

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT: Keith Lichten
MEETING DATE: February 8, 2023

ITEM: 7

Supporting Bay Area Creek and Wetland Restoration: Background and Update on the Statewide Restoration General Order (SRGO) – Information Item

DISCUSSION

This item covers:

- Background on historical impacts to wetlands and other waters of the San Francisco Bay Region;
- Past impacts and anticipated climate change as drivers for current and planned restoration of Bay Area waters;
- Examples of restoration projects, challenges, and efforts to address those challenges, including planning and coordination efforts around restoration; and
- The role the new Statewide Restoration Order is expected to play in facilitating restoration projects.

San Francisco Bay wetlands and waters have been significantly impacted from their pre-European settlement condition. The Bay was filled for farming, salt-making, and development, and Bay Area rivers and creeks were filled, channelized, and disconnected from their floodplains. By the time filling of the Bay was stopped or slowed, about 80 percent of the Bay's tidal marshes had been lost. The loss of bay and watershed habitats has impacted many species of plants, fish, and wildlife, leading some to become threatened or endangered.

Restoration projects play an important role in rectifying these historical impacts, through restoring natural processes, habitats, and species. In addition, they can provide [resilience in the face of anticipated climate change](#). For example, restored tidal marsh can keep pace with rising tides through sedimentation, helping to provide flood protection for adjacent more-upland property and reducing the need for harder, more expensive, less habitat-friendly interventions like levees or seawalls.

Examples of Bay restoration projects include restoring shoreline habitats, including mudflats, tidal ponds, rocky intertidal habitat, and various subtidal habitats; restoring historic salt ponds to tidal wetlands; removing pilings and other in-water structures; and breaching levees to reconnect tidal marshes. These activities can provide vital wildlife habitat, improve flood protection capacity and sediment conveyance, increase transitional estuarine habitats, improve water circulation and quality, contribute to sea level rise adaptation, and allow opportunities for public access. These multiple goals can conflict, such as when species restoration goals may conflict with public access, or

when tidal restoration has the potential to increase flood risk, for example by removing an agricultural levee that may be providing flood protection. These conflicts are addressed during project design and authorization.

In the watersheds flowing to the Bay, restoration projects on rivers and creeks include enhancing and restoring wetlands and riparian habitat; restoring floodplains; improving stream crossings; restoring fish passage and spawning habitat; and daylighting creeks to provide vital wildlife habitat and sustainable flood protection, improve water quality and beneficial uses, and allow opportunities for public access.

Restoration project drivers include climate change adaptation, protecting and restoring beneficial uses, rectifying historical impacts, and achieving multiple benefits.

Restoration project challenges include site constraints, competing goals, budget and timing/availability of funds, availability of technical expertise, California Environmental Quality Act (CEQA) compliance, and coordinating multiple parties, including the public and municipal, state, and federal agencies.

While we need to efficiently review and authorize restoration projects, we also need to ensure that the projects fit within a broader set of landscape-scale goals for restoration, are well designed, and will function as intended. It is the goal of interagency collaboration to expedite restoration projects while also ensuring we can meet the interests and mitigate the constraints for mutual success.

In 2012, the State Water Board adopted a programmatic authorization for “small” restoration projects—that is, restoration projects less than 5 acres or a cumulative total of 500 linear feet of stream bank or coastline, and that qualify under the CEQA categorical exemption for “Small Habitat Restoration Projects” (14 CCR 15333; [Small Habitat Restoration General Certification](#)). We typically authorize seven or eight projects under the Small Habitat Restoration General Certification every year.

On August 16, 2022, the State Water Board adopted a general order to cover restoration projects that were larger than the limits in the Small Habitat Restoration General Order: the [Statewide Restoration General Order](#) (SRGO). The SRGO’s purpose is to expedite consultation, authorization, and permitting of restoration projects intended to help the State of California achieve its habitat restoration, species recovery, and water quality improvement goals. To be eligible for coverage under the SRGO, projects must meet the definition of a restoration project as defined and be consistent with approving Regional Water Board’s Basin Plan. A “restoration project” is defined as one that will result in a net increase in aquatic or riparian resource area, functions, and/or services through implementation of the eligible project types, relevant protection measures, and design guidelines.

In October 2020, Governor Newsom issued the [Nature-Based Solutions Executive Order](#), which advances biodiversity conservation as an administration priority and elevates the role of nature in the fight against climate change. The Executive Order committed California to the goal of conserving 30 percent of our lands and coastal waters by 2030, known as the 30x30 initiative.

One of the 30x30 goals is to accelerate restoration by improving processes. A specific action under that goal was to expand the development and use of programmatic environmental review associated with permitting. Development of the SRGO and its associated Programmatic Environmental Impact Report (PEIR) is an example of an action to accomplish the 30x30 process goal.

We support the SRGO as a permitting tool for large-scale restoration projects that will make the permitting process more predictable, consistent, and timely. The Order contains categories of project types, relevant general protection measures, and design guidelines that have been developed to facilitate restoration project design. The approving Water Boards will independently review any project proposed for authorization under the Order to analyze impacts to water quality and designated beneficial uses within the applicable watershed(s). Projects must be designed to protect water quality and beneficial uses in accordance with regional or statewide water quality control plans. A pre-application consultation is required prior to the submittal of a Notice of Intent (NOI) requesting project authorization under the Order. The approving Water Board determines if a proposed project meets the definition of a restoration project and is eligible for authorization under the Order. If eligible, the Water Board issues a Notice of Applicability (NOA) authorization.

Restoration projects involve a range of steps, which can include acquiring land, obtaining funding, developing designs, obtaining approvals, constructing the project, and monitoring and adaptively managing the implemented project. The SRGO is expected to speed the step for obtaining approvals to construct a proposed design because it will allow modest reductions in time to submit applications and write the authorization. These large projects will continue to be technically complex and need to balance competing objectives, with the potential for adverse impacts to water quality and beneficial uses. As a result, Water Board staff is committed to working collaboratively with project proponents and stakeholders, including other agencies, as restoration project designs are developed, to ensure that they can be efficiently authorized once applications are submitted.

The Water Board is a proponent of and committed to agency coordination and the development of policies and technical guidance that have helped define or support broader landscape-scale goals and which are often used in a restoration project's basis of design. We have participated in or helped lead efforts including: the multi-agency [Dredged Material Management Office](#) (DMMO)/[Long Term Management Strategy](#) for dredged sediment in San Francisco Bay (LTMS); the [Bay Restoration Regulatory Integration Team](#) (BRRIT) and the BRRIT's associated [Policy and Management Committee](#) (PMC); the [Baylands Habitat and Ecosystem Goals project](#); the [San Francisco Bay Shoreline Adaptation Atlas](#); and the SF Bay [Regional Monitoring Program](#) (RMP)/Wetlands RMP. In addition, we are on the Board of the [San Francisco Bay Joint Venture](#) and the [Advisory Committee](#) of the San Francisco Bay Restoration Authority. We welcome the opportunity to expand these efforts as project proponents continue to evolve and engage in the restoration work.

Some examples of the work we have done to date include the preparation of [guidance](#) to support project proponents crafting project designs to obtain federal funding. We also participate in a number of technical advisory committees that help guide stream and wetland restoration projects and funding, including grant applications. These include committees associated with large projects, such as the Napa living river restoration, and those that are focused on a particular water body, like a salmon-bearing creek in West Marin County, that may see a range of projects over time. Taken as a whole, this work helps guide restoration project designs by setting expectations for balancing habitat for existing species with longer-term restoration goals; recognizing the information, analyses, and expertise needed to design successful restoration projects; identifying preferred design approaches to avoid unanticipated adverse effects (e.g., minimizing methylation of mercury from restoring tidal action to diked Baylands, or identifying restoration elements, like shallowly-sloped ecotone levees, that can manage anticipated sea level rise while providing space for tidal marsh habitat to transgress over time as tides rise); transferring information, like sediment quality reuse guidelines, where it is appropriate to use across multiple projects, so that it does not have to be developed independently for each project; and coordinating project activities and differing agency, project proponent, and other stakeholder mandates and goals.

Restoration projects require the coordination and involvement of the project proponent, local land use and flood management agencies, numerous environmental agencies, and other stakeholders. The Water Board's work typically involves advance coordination to ensure designs are consistent with applicable policy and guidance and incorporate appropriate expertise and site-specific information and analyses. It also includes plan review and field inspections of the site and, as appropriate, the contributing watershed or broader landscape context. Staff typically reviews project proposals and designs well before applications are ever submitted.

There is substantial interest in the SRGO and opportunities to facilitate timely completion of successful restoration projects from the Bay Area restoration community. The restoration community includes project proponents, such as local Resource Conservation Districts, land trusts, flood management agencies, and Ducks Unlimited; coordinating groups such as Sustainable Conservation; local, state, and federal agencies; local residents and landowners; and environmental and other NGOs. Staff and a cross section of the restoration community will present at the Board meeting.