



# 2024 Annual Report

Reflecting on Growth and Collaboration

Delta Stewardship Council

## Welcome from Chair Julie Lee

Each year, the Council develops a report to showcase the progress made toward California's coequal goals for the Sacramento-San Joaquin Delta. **This year's accomplishments saw no bounds.**



Since becoming chair, I have built relationships with state legislative members, Delta county supervisors, agency leaders, staff, communities, and others working toward positive change in the Delta by promoting science-based decision-making.



### **A few highlights for me in 2024 were...**

- Attending and presenting the opening remarks at the 12<sup>th</sup> Bay-Delta Science Conference, which we co-hosted with the U.S. Geological Survey in person for the first time since 2018. Over 800 people, representing 228 organizations across disciplines, attended this three-day event.
- Hosting Assemblymember Diane Papan, chair of the Assembly Water, Parks, and Wildlife Committee, and her staff on a boat tour of the Delta to showcase its beauty, importance, and challenges.
- Chairing my first Delta Plan Interagency Implementation Committee autumn gathering in October – one of the most well-attended meetings to date – focused on Delta levees.
- Writing a [letter of support](#) for Congressman John Garamendi’s Abandoned and Derelict Vessel Removal Act.
- Participating in the Council’s tribal roundtable as part of developing a tribal and environmental justice issue paper.
- Attending Native American Day at the California State Capitol.
- Participating in the first meeting of the National Heritage Area Advisory Committee.
- Briefing the Legislature on our ecosystem restoration, levee, tribal, and environmental justice work.
- Meeting with many Delta county supervisors to identify future collaboration and partnership opportunities.

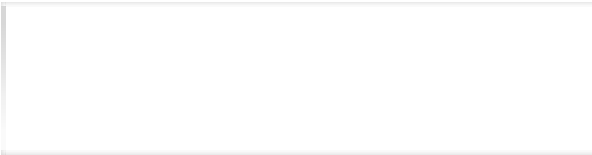
Our agency's mission is inherently collaborative, both internally and externally. In that vein, I would like to celebrate the following milestones, among many others, reached this year by our partner agencies.

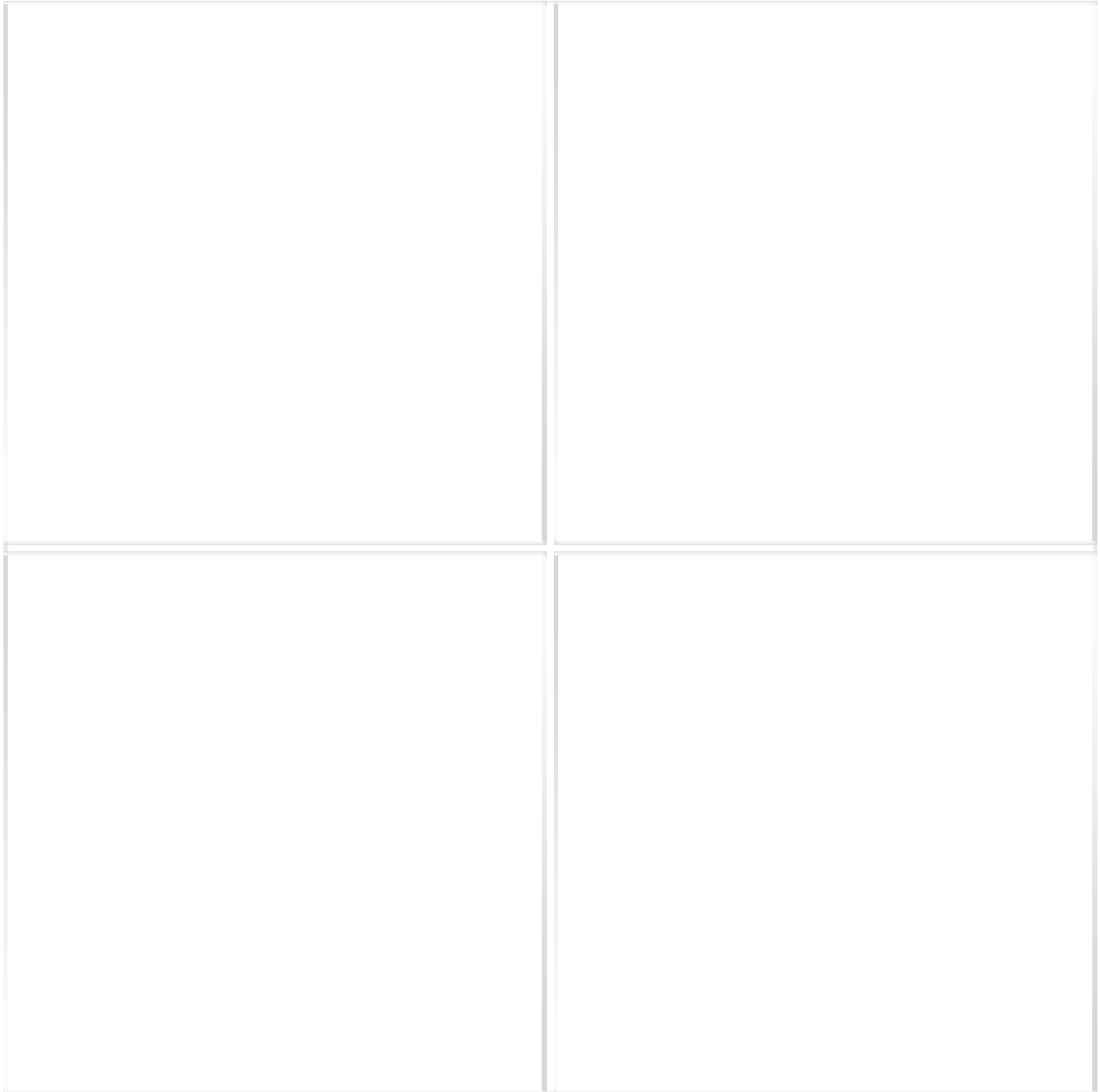
- The California Natural Resources Agency: California's 30x30 Initiative, an effort to conserve 30% of land and coastal waters to reverse biodiversity loss, reported the addition of 861,000 acres of conserved lands verified across the state and \$1.3 billion in state funding allocated from the Nature Based Solutions Package to support this work. These projects include investments in the Delta, such as the Hoover Ranch, Bethel Island acquisition by the John Muir Land Trust funded by the Wildlife Conservation Board and Sacramento-San Joaquin Delta Conservancy.
- The California Department of Water Resources (DWR) implemented the Delta's largest-ever tidal wetland restoration project, Lookout Slough Tidal Habitat Restoration and Flood Improvement Project, which reduced flood risk and supported wildlife and certified consistency with the Delta Plan in 2022.
- The Delta Protection Commission submitted its management plan for the Sacramento-San Joaquin Delta National Heritage Area to the U.S. Secretary of the Interior, providing a guide for enhancing and promoting this ecological, agricultural, recreational, historical, and cultural treasure.
- The Delta Conservancy executed \$34.2 million in Nature Based Solutions grants to create approximately 11,000 acres of wetland habitat, stop land subsidence and related carbon emissions, and improve the land's resilience and economic viability.
- California State Parks is preparing a General Plan for the Delta Meadows property, located near the Delta legacy

communities of Locke and Walnut Grove.

Let these accomplishments be a testament that **challenges can be overcome when we foster opportunities to work together**, guided by the best available science and adaptive management.

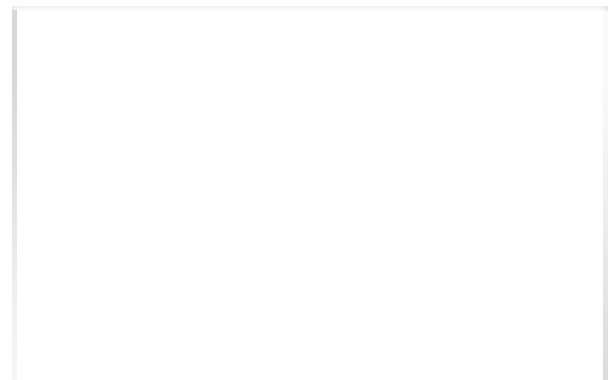
Sincerely,





## Introduction

California relies on the Sacramento-San Joaquin Delta as a hub for water, biodiversity, agriculture, infrastructure, transportation, recreation, and more. Since 2010, the Delta Stewardship Council has worked to advance

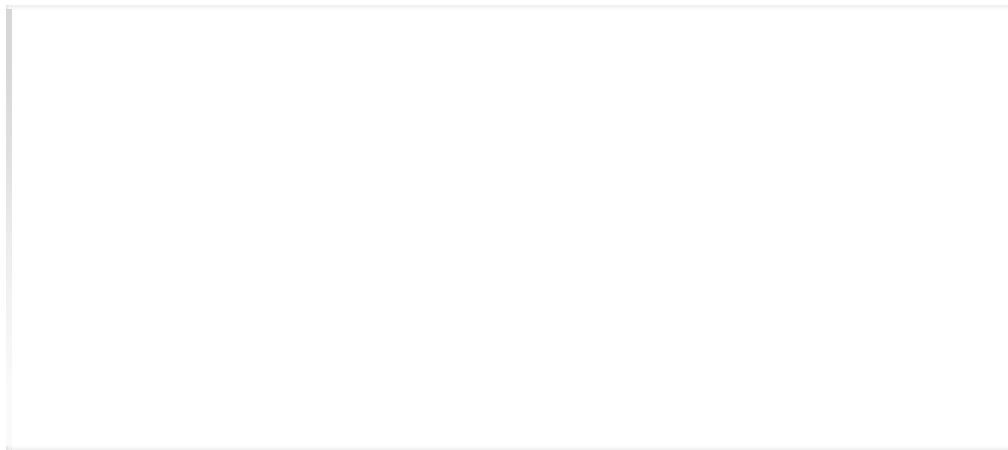


California's coequal goals for the Delta – a reliable statewide water supply and a resilient ecosystem – in a manner that protects and enhances the Delta's unique character and values. In 2024, we reflected on how our agency has grown to continue facilitating collaboration with our partners.

## **Leadership**

The Council, its Delta Science Program, and the Delta Independent Science Board (Delta ISB) welcomed new leadership and expressed heartfelt thanks for the knowledge and relationships established by those moving on. We're thankful for the leadership of former Council Chair Virginia Madueño, Delta ISB Chair Dr. Lisa Wainger, and Delta Lead Scientist Dr. Laurel Larsen.

We welcomed Julie Lee as Council chair, Gayle Miller as vice chair, and Dr. Lisamarie Windham-Myers as Delta lead scientist in April, as well as Dr. Inge Werner as Delta ISB chair in September, and Dr. Diane McKnight as Delta ISB chair-elect in August.



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In 2024, our agency doubled down on our

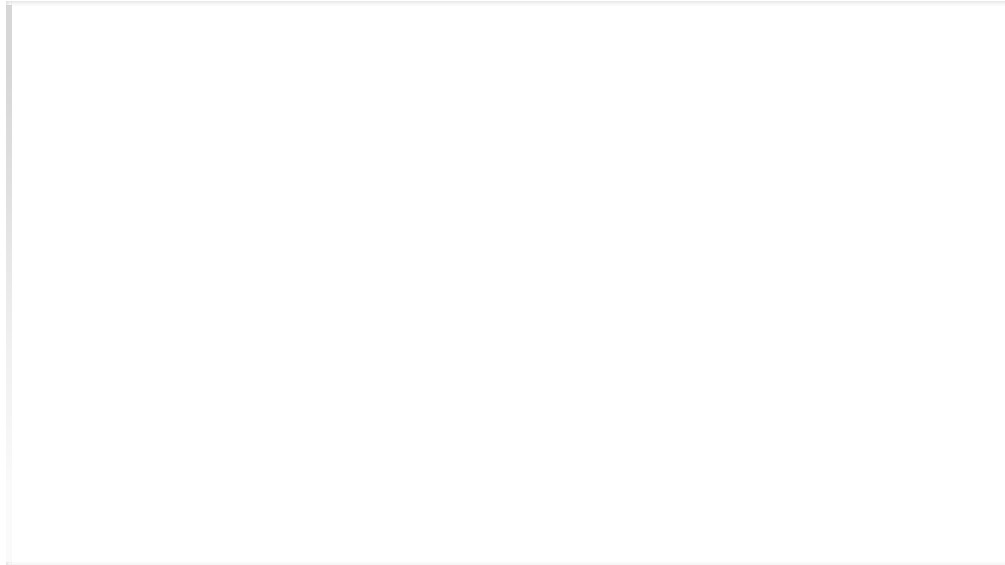
commitments to advance climate adaptation and Justice, Equity, Diversity, and Inclusion (or JEDI). We did so by adding a new unit to our agency focused on Climate and Environmental Justice in May, and we hired our first-ever JEDI Officer in November. These actions are intended to further progress on two topics intrinsic to the Council's role and mission, and we are better positioned to carry out our work as a result.

## The Delta Plan

Following the 10<sup>th</sup> anniversary of the Delta Plan's adoption, **the Council published its second review of the Delta Plan in 2024**. The Delta Reform Act of 2009 requires the Delta Plan to be reviewed every five years to ensure it remains responsive to the Council's mission. The [2024 Delta Plan Five-Year Review](#), our second review since the Delta Plan's adoption, provides "report cards" that rate ten-year progress toward the Plan's performance targets.

The 2024 Review also analyzes how effectively the Council has carried out its regulatory and appellate roles and recommends actions the Council may pursue over the next five years. This information will inform the Council's near-term priorities and adaptive management of the Delta Plan.





## Responding to Emerging Issues

The Council's 2019 Five-Year Review identified environmental justice as a priority issue in the Delta. It recommended that an issue paper be developed to investigate strategies and responses to address environmental justice within the Delta Plan, summarize the best available science, and identify future policy options for Council consideration. Since efforts began in February 2021, the paper has evolved to also consider tribal justice.

In 2024, after extensive research, consultation with tribes, and community/expert discussions, **the Council released a draft of "Tribal and Environmental Justice Issues in the Sacramento-San Joaquin Delta: History and Current Perspectives" for public review.** The draft presents the Council's understanding of tribal and environmental justice issues in and around the Delta and recommends actions to better address those issues within the scope of the Council's mission, authority, and influence. As part of the outreach efforts for the public review draft, staff briefed legislative staff, initiated consultation with tribes, participated in events throughout the

Delta, and published [a blog](#).

## **Performance Measure Highlights**

**How do we gauge the effectiveness of the Delta Plan? How do we know if conditions in the Delta are improving or worsening?** Our online [Performance Measures Dashboard](#) provides critical information the Council uses to adaptively manage the Delta Plan and understand whether Delta Plan policies and recommendations are working as intended.

This year, Delta Plan performance measures showed...



**Water conservation and water use efficiency are key components of regional water supply reliability and**

**reduced reliance on the Delta's water.** Updated regulations by the State Water Resources Control Board established new goals for reducing urban water use this year, allowing local water suppliers to implement regionally appropriate solutions. These new conservation goals took effect on January 1, 2025.



**Long-term groundwater sustainability is essential to local self-reliance and improved regional water supply reliability.**

In 2024, the Sustainable Groundwater Management Act marked ten years of implementation, including establishing over 250 Groundwater Sustainability Agencies and over 100 Groundwater Sustainability Plans. This has resulted in 4.1 million acre-feet of water added to the underground aquifer since 2014 and increased funding for local groundwater

recharge and monitoring projects.



**Land subsidence is a critical issue affecting many aspects of Delta management.** For example, it decreases levee stability, increases flood risks, causes farming soil loss, and releases vast quantities of carbon dioxide into the atmosphere. In 2024, new projects were funded by the Sacramento-San Joaquin Delta Conservancy to reduce subsidence, build soil, and sequester carbon, converting 11,000 acres of subsided land into managed wetlands and rice production and resulting in 110,000 metric tons per year of avoided carbon emissions.



**Restoring ecological floodplain processes supports native fish species and vital ecosystem functions.** In spring 2024, the Yolo Bypass, a large floodplain habitat adjacent to the Delta, flooded for the second year in a row, achieving the desired ecosystem targets for duration, frequency, and extent of floodplain inundation that provided ecological benefits to native fish and Delta food webs.

**A functioning ecosystem with thriving habitats for species benefits the communities that live and spend time in the Delta and those that use Delta water** by helping to reduce flood risk, improve public access, lessen the impacts of extreme heat, and reduce greenhouse gas emissions.

In 2024, we continued progressing toward a restored Delta ecosystem with continued progress toward adopting regulations to implement recent amendments to the Delta Plan's Ecosystem Chapter. The amended chapter fills a gap in regional restoration efforts by providing a framework for achieving restored, protected, and functioning Delta ecosystems; an essential component of this framework is ensuring that ecosystem restoration is implemented to enhance the Delta as a unique place. It promotes implementing restoration in a way that provides direct social benefits to Delta communities, minimizes conflicts to surrounding communities and land uses, and promotes proactive consultation and coordination with Native American tribes. The associated regulations will take effect in 2025, culminating in a multi-year collaborative effort to bolster regional restoration efforts substantially.



## Implementing the Delta Plan

As part of the Council's regulatory role to ensure certain projects in the Delta are consistent with the Delta Plan, this year, the Council wrote 15 comment letters to state and local public agencies likely to carry out, approve, or fund Delta Plan-covered actions within the Delta or Suisun Marsh. The letters commented on particular aspects of the projects and invited the lead agency to consult Council staff for assistance with the certification process. 2024 was an unusually light year for covered actions, as **two** certifications were submitted to the Council this year by state and local agencies evaluating the consistency of their covered actions with the Delta Plan's 14 regulatory policies. One of these actions, the DWR 2024-2026

Geotechnical Activities Project, was appealed by multiple parties. The Council conducted a hearing on this matter at its December 2024 meeting and will issue a determination in early 2025.


**This year, the Council completed the Delta Levees Investment Strategy** (DLIS), a tool the state uses to prioritize investments in Delta levee operations, maintenance, and improvements, thus reducing the likelihood and consequences of levee failures. The amendment assigns a priority tier (very high, high, or other) to islands or tracts within the Delta and Suisun Marsh. It directs the DWR to fund levee improvement projects in priority order. Additionally, DLIS requires the DWR to submit an annual report to the Council describing Delta levee improvement investments relative to the established priorities. The regulation took effect on January 1, 2024. Additionally, we released 1) a [decision-support tool](#) to explore flood risk results for each Delta island and tract across time frames and future scenarios and 2) a [story map](#) to describe the importance of the investment strategy and how it came to be in an interactive format.





### **Collaboration Spotlight**


Delta flood risk is one of the most urgent threats to California and will continue to worsen due to climate change. In January, the Council sent a [letter](#) to the legislature highlighting the completion of DLIS and encouraging targeted and sustained funding for Delta levee operations, maintenance, improvement, and emergency response.



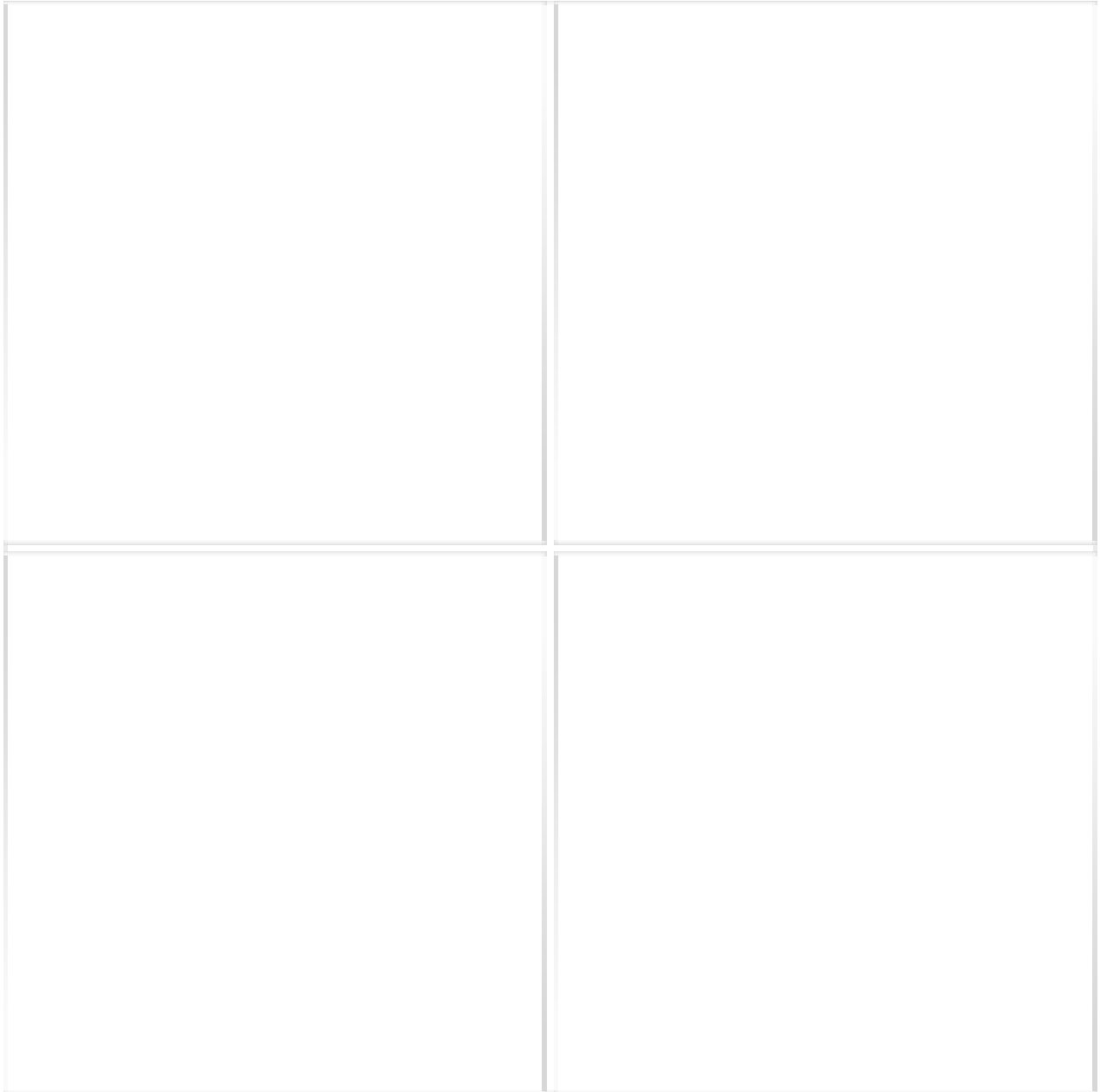
The topic of Delta levees was the focal point for the Delta Plan Interagency Implementation Committee’s autumn gathering in October at Bogle Family Vineyards in Clarksburg, California. In support of the meeting, the Council published [a blog](#) describing Delta levees as the “backbone of the coequal goals.” The meeting also saw the release of the [Crosscut Budget Report for fiscal years 2022-2023](#), representing a multi-year and multi-agency collaboration to understand Delta science funding better.

### **Climate Adaptation**

Climate change is altering the physical environment of the Delta and Suisun Marsh, and we will continue to



experience its effects through more severe flooding, hotter temperatures, and prolonged droughts. The Council's two-part [Delta Adapts](#) climate initiative aims to boost regional resilience in the face of these impacts. Following an assessment of the region's greatest vulnerabilities to climate change, Council staff made significant progress this year by **publishing a public review draft of the first-ever climate adaptation plan for the Delta in November**. The draft Adaptation Plan was accompanied by [a blog](#) detailing strategies and actions to improve regional resilience to climate change, including implementing entities, adaptation costs, and governance recommendations. It was informed by a robust outreach campaign that reached tribes, communities across the Delta, and government agencies. As the world continues to feel the pressures of climate change, including sea level rise, changes in precipitation patterns, and warming temperatures, regional adaptation rooted in science-based decision-making is more critical than ever.



## Science

### Science Communication

**Communication is essential to building the Delta science community and delivering pertinent information to scientists, decision-makers, and the public.** In 2024, the Council supported science communication by hosting or co-

hosting several events highlighting research findings and providing meaningful networking opportunities.

### Conferences

From May 28-29, we co-sponsored the San Francisco Estuary Partnership's **2024 State of the Estuary Conference**, which showcased the latest information about the region's work to sustain and improve the estuary's habitats, living resources, water quality, climate resilience, and environmental stewardship. Council staff organized panels on tribal stewardship, restoration progress, and leveraging open science, synthesis, and collaboration to advance fisheries and food web knowledge in the estuary and presented posters. The Council has been a partner in this conference since 2015, and it is a large part of our dedication to science communication to build a robust Delta science community.



From September 30 to October 2, we co-hosted **the 12<sup>th</sup> Bay-Delta Science Conference** (BDSC) with the U.S. Geological Survey at the Safe Credit Union Convention Center in

Sacramento. More than 800 environmental scientists, managers, and others gathered to hear presentations on "Cultivating Connections for a Dynamically Changing Environment," as embracing connections across ways of knowing, disciplines, and geographies will be the key to meaningful adaptation. Alongside the Council's Deputy Executive Officer for Science, Henry DeBey, and Chair Julie Lee, opening remarks were provided by Assemblywoman Lori Wilson (District 11) and State Water Resources Control Board Chair Joaquin Esquivel. Attendees also heard keynote presentations from Cache Creek Conservancy Cultural Practitioner of Maidu/Wintun, Hupa/Yurok Traditions, Heritage, and Experiences Diana Almendariz, California State University, Chico, Professor Don Hankins, and California Department of Pesticide Regulation's Chief Deputy Director & Science Advisor Karen Morrison. Conferences like the BDSC provide a venue for collaborating and networking with those who represent, work, and live in the Bay-Delta communities on a scale unavailable anywhere else.




Photo credit: Lynn Takata, California Department of Fish & Wildlife (CDFW)

## Workshops

From March 26-27, we hosted the second part of the **Salinity Management Workshop** series. The goals of this workshop series were to build a shared understanding of the issues associated with ocean salt intrusion in the Delta and possible management actions, identify knowledge gaps and lay the groundwork for a collaborative adaptive management approach to salinity management. Attendees heard presentations from subject matter experts on challenges, opportunities for collaboration, and advancements in salinity modeling and participated in breakout groups that explored these topics and others. [Day 1](#) focused on tradeoffs and uncertainties associated with different management actions and identifying who is impacted by those actions. [Day 2](#) highlighted results from a modeling exercise that demonstrated scenarios of various management actions.

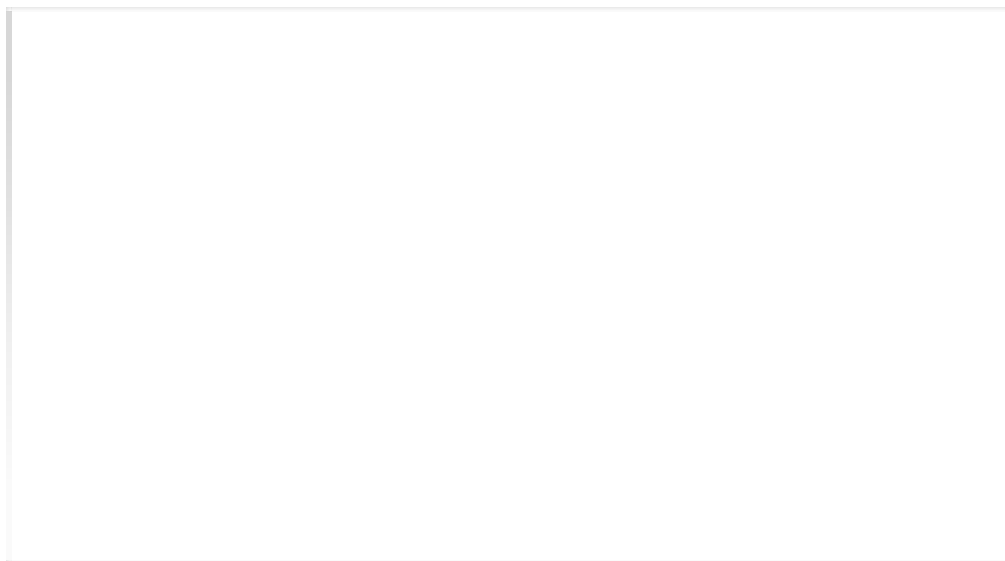
On July 12, the Council hosted **the second Science for Communities Workshop** at San Joaquin Delta College in Stockton, an event focused on connecting scientists and community-based organizations and tribes. Presentation topics included safe fish consumption and contaminants, emergency housing during flood events, staying informed about harmful algal



blooms, youth engagement, and more. Attendees built relationships, promoted knowledge-sharing, and learned about internship opportunities and results from ongoing research projects.

### **Seminars and Symposia**

On May 31, we co-hosted **a symposium with the U.C. Davis Coastal & Marine Sciences Institute** to better understand food web dynamics from the San Francisco Estuary to the Pacific Ocean. Ecosystem-based fisheries management is a holistic approach that emphasizes habitat and food webs. This symposium convened food web experts to discuss ongoing research, find synergies in approaches and findings, and identify information gaps to improve ecosystem-based fisheries management.



On October 8, we hosted a webinar to share information about **the Delta Science Tracker**. This online tool hosts a comprehensive inventory of scientific research and monitoring activities conducted in the Delta. The webinar introduced attendees to the major features of the web-based tool,

explained its uses and the benefits it provides to Delta Science community members, and demonstrated how it is being used to assess progress toward implementing the [2022-2026 Science Action Agenda](#). Researchers, managers, decision-makers, and other interested parties attended. Visit the Delta Science Tracker's ["Getting Started" resource page](#) to learn more. What is the Delta Science Tracker? It's a living, comprehensive inventory of scientific research and monitoring activities in the Delta. It promotes communication of science activities and their outcomes, transparency regarding funding sources and expenditures, and opportunities for collaboration.

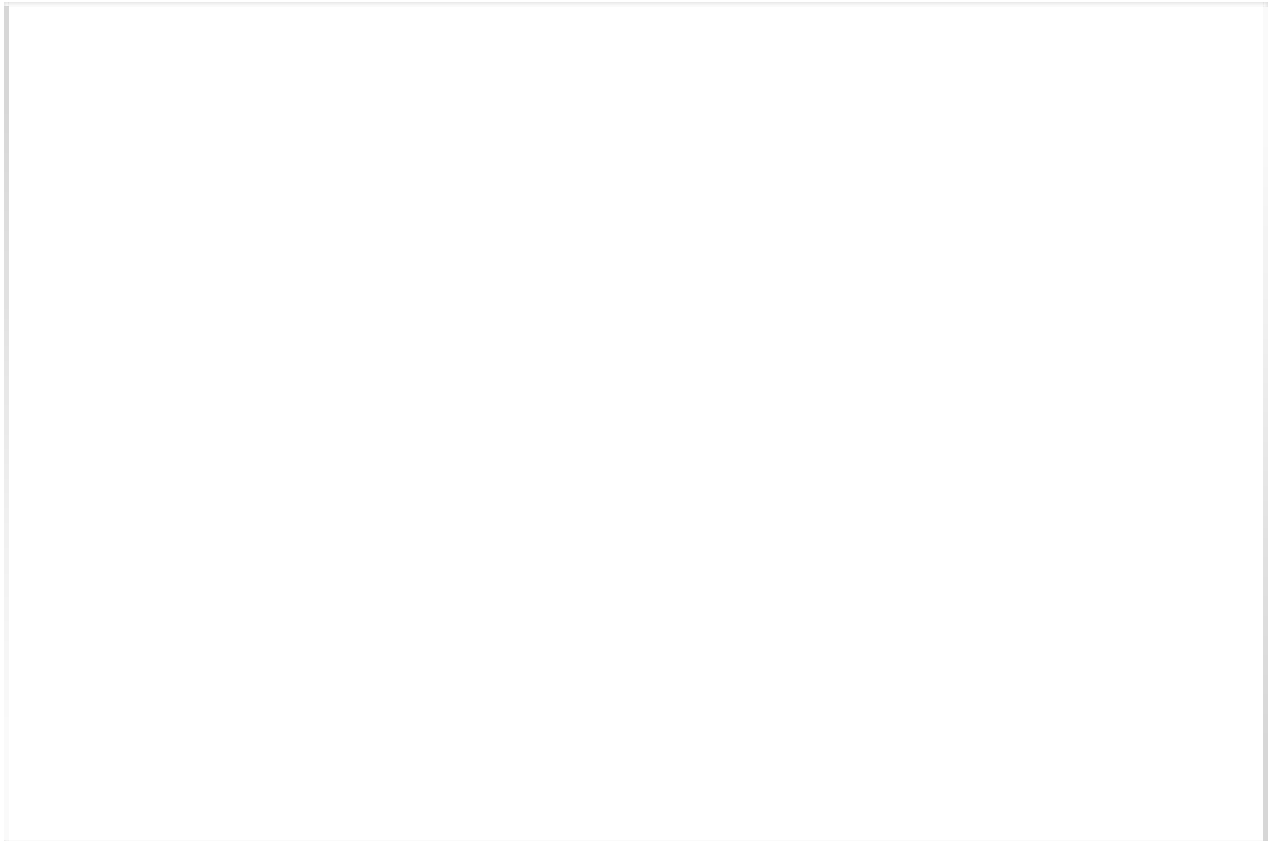


Photo credit: Lynn Takata, CDFW

## Science Communication Spotlight

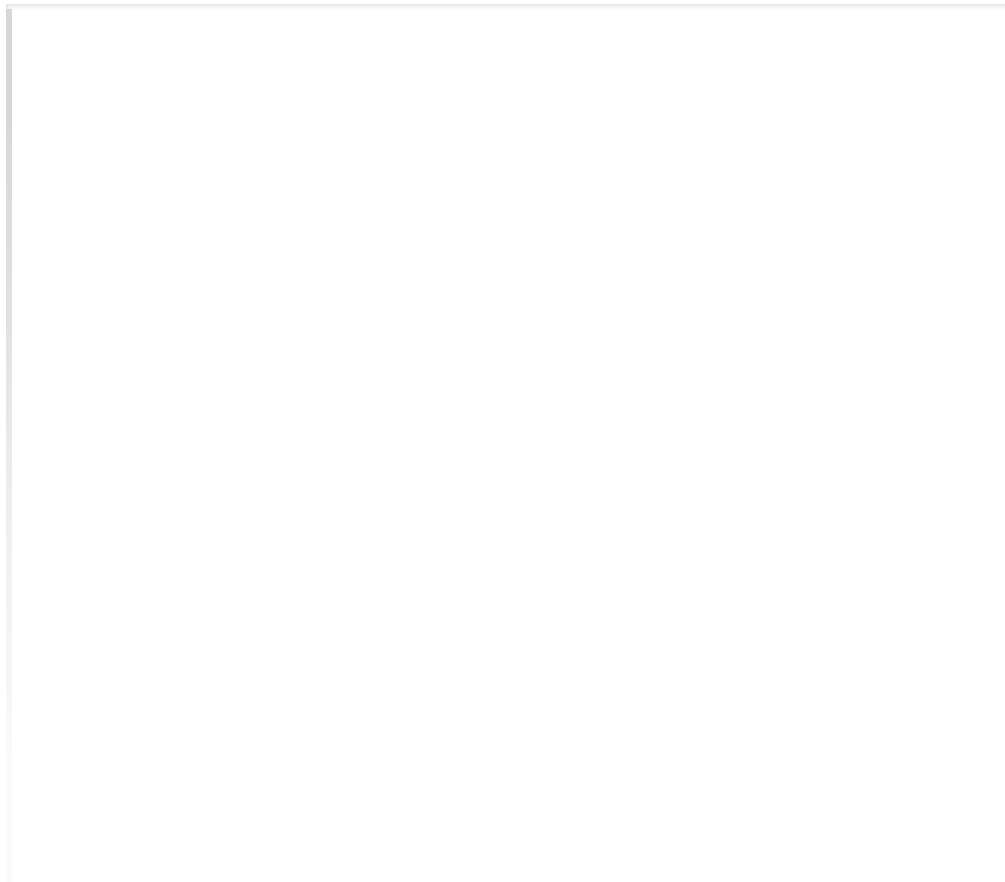
On April 22, **we celebrated Earth Day,**

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which began in the 1970s with a focus on recycling, using less electricity, and conserving water. Fast-forward to today, Earth Day has become so much more and is everything from mitigating the impacts of climate change to environmental justice. Read [the blog](#) our Delta Science Program published for Earth Day about its efforts to analyze data with the National Center for Ecological Analysis & Synthesis.

## **Collaborative Science**

**Led by the Delta Science Program, the Delta Science Strategy is a collaborative effort intended to guide and benefit the Delta community.** The Strategy comprises three documents: the [Delta Science Plan](#), the [Science Action Agenda](#), and the [State of Bay-Delta Science](#).



Collaborative science, especially across federal, state, and local agencies, universities, and environmental groups, is critical to informing resource management and long-term regional planning. In 2024, the Delta Science Program started developing the third iteration of the Delta Science Plan, which aims to provide the vision, principles, and approaches for coordinating science in the Delta. This iteration's proposed focus addresses the “wicked” problems, or “grand challenges,” facing Delta science. As such, in November, we published **an essay detailing the four grand challenges to Delta science.**

**Grand Challenge****#1:**

Scientists and managers must anticipate a world in which environmental conditions and regulations may differ fundamentally from those faced today.

**Grand Challenge****#2:**

Environmental change is outpacing the traditional pace of science.

**Grand Challenge****#3:**

Flows of scientific information remain decentralized and poorly connected to communities and decision-makers.

**Grand Challenge****#4:**

Other ways of knowing, especially Traditional Knowledge, remain siloed from decision-making.

A workshop will be held in February 2025 to gather input from the Delta science community about priority actions, tools, and strategies to address the grand challenges. A public review draft

of the 2025 Delta Science Plan is expected to be released in the fall of 2025.

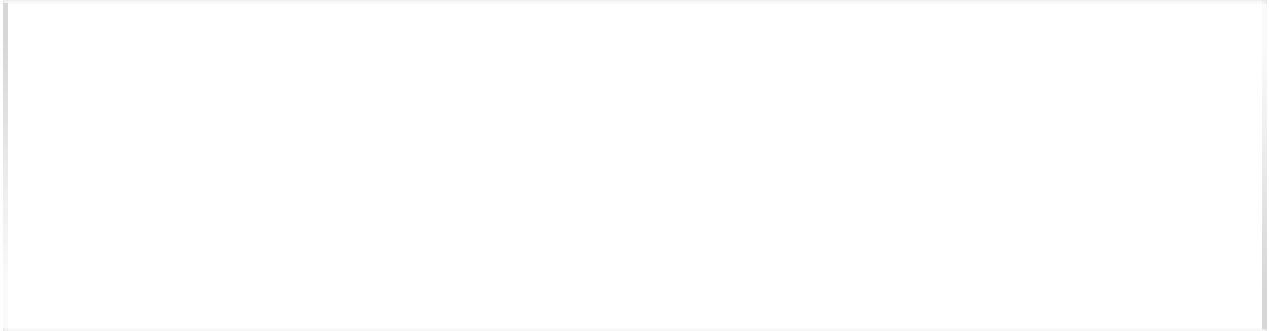
As the 2022-2026 Science Action Agenda recommended, **our Delta Science Program co-published a strategy for monitoring Cyanobacterial harmful algal blooms (CHABs) in the Delta** in October to address the needs of the science community and establish a pathway for creating a community-informed monitoring program. The strategy provides an approach to advancing the management of Delta CHABs by coordinating the collection of priority data, promoting data-sharing, and identifying feasible mitigation techniques for reducing HAB prevalence. Authored by the DWR, Environmental Science Associates, California Department of Fish and Wildlife, and our Delta Science Program, with extensive input from public meetings and review periods, this document is intended to support collaborating agencies, scientists, and others interested in helping to manage this critical issue in the Delta. It will be implemented through the Interagency Ecological Program's Water Quality and Phytoplankton Project Work Team.

Our work in collaborative science doesn't stop there. The Delta Science Program coordinated a session at the 2024 California Water & Environmental Modeling Forum Annual Meeting in September. The session was organized and moderated by Delta Lead Scientist Dr. Lisamarie Windham-Myers and focused on the current strategy and plan to build foundational elements of the Collaboratory using real-world scientific projects and use

cases. Presentations demonstrated how various use cases would benefit from a Collaboratory approach, and the session ended with a Q&A that fostered a conversation with the modeling and management community regarding the next steps and broader vision for the Collaboratory.

## Research Funding

**Funding research is a core element of the Delta Science Program's mission** to provide the best possible unbiased scientific information to inform water and environmental decision-making in the Delta. The Delta Science Program has supported hundreds of research projects addressing key knowledge gaps and fundamentally advancing the understanding of the Bay-Delta's dynamic socio-ecological system.



In April, our Delta Science Program, in partnership with California Sea Grant, released a call for proposals for the 2025 Research Awards. **With \$6 million available for research funding, the Delta Science Program sought projects integrated with natural resource managers, community groups, or tribes that addressed the priority science actions identified in the 2022-2026 Science Action Agenda.** Before the funding call, to encourage connections between prospective projects and tribes or community-based organizations, the

Council released a survey to identify and offer suggestions for where connections could be made. Sixty-six proposals were submitted requesting over \$52 million. In December 2024, selected proposals were notified of the intent to award.

Also in April, the Delta Science Program, in partnership with California Sea Grant, released a call for the 14<sup>th</sup> round of Delta Science Fellowships. This critical program funds the next generation of Delta researchers for projects of up to two years that will advance the priority science actions identified in the 2022-2026 Science Action Agenda. Twenty-three applications were submitted, and seven selected applicants were notified of the intent to award in November 2024.

In May, the Delta Science Program began a [seminar series](#) featuring the recipients of research awards in 2020 from our Delta Science Program, the U.S. Bureau of Reclamation, and the State Water Contractors. Presenters showcased how their projects addressed critical biophysical and social science knowledge gaps in the Delta, as identified by the 2017-2021 Science Action Agenda, to inform policy development and the management of migratory fish, multi-benefit wetland habitats, harmful algal blooms, and more. Delta agency scientists, managers, decision-makers, and those interested in applying to our 2025 Research Awards were encouraged to attend. Information sheets were created for each project to summarize the work and management implications, and they are available on [our website](#). The series is expected to conclude in May 2025.

**Investing in research now directly shapes the efficacy of Bay-Delta management in the future.** The following is a snapshot of recent findings and their implications from the



## Delta Science Program's funding of research awards.



**Improving early detection of and rapid response (EDRR) to aquatic invasive vegetation:** Invasive species are a significant threat to California's economy and the Delta's ecosystem. Dr. Christine Whitcraft (California State University, Long Beach) completed directed action research in 2024, documenting the challenges of EDRR by interviewing those working on invasive species issues.

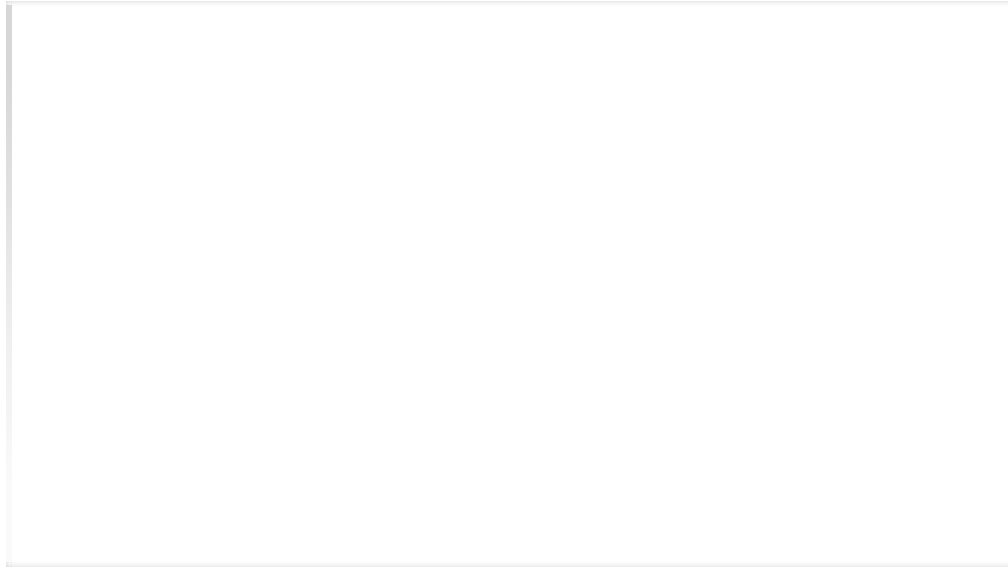


Dr. Whitcraft's findings will improve existing processes and support the development of cost-efficient paths forward in collaboration with the [Delta Interagency Invasive Species Coordination Team](#).

Learn more on the [Delta Science Tracker](#).



**Assessing sea-level rise and flooding changes in the Delta using historical water-level records:** Sea-level rise and water level variability threaten major population and agricultural areas worldwide, including the Delta. In this 2021 Delta Research Award project, Dr. Stefan Talke (Cal-Poly San Luis Obispo) synthesized water level historical records – some handwritten – from 1857 through 1982 to improve our understanding of tidal, flood, and sea level trends.



The improved estimates show that the largest relative sea-level rise rates in the entire state occur in the Delta due partly to subsidence. These results can help prioritize levee

improvements and better manage water resources.

Learn more on the [Delta Science Tracker](#).



**Mapping the adaptation governance network of the Delta:**

Tidal wetland ecosystems uptake a lot of atmospheric carbon into their plants and soils. They also export a lot of carbon, affecting coastal communities through climate mitigation, flood protection, and food web support. Dr. Patty Oikawa (California State University, East Bay) led an integrated modeling effort with funding from a 2019 Delta Research Award to improve our ability to predict carbon budgets in tidal marshes of the Delta.



Dr. Oikawa and her team published this integrated model in October, now called PEPRMT-Tidal-CMEM, using field and remotely sensed data. This widely applicable model, developed during her funded research project, provides critical new insights into greenhouse gas budgets of tidal wetlands here and across North America, including how coastal lands can be restored and managed to combat climate change.

Learn more on the [Delta Science Tracker](#).



**Closing critical knowledge gaps of greenhouse gas dynamics in tidal wetlands:** Carbon dynamics in tidal wetlands are not fully understood yet have implications for coastal communities, food webs, and the blue carbon market.



Dr. Patty Oikawa (California State University, East Bay) researched this topic with funding from the 2019 Delta Research Awards to develop a new remote sensing-based model called PEPRMT that provides critical new insights into greenhouse gas budgets of tidal wetlands across North America, including how tidal wetlands can be restored and managed to combat climate change.

Learn more on the [Delta Science Tracker](#).

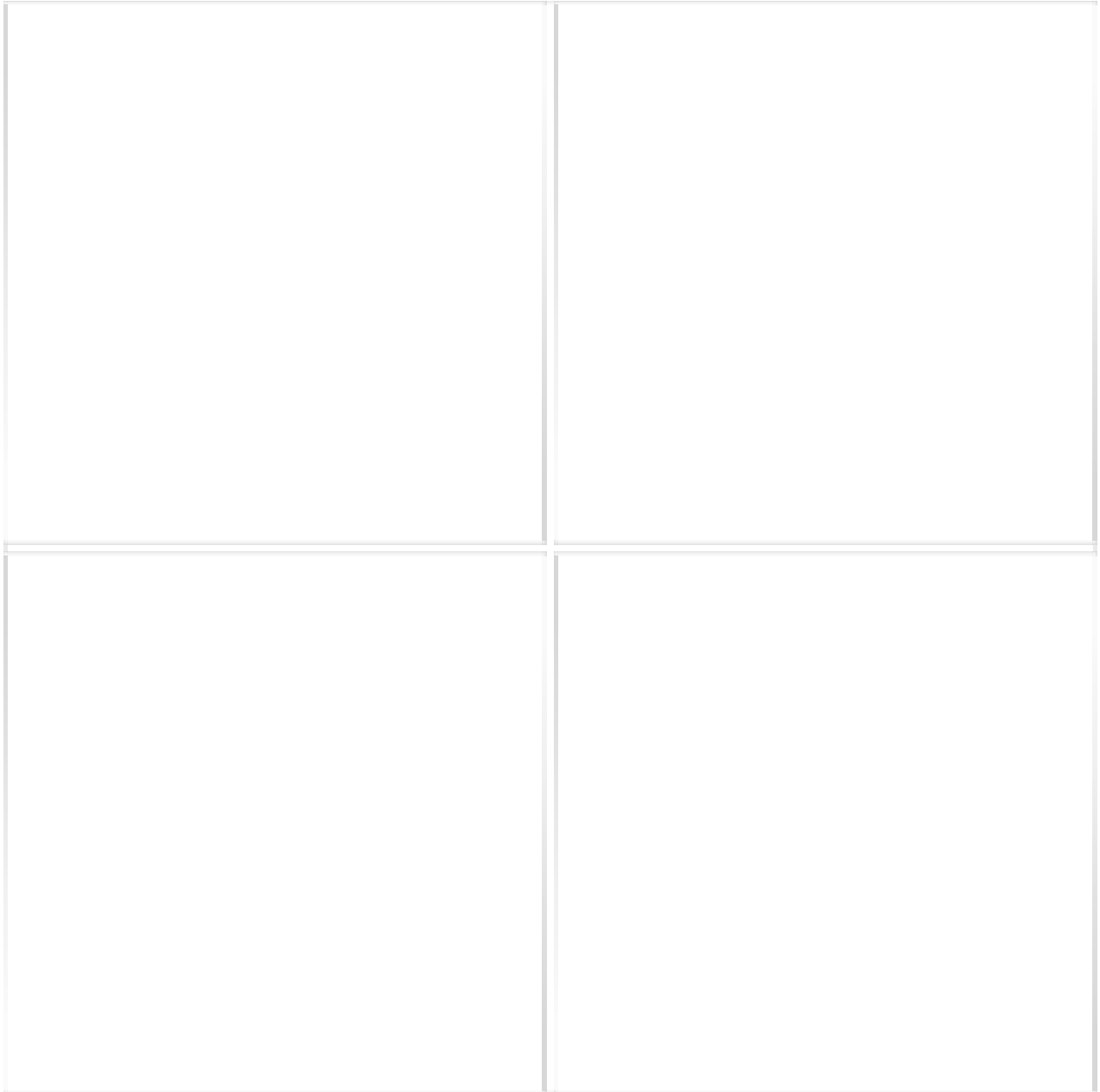
### **Supporting Early Career Development**

The 2022 Delta Science Fellows cohort completed their fellowships this year. This fellowship program supports early career scientists and fosters the next generation of science



leaders. A cornerstone of the program is to pair fellows with research mentors and community mentors in collaborative research, data analysis, and synthesis projects relevant to policy and management. Learn more on the [Delta Science Tracker](#).

Our Delta Science Program and the California Sea Grant co-hosted an Early Career Leadership Workshop in May. This workshop is organized for each fellowship cohort to allow fellowship recipients to learn and practice science communication skills and to offer fellows opportunities to learn from community members about their experiences building successful careers in science. Over three days, six Delta science fellows and several Delta Science Program staff participated in the workshop, including science communication training, presentations from a diverse range of Bay-Delta scientists and managers, and a field trip to the Yolo Bypass and Fremont Weir.



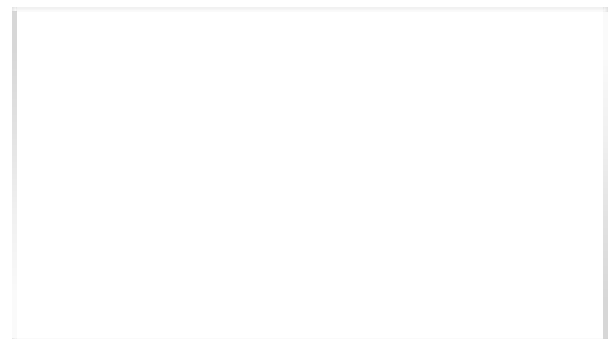
## Peer Review

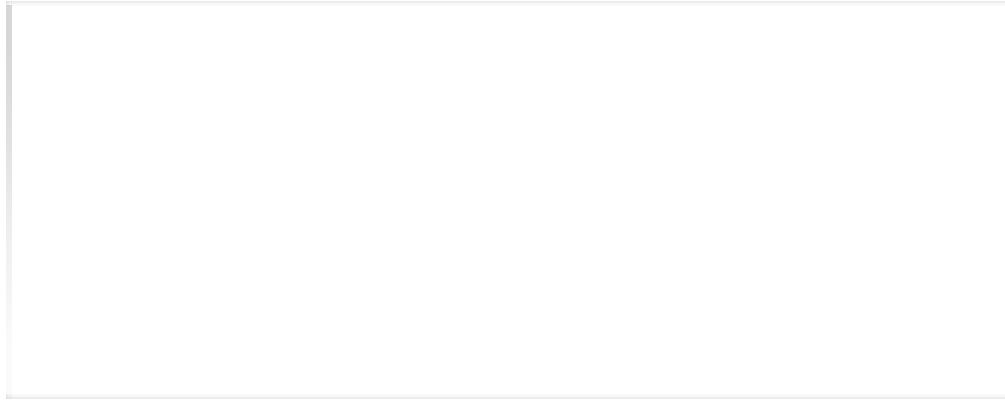
**Independent scientific peer review is essential for ensuring that water and environmental decision-makers can use credible and legitimate science.** The Delta Science Program is a leading regional independent scientific peer review coordinator, building trust within the Delta science and management community.

## Two peer reviews reached significant milestones this year.

- In April, at the request of the DWR, our Delta Science Program completed facilitating an independent scientific peer review of the Delta Smelt Summer-Fall Habitat Action (SFHA) Monitoring and Science Plans and Structured Decision-Making Approach. This review aims to help improve the evaluation and adaptive management of the SFHA. The [final review letters](#) from four subject matter experts are available online.
- In June, at the request of the U.S. Bureau of Reclamation, our Delta Science Program completed facilitating an independent scientific peer review of Reclamation's Fish and Aquatic Effects Analysis for the long-term operations of the federal Central Valley Project and State Water Project. The Fish and Aquatic Effects Analysis informs a Biological Assessment, which is necessary when a federal agency proposes an action that may affect Endangered Species Act (ESA) listed species. The [final report](#) includes the panel's responses to the charge questions, which will guide improvements to the analytical approach and final Biological Assessment.

In June, our Delta Science Program published an [information sheet](#) describing how our peer review process uses independent scientific experts and established guidelines to provide rigorous, transparent, and objective feedback on the scientific validity of processes, programs, projects, plans, or products.





As a core function of the Delta Science Program, independent scientific peer review builds trust. It is an effective and crucial tool to ensure the quality and integrity of scientific information used for decision-making.

## **The Delta Independent Science Board**

The Delta Independent Science Board provides oversight of the scientific research, monitoring, and assessment programs that support the adaptive management of the Delta through periodic reviews of each of those programs. In 2024, the Delta ISB completed seven products, including letter reviews of key agency documents such as the DWR's Final Environmental Impact Report for the Delta Conveyance Project and the State Water Resources Control Board's draft Staff Report/Substitute Environmental Document in support of possible updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento San Joaquin Delta Estuary.

In addition, the Delta ISB completed a major thematic review on food webs, "Advancing Scientific Understanding and Management of the Delta Through a Food Web Perspective." This review provides information to help organizations, including state and federal agencies, assess how to better incorporate and advance food web knowledge to manage the

Delta's ecosystems and identify what tools are available or should be developed. In response to this review, the Interagency Ecological Program (IEP) Synthesis Team proposes a food web modeling project to assess the effectiveness of tidal wetland restoration and other resource management actions.



## Conclusion

Our dedication to achieving the coequal goals doesn't end here. As we close the book on 2024 and turn the page to 2025, we anticipate reaching several milestones, including finalizing our tribal and environmental justice issue paper, Delta Adapts Adaptation Plan, Delta Science Plan, investing millions of dollars in Delta research, and more. Each milestone will require continued partnership and efforts to facilitate collaboration with policymakers, agencies, tribes, scientists, and communities to further the coequal goals. To learn about these projects and the achievements highlighted in this report, visit our website at [deltacouncil.ca.gov](https://deltacouncil.ca.gov). [Subscribe to receive our email announcements](#) and follow the Council on social media ([X](#), [Instagram](#), [LinkedIn](#), and [Facebook](#)) to receive real-time updates about our agency's activities and learn how you can participate.



## Acknowledgement

The photos and videos throughout this report are courtesy of Council staff, funded researchers, the DWR, and the CDFW. Many thanks to those who contributed.

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