

**Morro Bay National Estuary Program**  
**Program Evaluation Status for 2025**  
Prepared for the August 2024 Executive Committee Meeting

This memo provides the status of the required actions outlined in the Program Evaluation (PE) letter from the 2020 review by EPA.

**Reporting on Changes in Conditions and Outcomes**

Status: Ongoing

Feedback from PE process: EPA would like to see calculations or estimates of pollutant reduction due to Comprehensive Conservation & Management Plan (CCMP) actions, whenever feasible. Would like to see these results shared in the annual work plan and the Morro Bay National Estuary (MBNEP) website.

Activities to address comment:

- Whenever possible, the Estuary Program incorporates pre- and post-project monitoring designed to provide data of pollutant reduction or restoration success. This is constrained by project type and monitoring feasibility (both in terms of logistics and cost). The Estuary Program is partnered with Trout Unlimited (TU) to collect flow data on Pennington Creek in a location where a TU project was implemented to address a water diversion. Staff continue to conduct ongoing monitoring of the freshwater seeps along the bay shoreline for nitrates to assess the impact of the Los Osos Water Reclamation Facility on shallow groundwater contamination.
- Planning interns have been tracking the status of CCMP Action Plans to support development of a webpage to share CCMP implementation status (see below).
- Staff are developing estimates of pollutant load reductions were applicable to share in the CCMP implementation tracker (see below).

**CCMP Implementation**

Status: Ongoing

Feedback from PE process: EPA liked the internal tracking system we developed to monitor the CCMP implementation progress. They would like to see a public-facing version of the information, perhaps in the Annual Report or on the website.

Activities to address comment:

- Staff is finalizing a Habitat Restoration and Conservation Strategy, which identifies metrics to track and report for CCMP progress. This information feeds directly into the CCMP Action Plan tracking effort.
- Staff is completing a review of the status of CCMP Action Plans (AP). Staff are developing project highlights and a Story Map that will be the basis for sharing this information. Statistics are being compiled and the Story Map developed to provide an overview of the number of APs per program priority area and the number that are currently underway. These priority areas are Land Protection, Water Quality Standards & Monitoring, Best Management Practices, Ecosystem

Conservation & Restoration, Freshwater Flow, Climate Change, Environmentally Sound Estuarine Resource Use, and Education & Outreach.

- Where relevant, staff are developing estimates of pollutant load reductions to share in the AP tracker.
- The website has undergone several improvements to incorporate AP tracking and highlights of each program area. These improvements include incorporating metrics to several AP efforts such as eelgrass restoration and the Mutts for the Bay program.

### **Program Implementation and Reporting – Outreach and Public Involvement**

Status: Ongoing

Feedback from PE process: EPA would like to see more outreach efforts specifically targeting visitors to Morro Bay. EPA would also like to see outreach materials geared toward a diversity of visitors.

Activities to address comment:

- During the summer of 2024, local education partner Creek Lands Conservation hosted a free bilingual summer camp program for youth from Guadalupe and Santa Maria, emphasizing environmental stewardship, watershed science, species identification, and more. Each week, campers kayaked on the Morro Bay estuary before meeting with Estuary Program staff to do nature journaling activities in Morro Bay State Park. Overall, Estuary Program staff worked with 25 youth ranging in age from 11 to 13 years old. Most of these youth live in Spanish-speaking communities, and many are bilingual themselves.
- In June and July of 2024, staff distributed various Estuary Program brochures and maps to local hotels and inns in Morro Bay and Los Osos. Staff also distributed marine debris informational coasters to local taphouses, bars, and coffee shops in Morro Bay and Los Osos, an effort that heavily targets visitors to the area.
- The Nature Center has recently been featured on the [Visit SLOCAL](#) webpage, which is a popular resource for area visitors.
- The Estuary Program continues to participate in the SLO Marine Protected Area Collaborative (SLOMPAC), a group of more than 28 nonprofits, agencies, colleges, tribal representatives, and community interest groups within the county who work together on monitoring, education, and enforcement issues within local Marine Protected Areas (MPAs). The Estuary Program has been able to apply for, receive, and manage grant funding to allow for education and outreach efforts that all SLOMPAC members can use. This partnership has allowed for the development, printing, and distribution of E&O materials for use throughout the SLOMPAC area and beyond. In June 2024, the Estuary Program and the Monterey MPA Collaborative distributed 31,000 coloring books translated in both Spanish and Traditional Chinese throughout all MPA Collaboratives in California. The materials are also accessible online and ADA-approved.
- The Estuary Program created a formal educational partnership with local nonprofit One Cool Earth (OCE) to support Watershed Week. Estuary Program staff provided training to OCE educators in Morro Bay on watershed science. During Watershed Week, OCE educators at 28 schools in San Luis Obispo County, reached over 10,000 students through school-wide activities, lessons, and conservation challenges through their Living in a Watershed lessons.
- The Estuary Program continues to host field trips to visiting schools throughout the central valley and coastal counties. In the 2023 to 2024 school year, the Estuary Program hosted

monthly field trips to Morro Bay for the Estuary Explorers Club from the Heartland Charter School, which is based in Bakersfield and has schools in various inland counties.

- The Estuary Program continued tabling events at the Downtown San Luis Obispo Farmers Market and the Morro Bay Main Street Farmers Market, which heavily targets visitors to the area. The popular Downtown San Luis Obispo Farmers Market brings in hundreds of people every week. The Estuary Program attends each Farmers Markets on average once per season and reaches anywhere from 100 to 300 people at each event.

### **Water Reuse and Hazard Mitigation**

Status: Ongoing

Feedback from PE process: EPA encourages projects such as the Pennington Creek rainwater catchment project to help address future water supply challenges. EPA recommends further consideration of the stressors identified in the Climate Vulnerability Assessment (CVA) to determine potential hazard mitigation projects. EPA would like, where possible, for the Estuary Program to establish pre-disaster partnerships and post-disaster approaches to conduct monitoring and to identify CCMP Actions that would assist in building resilience to hazards and the changing climate.

Activities to address comment:

- Multiple efforts are underway under the Bipartisan Infrastructure Law (BIL) funding to address water conservation and climate change. A groundwater monitoring well has been installed to support safe drinking water for the community of Los Osos, and a project is starting up to rehabilitate two existing groundwater monitoring wells. Expanded drought monitoring work is underway, with expanded dry season flow monitoring. Data will be collected over the next three years for an analysis to help target locations and landowners for potential water conservation projects. Cal Poly continues to collect, review, and share data collected by bay water quality sensors funded through BIL. The data helps to accurately track climate change impacts on bay water quality and factors that impact eelgrass health. BIL funding is supporting implementation, planning, and coordination on stormwater management efforts with partners such as Camp San Luis Obispo Army National Guard Base.
- A partner effort is underway to expand and improve the rainwater storage capacity at Pennington Creek. Creek Lands Conservation (CLC), Cal Poly, and the Coastal San Luis Resource Conservation District (CSLRCD) have funding to increase rainwater catchment capacity and to pursue changes to Cal Poly's water rights. Engineering designs are at the 65% level. The project will utilize the existing riparian wells to pump water into the tanks during high flow events and install two additional tanks to supply more of Cal Poly's water needs during the dry season. Work is underway by CLC on the water rights changes and permitting needed for the effort. BIL funding is likely to be utilized to support the effort.
- The Estuary Program conducts monitoring and maintenance on the Chorro Creek Ecological Reserve restoration project, which reconnected the creek to its floodplain. Staff are exploring options and funding for addressing impacts to the site from winter storms. Staff are also planning for further geomorphic monitoring like lidar and cross-section surveys on the side channels and intends to fund this work through the FY25 320 workplan.
- The Habitat Conservation and Restoration Strategy, an ancillary document to the CCMP, outlines challenges to habitat and establishes targets to measure habitat health. The plan is nearly completed, having incorporated EPA comments with a focus on presenting the information by

habitat type and developing measurable targets. Many of the threats to habitat such as surface water flow, water quality parameters, changes in wetland areas, etc. are impacted by the challenges outlined in the CVA. The plan incorporates and builds off the Estuary Program's CVA, incorporating climate considerations as applicable. The plan also outlines projects and efforts to mitigate these potential hazards.

- The impacts from the large winter storms of 2023 are still being addressed and led to expanded partnership opportunities. The Estuary Program is working with the San Luis Obispo Council of Governments (SLOCOG) and the CSLRCD on projects to address potential flooding of infrastructure, communities, and impacts to habitats that are expected from climate change impacts. Additionally, two BIL-funded projects are underway to address climate resilience. A project with USGS addresses tidal marsh impacts from sea level rise. A historical ecology study with San Francisco Estuary Institute (SFEI) will inform conservation and restoration efforts in our most sensitive habitats to help increase climate resilience.