

POLICY ISSUE: Lack of collaborative decision-making among agencies	
Date initiated:	**Priority**: 2023
Agency and/or Legislative Fix: Agency fix	
POC: Luisa Valiela, 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; information gathering through surveys to applicants; BRRIT internal coordination; using PMC elevation process	
Update 2023: • BRRIT and SFBRA are increasing the frequency of reminders to applicants to complete these surveys and reassessing and updating survey questions to better understand how the BRRIT can help applicants through the permitting process. SFBRA will start obtaining individual feedback from applicants • BRRIT coordination and early feedback on public access and wildlife concerns: Greenwood Gravel Beach, Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project, Palo Alto Horizontal Levee Pilot Project, Lower Walnut Creek Restoration - North Reach Public Access Improvements	
Updates 2020 and 2021: BRRIT outreach; satisfaction surveys; pre-application satisfaction surveys	
Further discussion needed?	

POLICY ISSUE: Protecting Single Species in the Context of Larger, Holistic Restoration Goals	
Date initiated: Not yet initiated	**Priority**: Not yet prioritized
Agency and/or Legislative Fix: Agency fix	
POC: Jana Affonso, USFWS	**Status**: Will be developed
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: Wetland Habitat Type Conversion	
Date initiated: 2020	**Priority**: 2021
Agency and/or Legislative Fix? Agency fix	
POC: Sahrye Cohen, EPA	**Status**: ACCOMPLISHED 2022
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. See **Fill for Habitat and Nature Based Solutions** issue for additional initiatives and updates.	
Initiatives: A multi-agency project to develop a science-based framework for assessing habitat type conversion actions in the SF Bay Region. This framework supports consistent and transparent decision-making using landscape and site-specific information.	
Aquatic Resource Type Conversion Evaluation Framework v.2 finalized and published. http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1110_ConversionFramework.pdf	

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
Advanced Mitigation for Restoration Projects and Shoreline Planning