



INFORMATION ITEM

[Delta Science Program Ecosystem Restoration Progress Review]

Summary

The majority of the Delta's historic ecosystems have been lost, reducing habitat for native species, and compromising ecosystem health. To help meet the coequal goal of the Sacramento-San Joaquin Delta Reform Act (Delta Reform Act) of protecting, restoring, and enhancing the Delta ecosystem, the Delta Plan includes restoration targets of between 60,000 and 80,000 acres. The Delta Science Program's draft Ecosystem Restoration Progress Review (Review) summarizes progress to-date towards these targets and discusses the policy motivations for restoration projects. The information in this report will set a baseline to track Delta Plan Chapter 4 restoration performance measures and inform adaptive management of future restoration efforts to advance California towards the coequal goals. Council staff will discuss these and other findings from the Review in the context of the Delta Plan and DPIIC Restoration Subcommittee activities.

Background

In June 2022, the Council adopted an amendment to Chapter 4 (Protect, Restore, and Enhance the Delta Ecosystem) of the Delta Plan.¹ The amendments to Chapter 4 identify restoration targets of between 60,000 and 80,000 acres above a 2007 baseline by 2050, with performance measures detailing acreages for specific ecosystem types included in Appendix A. The major ecosystem types in these performance measures include tidal wetlands (32,500-acre target), non-tidal wetlands (19,230-acre target), riparian and floodplain (16,300-acre target), and oak woodland (13,000-acre target). In addition to these performance measures, Chapter 4 of the Delta Plan is guided by the goal of implementing "large-scale restoration projects that restore ecosystem function," and increasing "resilience to

¹ The regulatory portions of the amendment (either amended or new policies) must undergo the rulemaking process pursuant to the Administrative Procedure Act before they become effective.

climate change,” in ways that “are compatible with adjacent land uses, and that support the cultural, recreational, agricultural, and natural resource values of the Delta as an evolving place.” Adaptively managing the implementation of restoration at the scale of the Delta Plan restoration targets requires an up-to-date analysis of where, when, and how ecosystems have been restored.

The Ecosystem Restoration Progress Review was led by Council staff to form the basis for future synthesis of restoration and evaluation of Chapter 4 performance measures by providing a baseline of restoration projects across the landscape. Prior to 2018, restoration implementation in the Delta was slow to develop compared to efforts in the lower Estuary (San Francisco Bay). In recent years, thousands of acres in the Delta have been restored across multiple projects. Many of these projects are part of the Department of Water Resources Fish Restoration Program, which is restoring 8,000 acres of tidal wetland required as mitigation for Delta smelt and salmon. These projects are required by the US Fish and Wildlife Service under the 2008/2019 Federal Endangered Species Act Biological Opinions for impacts related to State and Federal Water Project operations. Other projects with different policy considerations and objectives have also contributed to recent restoration progress. The Ecosystem Restoration Progress Review includes information on the relative contributions of projects across these policy considerations to help the Council, the DPIIC RSC, and others identify potential policy pathways for meeting Delta Plan restoration targets.

Progress Towards Restoration Targets

Using project information from the online [EcoAtlas Project Tracker](https://ecoatlas.org/regions/ecoregion/bay-delta) (<https://ecoatlas.org/regions/ecoregion/bay-delta>), project documents, expert interviews, and the Delta Stewardship Council Covered Actions website, the Ecosystem Restoration Progress Review identifies ecosystem restoration acreage totals for in-process projects, planned projects, projects completed since 2008 and projects completed before the 2007 baseline. Since 2008, 20,760 acres of restoration have been completed, are currently in progress, or are planned in the legal Delta and Suisun Marsh. Acreages for projects completed since 2008, currently in-progress, and planned are as follows: 14,624 acres of tidal wetland towards the 32,500 target, 4,238 acres of non-tidal wetland towards the 19,230-acre target, and

1,900 acres of riparian and floodplain towards the 16,300-acre target. Planned project acres are subject to change. Across all projects, 40% (8830 acres) are mitigation for the State and Federal Water Projects, 12% (2700 acres) are mitigation for other impacts, 19% (4,160 acres) are related to the DWR Delta Levees Program's requirements under AB 360 (1996), 20% (4,587 acres) are green infrastructure projects, and 9% (1,930 acres) are voluntary projects motivated primarily by general ecological goals. Across projects, there was a clear need to better incorporate tribal, community, and environmental justice considerations into ecological restoration planning and implementation.

Next Steps and Related Efforts

These findings will be submitted in winter 2022 for publication as a peer-reviewed paper that will inform agencies and other groups implementing restoration in the Delta. The effort directly informs the Delta Plan Interagency Implementation Committee (DPIIC) Restoration Subcommittee, which was created to bring together DPIIC member agencies, members of the public, and other groups to strategize around achieving the restoration vision in Chapter 4 of the Delta Plan. The results are also currently being used to inform scenarios for the Delta Adapts Climate Change Adaptation Strategy.

Fiscal Information

Not applicable.

List of Attachments

*Attachment 1: Graph of Completed, In-Progress and Planned Ecosystem Restoration Projects in the Delta and Suisun Marsh (*Planned projects subject to change)*

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