



DELTA STEWARDSHIP COUNCIL

A California State Agency



Five-Year Review of the Delta Plan

October 2019

Foreword

When the California Legislature passed the 2009 Delta Reform Act creating the Delta Stewardship Council, it charged the Council with tackling one of the grand challenges of our time: achieving the state's coequal goals for the Sacramento-San Joaquin Delta.

In response to this charge, the Council in 2013 unanimously adopted the state's first-ever Delta Plan. Developed through thousands of hours of public input, built on interagency collaboration, rooted in best available science, and strengthened by the Council's covered action authority, the Delta Plan represents a bold new approach to governance in the Delta.

On a fundamental level, the first five years of implementing the Delta Plan thoroughly tested the Legislature's vision. But this experiment has proved effective. Despite the punishing effects of a five-year drought that lasted through 2017, significant administration and policy changes at both the state and federal levels, and legal challenges to the Delta Plan's regulatory application, the seven-member Council and its staff remain more resolute than ever in their commitment to implementing the Delta Plan.

Through its early implementation of the Delta Plan, the Council has established its leadership role and raised the bar for 21st century governance through its proactive and transparent decision-making. Additionally, the Council has applied its regulatory authority in reviewing 20 certifications of consistency, and 10 appeals related to two projects. Collectively, this work has reinforced the Council's role as a reliable, independent voice for both science and policy in the Delta.

Recognizing that the fate of the Delta depends on the ability of its actors to work together in new and innovative ways, the Council has doubled down on investing in and leading collaborative efforts, and has blazed new trails in federal, state, and local agency coordination. Supported by the reputation of its Science Program and the advice of the Delta Independent Science Board, the Council has championed the unifying role that best available science can play to inform critical policy and reduce conflict in resource management decisions in the Delta. While this trailblazing has not been without its difficulties and setbacks, the Council has laid a strong foundation for future work in support of the Delta Plan.

The road ahead is far from easy. Climate change impacts in the form of extreme drought, more frequent flood events, a dwindling Sierra snowpack, and rising sea levels will increase pressure on the Delta's levees as well as the demand for the Delta's already stressed resources. These challenges and others will confront natural resource managers, scientists, and decision makers long into the future.

Yet in this dynamic physical and policy landscape, the Council remains focused on the core principles and strategies that have made the Delta Plan successful to date, and through data and reflection, the Council will make adjustments to reach the Delta Plan's objectives. Before the state had a Delta Plan, dozens of players, acting on individual and often disparate missions, were determining the Delta's future. With a Delta Plan, Californians can work together to build a more resilient Delta for all.



A handwritten signature in blue ink that reads "JRP" followed by a long horizontal line.

Jessica R. Pearson, Executive Officer
Delta Stewardship Council

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Abbreviations and Acronyms

BCDC	San Francisco Bay Conservation and Development Commission
CalBRACE	California Building Resilience Against Climate Effects
CalEnviroScreen	California Communities Environmental Health Screening Tool
CalEPA	California Environmental Protection Agency
CALFED	California Bay-Delta Program
CDFW	California Department of Fish and Wildlife
Council	Delta Stewardship Council
CVFPB	Central Valley Flood Protection Board
CZMA	Coastal Zone Management Act
DBW	State Parks, Division of Boating and Waterways
Delta Reform Act	Sacramento-San Joaquin Delta Reform Act of 2009
Delta	Sacramento-San Joaquin Delta
Delta Conservancy	Sacramento-San Joaquin Delta Conservancy
DLIS	Delta Levees Investment Strategy
DOI	U.S. Department of the Interior
DPIIC	Delta Plan Interagency Implementation Committee
DWR	California Department of Water Resources
Five-Year Review	Five-Year Review of the Delta Plan
HPI	Healthy Places Index
IAMIT	Interagency Adaptive Management Integration Team
LPP	Local Protection Program
Marsh Plan	Suisun Marsh Protection Plan
NOAA	National Oceanic and Atmospheric Administration
Proposition 1	Water Quality, Supply, and Infrastructure Improvement Act of 2014
RCD	Resource Conservation District
RD	Reclamation District
Reclamation	U.S. Department of the Interior, Bureau of Reclamation

ROI	Regional Opportunity Index
SFCWA	State and Federal Contractors Water Agency
SJAFCA	San Joaquin Area Flood Control Agency
State Parks	California Department of Parks and Recreation
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WSAFCA	West Sacramento Flood Control Agency

Chapter 1. Introduction

The Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) established the Delta Stewardship Council (Council) to create a comprehensive, long-term, legally enforceable plan to guide the management of the Sacramento-San Joaquin Delta (Delta). The Delta Reform Act was a new chapter in the decades-long effort to coordinate the overlapping agencies and authorities responsible for managing Delta resources. It introduced the coequal state policy goals for the Delta: providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem while protecting the unique cultural, recreational, and agricultural values of the Delta as an evolving place.

Additionally, the Delta Reform Act required the Delta Plan to be based on the best available scientific information, include measurable targets associated with achieving the objectives of the Delta Plan, and include a science-based, transparent, and formal adaptive management strategy for ongoing ecosystem restoration and water management decisions.

The Delta Reform Act also delegated to the Council regulatory and appellate authority to oversee implementation of this plan through coordination and oversight of state and local agencies proposing to fund, carry out, and approve certain actions that take place in whole or in part in the Delta and Suisun Marsh, referred to as “covered actions.”

Since 2010, the Council has developed, adopted, amended, and coordinated the implementation of the Delta Plan, addressing multiple complex challenges in the process. The Delta Plan was completed and adopted in September 2013, and it describes a coordinated approach across federal, state, and local agencies to manage Delta resources. Progress has been made, but much remains to be done. The Delta Plan was developed to achieve the state’s coequal goals of a reliable statewide water supply and a protected, restored Delta ecosystem in a manner that preserves the values of the Delta as an evolving place, and it includes 14 regulatory policies and 83 recommendations. Collectively, these policies and recommendations address current and predicted challenges related to Delta water supply reliability, ecosystem protection and enhancement, the Delta as an evolving place, improved water quality, and flood risk reduction—referred to below as the Delta Plan’s core elements. The Delta Plan’s policies and recommendations are based on best available science and depend on cooperation and coordination among federal, state, and local agencies.

The Delta Reform Act states that “[t]he Council shall review the Delta Plan at least once every five years and may revise it as the Council deems appropriate...” (Water Code section 85300, subd.(c)). To meet this requirement, the Council initiated a Five-Year Review of the Delta Plan (Five-Year Review) in 2018, the first iteration of this ongoing requirement.

The purpose of the Five-Year Review is to consider the Delta Plan’s core elements in light of years of experience, and to reflect on the successes and challenges of

implementing the Delta Plan. By considering the Plan and implementation progress, the Council is better positioned to develop a roadmap for potential future changes and improvements to Delta Plan content and implementation strategies. This report summarizes the accomplishments of the Council through implementing the Delta Plan, presents findings from the Five-Year Review process, and recommends priority actions for the next five years to strengthen the Plan and its implementation.

This Five-Year Review report represents an important component of the Delta Plan’s three-phase continuous and deliberative adaptive management framework: *Plan*, *Do*, and *Evaluate and Respond* (Figure 1-1). Because of the level of uncertainty and rapid change, the long-range management of the Delta must have a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation. This adaptive management approach “ensures that the Delta Plan is updated as often as necessary to incorporate new information or to modify policies and recommendations to ensure achievement of the coequal goals.”¹

Consistent with the third step in the adaptive management process, *Evaluate and Respond*, the Delta Plan has been amended five times to date to adjust to new information and focus areas, with a sixth amendment currently under development (Figure 1-2).

The Five-Year Review represents a continuation of the third step in the adaptive management process and marks the beginning of a new cycle of *Planning* and *Doing*.

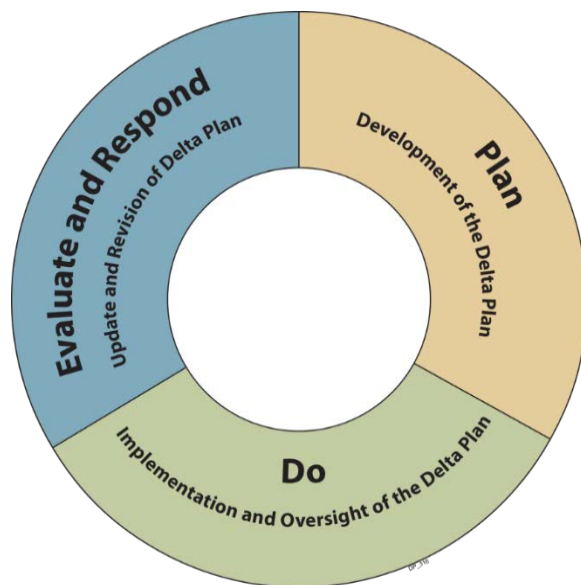


Figure 1-1. Delta Plan Three-Phase Adaptive Management Framework

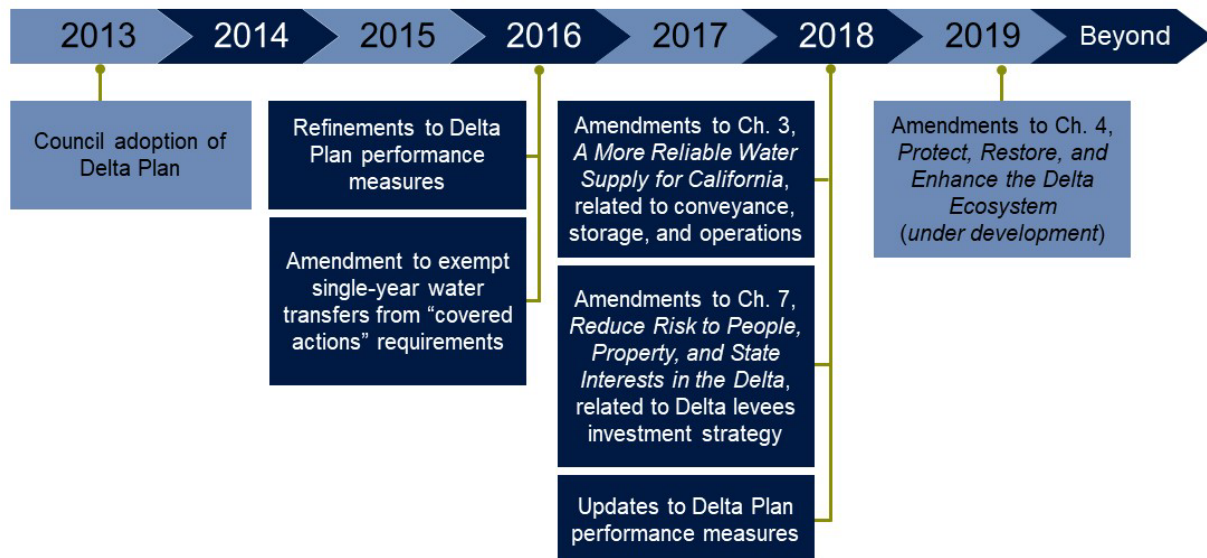


Figure 1-2. Delta Plan Amendments Since Adoption

To complete this Five-Year Review, Council staff reviewed the Delta Plan, assessed the status of its implementation activities, and gathered agency and stakeholder evaluations of the Delta Plan (Figure 1-3). The Council conducted the following activities between December 2018 and April 2019:

- **Comprehensive Review of the Delta Plan, Staff Interviews, and Workshops:** Council staff reviewed the Delta Plan, as well as Delta Plan implementation progress and emerging issues.
- **Covered Actions Review:** Council staff analyzed the certifications of covered actions that have been filed to date, identifying insights and areas for improvement in the regulatory and early consultation process.
- **Performance Measures Review:** Council staff updated and evaluated progress towards the Plan's performance measures by assessing results reported by responsible agencies and by conducting outside research.
- **External Evaluation of the Plan:** Council staff conducted 31 individual and focus-group interviews with the agencies and stakeholders that engaged with implementation activities. An online survey with similar questions was distributed to more than 5,000 Council listserv subscribers, with 124 responses collected (see Appendix A, Stakeholder Assessment Summary).
- **Delta Plan Interagency Implementation Committee Surveys and Interviews:** Members of the Delta Plan Interagency Implementation Committee (DPIIC) provided feedback on the Delta Plan, DPIIC's role in implementation to date, and how DPIIC could better assist in coordinating the Plan's implementation.

- **Sister Agency Chapter Reviews:** The Sacramento-San Joaquin Delta Conservancy (Delta Conservancy) and Delta Protection Commission reviewed specific chapters of the Delta Plan.

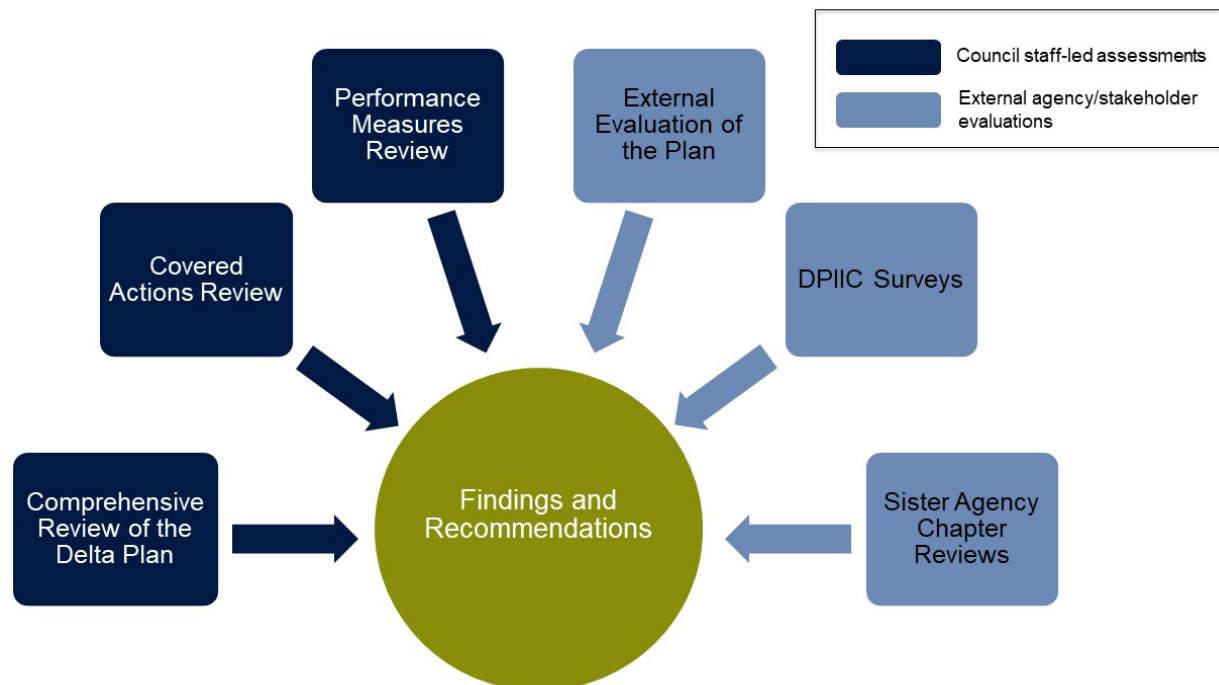


Figure 1-3. Five-Year Review of Delta Plan Activities

The Council will use the recommendations provided in this first Five-Year Review report to inform future operations' plans, work plans, and other staff resource planning activities. Future reviews may involve slightly different approaches. However, we anticipate that they will benefit from a longer implementation period and more in-depth performance measure data and trends.

The last six years have proven that the carefully crafted and thoughtful elegance of the Delta Plan can stand the test of time, if adaptively managed. The Delta and the political and regulatory landscape the Council navigates have been, and will continue to be, dynamic. Several significant events that were unforeseen when the Delta Plan was created also impacted the direction of the Council's work. Both of these factors underscore the importance of adaptively managing Delta Plan implementation to respond to crises like drought, flooding, or economic recession in the context of a changing climate.

Chapter 2. Accomplishments

Laying the Foundation for Successful Implementation of the Delta Plan

In the six years since the adoption of the Delta Plan, the Council has invested significant resources toward creating a sound framework for implementing this landmark management plan, including:

- Implementing a new regulatory authority in the Delta through covered actions
- Amending and updating the Delta Plan in response to commitments made by the Council and to changing circumstances and conditions in the Delta
- Coordinating implementation of the Delta Plan across federal and state agencies by creating and overseeing a DPIIC
- Supporting the Delta Plan with the best available science for long-term Delta management through guiding documents, peer review, and strategic investments
- Advancing funding in the Delta by advocating for, and coordinating with, agencies to better align available funding with Delta Plan objectives

These accomplishments set the stage for future progress toward implementing the Delta Plan and achieving the coequal goals; reinforcing the leadership role of the Council in charting the course ahead.

Implementing a New Regulatory Authority in the Delta Through Covered Actions

The Council's covered action consistency review process provides an avenue for the Council and public to review and comment on the consistency of proposed state and local projects with the Delta Plan's regulations. This self-certification process is a critical tool for successful Plan implementation by encouraging projects' consistency with Delta Plan policies. It increases coordination of activities across federal, state, and local agencies and provides a forum for stakeholders and the public to share ideas and concerns. As a result, this process maximizes the benefits of projects in the Delta and strengthens the overall implementation of the Delta Plan.

To assist agencies with projects that may qualify as covered actions, the Council employs an early consultation process as required by the Delta Reform Act (Water Code section 85225.5). Through this process, Council staff meet with project proponents to discuss relevant Delta Plan policies and to answer questions about certification of consistency requirements. "Project proponent" is used throughout this

document to describe the state and local agencies that are proposing to carry out, approve, or fund proposed covered actions.

During the first six years of implementing the Delta Plan, the Council applied its regulatory authority in reviewing 20 certifications of consistency, and 10 appeals related to two projects. The Council has also provided more than 100 formal comment letters to other agencies to ensure that proponents of projects are aware of the Delta Plan's requirements and how they may apply to their projects.

Amending and Updating the Delta Plan

In response to changing circumstances, and in accordance with commitments made in the original 2013 Delta Plan, the Council adopted five amendments during the period of 2013-2018 (see Figure 1-2).

- **Performance Measures:** The Delta Plan's performance measures are measurable targets for the Council to evaluate progress and effectiveness of Delta Plan implementation. When first adopted, the Delta Plan contained preliminary performance measures developed to monitor implementation of its policies and recommendations. The Council subsequently conducted a rigorous public process and adopted new and refined performance measures in 2016. The updated performance measures are broad and diverse indicators that define measurable success, assess whether specific actions are producing expected results, promote transparency, and support Council action, decision-making, and adaptive management.
- **Single-Year Water Transfers:** Water transfers across the Delta can be an important tool for improving water supply reliability, especially in drought years when some water rights' holders may choose to sell a portion of their water supply to areas of the state that are harder hit or place a greater value on that water. The Council amended its regulatory policies to exempt single-year water transfers from regulation under the Delta Plan, simplifying the implementation of these short-term transfers.
- **Conveyance, Storage, and Operations:** This amendment includes a series of recommendations that fulfill the Council's statutory requirement to promote options for water conveyance, storage, and the operations of both (Water Code section 85304). The amendment endorses a dual conveyance approach to moving water through the Delta and it recommends that the design and implementation of new or improved conveyance infrastructure in the Delta minimize disruptions to transportation and business activities in the Delta, that they complement the Delta landscape, and that they are implemented in cooperation with affected communities, local governments, the Delta Protection Commission, and Delta stakeholders. While not promoting any specific projects, this amendment also recommended the following project types:
 - New or improved conveyance or diversion facilities in the Delta
 - Improving or modifying the existing conveyance facilities

- Implementing new and/or expanded surface water and groundwater storage
- Improving water operations monitoring, data management, and data transparency
- Operating the system using adaptive management
- **Delta Levees Investment Strategy (DLIS):** The DLIS is a multiyear project to update interim priorities for state investments in Delta levees provided in the 2013 Delta Plan (more than \$700 million since the 1970s). The new priorities seek to reduce flood risk and better integrate Delta levees with other Delta actions and statewide flood control. The DLIS was developed with substantial input from the California Department of Water Resources (DWR), the Central Valley Flood Protection Board (CVFPB), and local and regional Delta stakeholders.
- **Output and Outcome Performance Measures:** The plan's performance measures provide decision-useful information on the status and trends toward the coequal goals, translating programmatic objectives into measurable indicators of progress. Based on stakeholder and independent scientific reviews, the Council refined and updated the Delta Plan's 38 output and outcome performance measures, which complement its 123 administrative measures. The measures were refined based on stakeholder comments and independent scientific reviews, and they aim to translate programmatic objectives into measurable indicators of progress. They are a vital part of the Council's adaptive management approach.

In response to the state's pivot from a habitat conservation plan known as the Bay-Delta Conservation Plan (BDCP), the Council has worked diligently to begin updating the policies and recommendations in Delta Plan Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*. Currently under development by the Council, this amendment considers past and future effects of climate change and sea level rise, incorporates lessons learned about adaptive management of the Delta ecosystem, identifies best practices for restoration projects, and addresses institutional changes to improve implementation so that species can begin to benefit from these projects as soon as possible.

Coordinating Implementation of the Delta Plan

While the Council is the lead agency tasked with overseeing the overall implementation of the Delta Plan, achieving the coequal goals by implementing the Delta Plan is a shared undertaking of many state, federal, and local agencies with common goals and collective statewide beneficial outcomes.

One of the primary avenues to coordinate activities to advance the coequal goals is through DPIIC. Envisioned in the Delta Reform Act (Water Code section 85204) and overseen by the Council, DPIIC committee members are leaders from 18 federal and state agencies that are vital to successful implementation of the Delta Plan. Along with

the Council and its Delta Science Program, the DPIIC agencies include: California Environmental Protection Agency (CalEPA); California Natural Resources Agency and its applicable departments, commissions, boards, and conservancies, California Department of Fish and Wildlife (CDFW), California Department of Food and Agriculture, DWR, CVFPB, Delta Protection Commission, Delta Conservancy, San Francisco Bay Conservation and Development Commission (BCDC); State Water Resources Control Board; National Oceanic and Atmospheric Administration (NOAA) Fisheries; U.S. Army Corps of Engineers (USACE); the U.S. Department of the Interior (DOI) and DOI agencies, Bureau of Reclamation (Reclamation), U.S. Fish and Wildlife Service (USFWS), and U.S. Geological Survey (USGS); and the U.S. Environmental Protection Agency (USEPA). Each implementing member agency is represented by the highest level of authority able to speak on behalf of the agency at a policy and management level.

DPIIC's greatest strength is its ability to drive Delta Plan implementation strategies and actions across agencies, and to shift agency organization and priorities accordingly. One area of enhanced coordination has been science, where DPIIC is aligning Delta-relevant science funding.

In 2016, DPIIC and the USGS, hosted a Science Enterprise Workshop to identify the institutional, geographic, and policy boundaries that exist in the Delta and to brainstorm solutions to improve the way agencies approach and fund science.

DPIIC establishes connections and dialogue between the San Francisco Bay and the Delta on science, funding, and multiagency advancement of ecosystem restoration projects. DPIIC represents a shift in Delta agency collaboration in the right direction. As leaders of their respective agencies, DPIIC members have paved an important path for continued interagency coordination and championed the pivotal, long-term role of best available science to fill knowledge gaps and to inform management decisions in the Delta. While much remains to be done, DPIIC's collaborative framework provides a forum to leverage the authority and expertise of the DPIIC agencies, resolve issues, and make progress on Delta Plan implementation actions.

Supporting the Delta Plan Through Best Available Science

As required by the Delta Reform Act, the Delta Plan is rooted in best available science, which is defined in the Delta Plan as science developed through a process that meets the criteria of relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review. Bolstered by its Delta Science Program, the Council is a champion for an open Delta science community and an advocate for the use of best available science in covered actions and other management decisions that impact the Delta.

Over the last six years, the Delta Science Program has worked with agencies, academic institutions, and stakeholder groups to create a three-part planning, implementation, and reporting strategy that embodies an open, collaborative "One Delta, One Science" community of scientists, policymakers, and decision-makers. This strategy includes:

- **The Delta Science Plan:** This document includes shared objectives for Delta science that provide a framework for guiding, organizing, and integrating science in the Delta. The Delta Science Plan was updated in 2018 (published in 2019) to reflect best available science and align with the current policies and recommendations in the Delta Plan.
- **The Science Action Agenda:** Based on the Delta Science Plan, this document prioritizes near-term actions (2017-2021) and identifies priorities for research, monitoring, data management, modeling, synthesis, communication, and building science capacity to engage in these activities.
- **The State of Bay-Delta Science:** This document is a synthesis, which is updated periodically (most recently in 2016), of the current scientific knowledge affecting the Delta. The next update is scheduled for early 2021.

In addition to these three foundational documents, the Delta Science Program works to strengthen science and policy connections, coordinate and promote science synthesis, manage and reduce conflict, support effective adaptive management, and advance the overall understanding of the Delta. These efforts are reflected in the 20 science peer reviews, 23 synthesis workshops and symposia, and 80 brown-bag seminars facilitated by the Delta Science Program from 2013-2018.

The Delta Science Program further supports policy and decision-making in the Delta by coordinating independent science peer review. This includes coordinating an independent science review for Reclamation. An independent science review is a requirement of the Biological Opinions issued by NOAA Fisheries, also known as the National Marine Fisheries Service, and the USFWS, for the Long-Term Operations of the State Water Project and the Central Valley Project. Regulatory agencies use the results of the science review to: develop lessons learned; incorporate new science; and make appropriate, scientifically justified adjustments to the implementation of the Biological Opinion's reasonable and prudent alternative actions as well as to inform future water operations.

The Delta Science Program's work also supports the Delta Plan's effort to bring together decision-makers, scientists, stakeholders, and the public to discuss current and future science and management issues in the Delta. Further, Delta Science Program activities are an important mechanism for scientists to communicate findings and forecasts to policymakers and resource managers who rely on best available science to make informed decisions for the region. All of these improvements in scientific knowledge of Delta conditions, response mechanisms, and opportunities are used to adaptively manage the Delta Plan through development of Delta Plan amendments, review of covered actions, and implementation of Delta Plan recommendations.

Delta Independent Science Board

The Delta Independent Science Board, which is made up of nationally and internationally prominent scientists with the expertise to evaluate the broad range of scientific programs that support adaptive management of the Delta, is responsible for reviewing the effectiveness of the actions taken by the Delta science community.

Through its science and program reviews, the Delta Independent Science Board provides oversight of scientific research, monitoring, and assessment programs in the Delta and advises the Council on its activities and on Delta Plan content and implementation (Water Code section 85280).

From 2013-2018, the Delta Independent Science Board completed six programmatic reviews on the topics of ecosystem restoration, fish and flows, Delta levees, adaptive management, Delta as a place, and water quality to help inform state and federal activities, the Delta Science Plan, the Delta Plan, and other Council initiatives. Each review considered climate change impacts, connections upstream and to the Bay, modeling and forecasting capabilities, state of science integration, uncertainty, and science and social system linkages. A selection of these reviews and their outcomes include the following:

- **A 2016 levee hazard review** brought together infrastructure and resource managers to explore natural threats to levees as well as the economic, environmental, and public-safety consequences of levee failures in the Delta. The review was also used as a resource to amend Delta Plan Chapter 7, *Reduce Risk to People, Property, and State Interests in the Delta*.
- **A 2016 adaptive management review** and subsequent journal article found that adaptive management has rarely been implemented as described in the Delta Plan. To address the barriers identified in the Delta ISB's review, including funding and coordination, the Interagency Adaptive Management Integration Team (IAMIT) developed a Delta Conservation Adaptive Management Action Strategy, which is now being used to improve adaptive management planning across agencies.
- **A 2017 review of the Delta as a place** identified the lack of social science research in the Delta and in part led to the creation of a Delta Social Science Task Force, which was charged with developing a strategic plan to strengthen and integrate social sciences into the science, management, and policy landscape of the Delta.

Advancing Funding in the Delta

As a relatively new state agency, the Council invested a considerable amount of time during the first six years of implementing the Delta Plan to ensure that funding for activities in the Delta and its watershed align with the objectives of the Delta Plan, the Delta Science Plan, and the Science Action Agenda.

Approved by California voters in 2014, the Water Quality, Supply, and Infrastructure Improvement Act (Proposition 1), is one of the largest sources of funding for water infrastructure, science, and planning statewide. Proposition 1 authorized \$7.5 billion in general obligation bonds to fund ecosystem and watershed protection and restoration; water supply infrastructure projects, including surface and groundwater storage; and drinking water protection. Many of these activities will affect the Delta directly or indirectly.

The Council has influenced the allocation of Proposition 1 funds to further the coequal goals by collaborating with state and federal agencies, including the California Water Commission, DWR, CDFW, the State Water Resources Control Board, Reclamation, and others. This collaboration includes identifying and aligning funding priorities across agencies with the Delta Reform Act, Delta Plan regulations, and Delta Plan objectives.

The Council also offers technical assistance in developing grant application guidelines and in reviewing proposals. As a result of the continued cooperation between the Council and CDFW, CDFW grant guidelines now include a requirement that new projects declare whether they are likely to be a covered action under the Delta Plan. CDFW guidelines also require implementation funding proposals to describe how the proposed project is consistent with the Delta Plan and offers an estimated timeline for completing the Council's certification of consistency with the Delta Plan. This demonstrates improved interagency coordination and increases the likelihood of alignment of Delta projects across multiple agencies and stakeholders with Delta Plan objectives.

In 2018, the Council led a joint funding solicitation with CDFW and Reclamation for new Delta science studies, demonstrating leadership roles in building capacity for the "One Delta, One Science" framework that promotes an open Delta science community working together to build a shared body of knowledge. The effort marked the first large, multiagency, competitive Delta science research solicitation in close to a decade, attracting 62 proposals requesting \$43 million in funding. The solicitation specifically prioritized action areas from the Council's Science Action Agenda, as well as science topics from CDFW's Delta Water Quality and Ecosystem Restoration Grant Program. The Council, CDFW, and Reclamation ultimately awarded nearly \$17 million to fund 26 critical scientific studies in the Delta and Suisun Marsh.

While the Council's influence on funding in the Delta is an important accomplishment for a relatively new state agency, the Council recognizes the highly variable nature of funding in the Delta and ongoing barriers to coordinate and secure long-term funding. The Council is committed to continued collaboration in order to overcome institutional barriers; to align federal, state, and local resources; and to prioritize long-term, reliable funding to advance the coequal goals and to meet the objectives of the Delta Plan.

Achievements Summary

While far from an exhaustive list of the complete work and accomplishments of the Council, DPIIC, and the Delta Independent Science Board, this summary reflects the success of initial efforts to implement the Delta Plan in the six years since it was adopted. More importantly, these milestones represent a solid framework on which to build for future Delta Plan implementation. The forward-looking efforts of these organizations underscore the commitment of both the Council and the broader Delta community to continue collaboration using the best available science. This commitment is crucial to meet the challenge of managing the ever-changing Delta landscape.

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Chapter 3. General Findings and Recommendations

Summary of Findings and Recommendations:

The Delta Plan, in its current, as-amended form, is effectively guiding the actions of local and state agencies working in the Delta. The Delta Plan does not require immediate significant changes to ensure successful implementation or to support the achievement of the coequal goals. Rather, the Council will focus on implementation activities over the next five years. Providing a stable, consistent plan and regulatory framework will support the sustained implementation of activities needed to achieve the coequal goals.

Long before the Council was created, there were conflicting demands among agencies and stakeholders about how to manage natural resources. Clarity was needed on how best to make decisions related to activities in the Delta. When the Legislature established the Council in 2009, it created a new legal and governance framework for the Delta's future, specifically stating, for the first time, how the state should approach resolving the inherent conflicts in managing resources through the coequal goals of restoring the ecosystem and creating a more reliable water supply for California.²

The Five-Year Review provides an opportunity to reflect on the successes and challenges since the creation of the Council and of Delta Plan implementation.

It has prompted productive conversations that will lead to increased success of the Council's endeavors, and improved outcomes for the Delta and those who rely on it.

There is ample reason for optimism. The Delta Plan, which is only six years old, is having a positive impact and furthering the state's coequal goals for the Delta. Innovation in practices and evidence of improved governance and coordination across local, state, and federal agencies offers hope. Implementation of the Delta Plan has resulted in the following increases:

- The Council and other state agencies have implemented more than 45 percent of the actions called for in the original Delta Plan.
- Amendments to the Delta Plan have strengthened its core elements and regulatory framework to further the state's coequal goals.
- Since adoption, 20 covered actions have been certified as consistent with the Plan—more than 70 percent of these have been certified in the past two years.
- The appeals process for certifications of consistency has been tested twice. Ten appeals of covered-action certifications have been filed on two different projects.

- The Council has actively engaged with project proponents in many early consultation efforts and on reviews of certifications of consistency.
- The DPIIC, envisioned in the Delta Reform Act, is functioning well as a state-federal coordinating body and can be built upon to advance Delta Plan implementation.
- The Council has updated and is actively tracking administrative performance measures (administrative responses to the Delta Plan) and output/outcome performance measures (policy outputs, and quantitative and physical outcomes of Plan implementation).

These successes demonstrate progress, improved coordination, and the potential that the physical outcomes envisioned in the Delta Plan can be realized through focused implementation.

General Findings

The following sections describe general findings from the Five-Year Review and propose next steps to address remaining challenges.

Adaptive Management of the Delta Plan

Part of the Delta Plan's strength is its adaptable nature, which occurs through the amendment process. When necessary, the Council can amend the Delta Plan to respond to new information, changing conditions, or other factors. During the first six years of Delta Plan implementation, several amendments were necessary to complete the Plan and respond to the changing administrative priorities. Since adoption, the Plan has been amended five times, as described in Chapter 2 of this report and shown in Figure 1-2. The Council is currently considering amendments to Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*. Because the Council is considering potential amendments to Delta Plan Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*, as part of a separate activity, Chapter 4 was generally omitted from the Five-Year Review.

These amendments were either necessary to complete the Plan or prompted by the Brown Administration's decision to pivot away from the comprehensive conveyance and ecosystem restoration plan in the BDCP. The BDCP was originally intended by the Legislature to become part of the Delta Plan.

While amending the Delta Plan was necessary in specific circumstances, the Council recognizes that regulatory certainty is important, and providing a consistent set of regulatory policies and recommendations moving forward will facilitate improved understanding of the Plan and its requirements; thereby increasing implementation and resulting in better outcomes for the Delta.

Role of Regulatory Policies and Process

The Delta Plan regulatory policies remain important, and Delta stakeholders have acknowledged that these policies are effective for managing activities in the Delta. The Council has made significant progress in support for policy implementation through agency coordination, early consultations, and appeals, but acknowledges that continued communication with all stakeholders on covered actions are necessary for improved Delta Plan implementation.

Through Council outreach to project proponents, there is heightened awareness and knowledge of the Council's jurisdiction and authority as well as the covered action certification process. This, along with the Council's early consultation efforts, has led to changes in proposed projects to become consistent with the Delta Plan and to provide for better project outcomes due to an improved understanding of the Council's regulations. Improved tools and resources developed by the Council have also resulted in increased covered-action certification filings.

New and Evolving Challenges

Some new challenges and initiatives, identified since adoption of the Delta Plan in 2013, could be considered for inclusion in future amendments. These include planning topics and emerging issues that have become increasingly important to the state, decision-makers, and Californians due to our current understanding of science, the societal importance of the issues, or both. Emergence of new and evolving challenges is expected for long-term plans and does not pose a significant barrier to continued implementation of the Delta Plan.

Consistent with the Delta Plan's adaptive management framework, the Council has initiated, or plans to initiate, studies and activities to develop additional information related to the following key planning topics: environmental justice and disadvantaged communities, climate change risks, federal coordination and participation, and the Delta as an evolving place. The Council's investigations in these areas, including engagement with stakeholders, will inform future Council deliberations on how to best respond to these challenges.

Other Findings

The Council has identified a number of out-of-date references, facts, and figures, while conducting a detailed assessment of the Plan. In addition, several administrative performance measures are out of alignment with current Delta Plan recommendations (due to amendments) or are out of alignment with current management priorities and frameworks (due to shifts in priority or legislation). Although updating these elements are a consideration over time, in keeping the Delta Plan relevant, they do not rise to the level of impeding implementation or require immediate amendment. Therefore, the Council intends to use future significant amendment processes that are completed for other policy-related purposes to update out-of-date information.

Next Steps to Address Remaining Challenges

Notwithstanding all of the progress that has been made in the last six years, the Delta remains in critical condition. Challenges related to Delta water supply reliability, the presence of new invasive species, and the high risk of levee failures remain. Six years is not long enough to realize substantial physical improvements in a complex system such as the Delta. The Council and stakeholders acknowledge that it will take time and focused effort to improve physical conditions in the Delta, even though governance changes reflect a positive trajectory in Delta Plan implementation. To this end, the Delta Plan, in its current, as-amended form, is effectively guiding the actions of local and state agencies working in the Delta, and the next five years will be best spent focusing on implementing activities to achieve the coequal goals.

The following sections of this report provide specific findings and recommendations for implementation activities that will guide Council resources over the next five years, and they identify key planning topics and emerging issues that warrant additional attention.

Chapter 4. Specific Findings and Recommendations

Strengthening Delta Plan Implementation

Recommendations to Strengthen Plan Implementation:

Covered Actions

Outreach and Early Consultation

Administrative Procedures

Adaptive Management

Best Available Science

Performance Measures

Delta Plan Recommendations Implementation

Tracking Output/Outcome Performance Measures

Staff Development

Staff Development and Technological Advancement

Strengthening Delta Plan implementation means focusing Council resources on advancing existing Delta Plan policies and recommendations rather than continually amending the Delta Plan.

Delta Plan policies are regulatory requirements that apply to covered actions. They are implemented through the certification of consistency and appeals processes.

Delta Plan recommendations are primarily implemented by the Council and other state agencies. Compliance with Delta Plan recommendations is not required to certify consistency with the Delta Plan. Rather, implementing the Delta Plan's recommendations requires Council leadership and collaborative effort to engage and leverage the authorities vested in other agencies. Recommendations in the Delta Plan generally involve administrative actions to catalyze change, including: updating plans, establishing advisory groups, developing guidance, and adopting requirements.

Performance measures are the metrics used to gauge whether Delta Plan objectives are met, including Delta Plan policies, recommendations, and the achievement of the coequal goals (see Water Code section 85308).

Based on experience, stakeholder feedback, analysis of the Delta Plan, and subsequent implementation actions, the Council has identified seven specific findings regarding ongoing Plan implementation: four findings related to covered actions, two findings related to Delta Plan performance measures, and one finding related to staff development.

The following sections summarize the Council’s findings and present recommendations for strengthening Plan implementation.

Covered Actions

The Council has regulatory and appellate authority over certain actions that take place, in whole or in part, in the Delta and Suisun Marsh, referred to as “covered actions” (Water Code section 85057.5). State and local agencies are required to demonstrate consistency with the applicable regulatory policies in the Delta Plan when carrying out, approving, or funding a covered action (see also Water Code section 85225).

Since the original Delta Plan regulations took effect in 2013, 20 certifications of consistency have been submitted to the Council; 70 percent of which were filed since January 2017 (see Figure 4-1 and Table 4-1). Of the 20 certifications, two were appealed: California WaterFix (Delta conveyance) in July 2018, and the Smith Canal Gate Project (flood protection project) in November 2018. The project proponent for California WaterFix withdrew its certification of consistency prior to the Council reaching a determination on the appeals. The Smith Canal Gate Project appeal was denied by the Council in February 2019.

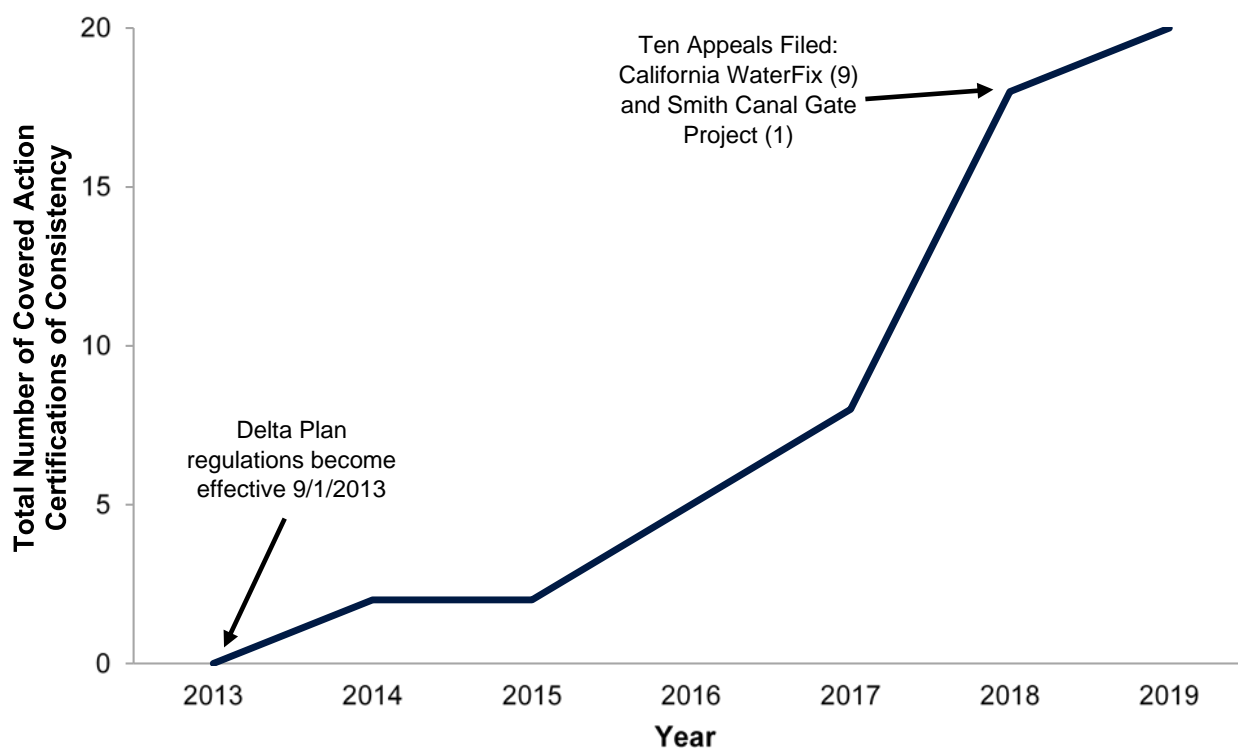


Figure 4-1. Cumulative Covered Actions Certifications of Consistency with the Delta Plan Submitted to the Delta Stewardship Council Since Inception

Table 4-1. Covered Actions Overview

Project Name	Proponent	Status	Filing Date
Sherman Island Whale's Mouth Wetland Restoration Project	DWR-EcoRestore	Certified	08/06/2014
Dutch Slough Tidal Marsh Restoration Project	DWR-EcoRestore	Certified	12/15/2014
Tule Red Tidal Restoration Project	SFCWA, DWR-EcoRestore	Certified	05/05/2016
Southport Sacramento River Early Implementation Project	WSAFCA, DWR-EcoRestore	Certified	10/05/2016
Yolo Bypass Corridors for Flood Escape on the Yolo Bypass Wildlife Area	Yolo County RCD	Certified	12/13/2016
Decker Island Fish Restoration Program	DWR-EcoRestore	Certified	11/06/2017
Bacon Island Reclamation District No. 2028 Levee Rehabilitation	RD 2028	Certified	11/17/2017
The Rio Vista Estuarine Research Station	DWR	Certified	12/19/2017
Yolo Flyway Farms Restoration Project	DWR-EcoRestore	Certified	01/02/2018
The Yolo Bypass Wildlife Area Habitat and Drainage Improvement Project	CDFW	Certified	01/10/2018
Aquatic Invasive Plant Control Program	State Parks/DBW	Certified	02/02/2018
Rush Ranch Lower Spring Branch Creek and Suisun Hill Hollow Tidal Connections Project	Solano County	Certified	07/20/2018
California WaterFix	DWR	Appealed/ Project Withdrawn	07/27/2018
Grizzly Slough Floodplain Restoration Project and McCormack Williamson Tract Restoration Project (North Delta Project)	DWR-EcoRestore	Certified	10/26/2018
Smith Canal Gate Project	SJAFCA	Appealed/ Appeal Denied	11/02/2018
South Sacramento Habitat Conservation Plan	Sacramento County	Certified	11/14/2018
Yolo Habitat Conservation Plan/Natural Community Conservation Plan	Yolo Habitat Conservancy	Certified	11/20/2018
Envision Stockton 2040 General Plan Update	City of Stockton	Certified	12/19/2018
Winter Island Tidal Habitat Restoration Project	DWR-EcoRestore	Certified	02/17/2019
Northwest Levee Improvement Project and Stone Road Seepage Reduction Project	Bethel Island Municipal Improvement District	Certified	05/19/2019

Note:

Table current as of September 2019. Agency acronyms are defined in the Abbreviations and Acronym section of this document.

Most covered actions submitted to the Council to date are for multi-benefit projects that relate to ecosystem restoration and/or flood risk reduction. Nearly all projects implicate the following Delta Plan policies: applying Delta Plan mitigation measures (G P1(b)(2)), using best available science (G P1(b)(3)), implementing adaptive management (G P1(b)(4)), avoiding introducing and improving habitat for invasive nonnative species (ER P5), and respecting local land use when siting water or flood facilities or restoring habitats (DP P2).

The following four sections summarize specific findings for strengthening Delta Plan implementation through the covered action process.

Outreach and Early Consultation

Recommendations:

- *Be proactive in outreach and communication with project proponents in early consultation.*
 - *Expand the use of Council meetings and reports to communicate upcoming and ongoing early consultations and certifications of consistency.*
-

The Delta Reform Act authorizes the Council to engage in early consultation with state and local public agencies that are proposing to carry out, approve, or fund proposed covered actions (Water Code section 85225.5).

Because covered action certification is a relatively new process, it has taken time for state and local agency proponents of projects to understand how it works. The Council's self-certification process for covered actions allows project proponents greater discretion than many regulatory programs. Self-certification presents challenges for both the Council and project proponents. However, self-certification can also help establish collaborative and cooperative relationships as part of early consultation, during which Council staff are often able to help project proponents understand Delta Plan requirements more clearly, allowing them to adjust the project to fit these requirements. In the first few years after adoption of the Delta Plan, several project proponents deferred consultation with the Council until very late in the project development process; sometimes coordinating as late as the project permitting phase when substantive changes necessary for consistency were costly and difficult to implement. Proponents of some early projects misunderstood consistency requirements, and a few projects proceeded to implementation without certifying consistency with the Delta Plan.

Over the last six years, the Council has invested significant time and effort into outreach and early consultation with project proponents. Council staff will continue to directly assist project proponents by reviewing their draft certifications and making appropriate recommendations. As awareness of the Council's role has grown, project proponents have increasingly adjusted their planning processes to accommodate early consultation and certifying consistency. The Council is now regularly notified by state and local agencies regarding the preparation of relevant environmental documents. These environmental documents increasingly include a description of the Delta Plan and its regulatory policies. When such descriptions are absent, proponents are generally willing

to incorporate them later in the process. Larger agencies that regularly approve, fund, and implement projects in the Delta now increasingly request early consultation without prompting. These indicators suggest that project proponents have grown to better understand the Council's role in providing assistance to project proponents in complying with the Delta Plan. There is, however, work to do in coordinating with the agencies that do not regularly approve, fund, or implement projects in the Delta.

Some of the tools and resources the Council has developed that have contributed to this progress include a checklist, created by Council staff and available on the Council's website, that agencies may use to facilitate the covered action process, certification forms, and related materials. There is also now online registration, as well as online certification and appeal submittal forms. Council staff periodically review and update these resources as needed. Currently, Council staff are upgrading the online certification and appeal submittal web portal to incorporate lessons learned from past experience. The Council's recent efforts are yielding significant returns, as evidenced by improved and increased early consultations with project proponents, and a corresponding increase in covered action filings the Council receives each year.

The Council's experience with outreach and early consultation is leading to better project outcomes in the Delta, including greater transparency and communication among stakeholders. The Council has learned that early consultation works best when it begins before the project is designed and continues throughout project development. Staff will also continue to strengthen communication with Council members and the public to keep them informed about potential covered actions and appeals, project difficulties, and successes.

The Council has identified the following priority actions to strengthen Delta Plan implementation through outreach and early consultation support for covered actions:

- Develop a process and reporting procedures for an "active projects list" identifying projects proceeding through the covered action process. Include information to inform the public and Council members about ongoing Delta-related projects and Council staff's engagement with them.
- Invest in developing relationships with local governments to build understanding of covered action requirements and how the Delta Plan can help guide local planning activities.
- Develop a GIS-based web map to advise project proponents whether proposed project may be implicated by one of the Delta Plan's eight spatial policies (ER P2, ER P3, ER P4, DP P1, RR P1, RR P2, RR P3, RR P4).

Procedural Adjustments

Recommendations:

- *Review the administrative procedures to identify what, if any, procedural changes may be warranted based on covered actions and appeals to date.*
 - *Implement procedural adjustments, if any, to address warranted changes.*
-

In contrast to the ways that some governmental plans are implemented, the Council does *not* exercise direct review and approval authority over covered actions to determine their consistency with the regulatory policies in the Delta Plan. Instead, state or local agencies self-certify Delta Plan consistency, and the Council serves as an appellate body for those determinations if any person challenges them. Appeals focus on the specific policies and issues that are challenged. The Council is required to apply the substantial evidence standard when reviewing appeals (Water Code section 85225.25).

The Delta Reform Act set specific timelines and requirements for the certification of consistency appeals process, and directed the Council to adopt administrative procedures for how the Council conducts the appeals process (Water Code section 85225.30).

The Council adopted Administrative Procedures Governing Appeals (Appeal Procedures) in 2010. Based on the Council's experience with the certifications of consistency and the appeals filed to date, the existing Appeal Procedures warrant review to identify potential improvements and incorporate lessons learned over the past six years.

The Council has identified the following priority actions to strengthen Delta Plan implementation through procedural adjustments:

- Review administrative procedures to identify the scope of procedural changes based on covered actions and appeals to date.
- Conduct a Council workshop on administrative procedures to elicit lessons learned and experiences from interested parties.

Adaptive Management

Recommendations:

- *Enhance outreach on adaptive management.*
 - *Focus early consultation on project-specific needs.*
 - *Work with other agencies to develop tools and information recommended in the Delta Conservation Adaptive Management Action Strategy.*
-

The Delta Reform Act states that the Delta Plan shall “include a science-based, transparent, and formal adaptive management strategy for ongoing ecosystem

restoration and water management decisions” (Water Code section 85308). Delta Plan regulations require ecosystem restoration and water management covered actions to include provisions for continued implementation of adaptive management. Adaptive management is project-specific and tailored to the purpose and objectives of a project. Project proponents and other stakeholders have generally been supportive of adaptive management, but they have expressed frustration with applying the Delta Plan’s general adaptive management framework on a project-specific basis. To address these challenges, the Delta Science Program offers focused adaptive management consultation.

Stakeholders also have expressed concern that other agencies have regulatory processes that require adaptive management plans that they perceive to have different requirements from the Council’s adaptive management framework. This concern is amplified when project budgets have limited resources for adaptive management planning. To address these concerns, the Council’s Delta Science Program has been working with other agencies that implement, fund, and have regulatory authority over projects to facilitate coordinated interagency support for adaptive management planning. Strategic actions to improve coordination, provide technical assistance, and fill knowledge gaps were developed with the IAMIT, and recently published in the Council’s Delta Conservation Adaptive Management Action Strategy.

The Council and stakeholders have also identified the lack of funding for ongoing and long-term adaptive management to be an additional challenge for projects. Delta Plan policy G P1(b)(4) specifically calls for “documentation of access to adequate resources...for the implementation of the proposed adaptive management process”. The Council recognizes this difficulty and will continue to work with funding agencies, project proponents, and the legislature to advocate for funding and adequate resources to meet this need.

There are limited stakeholder perspectives on the application of adaptive management for water management projects, possibly because only one water management covered action has been the subject of a certification of consistency to date, which was ultimately withdrawn. Considering this lack of data, no specific strategies are currently recommended to increase support for adaptive management planning for water management covered actions. The Council will engage with agencies proposing water management covered actions to help develop and support adaptive management efforts consistent with the Delta Plan, and it will reevaluate these efforts as additional projects come forward.

The Council identified the following priority actions to strengthen Delta Plan implementation through improved adaptive management:

- Enhance outreach on adaptive management through comment letters by the Council on proposed covered actions, direct project engagement, and through venues such as the IAMIT, the Suisun Marsh Plan Adaptive Management Advisory Team, and the Council’s Adaptive Management Forums.

- Focus early consultation on project-specific needs by offering step-by-step support and providing proponents with example adaptive management plans from similar projects, to assist project proponents in developing their own plans.
- Work with the IAMIT to develop tools and information recommended in the Delta Conservation Adaptive Management Action Strategy, to support adaptive management efforts of individual restoration projects and integration of efforts across the system. Project proponents could use these tools and information to develop their own adaptive management plans. Examples include:
 - Providing access to existing conceptual models and support for development of new models to fill gaps for common project types lacking support.
 - Coordinating with other Delta regulatory bodies to assist project proponents when developing adaptive management plans.

Best Available Science

Recommendations:

- *Enhance outreach to project proponents in order to provide support in early consultation for best available science considerations.*
 - *Identify priority topics for research to include in future Science Action Agendas.*
-

The Delta Plan must include subgoals and strategies that “make use of the best available science” to restore the Delta to a healthy ecosystem (Water Code section 85302). Determining what constitutes the best available science is a process that requires gathering scientific information from multiple sources and assessing it across many variables. Delta Plan regulations require all covered actions to document the use of best available science using six criteria: relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review.

Results from stakeholder interviews indicate that the definition and intended use of best available science is not always clearly understood, and that more support is needed through early consultation regarding how to apply and document the use of best available science. The challenge of defining best available science, particularly as it relates to timeliness, has been highlighted during appeals processes. Communicating with the public about best available science could also be improved to clarify how criteria are used to help gauge the quality and applicability of scientific studies for a specific project.

Delta Plan policy G P1(b)(3) requires project proponents to use best available science when it is “relevant to the purpose and nature of the project” and requires that the analysis of other Delta Plan policies rely on best available science (23 CCR section 5002). With regard to the two certifications of consistency that have been appealed, appellants raised climate change, hydrodynamic modeling, and water quality as best available science areas of concern.

The Council identified the following priority actions to strengthen Delta Plan implementation through improved use of best available science:

- Enhance outreach on best available science through comment letters by the Council on proposed covered actions, direct project engagement, and development of support resources through interagency coordination venues such as the IAMIT, Suisun Marsh Plan Adaptive Management Advisory Team, and the Council's Adaptive Management Forum.
- Focus early consultation on project-specific best available science needs, with emphasis on thorough explanations of the policy's six criteria, and ways to document the use of best available science.
- Develop scientific tools, venues, synthesis products, and publications through Science Action Agenda priorities. These resources would then be available to project proponents when developing their certifications of consistency. (However, project proponents would not be required to use these resources.)

Performance Measures

Performance measures translate programmatic goals and objectives into quantified or otherwise measurable indicators of progress towards achieving Delta Plan objectives. They are a vital part of the Council's adaptive management approach to the Delta and provide decision-relevant information for Delta stakeholders (see Water Code sections 85211, 85302, and 85308).

The Council has developed and refined performance measures over multiple years with the help of state, federal, and local agencies, scientists, stakeholders, and the public.

There are three types of performance measures in the Delta Plan:

- **Administrative performance measures** describe decisions made by policy makers and managers to finalize plans or approve resources (funds, personnel, projects) for implementation of a program or a group of related programs. The administrative measures are near-term, and consist of actions identified in Delta Plan policies and recommendations by the Council, and other state, local, and federal agencies.
- **Output performance measures** evaluate the factors that may be influencing outcomes and include on-the-ground implementation of management actions, such as acres of habitat restored or acre-feet of water released, as well as natural phenomena outside of management control (such as a flood, earthquake, or ocean conditions).
- **Outcome performance measures** evaluate responses to management actions or natural phenomena. Outcome performance measures describe the effects and impacts of management actions upon the system that is being managed, such as restoration of suitable habitat conditions or enhanced ecological functions. Outcome measures are, often, the hardest to measure and assess, yet they are most relevant to the goals and objectives of the Delta Plan. This can include, for

example, presence of target species in constructed habitats or increased abundance of native populations.

Development of informative and meaningful performance measures is a challenging task that has been an ongoing effort of Delta Plan implementation. In February 2016, the Delta Plan was amended to include refined performance measures, which were again amended in April 2018. Also in April 2018, the Delta Plan was amended to revise Chapter 3, *A More Reliable Water Supply for California*, to include new recommendations for conveyance, storage, and operations, and to revise Chapter 7, *Reduce Risk to People, Property, and State Interests in the Delta*, to include new guidance for state investments in Delta levees. Hence, amending the Delta Plan with new or revised policies and recommendations necessitates review of (and potential revisions to) performance measures.

The Council designs performance measures to track important trends and to address whether specific actions are producing expected results. Assessment of the Delta Plan's performance measures contribute to information and knowledge about the status of the Delta ecosystem and reliability of statewide water supply. As a result, Delta Plan implementing agencies, stakeholders, and the public can evaluate management actions in both quantitative and qualitative terms and obtain a better understanding of how actions affect the achievement of the coequal goals. Thus, the more long-standing the performance measures, the more valuable data they provide over time.

The Council's website reports on the status and trends of performance metrics through web-based dashboards accessible at: <http://viewperformance.deltacouncil.ca.gov>. An administrative performance measures dashboard tracks and displays progress of administrative actions recommended by the Delta Plan. This tool identifies the agencies involved, and offers the ability to review the status of each administrative performance measure. Users can interact with the tool to view, sort, and filter administrative actions by responsible agency and implementation status. An output-outcome performance measures dashboard allows access to performance metrics, baselines, and targets for each of the output and outcome performance measures. The Council maintains and updates the dashboards as new data become available.

A companion resource to the web-based performance dashboard is a printed guidebook providing an overview of performance expectations and metrics for measures adopted in 2018. This document was published in order to communicate the performance measures in a more easily understandable and accessible form for the broader public.

Delta Plan Recommendations and Administrative Performance Measures

Recommendations:

- *Develop specific strategies and approaches for outreach, engagement, and collaboration with implementing agencies.*
- *Build on existing tracking and monitoring system to improve performance measures tracking.*
- *Establish a process to manage future legislative and administrative changes that affect Delta Plan recommendations and administrative performance measures.*

The Council uses the administrative performance measures dashboard as a tool to track and display progress of administrative actions recommended by the Delta Plan. The Council populates the dashboard primarily from data of implementing agencies, and other outreach efforts.

As part of the Five-Year Review process, and building on the existing information in the Administrative Performance Measures Dashboard, the Council reviewed the status of each administrative performance measure and Delta Plan recommendation and analyzed the progress made to date to implement each. Based on these assessments, the Council has identified 145 administrative actions called for in the Delta Plan. The status of these 145 administrative actions (as of June 2019) is described below and summarized in Figure 4-2.ⁱ



Figure 4-2. Administrative Performance Measures Status

- About 45 percent are complete, ongoing, or on schedule to be completed. For example, WQ R08-06 (The State Water Resources Control Board and Regional Water Quality Control Board's complete Total Maximum Daily Loads and Basin Plan amendments for methyl mercury) has been completed.

ⁱ The 145 administrative actions consist of the 118 administrative performance measures contained in the 2013 Delta Plan as adopted, and four additional measures adopted in 2016, as well as two new administrative measures adopted in 2018 and 21 new recommendations contained in the amendments to Chapters 3 and 7, adopted in 2018, that describe necessary administrative actions but that do not yet have associated performance measures.

- About 19 percent are behind schedule or show limited progress toward implementation. For example, WR R01-01 (Implement water efficiency and water management planning laws) shows limited progress towards implementation.
- Another 16 percent are new and need additional time to show progress. For example, WR R12k (Promote water operations monitoring data management and data transparency—see Delta Plan for additional detail).
- Around 18 percent are out of alignment with current regulations, state administration priorities, or have inconsistencies between amended Delta Plan recommendations and associated administrative performance measures that have not been amended. For example, a few of these are out of alignment because they have been superseded by recent legislation, such as the Sustainable Groundwater Management Act of 2014.

As demonstrated by the percentages above, efforts by the Council and other agencies to implement Delta Plan recommendations have been successful in part but remain incomplete; more can be done to improve and accelerate implementation of the recommendations.

Insights from surveys and outreach to DPIIC agencies indicate that implementing agencies, in some cases, are not fully aware of the Delta Plan recommendations that address them. In other cases, responsible agencies have not made implementing the Delta Plan recommendations a priority. Since the Delta Plan was adopted, the Council has focused its attention and resources on development and outreach related to covered actions, Delta Plan amendments, and other coordination activities. With many of these activities completed, the Council has increased capacity to emphasize the importance of Delta Plan recommendations.

It would be difficult for the Council to focus on all of the incomplete administrative actions at once, and not all administrative actions should be weighted equally when it comes to their role in furthering the coequal goals. In addition, implementation of Delta Plan recommendations requires action by partner agencies. It is important to note that the Council does not have authority to compel other state or local agencies to undertake activities to implement Delta Plan recommendations. The Council has found that cooperation and the sustained effort needed to implement Delta Plan recommendations is most effective when partner agencies are, in pursuit of their own priorities, working on Delta Plan-related efforts. It is therefore important for the Council to consider the timing of its focus and resources on activities that partner agencies are actively engaged in that relate to Delta Plan recommendations when prioritizing our efforts.

For example, DWR is updating its Urban and Agricultural Water Management Plan guidance in 2019–2020, providing an active process that directly relates to multiple Delta Plan recommendations, and would advance the state’s statutory policy of reducing California’s reliance on the Delta through improved regional self-reliance (Water Code section 85021). Thus, 2019–2020 provides an important opportunity to engage DWR on Delta Plan recommendations that are specifically related to Urban Water Management Planning, such as:

- WR R01-01: Identify the number of urban and agricultural water suppliers that certify they have adopted and are implementing supply planning, conservation, and efficiency measures required by state law by 2015, meeting the standards and deadlines established by code.
- WR R02-01: DWR adopts and implements a requirement for State Water Project contracts and transfer agreements that requires implementation of state water efficiency, water management laws, goals, and regulations, including compliance with Water Code section 85021.
- WR R04-01: Identify percentage of urban and agricultural water suppliers that receive water from the Delta watershed that have incorporated an expanded Water Supply Reliability Element into their urban water management plan and agricultural water management plan by December 31, 2015. This performance measure tracks the number of water suppliers statewide that have provided the information necessary for WR P1 compliance in their water management plans.

The Council has identified the following specific actions to improve Delta Plan recommendation and administrative performance measure implementation:

- In Council work plans, identify Delta Plan core strategies for focused action based on the activities being undertaken by partner agencies in the upcoming year, Council priorities, and other opportunities for increased emphasis and activity.
 - Develop topic-specific strategies and approaches for outreach, engagement, and collaboration.
 - Link DPIIC agenda items to priority recommendations and administrative performance measures.
 - Develop regular updates for DPIIC members regarding the administrative performance measures, where progress could be accelerated, and where increased coordination can promote implementation of Delta Plan recommendations.
- Build on the existing tracking and monitoring system used to maintain the Administrative Performance Measures Dashboard and to improve its utility.
 - Solicit regular progress updates on administrative performance measure progress from implementing agencies through established points of contact.
 - Distribute a structured electronic questionnaire, to allow for fast and convenient responses from administrative agencies.
 - Conduct in-person meetings with lead-agency points of contact to follow up on responses to questionnaires, where appropriate.

- Enhance reporting features of the Administrative Performance Measures Dashboard to display richer details and links to Delta Plan outputs and outcomes.
- Revise and update Delta Plan recommendations and administrative performance measures to ensure alignment with the Delta Plan.

Output and Outcome Performance Measures

Recommendations:

- *Monitor and track output/outcome performance measures to enable these measures to provide enough data to inform conclusions about the trajectory of Delta Plan performance.*
 - *Communicate with partner agencies and the public about priority Delta Plan recommendations and progress toward accomplishing them, to raise awareness.*
-

The output and outcome performance measures enable the Council to integrate science and monitoring results into policy and adaptive management decisions, and to evaluate progress towards achieving the coequal goals. These performance measures also provide an important tool for informing stakeholders about progress on Delta Plan implementation and conditions in the Delta. In April 2018, the Council adopted a revised set of output and outcome performance measures for the Delta Plan. Following the adoption, the Council launched a new web-based dashboard that enables tracking of progress towards the performance targets.

The dashboard provides interactive visualizations with graphs, maps, and tables, and aids in understanding and interpreting performance metrics. The dashboard is intended to provide access to updated performance data and to become a repository of related information—from scientific studies to on-the-ground efforts—and emerging management, executive, and legislative issues.

While the dashboard provides current information, measuring performance requires time to obtain the amount and quality of data needed to reach a scientifically sound understanding of trends and outcomes. As the Council gathers and assesses additional performance data, and as performance measure target dates approach, the dashboard and the Council's Annual Report will provide a view of status changes, trajectories, and emerging trends. Assessments of the output and outcome performance measures will support science-based actions in the Delta and contribute to Delta Plan updates and other Delta and estuary activities such as the San Francisco Bay Estuary Partnership's State of the Estuary Report.

In addition to monitoring and tracking, the Council is currently engaged in public outreach activities related to the output and outcome measures dashboard. Demonstrations and workshops with stakeholders and partner agencies provide information about the output and outcome performance measures as well as a space to solicit feedback on the presentation of information.

Because the output and outcome performance measures were recently updated, no additional changes to the measures are recommended at this time. However, the Council has identified the following specific actions to improve output and outcome performance measure implementation:

- Communicate output/outcome performance measure information and implications to stakeholders.
 - Continue outreach and education through working groups, conferences, direct interagency engagement, and public engagement.
 - Improve linkages between the output/outcome reporting tool and the administrative performance measures reporting tool to illustrate how these two types of performance measures reinforce each other and connect conditions on the ground to agency actions.
- Continuously improve the value of the reporting tool through timely content updates and connecting users to more resources.
 - Update the output/outcome performance measures reporting tool to include new performance measures introduced as a part of the proposed amendment to Delta Plan Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*, once adopted.

Staff Development and Technological Advancement

Recommendations:

- *Focus resources and efforts on the development of staff capacity, expertise, and IT infrastructure improvements.*
- *Deploy new analytical tools to support management and policy decisions, with specific focus on synthesis, visualization and communication, performance measures tracking, and covered action analyses.*

The Delta Reform Act directs the Council to create a Delta Plan that incorporates all of the following attributes (Water Code section 85308):

- “Be based on the best available scientific information.”
- “Include quantified or otherwise measurable targets associated with achieving the objectives.”
- “Where appropriate, utilize monitoring, data collection, and analysis of actions sufficient to determine progress toward meeting the quantified targets.”
- “Where appropriate, recommend integration of scientific and monitoring results into ongoing Delta water management.”
- “Include a science-based, transparent, and formal adaptive management strategy for ongoing ecosystem restoration and water management decisions.”

Analysis of past development and implementation of the Delta Plan indicates an increasing need for Council expertise in data-driven analyses and tools to connect critical information to decision makers.

The Council engages in many processes—such as developing new regulatory policies and Delta Plan amendments, analyzing performance measures, and coordinating scientific reviews—that improve and incorporate scientific information related to the agency’s mission. This effort involves building and maintaining technical capacity and knowledge across a broad range of topics including the Delta ecosystem, statewide water supply, regional culture and economics, and Delta hydrology and physical dynamics, as well as developing and deploying communications tools that convey technical information to stakeholders, decision makers, and the public. Understanding and using appropriate analytical tools and processes to connect best available science and data to decision support has been important in implementation of the Delta Plan.

Since the Delta Plan was adopted, the Council has conducted technical analyses and communicated complex information to the public and other agencies to inform policy and adaptive management decisions. This includes development of the Delta Plan itself, early consultation tools and resources for covered action consistency certifications, the Delta Science Plan, State of Bay-Delta Science publications, output/outcome performance measures dashboard (see Figure 4-3), the DLIS decision support tool, and more. These activities have led to developing some of the most important information used for Delta Plan development, implementation, and tracking. Additional resources will be required to continue to perform these types of analyses, and to develop and deploy the next generation of tools.

Example Application: Performance Measures Dashboard

Developing, tracking, and reporting on implementation of performance measures requires staff to access quantitative information from dozens of sources, understanding the nuances and quality of each data source, and then processing, analyzing, and creating high-quality graphics of those data so that they can be used for performance measure tracking and communication to the Council and stakeholders.

Slope of Outflow to Inflow Ratio

This graph shows the slope of 10-year rolling averages of the Delta outflow to inflow ratio by decade.

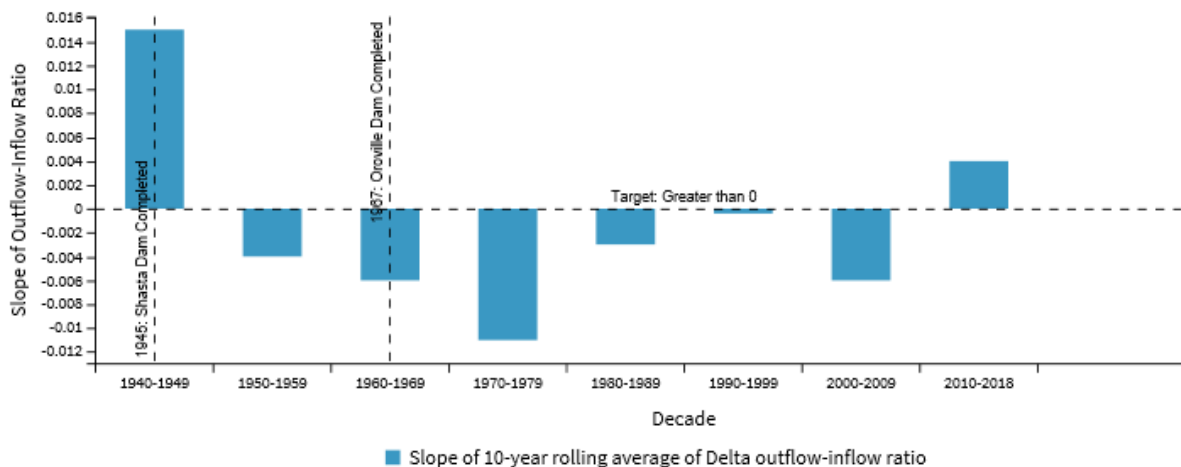


Figure 4-3. Example Performance Measures Dashboard Graph of Delta Outflow to Inflow Ratio

The need for data-driven decision-making is likely to accelerate in the future. This will require development of appropriate staff capacity to process, analyze, and communicate findings and recommendations to the Council. Ongoing efforts, including the proposed amendment to Delta Plan Chapter 4, Protect, Restore, and Enhance the Delta Ecosystem and the Climate Change Vulnerability Assessment and Adaptation Strategy, highlight the types of skills and tools that are needed now and will increasingly be needed in the future.

The Council identified the following priority actions to strengthen Delta Plan implementation through staff development and technological advancement:

- Develop an information technology infrastructure, hardware, and software update plan to meet technological development and deployment needs, and to plan for migration to cloud-based computing.
- Develop internal capacity to deploy analytical, visualization, and technical communication tools. Potential next steps include:
 - Targeted technical training to advance Council projects that include performance of statistical analyses, modeling, and data management; use of open platforms for collaborative project development and synthesis; use

of visualization and communication tools; and use of decision-support processes like structured decision-making.

- Extend the use of existing models to support forecasting of conditions or outcomes from management actions, and to provide decision-support tools. The Council already facilitates an Integrated Modeling Steering Committee, providing an existing platform for this activity.
- Increase collaboration with scientists at partner agencies to foster learning and development of resources and expertise in technical areas.
- Hire and retain staff with appropriate technical experience and knowledge of the Delta.
- Improve technical capacity that supports the Council and implementation of the Delta Plan, including data-driven policy analysis and development.
- Continue to invest in resources to support covered actions and to improve user experience, accessibility, and utility for project proponents.
 - Improve and support web-based certification and appeal portals.
 - Develop a web map of spatial Delta Plan regulatory policies.
 - Improve online tracking and reporting for covered actions.

Key Planning Topics and Emerging Issues

The Council continually evaluates key planning topics and emerging issues that are of importance to the state, policy makers, and Californians. The 2013 Delta Plan anticipated some of these issues, but not all of them. Therefore, the depth of treatment of policy responses in the current Plan may not be fully aligned with the current understanding of science, the societal importance of these issues, or both. Subsequent amendments to the Delta Plan need to create a balance between providing a long-term, stable framework while still anticipating key policy issues that may arise. The Council can also address best available science, state and federal policy and priorities, and economic drivers that may also direct shifts in the importance of each issue outside of the Delta Plan through synthesis, policy white papers, or other forums.

Based on analysis of the Delta Plan, stakeholder feedback, and recent scientific findings, four planning topics and emerging issues were identified as having a specific need for more information and analysis to inform potential future actions: (1) environmental justice and disadvantaged communities; (2) robust treatment of climate change risks to the Delta; (3) federal coordination and participation; and (4) various aspects of Delta as an evolving place. The Council has already begun to develop additional information related to each of these issues to support future policy decisions or implementation activities, but additional work is needed prior to deciding on an appropriate policy response.

Environmental Justice and Disadvantaged Communities

Improving environmental justice and conditions in disadvantaged communities are important priorities for the State of California. These issues relate to the Delta Plan in the Delta, in the Delta watershed, and throughout areas of the state that receive water from the Delta. Past legislation, executive actions, covered action appeals, and Delta Plan amendments have highlighted the importance of these issues and underscore the need for a deeper assessment of how the Delta Plan can support improvements in environmental justice and conditions for disadvantaged communities.

Background

Environmental justice refers to communities disproportionately impacted by the environmental impacts of planning and project decisions. Disadvantaged communities refer to communities with significant poverty or other adverse economic factors. These communities are also often (but not always) underserved by basic services associated with adequate standards of living, including access to reliable and clean water, safe and sanitary housing, food security, and transportation.

The Delta region is home to multiple disadvantaged communities and environmental justice is an area of concern for many activities in the Delta. In addition, water exported from the Delta is an important source of drinking and irrigation water for disadvantaged communities throughout the state. Since adoption of the Delta Plan in 2013, the state legislature has passed several environmental justice and disadvantaged community laws, and both the Brown and Newsom Administrations have identified these issues as key areas of concern.

The Delta Plan contains consideration of, and references to, environmental justice issues and disadvantaged communities. However, through the Five-Year Review process, the Council identified additional aspects worthy of further investigation.

Environmental Justice

Environmental justice in California law is defined as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Government Code section 65040.12(e)). The California Attorney General’s Office clarified that “fairness in this context means that the benefits of a healthy environment should be available to everyone, and the burdens of pollution should not be focused on sensitive populations or on communities that already are experiencing its adverse effects.”³

Chapter 3, *A More Reliable Water Supply for California*, of the Delta Plan recognizes California’s Human Right to Water statute (Water Code section 106.3) which declares that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes” and that relevant agencies need to take this into consideration “when revising, adopting, or establishing policies, regulations, and grant criteria.”

In 2015, California became the first state to mandate that all state agencies consider the effects of climate change in planning and investment decisions when Governor Jerry Brown issued Executive Order B-30-15. This order states that because “climate change will disproportionately affect the state’s most vulnerable citizens,” all “State agencies’ planning and investments shall...protect the state’s more vulnerable populations.”

Government Code section 65302 requires local governments to “identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities” in their general plans. County and city general plans must include “a safety element for the protection of the community from unreasonable risks associated with the effects of various geologic hazards, flooding, wildland and urban fires, and climate adaptation and resilience strategies.”

In response to these legislative measures, the State Water Resources Control Board and Regional Water Quality Control Boards have established an Environmental Justice Program to integrate environmental justice in the decisions, regulations, and policies of these agencies.

Within the Delta, and in areas reliant on water supplies exported from the Delta, low-income communities and communities of color experience a disproportionate burden of health problems. These inequitable impacts are often caused by decades-long, pervasive socioeconomic conditions that are perpetuated by systems of unbalanced resource distribution. Over time, several factors, including climate change, are expected to exacerbate these disproportionate impacts.

Disadvantaged Communities

Disadvantaged communities are (1) “areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation,” or (2) “areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment” (Health and Safety Code section 39711). These low-income areas typically have “an annual median household income that is less than 80 percent of the statewide annual median household income” (Water Code section 79505.5).

A variety of tools and methodologies can be used to characterize disadvantaged and vulnerable populations. Several such tools indicate that in-Delta communities and communities within the Delta watershed and/or areas that receive water from the Delta are disadvantaged in some aspect. As an example, Figures 4-4 and 4-5 use the California Communities Environmental Health Screening Tool (CalEnviroScreen), developed by the Office of Environmental Health Hazard Assessment, on behalf of the CalEPA, to display disadvantaged communities within the Delta (Figure 4-4), within the Delta watershed, and in areas outside of the Delta watershed that receive Delta water (Figure 4-5).

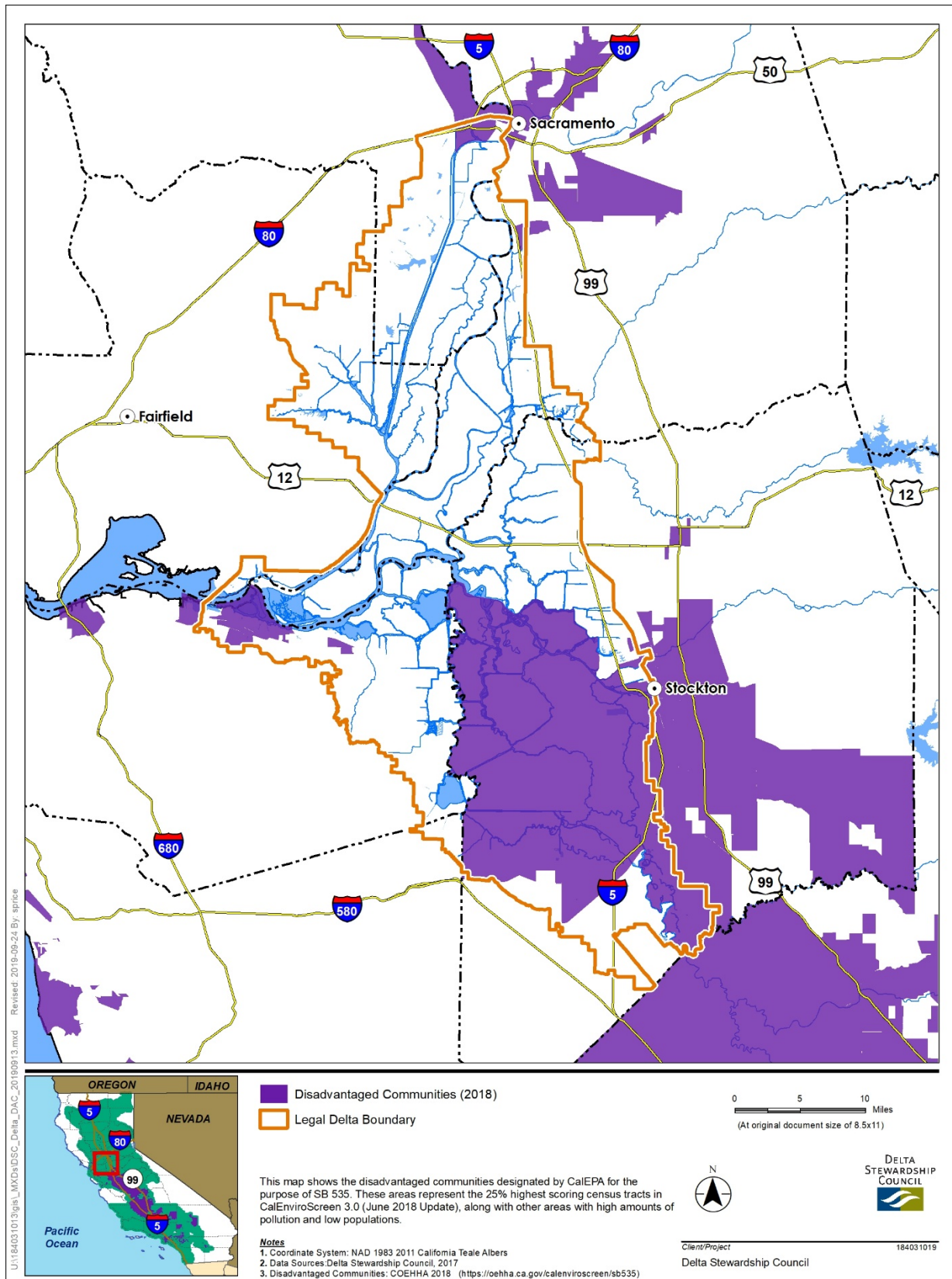


Figure 4-4. Disadvantaged Communities Within and Near the Delta

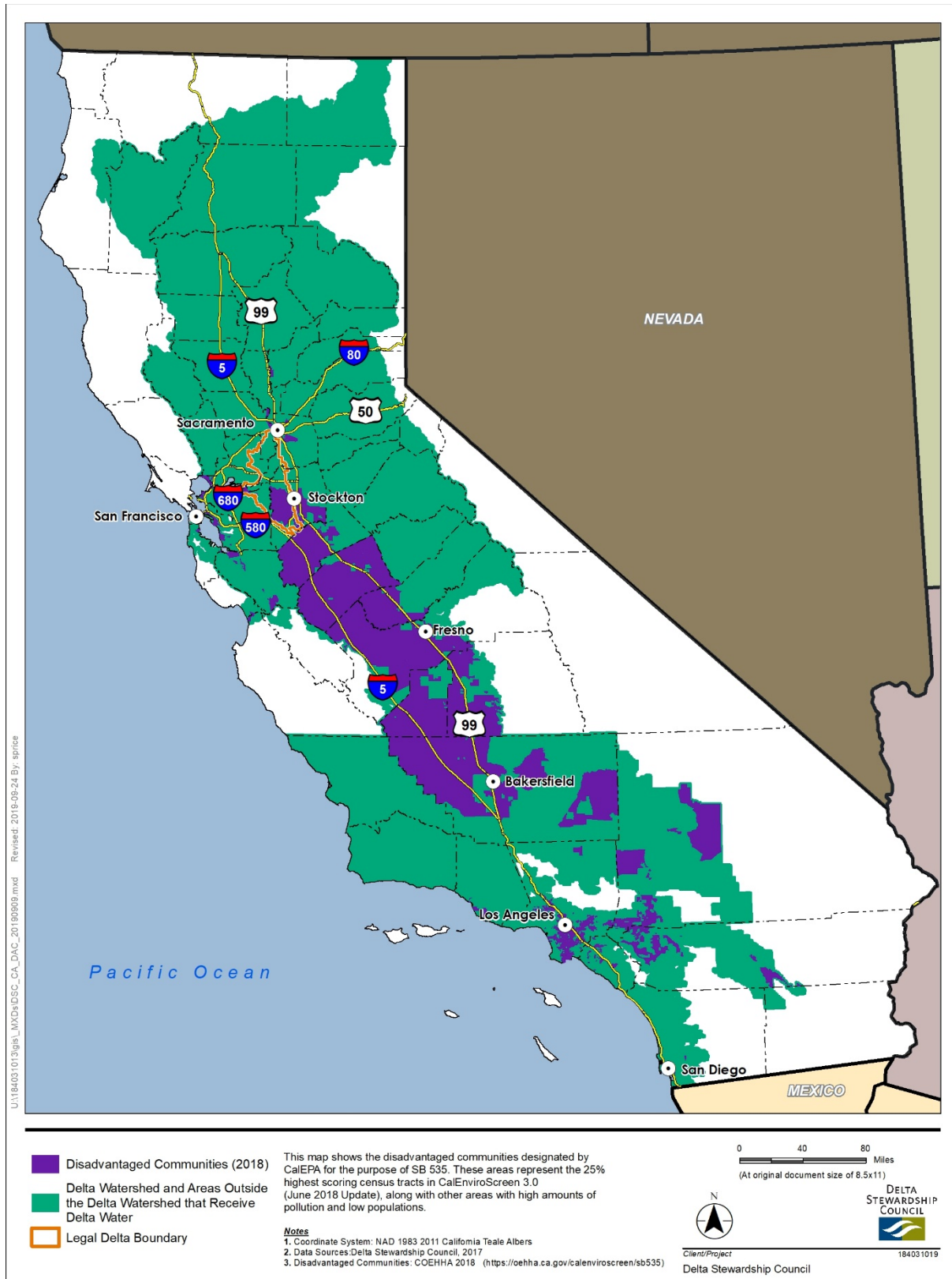


Figure 4-5. Disadvantaged Communities Within the Delta Watershed and Areas Outside the Delta that Receive Delta Water

Other tools provide assessments of other metrics of environmental and social vulnerability, and include:

- The *Climate Change and Health Vulnerability Indicators for California*, part of California Building Resilience Against Climate Effects (CalBRACE),⁴ a California Department of Public Health project, measures resilience from a health perspective.
- The *Urban Heat Island Index for California*⁵ (a CalEPA tool) focuses on vulnerability to extreme heat caused by urban development.
- The *Healthy Places Index (HPI)*⁶ and *Regional Opportunity Index (ROI)*⁷ both focus on the social half of environmental justice community identification.
- All of these tools identify populations and areas within the Delta that fall below statewide average conditions for each metric.

In addition to providing drinking water for communities throughout the state, Delta water exports provide an important source of water for agricultural communities in the San Joaquin Valley and central coast, and thus directly impact the economy, tax base, and employment opportunities throughout these areas.

As discussed above, there are many tools, metrics, and methodologies for identifying environmental and social disadvantage. A challenge for the Council in addressing environmental justice and involvement of disadvantaged communities, and in planning efforts in the Delta and in Delta Plan implementation, is identifying which tools and indicators of community vulnerability would be the most relevant to, or effective for, achieving the Council's goals.

While existing indicators can be used to produce high-level measures of the environmental vulnerability of underserved communities throughout California, continued data collection (and at smaller geographic scales) will allow these indicators to be used more effectively to better serve the needs of the Council in the future.

State Funding Initiatives Related to Environmental Justice and Disadvantaged Communities

The State has acknowledged the historical underinvestment in disadvantaged communities and explicitly directed funds to help meet the water supply and water quality needs of these areas. All recent water-related bond initiatives have included provisions to ensure that significant portions of grant funding be allocated to disadvantaged communities, economically distressed areas, or underrepresented communities. In addition, recent amendments to Health and Safety Code sections 39713 and 39715 allocate a set amount of the proceeds from the cap-and-trade program to projects that provide benefit to and/or are located in disadvantaged communities. The passage of these propositions highlights the emergence of environmental justice and engagement with disadvantaged communities as statewide public priorities.

Findings

Recognizing the importance of environmental justice and involvement of disadvantaged communities in planning efforts in the Delta and in Delta Plan implementation, the Council has taken steps to address these topics in the Delta Plan, and engagement with these communities has increased.

The 2018 Delta Plan Amendments include recommendations that, among other things, address improvements to conveyance, system storage, and the operations of both that can support sustainable water management throughout the state. This support benefits disadvantaged communities, and helps ensure the right to safe, clean, affordable, and accessible water for human consumption and domestic use. Specific recommendations in the Delta Plan that address the State’s human right to water policy, that are consistent with California Water Code section 106.3, include:

- **WR R12b.** Evaluate, Design, and Implement New or Improved Conveyance or Diversion Facilities in the Delta
- **WR R12f.** Implement New or Expanded Groundwater Storage
- **WR R12h.** Operate Delta Water Management
- **WR R12j(2)(e).** Operate New or Improved Conveyance and Diversion Facilities Outside of the Delta

Other chapters of the Delta Plan relate to environmental justice and disadvantaged communities’ issues and may warrant future expansion of scope and policy responses, including:

- Delta Plan Chapter 5, *Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an Evolving Place*, calls for “cooperat[ing] with local and regional planning agencies to provide timely advice about sustainable community strategies and other local and regional plans for consistency with the Delta Plan...Through this coordination, decisions about locating and planning new urban development in the Secondary Zone can be coordinated to meet local communities’ housing and other needs.” Delta Plan recommendation **DP R3** calls for local governments to “plan for the vitality and preservation of legacy communities,” **DP R5** encourages “adequate infrastructure to meet needs of development with...local plans,” and **DP R12** calls for recreation development to “minimize adverse impacts to nonrecreational landowners.” Aside from Delta Plan recommendation **DP R3** (which only accounts for 2 percent of the Delta’s total population), none of these recommendations include community welfare as a factor to be considered in assessing performance. There is also no specific mention of disadvantaged communities.
- Delta Plan Chapter 6, *Improve Water Quality to Protect Human Health and the Environment*, explicitly recognizes small and disadvantaged communities as an “additional area of...concern related to water quality” since “ensuring a safe drinking water supply can have a disproportionate cost” for these populations.

The water supply in these areas is often disproportionately impacted by nitrate and other groundwater pollutants. Delta Plan recommendations **WQ R1** through **WQ R3** are linked to in-Delta water quality but do not provide any specific protections to, or consideration of, vulnerable populations that may be disproportionately dependent on Delta water quality.

Stakeholders recently provided feedback suggesting that an issue related to environmental justice and disadvantaged communities is a lack of representation in the Council's decision-making process. While these local stakeholders are interested in Delta planning, they expressed frustration about the extent of formal representation of Delta communities within the Delta's statutory decision bodies. They find the composition of the Council and the DPIIC inadequate to address their concerns, and that elected officials outside of the Delta often overlook their concerns in favor of other interests. In addition, the broad spatial distribution of the Delta and its communities means that representatives may have differing concerns depending on their location within the region, making it difficult for an individual or group to fully represent the region's diverse concerns and needs. While the covered action appeals process affords stakeholders opportunities for engagement and disclosure, local landowners, tribes, and community members suggested more coordination between them and the Council on Delta Plan implementation efforts.

Other concerns voiced by stakeholders include the technical nature of the Delta Plan and the format of Council meetings. Those interviewed understand that some of the technical nature of the Plan is necessary and that certain jargon or technical language needs to be used. These community members also suggested that the traditional Council meeting formats and forums for interaction with Council at the meetings were not conducive to fully capturing concerns or understanding complex issues, and that the implications of Delta planning and policy decisions made by the Council were not fully understood by the public.

The Council is currently developing a public participation plan that will address how environmental justice and disadvantaged communities can be better integrated into Council's decision-making processes. By utilizing the indicators discussed above, the Council would be able to accurately identify disadvantaged communities for the participation plan—allowing for more effective engagement and feedback.

In order to investigate the potential need for additional strategies or responses within the Delta Plan to address disadvantaged communities and environmental justice, the Council recommends developing an issue paper that summarizes the best available science, including additional findings and guidance from the Social Science Task Force and Delta Climate Change Vulnerability Assessment and Adaptation Strategy. The issue paper would also identify future policy options for the Council to consider.

Robust Treatment of Climate Change Risks to the Delta

Since the Delta Plan was adopted in 2013, our understanding of climate change as one of the defining challenges of the twenty-first century has progressed. Critical changes to temperatures and precipitation are occurring in California and will continue to transform the Delta and its watershed. While the Delta Plan recognizes climate change as a global stressor, the effects to the Delta ecosystem are discussed generally and with limited focus on management strategies to address climate vulnerabilities.

Background

The consensus of a large body of scientific work clearly indicates that Earth's climate is changing and will continue to change at an increasingly rapid pace.⁸ Global warming—the observed and continuing increase in atmospheric and ocean temperatures—is expected to continue, although the exact rate of climatic change remains difficult to predict.⁹ These changes will affect water supplies and the Delta and Suisun Marsh ecosystem and, consequently, the Delta Reform Act's mandate to provide more reliable water supplies and protect, restore, and enhance these areas.

In the Delta and Suisun Marsh, global warming creates four primary stressors that will impact the watershed: increasing air temperatures, sea level rise, increased frequency of extreme weather events (e.g., floods, droughts), and changing precipitation and runoff patterns.¹⁰ The Delta will experience climate change effects both from gradual changes and from extreme events that are likely to become more frequent.¹¹

As the climate warms, increasing air temperatures cause thermal expansion of the oceans and melting of land-based glaciers, ultimately leading to accelerating rates of sea level rise.¹² In the Delta, sea level rise will raise water levels, which will have impacts on native Delta habitat, levee stability and vulnerability, water quality (e.g., increased salinity intrusion) and will increasingly stress the water supply system which requires the repulsion of sea water to maintain fresh water diversions from the Delta. Future sea level rise and extreme weather events will also increase the frequency of very high-water events in the Delta, making levees more vulnerable to overtopping and other failures.¹³

Delta hydrology—the movement, distribution, and quality of water as it circulates through the environment—will change partly due to more precipitation falling as rain and snow melting earlier in the season. These changes will alter the flow regime of the Delta watershed and consequently inflows to the Delta. Dry season flows are expected to become harder to maintain, and summer and fall salinity levels in the Delta are expected to increase. This altered flow regime (in addition to sea level rise, storm surge, and tidal fluctuations) will cause variations in water levels that will have impacts on Delta levees, water supply operations, water quality, and habitat throughout the Delta.¹⁴

Climate change is expected to affect water quality and water supply in the Delta and Suisun Marsh primarily by increasing salinity intrusion, decreasing freshwater inflows at critical times of the year, and increasing water temperatures, making it harder to restore a healthy Delta ecosystem, and exacerbating existing challenges. An increase in salinity will impact the range distributions of native species while also posing problems for

agricultural and municipal and industrial water users.¹⁵ Changing hydrological patterns may increase the prevalence of some pollutants (e.g., disinfection byproducts) and increase water temperature conditions in the Delta, leading to increased harmful algal blooms and/or resulting in water supply/treatment problems.¹⁶ Altered precipitation and runoff patterns are likely to limit the degree to which reservoir management can be used to improve these conditions and mitigate their impacts.

Human-caused changes to the Delta, such as leveeing river channels, farming practices that have led to subsidence, and reduced flows have reduced the resiliency of the Delta, making the system more vulnerable to stressors. These human activities have impaired the condition of the Delta ecosystems by reducing habitat extent, introducing new stressors (e.g., nonnative species, toxins) and limiting how the landscape and ecosystems can behave in response to future variability. Disconnected energy flows across elevational, latitudinal, and horizontal gradients, and the reduction or removal of ecological interfaces will continue to impact how the Delta responds to climate change in the future.

Findings

The Delta Reform Act defines “restoration” of the ecosystem and includes consideration of “the future impact of climate change and sea level rise” (Water Code section 85066) and identifies a restoration timeline horizon of the year 2100 for “large areas of interconnected habitats within the Delta and its watershed” (Water Code section 85302(e)(1)). More generally, executive Order B-30-15 (2015) requires state agencies to consider the “future impacts of climate change and sea level rise” and to incorporate these considerations into planning and investment decisions.

Recent stakeholder engagement has further illustrated a rising concern for climate change and its projected impacts on economic, social, and environmental resources in the Delta. Specifically, sea level rise, weather extremes, and native habitat and species decline were issues raised throughout the engagement process for this review.

The Delta Plan acknowledges the need to consider the changing climate conditions and sea level rise, but additional steps should be taken to safeguard achievement of the coequal goals for the Delta in the context of a changing climate. The following Delta Plan recommendations include those adopted by the Council in 2013 and additional recommendations adopted by the Council in 2019 to improve conveyance, system storage, and the operations of both, and to support actions to address an uncertain climate future:

- **WR R4.** Expanded Water Supply Reliability Element
- **WR R12b(1)(c).** Evaluate, Design, and Implement New or Improved Conveyance or Diversion Facilities in the Delta
- **WR R12b(2)(a).** Evaluate, Design, and Implement New or Improved Conveyance or Diversion Facilities in the Delta
- **WR R12d(1)(b).** Promote Options for New or Expanded Water Storage

- **WR R12d(2).** Promote Options for New or Expanded Water Storage
- **WR R12e(1)(a).** Design, Construct, and Implement New or Expanded Surface Water Storage
- **DP R6.** Plan for State Highways
- **All Risk Reduction recommendations.** As climate change increases flooding risks in the Delta, implementation of all risk-reduction recommendations will become more important for protecting people, property and state interests in the Delta.

Furthermore, efforts are underway to better integrate climate change science into Delta Plan Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*. Council staff authored three recent science synthesis papers on climate change, Delta ecosystem stressors, and Delta ecosystem management and restoration to support the Council's efforts to amend this chapter. The Council has noted that while it is difficult to quantify long-term ecosystem changes in response to climate change, planning efforts should attempt to highlight how climate change may exacerbate current stressors or create new vulnerabilities to ecosystem restoration.¹⁷ The Delta Plan policies and recommendations in Chapter 4, *Protect, Restore, and Enhance the Delta Ecosystem*, are being reviewed and proposed revisions will focus on achieving successful restoration under predicted future conditions, consistent with updated state climate change guidance.

The Council has also initiated a three-year effort to complete a climate change vulnerability assessment and adaptation strategy for the Delta and Suisun Marsh, working closely with other state, federal, and local agencies. This work will help identify and characterize vulnerable assets and services in the Delta; sensitivity, exposure, and adaptive capacity of human, animal, and plant populations; and gaps and linkages in local and regional climate change planning efforts. The Council has assembled a technical advisory committee and will be soliciting stakeholder feedback to assess the climate change vulnerability assessment, adaptation strategies, and resiliency goals. This work will provide additional downscaled climate science information and adaptation strategies specific to the Delta to support state and local planning. Following completion of this assessment, the Council will evaluate the potential for amendments to the Delta Plan to better address climate change risks to the Delta.

Federal Coordination and Participation

The Delta Reform Act states that “The council shall develop and implement a strategy to appropriately engage participation of the federal agencies with responsibilities in the Delta.” The Delta Plan followed this direction by laying out a coordinated state, federal, and local approach to Delta management. This coordinated approach notwithstanding, the covered action process delegated to the Council by the Delta Reform Act only covers state and local activities. While the Council has had several successful partnerships and productive activities with federal agencies, there remains potential for additional and improved coordination and participation with federal agencies for Delta Plan implementation.

Background

Affirming federal participation in management activities in the Delta, the coequal goals for the Delta were included in the federal Energy and Water Development Appropriations Act of 2012 (Title II of the Consolidated Appropriations Act of 2012 PL 112-074):

The Federal policy for addressing California’s water supply and environmental issues related to the Bay-Delta shall be consistent with State law, including the coequal goals of providing a more reliable water supply for the State of California and protecting, restoring, and enhancing the Delta ecosystem... Nothing herein modifies existing requirements of Federal law. (Section 205)

Many initiatives, programs, and plans developed and implemented over the past 50 years address federal-state collaboration and cooperation on activities related to water management and improved habitat conditions within the Delta. Some recent examples include the California Bay-Delta Program (CALFED), established in 1995; and the *Interim Federal Action Plan for the California Bay-Delta*, developed in 2009 by the DOI, U.S. Department of Commerce, U.S. Department of Agriculture, U.S. Department of the Army, U.S. Environmental Protection Agency (USEPA), and the Council on Environmental Quality. The Interim Action Plan states that its “most important aspect... is the Federal Government’s reaffirmation of its partnership with the State of California and local authorities” (2009).

A 2018 report by the Government Accountability Office, *San Francisco Bay-Delta Watershed: Wide Range of Restoration Efforts Need Updated Federal Reporting and Coordination Roles*, examined, among other things, the extent to which federal and nonfederal entities coordinate watershed restoration efforts. The report concluded that “[t]he complex nature of the restoration efforts in the San Francisco Bay-Delta watershed demands a high level of coordination across many entities and competing interests. The results of federal and nonfederal entities working together can be seen in parts of the watershed, such as the Bay... In other parts of the watershed, particularly the Delta, coordination has wavered.”

Sections below provide background on current federal agency coordination and collaboration on Delta Plan implementation activities and describe potential increased federal coordination and participation opportunities.

Delta Plan Interagency Implementation Committee

As previously discussed, the Council established DPIIC shortly after adoption of the Delta Plan in 2013. The federal agencies on DPIIC are: NOAA Fisheries; USACE; USEPA; and the DOI and DOI agencies, Reclamation, USFWS, and USGS.

Federal agency DPIIC members have previously requested that DPIIC meetings provide a clearer message as to what the state agencies need from the federal government. There are several other similar state-federal partnerships across the country where representatives serve on task forces together. Studying the successes of these other partnerships could provide a model for how to get the most out of federal engagement in the Delta, particularly on funding that affects Delta projects.

Federal Engagement, Partnerships, and Programs

The Council actively engages with federal agencies on implementation of program, projects, and plans that benefit the Delta and the Council's activities to further achieve the coequal goals. Council staff engage with federal agencies through numerous working groups, technical advisory committees, and forums that assist with science support and adaptive management of federal projects. Staff also engage with federal agencies through the early consultation process on infrastructure and restoration projects and programs where there are joint state-federal project proponents (e.g., Coordinated Long-Term Operation of the Central Valley Project and State Water Project and Related Facilities, Yolo Bypass Salmonid Habitat Restoration and Fish Passage, California WaterFix, and Los Vaqueros Reservoir Expansion Project).

The Council's activities are supported and implemented through several key partnerships with federal agencies, including, but not limited to the following:

- **National Estuary Program and San Francisco Estuary Partnership:** The National Estuary Program, administered by the USEPA, plays an important role in the management of natural resources nationwide. The Council has been an active participant in development and implementation of the management plan for the San Francisco-Bay Delta National Estuary Program since 2013. The San Francisco Estuary Partnership develops and maintains the Estuary Blueprint Comprehensive Conservation and Management Plan (CCMP) and convenes an implementation committee that includes many of the same members as DPIIC. Over the past several years, the Council has been emphasizing and strengthening our Bay-Delta connections through more engagement in the CCMP Implementation Committee meetings. The Estuary Blueprint lays out an action plan to manage the estuary, and many Council priorities are included in the plan. In addition, the Council is copublishing a State of the Estuary report in Fall 2019 that includes Delta Plan performance measures, and the Council is a major partner in the biennial State of the Estuary conference. This collaboration is an important part of the federal engagement process for the Council.
- **Memorandum of Understanding with USGS for Delta Lead Scientist**
Position: The USGS and the Council have a long partnership history to support the Council's role as an honest broker of science in the Delta. Pre-dating the Council, the USGS sponsored the Delta Lead Scientist position under CALFED,

and the CALFED science program. The Council has a memorandum of understanding with USGS that outlines the roles and responsibilities of each agency, and defines the roles that the Delta Lead Scientist plays in supporting the mission of the Delta Science Program and in supporting adaptive management of the Delta Plan. This role, and the independence maintained by the partnership, are critical to implementing the Delta Plan, and to providing independent oversight and science advice to the Council.

- **Engagement with Reclamation:** The Council has been working closely with Reclamation to support their need for credible, legitimate, and relevant science to support decision-making. There are several venues for this work: through reimbursable contracts to support peer review and independent review of aspects of the Long-Term Operations of the Central Valley Project; through directed studies, like the recent Structured Decision Making pilot study, supporting adaptive management; and through the recent competitive solicitation that included \$2 million in federal funding for critical science investigations. The partnership and close coordination with Reclamation provides opportunities for adaptive management of the Delta Plan recommendations, as well as important forums for discussion of science needed to support decision-making.
- **Opportunities for Engagement:** Council staff work closely with federal agencies to understand how their work could assist with implementation of future Delta Plan activities. For example, the USACE conducted a Delta Islands and Levees Feasibility Study in 2014. The study evaluated federal interest, under multiple authorities, in flood risk management and ecosystem restoration within the Delta. A fundamental assumption of the study was that the conservation measures identified by the BDCP would be implemented, and therefore did not require evaluation or consideration. The decision by California not to pursue the BDCP leaves an opportunity to re-engage with the USACE to more comprehensively study the problems and opportunities with respect to ecosystem restoration and to re-evaluate federal interest in these activities. In 2018, USACE and nonfederal partner DWR authorized implementation of the study recommendations, and they began work on several projects that benefit economic development and restoration in the Delta.

Coastal Zone Management Act

The current regulatory provisions of the Delta Plan, including the consistency review and appeals process, apply to covered actions of state and local agencies. However, as stated above, the Delta Reform Act requires the Council to develop and implement a strategy to appropriately engage participation of the federal agencies with responsibilities in the Delta (Water Code section 85082). The Delta Reform Act further states that if the Council adopts a Delta Plan pursuant to the federal Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. Sec. 1451 et seq.), the Council shall submit the Delta Plan for approval to the United States Secretary of Commerce pursuant to that act, or to any other federal official that is assigned responsibility for the Delta pursuant to a federal statute enacted after January 1, 2010 (Water Code section 85300).

The CZMA, administered by NOAA’s Coastal Programs Division, is responsible for advancing national coastal management objectives and maintaining and strengthening state and territorial coastal management capabilities. The goal of the CZMA is to address national coastal issues and to “preserve, protect, develop, and where possible, to restore or enhance the resources of the nation’s coastal zone.”¹⁸ The National Coastal Zone Management Program encourages eligible states to implement management plans that will balance the competing demands of coastal resource use, economic development, and conservation.

Section 307 of the CZMA (16 U.S.C section 1456), called the “federal consistency” provision, gives states a voice in federal agency decision-making activities that may impact a state’s coastal uses or resources. The federal consistency provision allows state agencies to manage coastal activities and resources and to facilitate coordination with federal agencies.

The federal consistency provision requires that “[e]ach Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs”—although the opportunity for presidential exemption exists (section 307(1)(A) and 307(1)(B)). It states that “[e]ach Federal agency carrying out an activity subject to ((1)(A)) shall provide a consistency determination to the relevant State agency...at the earliest practicable time, but in no case later than 90 days before final approval of the Federal activity unless both the Federal agency and the State agency agree to a different schedule” (section 307(1)(C)).

Pursuant to section 307, a federal agency will provide a state with a consistency determination for any activity affecting coastal uses or resources, and a lead state agency—typically the same agency implementing the management program—will perform a federal consistency review. Under this authority, if the Delta Plan were approved as a federal coastal management program under the CZMA, the Council would be authorized to review activities of federal agencies affecting the Delta, including activities directly conducted by federal agencies and activities permitted or licensed by these agencies, for consistency with the Delta Plan.

In 1978, California joined the Coastal Zone Management Program. California’s Coastal Zone Management Program is administered by three state agencies:

- The [California Coastal Commission](#) manages development along the California coast, except in San Francisco Bay, where the
- [San Francisco Bay Conservation and Development Commission](#) (BCDC) oversees development.
- The [California Coastal Conservancy](#) purchases, protects, restores, and enhances coastal resources, and provides access to the shore.

Within the area addressed by the Delta Plan, the Suisun Marsh is within the California Coastal Zone and is within the jurisdiction of the BCDC—the federally designated state coastal management agency for the San Francisco Bay segment of the California

Coastal Zone. The federal CZMA empowers BCDC to ensure that federal projects and activities are consistent with BCDC's regulations and policies. The Suisun Marsh Protection Plan (Marsh Plan), administered by BCDC, protects a primary management area comprised of tidal marsh, managed wetlands, adjacent grasslands, and waterways; while the Local Protection Program (LPP) protects a secondary management area comprised of significant upland buffer lands. BCDC is currently initiating an update to the Marsh Plan, and recently approved Solano County's update to its LPP.

Since adoption of the Delta Plan, the Council has met with federal agency representatives, BCDC, and the California Coastal Commission to discuss the possibility of expanding California's Coastal Zone Management Program to the Delta by submitting the Delta Plan to the Secretary of Commerce for approval under the CZMA. This complex effort warrants further investigation and analysis.

Findings

While the Delta Plan calls for a coordinated state, federal, and local approach to management of the Delta, the covered action process only covers state and local activities. As described above, the Council has worked successfully with federal government agencies on a number of important issues. The Delta Plan currently addresses federal coordination and participation through many recommendations, including the following:

- **WR R12a.** Promote Options for New and Improved Infrastructure Related to Water Conveyance
- **WR R12b.** Evaluate, Design, and Implement New or Improved Conveyance or Diversion Facilities in the Delta
- **WR R12c.** Improve or Modify Through-Delta Conveyance
- **WR R12d.** Promote Options for New or Expanded Water Storage
- **WR R12e.** Design, Construct, and Implement New or Expanded Surface Water Storage
- **WR R12g.** Promote Options for Operations of Storage and Conveyance Facilities
- **WR R12h.** Operate Delta Water Management Facilities Using Adaptive Management Principles
- **WR R12j.** Operate New or Improved Conveyance and Diversion Facilities Outside of the Delta
- **ER R4.** Exempt Delta Levees from the USACE's Vegetation Policy
- **RR R1.** Implement Emergency Preparedness and Response
- **RR P4.** Floodplain Protection
- **RR R10.** Continue Delta Dredging Studies
- **RR R12.** Renew Federal Assistance for Post-Disaster Response

Although these Delta Plan recommendations, and their associated administrative performance measures, provide mechanisms for federal agency coordination and participation, there are still additional opportunities to improve collaboration for Delta Plan implementation.

One mechanism identified is through more directed engagement of DPIIC on ecosystem restoration issues. Based on recent interviews with DPIIC agency representatives, the addition of working meetings driven by action items and outcomes could focus DPIIC attention on actions related to Delta Plan implementation, including those activities led by federal agencies. DPIIC also provides an existing forum in which state and federal agencies are identifying barriers to Delta Plan project implementation. Restoration projects provide a specific area of potential cooperation to improve Delta Plan implementation. Known barriers to implementing ecosystem restoration projects include restrictions on the amount and use of restoration funding, complex and time-intensive permitting requirements, and a lack of authority and funding to support long-term ownership and management of restoration projects. Addressing these challenges requires institutional commitment to a single, consolidated restoration forum with agency support and discretion to align strategies. The existing charter and federal engagement of DPIIC provides a framework for this type of forum, focused on implementing restoration projects.

Also, the extent and complexity of some of the programs, projects, and plans led by federal agencies that relate to Delta Plan implementation requires continued Council staff coordination with federal agency staff. The continued staff-to-staff coordination will be important for building relationships between the Council and federal agencies, and for fostering a better understanding of, and voluntary alignment with, the Delta Plan by federal agencies. Strategic partnerships amongst agencies, including continued investment in fostering these relationships on an ongoing basis, will be important to help accelerate progress toward protecting, restoring, and enhancing the Delta ecosystem.

In order to investigate fully the potential strategies for engaging federal agencies, the Council recommends developing an issue paper that outlines opportunities to improve federal participation. This will include documenting the steps necessary to submit the Delta Plan to the Secretary of Commerce for inclusion in California's Coastal Zone Management Program under the CZMA, greater use of DPIIC, staff-to-staff engagement, and other potential strategies. The Council would explore trade-offs and synergies between these strategies for improving federal participation in Delta Plan implementation.

Delta as an Evolving Place

The Delta Plan treatment of the Delta as an evolving place puts considerable focus on the current character of the Delta and may require the consideration of additional strategies to increase the Delta’s resilience to the forces of change facing it. Since the Plan’s adoption in 2013, the Council and stakeholders have suggested that this concept be better integrated throughout the Plan.

Background

The Delta Reform Act tasked the Council with furthering the coequal goals (providing a more reliable water supply for California, and protecting, restoring, and enhancing the Delta ecosystem) “in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.”

As an evolving place, the Delta will need to adapt to changing social, economic, and environmental conditions in an uncertain future—whether due to climate change (e.g., sea level rise, extreme weather events), growing populations, or shifting commodity markets. While change is inevitable, some of these changes can be accommodated through policies and recommendations that help preserve and enhance the unique characteristics and values that distinguish the Delta from other places.

Delta Plan Chapter 5, *Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an Evolving Place*, describes a future:

...where the Delta’s unique qualities are recognized and honored. Agriculture will continue to thrive on the Delta’s rural lands; and its cities, ports, and rural villages will be desirable places to live, work, and do business. Visitors to the region will enjoy recreation on and in its waterways, marshes, resorts, parks, and historic legacy communities. The Delta’s land uses and development will be resilient, protecting the rural character of the area, reducing risks to people and property, adjusting to changing conditions, and promoting the ability to recover readily from distress. The Delta’s economic vitality will provide resources to respond to change and to support the families and businesses that make the Delta home. The vision of the Delta as an evolving place also acknowledges the role of Delta residents in shaping the future of the region through active and effective participation in Delta planning and management.

To further this vision, in 2017, the Delta Protection Commission spearheaded the Delta as Place Interagency Working Group to facilitate implementation of policies and recommendations identified in the Delta Plan and to advance Delta values. The Council participates in this working group, which focuses on “coordinating activities in agricultural sustainability, culture, economic development, energy and transportation infrastructure, recreation, and subsidence reversal/carbon markets across federal, state, and local agencies.”

Findings

The Council and stakeholders identified several emerging issues related to the Delta as an evolving place. The Delta Plan adopted the language of the 2008 Delta Vision Blue Ribbon Task Force which stated that “protecting the Delta as an evolving place means accepting that change will not stop, but that the fundamental characteristics and values that contribute to the Delta’s special qualities that distinguish it from other places can be preserved and enhanced while accommodating these changes”. Despite this, some stakeholders believe that the concept of the Delta as an evolving place is still being defined or that it isn’t clear how to operationalize the concept. These stakeholders feel that this lack of clarity leads to difficulties in understanding or developing a common vision of what Delta as an evolving place means.

Representation from in-Delta communities is a common concern for many residents who feel that a lack of orientation to Delta as Place by decision-makers and nonresidents could be a future barrier to the Plan’s success. Stakeholders suggested that open communication and meaningful inclusion during the planning process (as opposed to during litigation), as well as clearly defined expectations and factors for success, could lead to more consistent progress.

The Delta Plan includes a core strategy to “maintain Delta agriculture,” while recognizing that some current agricultural lands may unavoidably be lost to achieve the coequal goals and to accommodate climate change. Regulatory policies DP P1 and DP P2 emphasize protecting the Delta from urbanization and reducing conflict with existing uses. Notwithstanding the Delta Plan’s focus, some current and past agricultural practices in the Delta have contributed to land subsidence, aquatic habitat loss, and water quality degradation. As the climate continues to change, sea level rise and levee vulnerability will further increase risks to Delta communities and residents. Moving towards a strategy that favors improving Delta agriculture and evolving Delta land uses to be more sustainable may be more aligned with the intended long-term protections envisioned by the Delta Blue Ribbon Task Force in defining the concept of Delta as an evolving place. Future guidance, incentives, or other programs could support alternative land-use practices that would produce a more resilient system that better preserves the Delta’s unique characteristics. An example could be Delta Plan recommendations or policy changes that favor agricultural practices and land uses that contribute to subsidence reversal.

Cultural resources, tribal values, and ecocultural values are part of what makes the Delta a unique and evolving place. Currently, the Delta Plan focuses primarily on the agriculture and economic side of Delta as Place, consequently missing some of the important and unique ecosystem services and values. Additional research and analysis could inventory and document these distinct cultural issues (i.e., cultural, tribal, ecocultural) and incorporate emerging social science work to help guide more targeted policies and recommendations related to Delta as Place.

While the Delta Plan dedicates Chapter 5, *Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an Evolving Place*, to Delta as Place considerations, the Delta Protection Commission has

recommended to the Council “...that any revisions to the Delta Plan must include within each chapter specific recommendations and policies to achieve the protection and enhancement of the Delta’s unique cultural, recreational, natural resource and agricultural values as an evolving place.” Recent updates to Delta Plan Chapters 3, 4 (ongoing), and 7 are responsive to this recommendation.

Another area highlighted by Council members, stakeholders, and the Delta Independent Science Board, is the need to incorporate more social science into research, studies, and planning being conducted within the Delta. Social science was identified as one of the priority areas in the Delta Science Program’s Science Action Agenda. In January 2019, the Council convened a Social Science Task Force that will recommend strategies for agencies to improve the use of social science for communication and decision-making in the Delta, including how it relates to Delta as Place. The Delta Social Science Task Force cohosted a workshop during July 2019 to highlight how social science research can address Delta management needs and to explore the integration of social and natural sciences in other systems.

In March 2019, the President signed into law the Delta National Heritage Area (NHA). Congress designates NHAs as places where natural, cultural, and historic resources combine to form a cohesive, nationally important landscape. NHAs are lived-in landscapes. Consequently, NHA entities collaborate with communities to determine how to make heritage relevant to local interests and needs. The designation of the Delta NHA and the development of the management plan for the Delta NHA present an important opportunity for the Council to work with the Delta Protection Commission, Delta communities, and others to further develop and refine a shared understanding of Delta as an evolving place issues.

To continue addressing these concerns, the Council recommends the preparation of an issue paper summarizing the best available science and identifying policy options related to “Delta as an Evolving Place.” This issue paper should include new findings from ongoing efforts, including the Climate Change Vulnerability Assessment and Adaptation Strategy, Social Science Task Force, and the public participation plan. In addition, the Council will continue to engage the Delta Protection Advisory Committee and Delta Protection Commission and will focus specific efforts on engagement with Delta representatives when conducting future Delta Plan amendments.

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Endnotes

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DELTA STEWARDSHIP COUNCIL

A California State Agency

Five-Year Review of the Delta Plan

Appendix A Stakeholder Assessment Summary

May 2019

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Attachments

- Attachment 1. List of Interview Participants
- Attachment 2. Interview Background Information
- Attachment 3. Interview Questions
- Attachment 4. List of Delta Plan Advisory Committee Questions
- Attachment 5. Delta Plan Advisory Committee Workshop Notes
- Attachment 6. Session Notes for the Delta Counties Coalition
- Attachment 7. Written comments of the San Joaquin Council of Governments

Abbreviations and Acronyms

ACWA	Association of California Water Agencies
Bay-Delta	San Francisco Bay–Sacramento-San Joaquin Delta
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
Coalition	Delta Counties Coalition
Council	Delta Stewardship Council
CVFPP	Central Valley Flood Protection Plan
DAC	Disadvantaged Communities
Delta	Sacramento-San Joaquin Delta
DPAC	Delta Protection Advisory Committee
DPC	Delta Protection Commission
DPIIC	Delta Plan Interagency Implementation Committee
DWR	California Department of Water Resources
SGMA	Sustainable Groundwater Management Act
State	State of California
USACE	U.S. Army Corps of Engineers

Stakeholder Assessment Background

As a component of the Five-Year Review of the Delta Plan, the Delta Stewardship Council (Council) conducted an external evaluation of the Delta Plan and Delta Plan implementation efforts. In order to obtain a broad range of input, Council staff enlisted a third-party collaborative specialist (consultant) to conduct outreach with the Council's stakeholders.

Outreach consisted of interviews and focus groups, a public meeting workshop and a broadly distributed survey that anyone with an interest in the Five-Year Review of the Delta Plan review process was invited to complete. Except for the public meeting and a session with public officials, all participants that provided feedback were offered some level of anonymity, should they choose it, to encourage the greatest degree of candor.

Outreach was conducted December 31, 2018 through February 13, 2019. This timeframe is significant as participants were aware of recent Council actions as well as the potential changes in water resources priorities due to election of a new State of California (State) Governor.

Collectively, participants expressed appreciation for the opportunity to provide input. The following recap summarizes the information gathered during the outreach process and more about the outreach methodology. While much of the feedback exceeded the general scope of the Five-Year Review of the Delta Plan, all feedback received is summarized in this report and is helpful for review of the Delta Plan and Delta Plan implementation efforts.

Outreach Interviews and Focus Groups

Thirty-one individual and focus group interviews considered 17 questions and ranged in duration from 30 minutes to 1.5 hours. Participants were selected for interviews based on their known interest and knowledge related to the Council, the Delta Plan and/or some aspect of Delta Plan implementation. A full list of participants is provided in Attachment 1.

Invitations for interviews were coordinated by Council staff and the Council's consulting team. Background information, including a description of the Five-Year Review of the Delta Plan process, were provided at the time the appointments were confirmed (Attachment 2).

Participants were advised that interview responses would be compiled for reporting in the aggregate and named quotes would only be used with permission. The Council's consultant also explained that the compilation of responses would outline general trends, areas of convergence and divergence, and surface challenges and opportunities useful for incorporation into the Five-Year Review of the Delta Plan. The purpose of

aggregation was to provide a greater opportunity for candor, particularly as many of those interviewed anticipate future interaction with the Council.

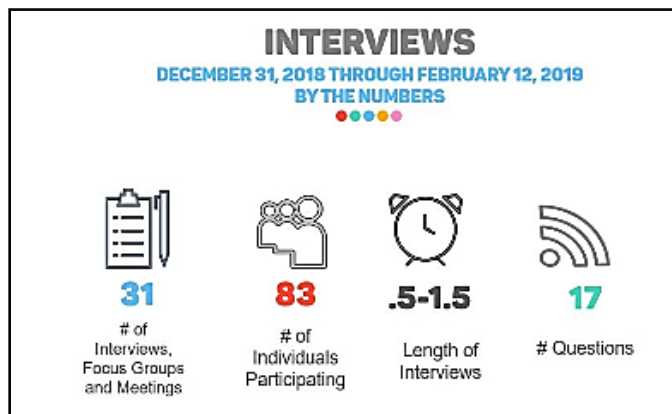


Figure 1. Interview Statistics

Interview Topics

Interview appointment reminder notes were accompanied by an advance copy of the interview questions (Attachment 3). Questions gathered information on expectations of the review process, how the Delta Plan is used, assessment of the success of the Delta Plan related to advancing the coequal goals in the context of Sacramento-San Joaquin Delta (Delta) as a place, the convergence of Delta Plan direction with the direction of the respondent's organizations, barriers to success, the Council's roles and authorities, including the certification of consistency process for covered actions, performance measures, and suggestions for improvement. Two questions focused on use of best available science and adaptive management in advancing the coequal goals and still another question asked about the role of the Delta Plan Interagency Implementation Committee (DPIIC). A final question invited any additional comments or suggestions.

Participants

Thirty-one interviews with 82 individuals were conducted December 31, 2018 through February 12, 2019. Interviews were conducted with individuals as well as small focus groups. Participants represented a wide range of interests including:

- Science community
- Former Council staff and members
- Sister State agencies
- Federal agencies
- Local agencies
- Special districts
- Delta counties representatives
- Water and water treatment agencies
- Environmental community
- Flood management organizations
- Tribes
- Former legislators
- Legislative staff
- Environmental justice and disadvantaged community advocates
- Regulated community
- Public policy experts

Interviewees were generous with their time and many prepared in advance. As might be expected, question responses were generally consistent with the interests of the sectors. As an example, the science community provided more detail on the use of science, representatives of Delta constituents expressed concern about representation in the decision process, and others focused on the most significant features of the plan as it relates to their own work. Many participants, across all sectors, noted that the leadership of the Council Chair had been significant and should be appreciated and congratulated.

Surveys

While the interview process gathered information from representative stakeholders, the Council also wanted to gather information from other interested stakeholders. A survey covering topics similar to the interview questions was distributed to well over 5,000 potential respondents. Invitations were issued through all Council mailing lists and multiple governmental and organizational websites. While responses were anonymous, they were tracked by the distribution channel. Over 80% of responses were the result of Council mailing lists and newsletters with sister agency outreach contributing to 16% of the generated responses. The remaining 4% of responses were from a mix of personal invitations to individuals not able to participate in an interview, Maven's Notebook readers and some Association of California Water Agencies (ACWA) newsletter readers.

The survey was open from January 17 to February 13, 2019. There were 124 anonymous responses to at least one or more questions. Questions covered the self-reported demographics of the participants and degree of familiarity with the Delta Plan elements and Council responsibilities. Multiple choice questions considered views on progress in achieving the coequal goals in the context of the Delta as an evolving place. Additional questions explored views on barriers to success and suggestions. Three optional questions covered the topics of adaptive management, best available science, and performance measures. An additional survey with more in-depth narrative questions was offered and 15 individuals initiated that survey; however, narrative responses were limited to just four of the respondents.

The overwhelming majority of respondents self-identified their Delta roles and interactions as being associated with residency, recreational use and/or business relationships. Many participants indicated they held multiple roles and nearly half also indicated they were a concerned member of the public. Table 1 provides more detail on the composition of respondents.

Table 1. Survey Respondents by Type

Concerned member of the public	48%
Current or past resident	38%
Recreate in the Delta	38%
Work in the agricultural sector (outside of the Delta)	26%
Provide consulting and/or technical services related to the Delta	19%
Work in a public water agency	17%
Work in another type of public agency	15%
Engage in government related advocacy	15%
Work in and/or own a Delta business	15%
Other*	1-10%

* Other:

Non-governmental organization (10%), agricultural sector inside of the Delta (8%), non-public water management agency (3%), land management or environmental organization (3%), no role (2%), press (1%), and family relationships (1%)

Participants were also asked about previous interactions with the Council. Interestingly 47% had attended a public workshop or Council meeting. Another 38% indicated they had not had any interactions with the Council at all. Still another 39% indicated that they are or have been an employee or consultant at an agency or organization that works with the Council and staff.¹ Six percent of the 114 respondents indicated they are or have been an elected official.

Delta Protection Advisory Committee

The Delta Protection Advisory Committee (DPAC), a chartered body of the Delta Protection Commission (DPC), participated in a publicly noticed workshop. The workshop was conducted in Walnut Grove, California on January 14, 2019, as an agenda item of a regular DPAC meeting. Nine members plus DPC staff were in attendance. The DPAC participants were advised that their comments would be submitted as part of a public document (see attachments 4 and 5).

General Findings

Each interview began with demographic types of questions including the sector the participant represented, familiarity with the Delta Plan and how they had been involved with any aspect of the Delta Plan. The interviewers explained that the interview was part of the Council's efforts to assess Delta Plan performance and implementation. They also advised that the Council is conducting an initial technical assessment of the Delta Plan content and evaluating the need for potential changes. Participants were then asked questions related to the Five-Year Review of the Delta Plan and related planning topics. Following are high level summaries of the overall responses to those questions.

¹ Percentages are based on the number selecting a particular choice in relation to 114 completed responses. Participants were allowed to select as many choices as applied.

Expectations

Participants were told that the Delta Reform Act requires the Council to review the Delta Plan at least once every five years and then asked what expectations they might have for the Five-Year Review of the Delta Plan.

In outlining expectations for the 5-year review process, a number noted that a thorough review of the first five-years is warranted, particularly as Delta stressors related to climate change and some still undefined factors have altered what may originally had been thought possible. Many suggested that the review should document the context in which the Delta Plan is being implemented and be bold in acknowledging the significant impact the Delta Reform Act, the Delta Plan and newly devised institutional arrangements have had in changing the way management of the Delta occurs. This context is particularly important in understanding why several participants suggested that the lack of progress did not equate to a lack of success. Other respondents were less optimistic and found that a lack of progress or decline indicated other approaches are needed.

Coequal Goals

Background information on how the Council was created in legislation to support achievement of the State mandated coequal goals for the Delta was provided and the coequal goals were defined as the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. It was also shared that the coequal goals must be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." (CA Water Code §85054)

Participants were then asked to describe the Delta Plan's success in achieving the coequal goals and what, if any, specific chapters or sections of the Delta Plan support this.

Overall there was significant divergence in describing success based on stakeholder type. An example of this contrast can be found in comments related to:

- Conveyance versus Ecosystem
- Complexity
- Agriculture versus Ecosystem
- Coequal versus tri-equal goals
- Agriculture versus - Conveyance

One overall comment related to the difficulty of assessing success in a five-year timeframe. More on specific responses are provided in the section on sector responses.

Barriers

After considering the degrees of success in achieving the coequal goals, participants were asked to articulate what factors or issues create the most significant barriers to achieving the coequal goals. Interestingly, the participants were largely consistent in describing barriers. Survey participant responses mirrored the interview responses although more detail was provided on place-based topics. The below list provides an overview of interview responses and Figure 2 provides an overview of survey responses related to barriers in achieving the coequal goals.

- Social dynamics
- Lack of clear objectives
- Implementation measurement
- Context, how to move forward
- Jurisdictional conflicts
- Language (significant terminology and phrases need definition and clarity)
- Lack of understanding of complex efforts like EcoRestore
- Local planning issues
- Local agency inclusion
- Funding
- Water rights

Barriers to the Coequal Goals

Investment / Money	Flood/ Levee
Agriculture	Fisheries/ Marine Life
Conflict	Institutional / Capacity
Co-Equal Goals	Landscapes
Communication	Leadership
Coordination	Politics
Definition	Representation
Delta as Place	Respect
Delta Representation	Science
Council Issues	Stakeholder Relations
Education/ Knowledge	Tunnels
External Interests	Water
Environmental	

Figure 2. Survey Responses on Barriers

Best Available Science

A copy of the Council's definition of best available science was provided and participants asked how well the Council incorporates use of best-available science into its decision-making or policy development process.

Overall responses were highly positive. A consistent theme was the importance of independence and a need for enhanced funding for this program.

Some respondents commented on the need to expand the science portfolio to include more research on Social Science. One group mentioned the importance of incorporating the use of Traditional Ecological Knowledge² into decision making.

Several mentioned there is a need for the research agenda to better align with decision making so that the best available science is directly relevant to pressing concerns. Still others felt that the science portfolio would be more efficient and effective if science being conducted in all the State agencies was better coordinated and leveraged for additive results.

Adaptive Management

A copy of the Council's definition of adaptive management was provided and interviewees were asked about how well the Council and Delta Plan support adaptive management in the Delta.

There was overwhelming agreement on the need for adaptive management. There was some disagreement among respondents about how well adaptive management approaches were being deployed. One area of discussion was how adaptive management approaches should be scaled. Some felt it was difficult to fully assess the effectiveness of approaches given the context of a highly complex Delta system and the number of variables that could impact outcomes. Some pondered if small efforts really made a difference.

Another aspect of concern was that adaptive management involved experimentation and it is inevitable some experiments will fail. This creates dilemmas for agencies that must ask rate payers to pay for something that might not work. The desire for certainty must be balanced with the need for adaptation.

Regulatory Authority & Consistency Certification Process for Covered Actions

One interview question asked what participants viewed as the regulatory role of the Council. They were also asked if they considered the Council's role and regulatory authority well-defined. Those familiar with Council's regulatory role were asked to what

² The US Fish and Wildlife Service defines Traditional Ecological Knowledge (also called by other names including Indigenous Knowledge or Native Science), as the evolving knowledge acquired by indigenous and local peoples over hundreds or thousands of years through direct contact with the environment.

extent has the Council been effective in executing those responsibilities and what, if anything, should be changed. An additional question related to how the Delta Plan’s consistency certification process for covered actions may have changed or altered projects.

While most participants viewed the Council as responsible for enforcing the Delta Plan, generally, unless a participant had been involved in some aspect of project planning, they were not particularly aware of the consistency certification process for covered actions or the Council’s regulatory role.

For those that were aware of the process, there were several tracks of responses. One track related to a need for more authority. To these respondents, the more passive role of reviewing actions (as in the certification of consistency process for covered actions) rather than affirmatively requiring actions (such as might be seen in other regulatory settings) were limiting the effectiveness of the Council.

Others felt that the certification of consistency process for covered actions might be useful for some types of projects, but questioned why a class of project that they themselves might propose would need to be reviewed. Some suggested that their own projects had minimal impacts, while others suggested that they were more knowledgeable than the Council about a certain type of project (e.g., levees) and were able to judge consistency with the Delta Plan without Council oversight.

Performance Measures

Questions on familiarity with Delta Plan performance measures were posed. Those with familiarity were asked for recommendations on how the performance measures could be improved.

This question also garnered a range of responses. Those extremely familiar with performance measures noted they were not consistent to form. For example, some measures were considered high-level while others were more specific. It was also noted that some were process measures while others were outcome measures. Some felt measures should be more specific and outcome based, while others felt the levels and types of measures were probably appropriate for the subject area.

A larger concern related to how the measures were being utilized or monitored and if it was possible to use the measurements.³

Delta Plan Interagency Implementation Committee

When asked about their familiarity with the DPIIC, many but not all participants indicated awareness. Those that were familiar with DPIIC were asked if it was meeting expectations set forth in the Delta Reform Act.

³ The assessment was conducted prior to the Council launch of the output/outcome performance tracker.

The overall response was that establishment of the DPICC held great promise, but its performance was less than what might be possible. Items interfering with performance issues were listed as infrequent meetings, and competition from other pressing priorities.

Several observed that the agendas were sometimes more directed to what would otherwise be appropriate for working group meetings, and that agencies were sending technical managers rather than decision-makers to the meetings.

Some also suggested that even when commitments and agreements were made by DPIC agency executives, they didn't always seem to be fully deployed within the executives' organizations.

Several individuals very familiar with DPIC felt that it would not have been as successful as it had been if it were not for the emphasis that the Council Chair placed on creating strong agendas and the strong commitment and leadership the Chair displayed.

Issues of Interest

During the interview process, several issues were raised that crossed multiple sections of the Delta Plan or aspects of Delta Plan implementation, and/or fell outside of the interview question framework. Following is a recap of those issues of interest.

Climate Change

The topic of climate change was raised in nearly every interview. The overarching message was that the effects of climate change would be significant; however, the precise ways in which climate change would eventually impact the Delta were still more difficult to predict with accuracy. Even so, those interviewed believed it would be wise to address likely risks. Following are some areas of concern.

Sea Level Rise

Rising sea levels were considered a certain risk with salinity, tidal influences, and storm surges all expected to create significant impacts on the Delta levees, fisheries, habitat and fresh water supplies. Many suggested it will be important to consider the appropriate courses of action relative to levees, water intake systems, transportation and utility corridors, and ecosystem restoration, and to understand the inevitable impacts of sea level rise. Some suggested looking at the Netherlands for planning options.

Weather Extremes

Drought and extreme storms (in-Delta and upstream) were listed as creating significant stress on different parts of the Delta. Reduced flows or flood flows, increased water temperatures or widely fluctuating turbidity, native species-friendly or invasive species-

friendly habits, and more were among the potential impacts described in one or more interviews. Many offered that managing the high variability of potential events requires a range of approaches ready to address both flood and drought in a single year.

Native Habitat and Species Decline

For those raising issues of native habitat and/or species decline, it was noted that changes in precipitation, seasonal patterns, and temperature regimes would have inevitable impacts on habitat and species. This was viewed as extremely relevant to decisions on restoration and adaptive management. It was also considered a ripe area for the Delta Science Program.

Representation

A long-standing issue for many of those that identify an affinity⁴ with the Delta as place has been what they view as a lack of representation in decision making processes. They find the composition of the Council and the DPIIC inadequate to address their concerns and that elected officials outside of the Delta often overlook their concerns in favor of other interests. Beyond membership in statutorily defined bodies, there was a request for broader intention in including Delta interests in outreach processes, advisory bodies, or other input opportunities. Related to outreach, several suggested that the traditional meeting formats were not conducive to fully capturing concerns or understanding complex issues.

Interestingly other interviewees, such as those representing tribal interests and underserved and disadvantaged communities, expressed similar views. They noted that while the groups they represented had significant interests in Delta planning, there was no formal representation of those concerns within the Delta's statutory decision bodies. Further, the issue of representation for these groups is complex as no individual can fully represent their diverse concerns.

In the case of tribal interests, processes do exist for government-to-government consultation; however, it was thought more work would be needed to fully understand when and how engagement should occur.

Related to underserved and disadvantaged communities, issues of representation are equally complex. Concerns may range from decisions that may create an environmental injustice (disproportionate impacts from projects), alter the economic viability of a community, and even impact affordable housing. In-Delta (primary and secondary zones) representatives may also have differing concerns depending on the location of their community within the region. For example, concerns of residents at Bethel Island, Antioch, Stockton, Isleton, and Rio Vista are all different. Out-of-Delta disadvantaged communities may be equally concerned regarding decisions impacting water availability and rates.

⁴ Affinities included living or working in the Delta (past or present) or having family relationships with those individuals. It also included those who recreate in the Delta and/or find cultural or other ties to the Delta.

Accessibility

Two issues were raised relative to accessibility. The first was related to language. It was noted that many Delta stakeholders are not fluent in English and important information is not accessible. Those raising the topic were pragmatic, indicating that highly technical information may not need translation, but that summaries and informational items should be provided. It was also noted that many of the technical and scientific documents offered by the Council were difficult to understand. In this case, it was suggested that summaries and informational brochures should be prepared for use by non-technical audiences.

The second issue of accessibility related to physical access to meetings and information. Several comments were made about the difficulty of getting to meetings given the large geographic reach of the Delta and, sometimes, poor transportation routes. The times of meetings could also preclude some participation.

Information access was also noted as important. Parts of the Delta still do not have access to robust internet service, making the downloading of large documents difficult. Even for those with good internet access, several commented it was difficult to know where to look for things and how to know to access them.

Sector Findings

By design, participants were selected to ensure that the perspectives of a wide range of stakeholders could be incorporated into Council's Five-Year Review of the Delta Plan process. As was the case with survey respondents, several participants fit into more than one stakeholder group. This was particularly true for government-affiliated participants that represented both their agency (federal, state, local) and their missions (water supply, flood protection, habitat protection, etc.).

Following are highlights of interviews specific to the perspectives of the participants. The goal of the highlights is to focus on areas where a particular topic was emphasized, or perspectives may diverge from the information provided as part of the General Findings.

Council Alumni

Council Alumni refers to individuals involved in the formation of the Council, contributors to crafting of the Delta Plan, past Council members, and staff and consultants with a strong influence on the Council's early years who are no longer directly involved. Interestingly, a significant number of respondents in this category (as well as a few the other categories) reported working on the CALFED program, either as consultants or as part of the then 13 state and federal implementing agencies. The CALFED agreement for all parties to work collaboratively toward achieving balanced improvements in the

Delta created a reference point from which the alumni offered lessons learned and explored contrasts with the current process.

In terms of the Five-Year Review of the Delta Plan, an overarching theme of all the interviews was that the history of how the Delta Plan and Council came into existence was important to understand and sets the foundation for understanding how it is doing now.

This group consistently affirmed their belief that even while CALFED and other Delta management approaches have come to sometimes bumpy ends, the Council is here to stay. They also felt that the Council and its leadership has done a good job.

Another consistent theme was that the Five-Year Review of the Delta Plan should acknowledge it might take 20 to 30 years to make real progress.

Historic Context

Many of the alumni provided their summary of the events leading to the Delta Reform Act, creation of the Council, and the crafting of the Delta Plan.

They explained that, in crafting the Delta Plan, they were required to address management of conflicts related to the ecosystem, flood control and levees, and restrictions on how much water can be moved through the Delta. They shared that the State legislature expected the Delta Plan would help address these concerns. They remembered that the DPC had much at stake, as they hoped to gain more protection for the Delta landscape than what the coequal goals provided. These alumni described the Delta as a “wicked problem.”

Some explained that even as the planning process progressed for implementation of the Delta Reform Act and the Delta Plan, some stakeholders thought it would be possible to return to the State legislature, after the fact, and have the Delta Plan altered or rescinded. Other stakeholders thought the Council would be given more authority than it eventually received.

Expectations

Related to their expectations for the Five-Year Review of the Delta Plan, many felt that acknowledgement of the history was important as the same pressures continue today and will continue in the future.

Others added that the changing physical conditions the Delta Plan addresses should also be described. A specific example was how much the original expectations for climate change had altered over time and that this would need to be considered in future planning.

Several said their expectation was that the Five-Year Review of the Delta Plan be written as a progress report on what has and should be happening in the San Francisco Bay–Sacramento–San Joaquin Delta (Bay-Delta) system. One person described the review as the management equivalent of adaptive management – it is a process of checking in and then adapting planning based on findings.

Most made comments along the line that the Five-Year Review of the Delta Plan offers an opportunity to step back and genuinely assess what constitutes the major accomplishments, what should have happened but didn't, and what might be addressed through Delta Plan amendments or legislation.

These participants all hoped the results of the Five-Year Review of the Delta Plan would be publicized and used to help people understand what is going on.

Coequal Goals

Regarding the degree of success in achieving the coequal goals, many of those interviewed explained that the ongoing and accelerating stressors will make it difficult to achieve the coequal goals and there is no quick fix. They cited examples such as sea level rise, climate change and land subsidence.

Some in this group believe that the concept of Delta as a place is still being defined and that stakeholders and decision-makers struggle to understand what it means. Creating clarity is more difficult as everyone agrees that things will/must change in the future. In thinking of the Delta as a place, there is no mechanism to anticipate those changes within the context of the coequal goals. This was problematic as those that live and work in the Delta are just one group of many crafting that definition. Transparency will be essential for any conversation on this topic.

Many of the alumni felt tremendous progress had been made on both sides of the coequal goal equation. One example was the use of agricultural water management plans to help estimate demand of water for the Delta. They also believed that the Delta Plan planning process accelerated other key initiatives, such as SGMA legislation and implementation, planning for more water storage and smaller projects, updating flow criteria, planning and implementation of ecosystem restoration projects, and adherence to performance measures for tidal marsh restoration projects. The Delta Plan has also helped with improving land use planning and protecting flood prone lands in the Delta.

Others felt it was hard to quantify progress because so many things had changed. Even so, they reiterated that the original vision for ecosystem restoration was still solid. They expressed optimism that there was finally momentum in getting things done. Referencing a performance dashboard, they said that moving ahead we will see “more green dots than yellow, and less red.”

Barriers

Even with this optimism there were concerns about the scales of efforts that would be necessary to truly make change.

One person said that having every discussion framed in the context of WaterFix had sucked the oxygen out of the room.

One person offered she found that a mindset focused on big ticket items was a barrier. She felt it was important to think about the Delta more holistically and approach issues at many scales.

One person discussed the difficulty of creating the scale of action needed to accomplish change. They offered as an example that perhaps 100,000 acres may be available for habitat restoration, but that it might take many more acres for real success to be achieved. In thinking about measuring results or success of actions, they rhetorically asked if knowing action(s) is not enough to begin with, how should success be measured?

Several mentioned institutional barriers. This particular group, given their long history in working in agencies and on State programs, was keenly aware of the friction that could occur when agencies operated with different missions and priorities. One cited example was the ongoing interagency discussions about levees and the rancor it sometimes causes. Another example related to the independence the Council demonstrated even as sister agencies desired more influence. A third example was the difficulty of fully engaging federal partners.

Performance Measures

Those that helped craft the performance measures in some ways validated the comments of the other interview participants. They discussed what they had to consider in developing them and the information that was available at the time.

One person noted that policy makers needed to have both quantitative measures and qualitative measures, and that can make the performance measures appear uneven. There was also discussion of what could realistically be measured in five years, and particularly the first five years of Delta Plan implementation. This short timeframe required use of both process and outcome measures.

One person mentioned that they didn't really care for performance measure report cards or dashboards, but they felt they are a good tool to help keep everyone accountable.

Science & Adaptive Management

Best Available Science

An overarching comment of this group of interviewees was that the definition and use of best available science was not fully understood. It was also noted that scientific information is generated from many sources and collecting this, then establishing what constitutes the best requires assessment of multiple variables.

Like many of those interviewed in the science sector, this group also affirmed that there are many decisions, especially those involving trade-offs, that require a values or politically based perspective. In this case, they felt some stakeholders did not fully understand how the science can inform decisions but not provide definitive answers. This same group also noted that outlining and applying a best management practice is different than outlining and applying the concepts of best available science.

Like most of the other interviewees, this group was complimentary of the work done to-date by the Council and saw the need to do more.

Adaptive Management

One issue that jumped out for the Council Alumni group was the difficulty of designing good adaptive management. They described a series of issues that included:

- **Policy Framework** – Some mentioned that it has been difficult to craft policy more than general guidance as adaptive management specifics are embedded in the projects and must be tailored to purpose. This can be frustrating to project proponents as they want more specificity in what will meet requirements.
- **Cost** – Adaptive management requires ongoing monitoring and other measures that can be expensive. One person noted that the desire for more data is universal. In considering methods, there is a need to balance costs with benefits. They also noted that adaptive management initiatives can be expensive to implement and that many would prefer “one and done” types of projects.
- **Regulatory Barriers** – Agencies are required to meet regulatory requirements, yet, particularly in the Delta, it is often not known what methods will deliver needed results. It is difficult to move forward with uncertainty when agencies face regulatory penalties if something fails.
- **Training** – One person discussed how engineers designing projects may need additional training on how to integrate adaptive management processes or features given that it may be new concept or that they have not done this before. Similarly, those in regulatory roles may need training to understand adaptive management components. Scientists may also need training to understand how to translate their research questions to real world applications and then go back to refine existing or identify new theory.
- **Scale** – As mentioned in earlier sections, it is important to understand both the spatial and temporal scales required to achieve results. This sometimes made it difficult to really assess progress.
- **Best Available Science and Information** – There are sometimes deficiencies in what is known, and this impacts what is designed. One provided example was the way new knowledge about the food web profoundly changed the way options were designed for the Delta smelt.
- **Collaboration** – Everyone agrees on the benefits of collaboration in developing projects and adaptively managing projects; however, time and resources are scarce and there are too many meetings already.

Legislature

Both Legislative staff and former Legislators were interviewed. This included several of the individuals involved directly in the crafting of the Delta Reform Act. Participants were particularly interested in any findings that might be derived from the Five-Year Review of the Delta Plan as they might be instructive for amendments to the Delta Reform Act. In beginning the discussion, one of the respondents pointed out that ongoing litigation related to the Delta Plan made a Five-Year Review of the Delta Plan somewhat

problematic. Even so, the group agreed it was critical to continue moving forward. One participant believed the inability of CALFED to change was its eventual downfall and this had informed the creation of the Council.

Expectations

Related to expectations for the Five-Year Review of the Delta Plan, they offered straightforward questions:

- What's the status?
- What's changed?
- Are there new policies we need to look at if the old ones have impeded our progress?
- What do we need to be considering related to climate models?
- How are we going to handle sea level rise?

They also felt it important to articulate what isn't happening, for example, will a gate or barrier like those used in the Netherlands prevent impacts of climate change.

In all cases, this group had expectations for both policy and science execution. They found the update to the Delta Plan might be an opportunity to express the Delta as a dynamic, changing system and affirm how the use of best available science allows for forward thinking. As an aside, some felt the thing that was changing the least was the social dynamics. For this, long standing tensions appeared to remain unshakeable.

Best Available Science

Related to the science approach, the respondents indicated it seems to be working the way they had hoped. They believe that just framing the questions about what it takes to restore the Delta sets forth a conversation that alone is valuable. They suggested that the Five-Year Review of the Delta Plan would allow for an enhanced discussion of what the Delta should be restored to and a restatement of how to achieve the goal when that outcome may not be known. The Review allows for the setting of new expectations and building out the whole context of the next conversation.

Science Community

Significant input was provided by the current and past members of the Independent Science Board, Science Advisors, and other science professionals. Those interviewed indicated they had extensive knowledge of the Delta Plan and review process, many having been directly involved in some aspect of Delta planning. For them the Delta Plan serves as a reference for marrying science and its relevance to the Delta Plan and Council. They noted that science topics come from the Delta Plan chapters. They also believe they have a role in establishing and reporting on performance measures.

One theme repeated by this community as well as many of the other interviewees, was the potential benefit of looking at other, far older, more publicized, complex, regional

planning efforts, such as those in Chesapeake Bay and the Everglades. This group was clear that they were not equivalent efforts, but they believed many of the lessons garnered from the Five-Year Review of the Delta Plan would benefit from a comparative analysis with these efforts. A specific example was the Chesapeake report card.

In outlining their expectations for the Five-Year Review of the Delta Plan, many noted it was important to reflect progress that has occurred, particularly related to the science. That said, most commented that it is too soon to evaluate performance measures crafted five years ago. They hoped the review leads to a more robust definition of the performance measures.

They also noted that the Delta is changing a lot and that those changes diminish the ability to understand what might lie ahead. For example, changes could lead to new endangered species. One person offered that, “To some degree, our ignorance might be advancing faster than our science.”

They also offered that the review might offer an opportunity to consider improvements in the technical information and data required for consistency determinations. They believed improved rigor in this area would allow for better alignment of science and technical information as well as improve decision making. They continued that the Council was in a unique position to ask agencies to get better information.

Coequal Goals

Related to the coequal goals, the group shared that it was important for everyone to understand the goal is integration of both goals and realize they’re not independent. They also noted that layering of the need to consider Delta as a place makes this integration complicated. They believe the Delta as a place, inherently sets limits, drivers, demand for water, and demand for certain species over others.

One person offered that they never understood why it’s coequal and not tri-equal goals. This person believed that reframing as tri-equal goals encourages everyone to look at the goals together. This person felt more input can be input obtained, and there would be better opportunities for engagement. There was also a sense that climate change could radically redefine the Delta as a place, so the idea of full integration is essential.

Barriers

Related to barriers this group quickly listed issues as follows:

- Agencies tend to over-emphasize one mission over another.
- Time, things are changing faster than we can organize.
- Time, it is going to take years for all legal authorities to be hammered out.
- Lack of jurisdiction over federal activity limits the ability to work at large scales.
- Institutions, “there are a lot of different gears, some of which are too fast, too slow.”

- Fear of failure and mistakes. Due to the very emergent nature of the work, there will be many mistakes along the way and this is inherently problematic for the institutions. There needs to be a discussion of how failure is part of the process.

Best Available Science Specific Discussion

As would be expected there was significant discussion of science with one person posing the question, “Can you name a California water problem in which science can solve the problems or concerns?”

A common response was that science helps but it is not a substitute for management or political or values decisions. In this case, what science can do is make clearer the tradeoffs and provide recommendations for better decisions, but never perfect decisions. One person offered that science is the same as management, there is no perfect decision, or never enough information to make a perfect decision.

For example, when discussing barriers, there is a lack of understanding of the interactive pressures. It’s still a barrier to achieving coequal goals. It may not be possible to achieve the goals without the right information.

It was explained there is a need for greater science integration among the science enterprise (including science programs of the agencies). True integration is needed to have the appropriate funds to look at things to cross all three goals.

Related to integration of science endeavors the group found that some work has been done but it appears to rely on individuals who serve as the integrators by reaching out and finding common purpose. They noted that this might be more effective as a formally recognized role. Adjacencies of research may not always be clear, particularly in cross disciplinary endeavors. They also found that some program efforts like the Interagency Ecological Program had been effective, if limited.

The group also considered the impact of the science work. They found that for the non-science community, the work can be difficult to understand. One person noted that stakeholders will interpret science that agrees with their perspectives. They believe it is important to place reasonable criteria on what is determined to be good science. They also noted that science that is subject to or has survived independent validation or scrutiny is not combat science.

Adaptive Management

Related to adaptive management, this group offered that it can be effective on a small scale; however, for the Delta as a whole, it is hard to do. One person added that the Council has done a good job of creating an adaptive management mindset unlike anywhere else in the world.

Delta Plan Interagency Implementation Committee

Related to the DPIIC, one person noted it probably has the potential to be important, but they are still in the infant stages of being effective.

Suggestions offered for improving effectiveness of the DPIIC included more frequent meetings, increased budget and a directed focus on science integration.

Funding

A major theme for this group was funding. They noted that there is a great deal of work needed without the resources to accomplish it. Several respondents also noted that more investment should be made in research by universities.

State Resources Agencies

Interviews were conducted with representatives of the California Natural Resources Agency and several sister State agencies including the California Public Utilities Commission, California Department of Fish and Wildlife (CDFW), California Department of Water Resources (DWR), and California Department of Parks and Recreation. Interviews were also conducted with the executive officers of the DPC and the Delta Conservancy. Of particular interest was how agencies incorporated the intent of the Delta Plan to further the coequal goals for the Delta and the extent to which the intent of the Delta Plan aligned with the individual and/or the organization. Participants were also asked to offer, what, if anything, should be changed to create better alignment.

For the sister state agencies, one area of tension was the need for those agencies to fulfil their own mandates and missions in the context of the Delta Plan. Interestingly, two seemingly divergent points were raised. One was that while priorities could be established, no one agency could be mandated to action. Conversely, some of the agencies viewed themselves as the experts on selected topics and felt that the ultimate jurisdiction over those actions should remain with their agency. Two topics particularly dominated this area of discussion: levees and ecosystem restoration projects.

In the case of priorities, one interviewee asked if there could be a way to increase urgency and accountability to ensure commitments were met.

Expectations

Most respondents felt the Five-Year Review of the Delta Plan should spend some time outlining what has occurred to date – both barriers and progress. One person noted that the review could also help to set realistic expectations about what is possible to do within limited timeframes. A number of those interviewed specifically mentioned a need to discuss climate change.

One person also felt it might be useful to address how changing conditions impact what seem to be goals for equilibrium among the coequal goals and Delta as place. This person felt that even maintaining the current status quo was challenging, and that added stressors would make accomplishing an equilibrium even harder.

Another respondent wanted the Five-Year Review of the Delta Plan to consider sister regulatory functions – for example, how new flow standards would be expected to change the Delta Plan performance and how would this impact performance measures.

Stakeholder Engagement

All agency respondents mentioned the importance of stakeholder engagement although their definitions of stakeholders may have varied.

Coequal Goals

Perspectives on the success of the Plan in achieving coequal goals tended to align with missions of the agencies being interviewed. Agencies largely focused on the success of coequal goals as related to Delta as place, ecosystem restoration, or water supply reliability. Most felt things could be going better but equally felt the issue was not the Delta Plan itself but externalities, both physical and social, and implementation issues.

Several suggested that there is a need for reframing of the conversations related to Delta as place. There was a general sense that Delta as place should recognize the Delta is not a static thing. They explained performance measures could be adjusted to consider the health of the Delta assets such as agricultural values, cultural and natural resources, and recreation. These measures could change overtime as society and circumstances change. If success was measured in this way it was felt there were successes to share, particularly with specific projects of agencies and non-profits.

Best Available Science

A consistent theme with this group and many others was the importance of social science in helping to create real and lasting change. This group understood that many decisions contained political- and values-based concerns that could not be addressed directly by good science and technical work. They were keenly aware of the many choices to be made.

As a group they were complementary of the science work being done.

Regulatory Authority & Consistency Certification Process for Covered Actions

Related to questions about the Delta Plan's certification of consistency process for covered actions, an area of concern for the agencies was how particular Delta Plan requirements were defined. For example, one person rhetorically asked, "What constitutes a significant impact?"

Several related a desire for Council staff to outline what would meet requirements and what the proper source of information was. One example related to the required project description. In this case the interviewee asked if a project definition for an environmental document was enough or if more was needed. Along the same lines several of those interviewed referenced what they viewed as a disconnect between terms being used by DWR and Council staff.

Still others wondered if Council was properly staffed to do what was necessary.

Performance Measures

Different ideas were offered related to the performance measures. Some found them too broad and most felt timeframes were problematic given that projects may take years to return benefits. Another concern was that there could be varying levels of performance depending on where actions were being implemented. In this case, one part of the Delta might be doing fine while another part may not be. One suggestion was to find ways to tailor performance measures to specific projects and locations.

Another suggestion was for the Council to coordinate with the agencies to gain agreement on the performance measures.

Flood Protection

A wide variety of flood protection entities (federal, state, regional, local, and special districts) work to maintain Delta flood management infrastructure both in the primary and secondary zones and in upstream and downstream watershed systems. While they all share common missions their roles and authorities vary as do some of their perspectives. Following are some highlights from stakeholders in the flood protection field.

Expectations

Related to their expectations for the Five-Year Review of the Delta Plan, several mentioned they felt there was a need for better definition of the goals and the end results or desired outcomes. They believed it was difficult to assess how to participate in improving the Delta when this outcome was not always clear to them. Another consistent theme was the desire to address issues related to the difficulty in funding or financing projects.

Several also suggested it was important to describe successes. One example given was the success of the Delta Levees Maintenance Subventions Program. This group believed that sharing successes would increase support for project activities.

One person suggested the Five-Year Review of the Delta Plan could be used to take a step back and consider the steps that led to development of the Delta Plan. This type of review would allow for a reassessment of the drivers and data used in the Delta Plan development. They explained that they believed that the data came from DWR, the data is old, and there's always room for doing more. Similarly, one person hoped that all the comments from the flood community would be truly heard. She felt that when the Delta Plan originally went through, not all the comments were heard.

Another person suggested that the Five-Year Review of the Delta Plan offered an opportunity for Council to take another look at DPC's Economic Sustainability Plan.

Coequal goals

For this group, it was sometimes difficult to align project activities with the stated coequal goals. While there certainly is an element of place-based benefit in flood risk management, it is harder to define how issues like navigation factor into the equation.

There is also an inherent tension between water supply planning and flood risk reduction planning. One example offered was that Folsom Dam is operated by U.S. Department of the Interior, Bureau of Reclamation for water supply while the U.S. Army Corps of Engineers (USACE) may be asking for early releases to reduce flood risk during snow melt or large storm events.

Best Available Science

This group was more likely to question the science used in decision making. One observation was that there are a lot of good data that haven't been published. One person also mentioned the extreme storm scenarios, and several mentioned the need for the Council to do more hydrodynamic modeling before making determinations on flood issues.

Barriers

These participants frequently cited institutional barriers to achieving mutual goals. One such barrier was the differences in requirements for federally funded projects versus what might be required as part of the Council's Consistency Certification Process for covered actions. One suggested option for overcoming this barrier was to implement more programmatic approaches that would allow conceptual agreement over a range of activities, eventually leading to more acceptance of individual elements of the program.

Another barrier was understanding what roles the individual agencies would ultimately play in moving a flood risk management project forward. When conflicting roles are identified, this group suggested there is a need for better role leadership.

Regional and geographic barriers were also cited. The coequal goals are expressed as achieving statewide needs which creates somewhat of an us versus them mentality with local interests. Some see this expanded statewide perspective as being a threat to their communities. It was felt this conflict would need to be addressed for the Delta Plan to be truly successful.

Regulatory Authority & Consistency Certification Process for Covered Actions

Several of the USACE representatives indicated it was sometimes difficult to find the best way to engage with the Council staff considering jurisdictional issues. They felt this disconnect limited what the USACE could offer to all the parties. There was a desire for a much stronger culture of collaboration.

One example was the USACE collaborations with DWR on various projects. In this case the USACE steps away from the Council process while DWR manages it. It struck at least one USACE participant that they should have a more defined role in moving projects forward.

In regard to the Council's regulatory authority, many in the flood stakeholder group questioned why some of their projects were even subject to consistency review. They understood that it was important to notify other agencies of activities for planning purposes but felt that requiring review for things that must be done seemed

nonsensical. One person suggested a need for something like a negative declaration for these types of projects, like what is used in California Environmental Quality Act (CEQA) determinations.

One person also anticipated potential conflicts with the Central Valley Flood Protection Plan (CVFPP). This group believed that the Council should use that plan as the guiding document rather than having the CVFPP being overridden by the Delta Plan.

Suggestions

This group offered a few suggestions for improvements. One area of discussion was the fact there are so many plans it was sometimes difficult to even track them, hardly get to an implementation level. There was also a perception that every time a project progressed to a higher level of detail, more objections might be raised. They felt there needed to be an acknowledgement that you're never going to please everybody but making some progress to a document is critical to get it going. They suggested that everyone should celebrate that there is a Delta Plan to be followed and whether or not you agree with the details of the Delta Plan, it's good to have a plan.

A last suggestion was for the Council to display a greater willingness to engage small communities in the decision-making process. They felt the Council could also help create more opportunities for the communities to receive financial support for critical projects.

Federal Agencies

The federal agencies in this category were the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and U.S. Geological Survey. The group did not include USACE as they were interviewed in the same groups as the flood protection stakeholders.

Many of the federal stakeholders described their interactions with the Delta Plan as more peripheral. While they were invested in a sustainable outcome for the Delta, their own work is framed by their federal responsibilities. For example, many of them contribute to the body of scientific knowledge on the Delta or maintain their own regulatory role.

Expectations

Those that were more engaged with the Delta Plan expressed a hope for the Five-Year Review of the Delta Plan to make overarching findings on the status of the coequal goals. Another expectation was that these reviews are done on a regular basis and be taken seriously.

Coequal Goals

Related to progress towards achieving the coequal goals, several framed their answers as those of third party observers. They reported some progress in restoration activities but declines in species. They saw more engagement with stakeholders but also little

movement in changing positions of stakeholders. One person noted that it was important to have clear metrics to determine progress in achieving the goals.

Others discussed how the coequal goals were qualified by the need for them to be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. These participants suggested there is a need to be realistic about what can be done, particularly given climate change, and the declining reliability of snow pack as a water supply.

Several were complimentary of progress to date and the Council's leadership in moving forward with implementing the Delta Reform Act.

Barriers

When asked about barriers the group listed several including an inherent tension in deciding who or what gets the water.

Several noted institutional or functional barriers. They believe that federal laws preclude some of the working relations that might be beneficial and that the State law does not prescribe a federal role. Some felt federal legislation would be necessary to allow the federal agencies to work more effectively with the State. As an example, they described the benefit of the CALFED Bay-Delta Program in allowing the agencies to work more closely together. That said, they also noted that it takes a long time to get things done when the federal government is involved.

Like most of the other sectors, references were also made to a lack of funding to achieve what is required.

Best Available Science & Adaptive Management

Best Available Science

The overall view of the Council's Delta Science Program was positive, but limitations were identified. One limitation was the level at which the science is being conducted. Some viewed the science as too general to have high utility and the science agenda as a work in progress.

Some explained that there was not a centralized place where the full science community can conduct science-based discussions to learn what other entities were working on, and what problems they hoped to resolve. They felt that while the Council is one player in the Delta, there are a lot of other players in the science field. They suggested a need to increase the level of interaction at the highest levels of government to bring all the entities into this type of conversation.

Some also focused on the importance of transparency of the science. This included independently-developed science using peer review, and the vigorous use of monitoring programs. It was also noted that science is never resourced properly.

Adaptive Management

Related to adaptive management, several indicated they didn't fully understand how the Delta Plan directed this, but they saw that different agencies had different approaches to adaptive management and that this could be problematic. One indicated that adaptive management needs to be a collective effort with understanding of all the intersections and drivers. This integration requires thoughtful evaluations of conflicting goals and mandates.

One explained that adaptive management must be specific and, yet when looking at the whole system, it also needs a complex evaluation. Adaptive management surfaces the conflicts for the multiple factors being managed. One result is that agencies may not be achieving what has been planned and that learning this result takes time. Several commented that it was sometimes difficult for agencies to be comfortable with the risk.

Delta Plan Interagency Implementation Committee

Regarding DPIIC, some of the federal agencies found it highly valuable while others questioned the value of what happens at the meetings. The less enthusiastic felt that having a place for high level partners is a great idea but there was sometimes a disconnect with the subject matter being discussed. This leads their agency executives to question the value of spending time to attend those meetings. Suggested improvements included the addition of working meetings driven by action items versus informational agendas. Some felt shorter meetings may be preferred and others felt DPIIC should be better resourced so that it could achieve its full potential.

Tribal Perspective

In considering the comments of a tribal entity, it is important to acknowledge that no single entity can speak for all California Native American Tribes. That said, an enduring and widely discussed interest of many California tribes is a desire for better utilization of Traditional Ecological Knowledge. Interviewees provided several examples of how this knowledge would help inform climate adaptation and other emerging issues. They also offered how this more robust understanding of what pre-contact conditions (baseline) were could inform current solutions. One example was the role beavers play in maintaining the watershed and the role of tule in managing mercury. It was noted that there appears to be a growing appreciation for the utility of incorporating this information in the Council's science programs.

Even while some progress is being made, an attendant concern was the lack of representation and outreach to tribes. They provided several examples of this, including the failure of decision makers to understand the importance of willow for baskets. They suggested that one problem was a lack of awareness of how a Tribe that might not be in the geographical location of an effort could very well have a strong heritage in the same location and/or a watershed relationship that bounds them by their up or downstream interests. This need for a broader understanding of tribal interests increases the importance of more diligent outreach.

Related to expectations for the review, these stakeholders wanted to know what current process are working and how good information from a wide variety of sources can be incorporated into decision making. They believed that an important element of answering the question of how things are going was noting all that had changed in just five years. Climate change and implementation of the Sustainable Groundwater Management Act (SGMA) were both offered as examples of changing conditions.

They also suggested that the concept of achieving coequal goals is impossible if the definition is just how to move the water to agriculture. They offered that the existing definitions were inherently limiting and precluded broader thinking about what should be happening. They offered the splitting of Bay Delta Conservation Plan into California EcoRestore and California WaterFix as examples. Defining these issues as polarities creates tensions.

Regional Agencies & Placed Based Interests

Those representing the regional and Delta place-based interests consistently raised concerns regarding representation in the decision-making process. Following are highlights of those discussions.

Delta Counties Coalition

Representatives of the Delta Counties Coalition (Coalition) participated in a group interview and requested formal notes for the session. A full copy of those notes is provided as Attachment 6.

The group illustrated a deep understanding of the Delta Plan and was one of the few groups able to provide specific descriptions of planning elements. A major concern for this group was the need for Delta Plan Chapter 5 (*Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an Evolving Place*) to receive greater attention. The members view the Council's coequal goals ("providing a more reliable water supply for California," and "protecting, restoring, and enhancing the Delta ecosystem") and the requirement to meet the coequal goals in a manner that "protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place" as more appropriately being tri-equal goals. They affirmed "Delta as an evolving place" is key and is needed to give certainty to people who live in and depend on the Delta. It is difficult to define, but important. It is peoples' homes and communities, and it's respecting the landscape, food, and farming in the Delta, and the recreational, environmental and cultural needs that ought to be part of decision-making.

They continued that the Delta Plan is a lifeline for agricultural sustainability and water supply that must represent hope for the future. A Coalition member pointed out that Delta farmers are often older and close to retirement and the Delta Plan must also be able to recognize and help address this community shift. They also suggested messaging to and engaging in on-going conversations with locals is critically important and repeatedly mentioned by the Coalition members as they restated various points throughout the session.

In considering barriers to success in achieving the coequal goals, the Coalition suggested that a bottom-up rather than a top-down approach is needed to reflect the Delta Plan principles to provide residents and visitors in the Delta a place to live, work, and play. They welcome open and honest debates on water supply reliability and reduced reliance on the Delta. Coalition members also acknowledged the large amount of ecosystem restoration forecasted to be implemented within the five counties represented by the Coalition. Coalition members suggested stronger local representation and meaningful inclusion, along with definitions of expectations and success factors, will result in far more viable and appropriate results.

A sense of weariness was expressed as the members relayed their multiple and on-going litigation experiences. Participants stated that addressing approaches to overcome barriers during planning would be more productive than voicing concerns through litigation and relying on the courts to make decisions. They pointed out that working together to find a more balanced approach is far preferred. They also noted, that as the Coalition became a cohesive group, its members have become very collaborative and like working together. They pointed out how much they prefer open conversations over dealing with litigation.

In response to a question about the Council's role and regulatory authority, the Coalition members found that interactions between the Council and other agencies are minimal. They shared that beyond the engagement of DWR and CDFW, they hadn't seen the Council going beyond requirements.

Related to adaptive management, the Coalition agrees that adaptive management is the only safety net down the road; however, they believe unsuccessful projects and/or adaptive management will come at the expense of the local jurisdictions and the environment. They found that adaptive management often relies more on trust than knowing that something might work based on a proven science perspective.

Delta Protection Advisory Committee

The DPAC interview was conducted as a public workshop. A full copy of the DPAC session notes are provided in Attachment 5. Some highlights follow.

The DPAC interview covered a range of topics but the overarching theme was the importance of representation. They believed inclusion of Delta perspectives in all aspects of Delta deliberations and decision-making was essential. This theme was married with the need for ensuring that "Delta as place" remains front and center in the review process and all updates to the Delta Plan. A specific request was made to reflect the need for protection and enhancement of the unique Delta values in all chapters of the Delta Plan. Throughout the discussion, they offered different examples of how a lack of orientation to the Delta as a place by decision-makers and non-residents created problems.

Like the Flood Protection groups, this group was generally more critical of the approach to science than most of the other participants and provided examples of where they believed the science or the approach to the science could be better.

The group also expressed some frustration with what they believed was a lack of communication by the Council and how that has led to a disconnect with Delta residents and businesses. They felt a lack of communication could be a barrier to success as there was a lack of clarity in the Council's vision for the Delta.

San Joaquin Council of Governments

In lieu of an interview, the San Joaquin Council of Governments provided written comments. A full copy of their correspondence is provided as Attachment 7.

Environmental Justice and Disadvantaged Communities

For the purposes of this assessment, environmental justice refers to communities disproportionately impacted by the environmental impacts of planning and project decisions. Disadvantaged Communities (DAC) refer to communities with significant poverty or other adverse economic factors. These types of communities are also often (but not always) underserved by services associated with adequate standards of living including reliable water treatment, food security and transportation options.

Representatives of these communities believe the definitions of these communities is a striking fit for much of the Delta region and these topics should be called out directly in the Delta Plan along with a revisit of how these factors are addressed in Delta Plan implementation.

One significant issue is the accessibility of the Delta Plan. Because of its technical nature it is difficult for non-technical audiences and communities to read and review the Delta Plan. Those interviewed appreciate that some of this cannot be avoided and that certain language needs to be used, but it may be necessary to have a version with a parallel translation that explains meaning and context. They also felt it was important that the Five-Year Review of the Delta Plan explain how decisions directly change lives or affect stakeholders.

This group believed that it might be appropriate to translate updates/amendments to the Delta Plan into other languages. They believed that after five years it was realistic to expect a version would be available in Spanish and Asian languages such as Chinese Mandarin, Vietnamese and Cambodian and Hmong should also be considered. The languages used in conducting the U.S. Census were offered as a reference point.

As described in the section on issues of interest, another overarching concern for this group was the extent to which they felt underrepresented in the decision-making process. As an example, they described how decisions related to topics such as recreational fishing may not fully incorporate the needs of those that fish for subsistence. Economic concerns were also pressing. It was noted that Delta Plan policies added costs and might also preclude development in locations where affordable housing is desperately needed.

Still another concern was the confusion stakeholders experience in trying to determine which agency to even contact. The complexity of Delta governance was perceived as overwhelming.

Environmental

Several environmental organizations were invited to participate in interviews for the Five-Year Review of the Delta Plan process, including American Rivers, the Audubon Society, Cal Trout, Trout Unlimited, the Natural Resources Defense Council, the Nature Conservancy, and the Institute for Fisheries Resources. Due to scheduling conflicts, participation of this group was highly limited.

Following are comments from those able to participate in the interview process.

Expectations

This group of stakeholders believes it is important to emphasize the multi-benefit approaches being used to achieve the coequal goals. Special mention was made of the need for integration of flood risk management with ecosystem enhancement. It was noted that while there are sometimes conflicts with flood management goals, flood-related projects offer many opportunities to achieve environmentally enhancing, multi-benefit outcomes.

Coequal Goals

One respondent pointed out that the Council is unable to advance the coequal goals outside of its regulatory role and expressed concern that its sister agencies may not be doing all that can be done. This was frustrating as many projects have been on the books for at least 20 years. One example shared was the apparent lack of action by CDFW outside of projects where DWR is contributing. It was shared that the Delta Conservancy should also be more engaged; however, they can often be bureaucratic and slow. The Delta Conservancy should be encouraged to accelerate its pace.

It was also noted that the achievement of coequal goals occurs within the context of the Delta as a place. To this end, there is a need to focus on creating economic viability for the region.

As was the case with many other stakeholders, compliments were offered for the previous Council Chair and optimism expressed about the new Chair.

Barriers

Barriers to achieving the goals include the Council's lack of authority, agency bureaucracy, and the slow pace of implementing agencies. Availability of funding for multi-benefit projects was also a concern.

Performance Measures

There was a sense that there needs to be clarity on the metrics, and it was suggested there should be some sort of dashboard for accountability.

Public Water Agencies

The interviewed public water agencies included both statewide organizations and agencies in the Delta region as well as water supply and wastewater treatment agencies.

Expectations

Related to expectations for the Five-Year Review of the Delta Plan, this group suggested it was a good opportunity to consider lessons learned, and define what has worked, and what hasn't. This assessment will allow the Council to consider areas for improvement and keep up with ever changing science. They felt it was important to describe what has been accomplished, particularly in the context of a dynamic environment and ever-changing science. It was suggested that there was much to learn from the Delta Plan Amendment process and the California EcoRestore process, particularly as it might relate to performance measures.

Some of the group members indicated they had no expectations and didn't pay a lot of attention to the covered actions process unless their agencies had to comply with them. For these individuals the lessons learned are extremely important as they hope to avoid the pitfalls encountered through the consistency certification process for California WaterFix.

Coequal Goals

Related to the coequal goals, this group emphasized that the sustainability of all water benefits will be essential for our water future. They collectively expressed support for the intent of the coequal goals and noted that a robust science program is essential. The group noted that there was a lot of emotion among stakeholders and there is a need for decisions to be supported by facts and science. They felt science and decisions must be linked to achieve the coequal goals.

Members also noted that water sustainability is not just the quantity issue but also a quality one. They observed that this wasn't always of focus to the water community, but it must be embedded in discussions of water supply. Reliability must be all encompassing.

This group also emphasized their need to take decisions back to their rate payers and explain what will be received in comparison to costs. Affordability and certainty are key for these agencies. One person added that good science helped to make the case for investment, particularly when funds are limited.

Best Available Science & Adaptive Management

Related to the science programming, this group believed it might be helpful to consult with stakeholders to ensure the right research questions are being asked. They noted there is a need to translate science into policies that are actionable and support decision-making.

Related to adaptive management, there was concern as to how the Council defines this and how other regulatory agencies would treat some approaches. A specific concern raised was related to climate change. Investments may not prove effective in a dynamic environment. In this case, an agency may fall out of regulatory compliance and must explain to rate payers why there are additional costs. A proposed solution was to create “safe to fail” options that allow more collaboration and experimentation.

Regulatory Authority & Consistency Certification Process for Covered Actions

Related to the regulatory and consistency certification process for covered actions, some felt there could be a broader role for Council staff in assisting project proponents. It was noted that this was not a criticism of Council staff (they were complimentary of Council staff) but of the role the Council staff played in the process. They would also like more assistance in understanding what would be required for documentation. This group made several mentions of the need for more clarity in requirements for consistency certification.

Like the flood protection stakeholders, this group questioned to what extent their projects should be subject to Council’s regulatory authority or oversight. They felt the oversight was appropriate for larger projects but perhaps not the smaller ones. They believed different standards might be appropriate for different types of projects.

For these agencies, time is money and they expressed a great deal of concern related to the time that the consistency certification process adds to projects.

Public Policy and Academic

This group of stakeholders included organizations such as the Public Policy Institute of California and well-known public policy academics.

Expectations

Several of the policy and academic stakeholders indicated they hadn’t realized there was going to be a Five-Year review of the Delta Plan so said they didn’t have or had low expectations. Others had more defined ideas about what should be included such as:

- Recap of the context and challenges of the five-year period
 - Tight timeframes
 - Biological opinions
 - State Water Board revisions to quality control requirements
 - SGMA
 - Litigation
 - Legislation

- A look back at objectives that work
- System impacts such as climate change and the multi-year drought
- Changes to hydrology
- Discussion of plan amendments and drivers for those amendments
- Genuine celebration of success for the Council leadership in pulling together agencies and creating more effective working arrangements
- Discussion of the institutional arrangements and perceived effectiveness of the distributed management
- Successful use of the consistency determination process and the implication for other complex efforts

Coequal Goals

Regarding the coequal goals, like many of the other sectors, this group of participants felt five years was not an adequate time to determine progress in achieving the coequal goals. They felt this assessment was even more complicated due the formation of, and energy needed to get agencies functioning in their new roles. They emphasized that achieving on-the-ground results often takes a long time.

Several also mentioned conflicts remained related to flood planning. They believed this creates significant issues for the State relative to liability. This was viewed as something that would need to be addressed particularly given the Legislature's requirements for Council to develop a Delta Levee Investment Strategy.

Ecosystem Restoration

Group members pointed out that there are outstanding legal obligations to undertake ecosystem restoration activities in the Delta. One suggestion was that there should be a better clarification of what parties are financially obligated to pay for and why. An option mentioned was to use the Five-Year Review of the Delta Plan to clarify what current agency roles are for ecosystem restoration. Some believed that the reality of the obligations has not been fully explained and that relatively little money has been spent on ecosystem restoration in the Delta.

Performance Measures

Some members of this sector suggested that performance measures should be prioritized. They believed it would be difficult to accomplish all the performance measures currently listed. One person suggested it might be difficult to get stakeholders to even focus on the performance measures. He offered, "If you're not using them, why does it matter to you?"

As a practical matter, the group members pointed out (like several other groups) that the performance measures are somewhat uneven with some being process measures and others being outcome measures.

Best Available Science & Adaptive Management

One commenter began by saying there are limitations on the incorporation of best available science.

This group generally paired the discussion of science with that of adaptive management indicating it has the same issues and emphasizes science collection. One person offered that the definition of adaptive management should be change management and the tools of change management should apply. This means that there is a need to change human behavior not just technical approaches.

This group was more critical of adaptive management efforts than most other sectors as they felt it would be important to better define what the State is trying to do and identify who has the relevant authority to do it. They suggested that what they view as a piecemeal approach consumed a lot of resources with a very modest effect.

Regulatory Authority & Consistency Certification Process for Covered Actions

Regarding the Council's regulatory authority, several in this group questioned if it was enough given the restricted role of the Council's oversight. They believed that many of the stakeholders didn't fully understand the Council authorities. Several indicated they expected some issues to be resolved in litigation.

Overall there was agreement that the Council has been effective and very active. They were found to take their job seriously and had earned great credibility.

This group particularly appreciated that the Council had done a great job in establishing themselves. They were particularly impressed with how the Council had demonstrated independence and complimented its strong leadership.

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List of Attachments

Attachment 1. List of Interview Participants

Attachment 2: Interview Questions

Attachment 3: Interview Background Information

Attachment 4: List of Delta Protection Advisory Committee Questions

Attachment 5: Delta Protection Advisory Committee Workshop Notes

Attachment 6: Session Notes for the Delta Counties Coalition

Attachment 7: Written Comments of the San Joaquin Council of Governments

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Attachment 1. List of Interview Participants

List of Interview Participants

Name	Organizational Affiliation
Alexandar Tavizon	California Indian Environmental Alliance
Alf W. Brandt	Counsel to California State Assembly Speaker Anthony Rendon
Alicia Kirchner	Chief of Planning Division, U.S. Army Corps of Engineers, Sacramento District
Andrea Lobato	Delta Levees Program, California Department of Water Resources
Barbara Daly	Delta Protection Advisory Committee
Bill Harell	Chief, EcoRestore Program, California Department of Water Resources
Brandon Nakagawa	County of San Joaquin, Water Resources
Brian Gray	Public Policy Institute of California
Brooke Schlenker	Planner, U.S. Army Corps of Engineers, Sacramento District
Campbell Ingram	Executive Director, Sacramento – San Joaquin Delta Conservancy
Carl Wilcox	Delta Policy Advisor, California Department of Fish and Wildlife
Carlos Torres	Public Policy Institute of California
Catherine Freeman	California State Assembly Committee on Parks and Wildlife
Christina (Tina) Yin	Region 9 Nonpoint Source Pollution & Watershed Priorities, U.S. Environmental Protection Agency
Cindy Messer	Former Deputy Executive Officer for Planning, Delta Stewardship Council; Chief Deputy Director, California Department of Water Resources
Cindy Tejada	Watershed & Floodplain Program Manager, U.S. Army Corps of Engineers, South Pacific Division
Cliff Dahm	Former Lead Scientist, Delta Stewardship Council, Delta Science Program; University of New Mexico / Delta Science Program
Conner Edwards	Environmental Justice Coalition for Water
Dan Ray	Former Chief Deputy Executive Officer, Delta Stewardship Council
David Eggerton	Executive Director, Association of California Water Agencies
David Strecker	San Joaquin County Farm Bureau
Dennis O'Connor	California State Senate Natural Resources and Water Committee
Don Thomas	County of Sacramento, Water Resources
Edward Hard	State of California Department of Parks and Recreation
Edward Hard	California Department of Parks and Recreation
Ellen Hanak	Public Policy Institute of California
Ellen M. Blake	Region 9 Office of Water Compliance and Enforcement, U.S. Environmental Protection Agency
Eperanza (Espie) Velmia	Café Coop
Erik Vink	Executive Director, Delta Protection Commission,
Felix Yeung	Program Manager, U.S. Army Corps of Engineers, Sacramento District
Gail Louis	Region 9 Watersheds Office Manager, San Francisco Bay Office, U.S. Environmental Protection Agency
Gary Bardini	Chief of Planning, Sacramento Area Flood Control Agency
Gilbert Cosio	Delta Reclamation Districts, MBK Engineers
Gilbert Labrie	Delta Protection Advisory Committee
Gwendolyn M. Buchholz	Former consultant to Delta Stewardship Council during Delta Plan development, Jacobs Engineering Group, Inc.
Jared Ferguson	Science & Technology Fellowship, California State Assembly Committee on Water, Parks and Wildlife

List of Interview Participants (contd.)

Name	Organizational Affiliation
Jay Lund	Delta Independent Science Board; University of California, Davis, Center for Watershed Sciences
Jeff Mount	Public Policy Institute of California, University of California, Davis, Center for Watershed Sciences
Jennifer Pierre	Executive Director, State Water Contractors
Jessica Davenport	Former Deputy Executive Officer for Planning, Delta Stewardship Council; San Francisco Bay Deputy Regional Manager, California Coastal Conservancy
Jesus Andrade	San Joaquin County Hispanic Chamber of Commerce / Stockton City Council
Jim Starr	State of California, Department of Fish and Wildlife
Joe Grindstaff	Former Executive Officer, Delta Stewardship Council
John Cain	American Rivers
John J. Kirlin	Former Executive Director, Delta Vision; McGeorge School of Law, Program in Public Policy
John Lungren	County of Sacramento
Johnathan Yang	Intern to Alf Brand, Counsel to California State Assembly Speaker Anthony Rendon
Kaylee Allen	Field Supervisor, San Francisco Bay-Delta Fish and Wildlife Office, U.S. Fish and Wildlife Service
Kim Anderson	Senior Regional Planner, San Joaquin Council of Governments (Submitted as written comments on behalf of Council, see Attachment 7)
Lea Castleberry	County of Contra Costa, Board of Supervisor – Diane Burgis, District 3
Linda Gifford	Delta Protection Advisory Committee
Lisa Thompson	Chief Scientist, Sacramento Regional County Sanitation District
Marguerite Patil	Special Assistant to the General Manager, Contra Costa Water District
Maria Rea	Assistant Regional Administrator, California Central Valley Office, National Oceanic and Atmospheric Administration, Fisheries West Coast Region
Mario Manzo	U.S. Bureau of Reclamation
Mark Pruner	Chair, Delta Protection Advisory Committee
Melinda Terry	California Central Valley Flood Control Association
Michael Roberts	Special Assistant for Delta Restoration, State of California, Natural Resources Agency
Mike Chotkowski	San Francisco Bay-Delta Science Coordinator, U.S. Geological Survey
Natasha Drane	Delta Counties Coalition
Patrick Johnson	Former Councilmember, Delta Stewardship Council, former Councilmember
Paul Dirksen	Flood Protection Planner, West Sacramento Area Flood Control Agency
Peter Goodwin	Former Lead Scientist, Delta Stewardship Council, Delta Science Program; University of Maryland, Center for Environmental Science
Phil Isenberg	Former Chair and Councilmember, Delta Stewardship Council
Rami Kahlon	California Public Utilities Commission
Richard (Dick) Norgaard	Delta Independent Science Board; University of California, Berkeley
Roberta Goulart	County of Solano, Water and Natural Resources
Ryan Hernández	County of Contra Costa; Contra Costa Water Agency
Sam Luoma	Editor-in-Chief, San Francisco Estuary and Watershed Science; Former CALFED Lead Scientist; University of California, Davis, John Muir Institute of the Environment
Sheri Norris	California Indian Environmental Alliance
Stephen Brandt	Chair of Delta Independent Science Board; Oregon State University, Department of Fisheries and Wildlife
Diane Burgis	Supervisor, County of Contra Costa, District 3

List of Interview Participants (contd.)

Name	Organizational Affiliation
Don Nottoli	Supervisor, County of Sacramento, District 5
Oscar Villegas	Councilmember, Delta Stewardship Council; Chair, Delta Protection Commission; Supervisor, County of Yolo, District 1
Patrick Kennedy	Supervisor, County of Sacramento, District 2
Sydney Chamberlin	California Council on Science Fellowship, California Senate Committee on Natural Resources and Water
Taryn Ravazzini	Former Delta Plan Implementation Committee Coordinator, Delta Stewardship Council; Deputy Director of Special Initiatives, California Department of Water Resources
Terry Mitchell	Sacramento Regional County Sanitation District; Sacramento Area Sewer District
Tim Washburn	Former Director of Planning, Sacramento Area Flood Control Agency
Tracy Collier	Delta Independent Science Board; University of California, Davis, Center for Watershed Sciences
Virginia Gardner	Program Manager, Delta Protection Commission
Yolanda Park	Café Coop

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Attachment 2. Interview Background Information



DELTA STEWARDSHIP COUNCIL

A California State Agency

Five-Year Review of the Delta Plan Interview Handout

Five-Year Review Terms

During the assessment, you will be asked about terms defined in the Delta Reform Act and Delta Plan that you may be unfamiliar with. These terms are defined below, for your convenience.

Adaptive management: The Delta Reform Act requires the inclusion of science-based adaptive management in the Delta Plan. Under the California Water Code section 85052, adaptive management means a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvements in management planning and implementation of a project to achieve specified objectives.

Best available science: The Delta Reform Act requires the Council to make use of the best available science in implementing the Delta Plan. As defined in the Delta Plan Glossary, best available science means the best scientific information and data for informing management and policy decisions. Chapter 2 of the Delta Plan discusses best available science as follows. Best available science is specific to the decision being made and the timeframe available for making that decision. Best available science is consistent with the scientific process (Sullivan et al. 2006). The processes and information used should be clearly documented and effectively communicated to foster improved understanding and decision making.

Coequal goals: The two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. (California Water Code Section 85054)

Delta Plan Interagency Implementation Committee (DPIIC): The Delta Reform Act charged the Delta Stewardship Council to establish and oversee a committee of agencies responsible for implementing the Delta Plan. Each agency shall coordinate its actions pursuant to the Delta Plan with the Council and the other relevant agencies. Water Code Section 85204. After adoption of the Delta Plan in 2013, the Delta Stewardship Council established the DPIIC and continues to coordinate and oversee its activities as required by the Act. DPIIC strives to facilitate Delta Plan implementation through increased coordination and integration in support of shared national, statewide and local goals for the Delta.

Sample of Delta Plan Chapter Summary

Delta Plan Core Strategies

Chapter 3 – A More Reliable Water Supply for California

- Increase water conservation and expand local and regional supplies
- Improve groundwater management
- Improve conveyance and expand storage
- Improve water management information

Chapter 4 – Protect, Restore, and Enhance the Delta Ecosystem

- Create more natural functional flows
- Restore habitat
- Improve water quality to protect the ecosystem
- Prevent introduction of and manage nonnative species impacts
- Improve hatcheries and harvest management

Chapter 5 – Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an Evolving Place

- Designate the Delta as a special place worthy of national and state attention
- Plan to protect the Delta's lands and communities
- Maintain Delta agriculture as a primary land use, a food source, a key economic sector, and a way of life
- Encourage recreation and tourism that allow visitors to enjoy and appreciate the Delta, and that contribute to its economy
- Sustain a vital Delta economy that includes a mix of agriculture, tourism, recreation, commercial and other industries, and vital components of state and regional infrastructure

Chapter 6 – Improve Water Quality to Protect Human Health and the Environment

- Require Delta-specific water quality protection
- Protect beneficial uses by managing salinity
- Improve drinking water quality
- Improve environmental water quality

Chapter 7 – Reduce Risk to People, Property, and State Interests in the Delta

- Continue to prepare for Delta flood emergencies
- Modernize levee information management
- Prioritize investment in Delta flood management
- Update funding strategies
- Manage rural floodplains to avoid increased flood risk
- Protect and expand floodways, floodplains, and bypasses
- Renew assurances of federal assistance for post-disaster levee reconstruction
- Limit State liability

Sample of Delta Plan Chapter Summary (continued)

Policies and Recommendations

- **Chapter 2 – The Delta Plan**
- **Policies**
 - G P1. Detailed Findings to Establish Consistency with the Delta Plan
- **Recommendations**
 - G R1. Development of a Delta Science Plan
- **Chapter 3 – A More Reliable Water Supply for California**
- **Policies**
 - WR P1. Reduce Reliance on the Delta through Improved Regional Water Self-Reliance
 - WR P2. Transparency in Water Contracting
- **Recommendations**
 - WR R1. Implement Water Efficiency and Water Management Planning Laws
 - WR R2. Require SWP Contractors to Implement
 - Water Efficiency and Water Management Laws WR R3. Compliance with Reasonable and Beneficial Use
 - WR R4. Expanded Water Supply Reliability Element
 - WR R5. Develop Water Supply Reliability Element Guidelines
 - WR R6. Update Water Efficiency Goals
 - WR R7. Revise State Grant and Loan Priorities
 - WR R8. Demonstrate State Leadership
 - WR R9. Update Bulletin 118, California’s Groundwater Plan
 - WR R10. Implement Groundwater Management Plans in Areas that Receive Water from the Delta Watershed
 - WR R11. Recover and Manage Critically Overdrafted Groundwater Basins
 - WR R12a. Promote Options for New and Improved Infrastructure Related to Water Conveyance
 - WR R12b. Evaluate, Design, and Implement New or Improved Conveyance or Diversion Facilities in the Delta

- WR R12c. Improve or Modify Through-Delta Conveyance
- WR R12d. Promote Options for New or Expanded Water Storage
- WR R12e. Design, Construct and Implement New or Expanded Surface Water Storage
- WR R12f. Implement New or Expanded Groundwater Storage
- WR R12g. Promote Options for Operations of Storage and Conveyance Facilities
- WR R12h. Operate Delta Water Management Facilities Using Adaptive Management Principles
- WR R12i. Update the Bay-Delta Plan and Consider Drought
- WR R12j. Operate New or Improved Conveyance and Diversion Facilities Outside of the Delta
- WR R12k. Promote Water Operations Monitoring Data Management, and Data Transparency
- WR R13. Complete Surface Water Storage Studies
- WR R14. Identify Near-term Opportunities for Storage, Use, and Water Transfer Projects

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Attachment 3. Interview Questions



DELTA STEWARDSHIP COUNCIL

A California State Agency

Questions:

1. What involvement do you have in activities relating to the Delta?
2. How do you or your agency engage or work with the Delta Stewardship Council and Delta Stewardship Council staff?
3. How do you or your agency typically use the Delta Plan?
4. The Delta Reform Act requires the Delta Stewardship Council to review the Delta Plan at least once every five years. This interview is part of the Delta Stewardship Council's efforts to assess Delta Plan performance and implementation. The Council is also conducting an initial technical assessment of the Delta Plan content and evaluating the need for changes.

Knowing this, what are your expectations for this Delta Plan Five-Year Review?

5. The intent of the Delta Plan is to further the coequal goals for the Delta. A copy of the Delta Plan's coequal goals has been provided. To what extent does the intent of the Delta Plan align with that of you and/or your organization? What, if anything, should be changed to create better alignment?
6. The Delta Stewardship Council was created in legislation to support achievement of the state mandated coequal goals for the Delta. "Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." (CA Water Code §85054)

How would you describe the Delta Plan's success in achieving the coequal goals?

What, if any, are the specific chapters or sections of the Delta Plan that support this?

7. What factors or issues create the most significant barriers to achieving the coequal goals?
8. What recommendations, changes, or revisions should the Council consider to facilitate the Delta Plan achieving the coequal goals?
9. What do you view as the role of the Delta Stewardship Council? Do you consider the Delta Stewardship Council's role and regulatory authority well-defined?

10. In thinking about the Delta Stewardship Council’s role and regulatory authority, to what extent has the Council been effective in executing those responsibilities? What, if anything, should be changed?
11. To what extent are the Delta Plan strategies and related policies and recommendations in the Delta Plan supportive of your agency or organization’s work on the Delta?
12. A copy of the Delta Stewardship Council’s definition of adaptive management has been provided How well do the Delta Stewardship Council and Delta Plan support adaptive management in the Delta?
13. A copy of the Delta Stewardship Council’s definition of best-available-science has been provided How well does the Delta Stewardship Council incorporate use of best-available science into its decision-making or policy development process?
14. To what extent and in what ways has the Delta Plan Covered Action Certification Process changed or altered a project(s) led by your agency or organization?
15. How familiar are you with the Delta Plan performance measures? Do you have any recommendations on how the performance measures could be improved to increase awareness and enhance the utility of Delta Plan implementation and performance?
16. Are you aware of the Delta Plan Interagency Implementation Committee (DPIIC)? If so, is DPIIC meeting expectations set forth in the Delta Reform Act?”
17. Do you have any other comments or suggestions related to Delta Plan performance and implementation that you would like to share?

Attachment 4. List of Delta Plan Advisory Committee Questions

Five-Year Review of the Delta Plan - Stakeholder Assessment Draft DPAC Questions

The Delta Stewardship Council was created in legislation to support achievement of the state mandated coequal goals for the Delta. "'Coequal goals' means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." (CA Water Code §85054)

The Delta Reform Act requires the Delta Stewardship Council to review the Delta Plan at least once every five years. This interview is part of the Delta Stewardship Council's efforts to assess Delta Plan performance and implementation. The Council is also conducting an initial technical assessment of the Delta Plan content and evaluating the need for changes.

Questions:

1. What are your expectations related to what should be considered in the Delta Plan Five-Year Review?
2. How would you describe the Delta Plan's success in achieving the coequal goals? What, if any, are the specific elements or sections of the Delta Plan that support success? What measures or standards would you suggest to determine the Delta Plan's success in achieving the coequal goals?
3. What factors or issues create the most significant barriers to achieving the coequal goals?
4. What recommendations, procedures, changes, or revisions should the Council consider to facilitate the Delta Plan achieving the coequal goals? What recommendations, procedures, changes, or revisions should the Council consider to facilitate the Five-Year Review?
5. A copy of the Delta Stewardship Council's definition of best-available-science has been provided. How well does the Delta Stewardship Council incorporate use of best-available science into its decision-making or policy development process? What, if any, recommendations do you have related to Delta science?
6. What other comments or suggestions related to Delta Plan performance and implementation would you like to offer?

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Attachment 5. Delta Plan Advisory Committee Workshop Notes

Delta Protection Advisory Committee (DPAC) Meeting
Delta Stewardship Council's Five-Year Review of the Delta Plan
Stakeholder Assessment Workshop Meeting Notes
Walnut Grove Presbyterian Church, Koinonia Room
Monday, January 14, 2019, 5:30pm – 7:30pm

Attendees

Name	Affiliation
Delta Protection Advisory Committee Members	
Mark Pruner	Chair, Delta Organization Representative
Barbara Daly	Vice Chair, Delta Business Representative
David Strecker	Delta Agriculture Representative – San Joaquin County Farm Bureau & South Delta Farmer
Gilbert Labrie	Delta Business Representative – DCC Engineering, Walnut Grove Architect
Melinda Terry	Delta Flood Entity Representative – California Central Valley Flood Control Association
Edward Hard	State Agency Representative – California Department of Parks and Recreation
Jim Starr	State Agency Representative – California Department of Fish and Wildlife
Linda Gifford	Delta Recreation Representative Rio Vista
Mario Manzo	Ex-Officio Member – U.S. Dept. of the Interior, Bureau of Reclamation
Erik Vink	Director, Delta Protection Commission
Virginia Gardner	Program Manager, Delta Protection Commission
Lisa Beutler	Stantec
Laura Castillo	Stantec

Distributed Documents

- Delta Plan Background Information and Interview Questions (Attachment A)
- A copy of HR 357 – J. Garamendi, a congressional bill to establish the Sacramento-San Joaquin Delta National Heritage Area, was shared with the group and was mentioned that the bill has had no changes.
- DPAC Delta as a Place Recommendations Letter – Mark Pruner handed out a letter that was written to the Delta Stewardship Council regarding the Delta Plan. The letter is dated November 28, 2018, addressed to Jessica Pearson, Executive Office, and signed by Erik Vink. The letter discusses how the Delta Protection Commission looks forward to their continued involvement in ensuring that “Delta as Place” remains front and center in updates to the Delta Plan. A specific request was made to reflect the need for protection and enhancement of the unique Delta values in all chapters of the Delta Plan. Mark Pruner asked that the letter be included as part of the feedback from the DPAC.

Workshop Notes

The workshop was conducted as an agenda item of a publicly noticed regular meeting of DPAC. Chair Mark Pruner began by calling the meeting to order and leading the Flag Salute. DPAC Election for Vice-Chair took place. Erik Vink asked Lisa Beutler to provide background and reason why Stantec was conducting interviews for the Delta Stewardship Council (Council).

Lisa began by sharing a little about the process to conduct 25-30 interviews with individuals and focus groups and that participants were selected by Council staff based on knowledge of those who were directly involved now or were participants in development and implementation of the Delta Plan. She explained that the Delta Reform Act states that “The Council shall review the Delta Plan at least once every five years and may revise it as the Council deems appropriate...” She explained that Stantec was retained to conduct stakeholder outreach for the Five-Year Review by conducting stakeholder interviews with the identified Delta-related focus groups/individuals. Lisa was chosen to perform the series of interviews because of her 20+ years of water-related, neutral facilitation experience and having no direct involvement with the Delta Plan.

Lisa informed the participants that the DPAC interview would be the only public workshop interview and that their comments and input would be submitted as part of a public document. She then referred them to their meeting packet which included background information and a copy of the interview questions. She explained how the collection of interview feedback would occur and how input from the additional interviews would be compiled in the aggregate to provide anonymous reporting (unless one wished to share a direct quote). Lisa also informed the DPAC members that they would have an opportunity to provide further feedback by participating in a broadly distributed stakeholder survey for the Five-Year Review of the Delta Plan.

One member of the group was familiar with the interview process through her work with Delta flood protection agencies. She began by expressing, on behalf of DPAC and Delta associated groups, her concern that individuals identified for the Delta flood-focused group interview did not appropriately represent flood risk management or levee maintenance interests in the Delta. She believed there had been little to no Delta stakeholder representation throughout the Delta planning process and are afraid that Delta stakeholders will not be accurately represented during this Five-year Review of the Delta Plan. She noted that no Reclamation District representatives were invited to participate in the planned focus group interviews. It was suggested that Council should invite at least one Delta stakeholder member/liaison for all meetings throughout the process. *(Note, subsequent to the DPAC meeting, interviews were scheduled comprised of Reclamation Districts and local and state flood risk management agencies in the Delta.)*

To begin, some group members explained that many Delta stakeholders aren't familiar with the Delta Plan, especially those in the Delta farming community and residents of the Primary Zone. If given the opportunity to share, they thought these individuals would be able to articulate how the Delta Plan has made their life easier or harder. Because

the Delta Reform Act Section 8504 states the “coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place” DPAC members suggested that the Council consider creating a list of suggested questions to ask the locals. An example suggested was asking individuals involved in agriculture in the Delta if the Delta Plan has helped their life and industry. They noted that this might be a big ask, but DPAC members suggested it’s the right ask.

The group shared their worries of the Council being visionary versus goal-oriented and would like the Council to be critical of their own outcomes. They believed the Council needs to be able to publicly share what they are not achieving and be critical of why they are not meeting their goals or expectations to allow opportunities for the Delta stakeholders to contribute and help the Council make progress towards achieving their goals. For example, DPAC would like to be more involved in development and implementation of a Delta funding strategy. DPAC members suggested that funding that was supposed to be earmarked for the Delta should be refocused and spent in the Delta.

DPAC members communicated that there are hundreds of potential markers of success for the Delta. They believed the Council should consider viewing agriculture in full context or the big picture to gain an enriched perspective. They explained that a local matter of high conflict and interest are road safety and transportation routing conflicts for agriculture, including the dangers of seasonal slow-moving harvest load vehicles. An example shared was the effect of traffic during high peak hours when a hauling-truck must wait for nearly one hundred cars to pass before being able to make left turn, and having vehicles impatiently passing around the trucks along roadway shoulders and bike lanes. Driving direction applications (e.g. Google, Apple Maps and Waze) have also caused major traffic safety issues through diverting through-traffic onto local Delta roads.

DPAC also suggested that communities in the Delta are defined by the people within the boundaries of Reclamation Districts, and urban environments in the Delta are part of a larger community who often interact with each other. Levees are part of the community.

The DPAC reiterated that they would like to see metrics/numbers to measure Delta Plan achievements. One suggested idea was establishment of a social science task force to establish baseline metrics for the Delta’s unique cultural, recreational, natural resource, and agricultural values. Until goals and outcomes are identified and measured, no one can see the achievements. DPAC members are concerned about the rate and extent of conversion of agricultural land to other uses (e.g. recreation) in the Delta. The acreage and number of protected properties that are preserved for natural and cultural uses should be made public. They expressed that the Delta has high quality soils and water supply for agriculture and they feel it is unfortunate that Delta land use conversions are occurring. How is the Council reporting and tracking how agricultural land is being converted? DPAC also conveyed that it’s not clear what “Delta as an evolving place” is – it’s something that has not been defined. DPAC would like to be involved in helping to

determine metrics/values and carefully developing a working definition for “Delta as an evolving place.”

Related to the Council’s Consistency Determination process, the group asked for provisions that require work being done in the Delta consider how core values are being impacted and what needs to be done to reduce impacts. They asked:

- How do you manage something if you do not know what you are managing?
- What is the baseline?
- Where do we start to set a baseline? 2019 or the next five years?
- How do we know the performance measures are being met when they are implemented by eight different agencies?

Regarding barriers to success DPAC conveyed several including unclear performance measures and unclear Council communication with stakeholders. They believe the Council has failed to clearly establish and share where they plan to end up if they want it to be better. One person provided a GPS analogy as an example: We can insert the address to a destination and the goal is to get you to arrive at the final destination regardless of any detours or any wrong turns. The GPS recalibrates to stay focused on the destination. Similarly, the Council has many potential routes with different time and money implications, but if the Delta Plan does not define where the Council needs or wants to end up, success measures cannot be set and met.

Regulatory requirements were also called out as barriers. One example was the very short window in which certain types of work can actually occur in the Delta due to regulatory requirements. A specific concern was how this affected working on levees.

Several members of the DPAC group had followed activities of the Independent Science Board (ISB) and related papers. There was some disagreement as to the utility of some of the work related to what they observed as needs in the field. They also questioned if best available science in the Delta Plan was actually the best as the Council only uses science that is published. They need to allow the Independent Science Board to bring forward new science thinking to keep up with the rapid changes that are physically taking place. They noted that some scientists have expressed concerns as to why new science approaches can’t be used if they will be effective. They believed the Council should consider using some of these professionals to define both what can be allowed and be rejected, as reasonable and credible. They suggested creating some voluntary pilots with good monitoring to ensure effectiveness. They also noted that the federal government appears to be allowing more of this.

Related, they felt there needs to be more of an emphasis on the social sciences and appreciated that the Council is convening a task force to pull together social science experts nationwide. Related was their assessment of how economics as a social science was being used and that the economic analysis may be causing harm more harm than good if it does not factor the full range of economic issues.

Some DPAC members noted there are also many economic barriers, specifically in the decline of the larger regional and statewide communities' interaction with the Delta communities. To supplement local coffers, those attempting to protect legacy communities have tried, unsuccessfully, to obtain grants. One example was community events and festivals in Isleton. Due to insufficient funding, many events have been cancelled and people have forgotten how great the community once was. DPAC hopes that these examples help the Council to look at all programs to engage locals reviving the Delta communities.

DPAC suggested that the Council go back and, separate from the Five-Year Review, look at the Economical Sustainability Plan with fresh eyes because it has a lot of good information and can identify what is currently trending. The group asked the Council not to forget the mission of the Delta Protection Commission.

In closing they asked that the Council please read the letter of recommendations for how "Delta as a Place" should be included in the Delta Plan and Delta Plan implementation efforts. (DPAC Delta as a Place Recommendations Letter) They thanked Lisa for the interview and asked that they be included in further Delta planning activities.

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Attachment 6. Session Notes for the Delta Counties Coalition

Delta Counties Coalition
Delta Stewardship Council’s Five-Year Review of the Delta Plan
Stakeholder Assessment Interview
Summary Notes
Stantec C-Street Offices
Thursday, January 17, 2019 1:00pm – 2:30pm

Attendees	Affiliation
Natasha Drane	Delta Counties Coalition Coordinator, Government Relations and Legislative Officer, Sacramento County
Diane Burgis	Supervisor, Contra Costa County Board of Supervisors, District 3
Lea Castleberry	Deputy Chief of Staff, Contra Costa Board of Supervisors, District 3
Ryan Hernandez	Contra Costa Water Agency
Don Nottoli	Supervisor, Sacramento County Board of Supervisors, District 5
Patrick Kennedy	Supervisor, Sacramento County Board of Supervisors, District 2
John Lungren	Senior Planner, Sacramento County
Don Thomas	Senior Planner-Delta Affairs, Sacramento County, Water Resources
Brandon Nakagawa	Water Resources Coordinator, San Joaquin County
Roberta Goulart	Water & Natural Resources Program Manager, Solano County
Oscar Villegas	Supervisor, Yolo County Board of Supervisors, District 1
Lisa Beutler	Stantec
Laura Castillo	Stantec

Lisa Beutler welcomed the Delta Counties Coalition (Coalition) and thanked them for attending. She restated that the session had been convened as the Delta Reform Act requires that “The (Delta Stewardship) Council shall review the Delta Plan at least once every five years and may revise it as the Council deems appropriate...” She explained that Stantec was retained by the Delta Stewardship Council (Council) to conduct third-party outreach for the Five-Year Review of the Delta Plan by conducting stakeholder interviews, focus groups and surveys with knowledgeable and interested Delta-related focus groups/individuals. She explained there were about 25-30 stakeholder focus groups and individuals identified as interview candidates based on their involvement in developing and implementing the Delta Plan. Lisa was selected to conduct the series of interviews because of her 20+ years of water-related facilitation experience, and no conflicts of interest as she has had no direct involvement with the Delta besides her participation as an instructor in the Delta Leadership Program.

For orientation she provided an overview of the interview process, the structure and pattern of questions, the collection of interview feedback and input in the aggregate and anonymous reporting (unless anyone wished to be directly quoted). She affirmed that a copy of the interview questions had been provided in advance of the session and noted that it was common for answers to questions to touch on more than one topic. She explained that while it was a structured process (all those interviewed were provided

with the same questions), the interview would focus on the questions of the most interest to the interviewees.

Lisa also advised that they, and those they represent, would have an opportunity to provide further feedback by participating in a broadly distributed stakeholder survey for the Five-Year Review of the Delta Plan.

Prior to launching the discussion, Coalition members expressed concerned that the Council did not have the most current list of Coalition contacts noting that several of the individuals invited were no long part of the group or had retired. They also requested an opportunity to review the summary/notes from this meeting prior to submittal to the Council and reporting to the public because, as public representatives, they have a role to make sure that their feedback is captured to represent the different people involved at various levels in Delta projects from their counties. Lisa informed the Coalition that she would not provide the raw notes to the Council or Coalition but would provide a summary to the Coalition. Lisa also mentioned that if the summary is provided to the Coalition, it would also be available to the public. The Coalition agreed, and they expressed appreciation for the direct involvement and opportunity to meet.

The interview began with the Coalition members' providing background on their role in the Delta Plan development and its implementation. They explained their involvement has ranged from participating in development of relevant legislation and involvement in the Delta Protection Commission (DPC), to involvement in assuring alignment of planning documents with broader goals/objectives. Staff within agencies represented by the Coalition often refer to and utilize the Delta Plan as part of their own planning processes.

The Coalition and those it represents have made an effort to engage in Delta Plan implementation at every level because, while the Delta and the Delta Plan are important for State and federal interests, they emphasized that in-Delta, local interests must be met too. They added that, if given the opportunity, the representatives that sit on the DPC would like to take a larger and deeper role in Council activities. That said, currently, only one of the seven Council members, the Chair of the DPC, formally represents the larger Delta interests. Even with the Chair of the DPC serving on the Council to provide a local voice they have found the voice isn't always heard because of the priorities of other Council members. They strongly emphasized there is not enough representation from the Delta counties in decision making matters within the Council or the Council's Delta Plan Interagency Implementation Committee (DPIIC). One Coalition member shared an observation from about eight (8) years ago when Delta counties were recognized as great stewards of the Delta and relationships with the Council were strong. Coalition members encouraged and invited new Council staff to build relationships with the Delta counties. They suggested allowing deeper relationships and opportunities rather than what they found amounted to handcuffing what they do at a local level. They felt changing this dynamic will help the Delta communities.

In responding to questions about the coequal goals, the Coalition's deep understanding of the Delta Plan was illustrated in their specific descriptions of planning elements. They highlighted a need for Delta Plan Chapter 5 (Protect and Enhance the Unique Cultural, Recreational, Natural Resource, and Agricultural Values of the California Delta as an

Evolving Place) to receive greater attention. The members view the Council's coequal goals ("providing a more reliable water supply for California," and "protecting, restoring, and enhancing the Delta ecosystem") and the requirement to meet the coequal goals in a manner that "protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place" as more appropriately being tri-equal goals. The affirmation of "Delta as an evolving place" is key and needs to give certainty to people who live and depend on the Delta. It is difficult to define, but important. It is peoples' homes and communities, and it's respecting the landscape, food, and farming in the Delta, and the recreational, environmental and cultural needs that ought to be part of decision-making.

They continued that the Delta Plan is a lifeline for agricultural sustainability and water supply that must represent hope for the future. A Coalition member pointed out that the average age for Delta farmers is now older and the Delta Plan must also be able to recognize and help address this community shift.

In considering barriers to success in achieving the coequal goals, the Coalition suggested that a bottom-up rather than a top down approach is needed to reflect the Delta Plan principles to provide residents and visitors in the Delta a place to live, work, and play. They welcome open and honest debates on water supply reliability and reduced reliance on the Delta. Coalition members also acknowledged the large amount of ecosystem restoration forecasted to be implemented within the five counties represented by the Coalition. Coalition members suggested stronger local representation and meaningful inclusion, along with and definitions of expectations and success factors, will result in far more viable and appropriate results.

The Coalition's general feeling is that the local voice they represent isn't valued or respected. They highlighted the limited representation of Coalition members in Delta Plan implementation activities, and that Delta values advanced by the Coalition members aren't necessarily the values of the majority of Council members. Coalition members highlighted what they found to be a clear lack of focus on the Delta as an evolving place and the plethora of options promoting water conservation. They also observed that most interest centered on building new conveyance and water infrastructure rather than alternatives to building new infrastructure.

They also suggested messaging to and engaging in on-going conversations with locals is critically important and repeatedly mentioned by the Coalition members as they restated various points throughout the session.

A sense of weariness was expressed as the members relayed their multiple and on-going litigation experiences. Participants stated that addressing approaches to overcome barriers during planning would be more productive than voicing concerns through litigations and relying on the courts to make decisions. They pointed out that working together to find a more balanced approach is far preferred. They also noted, that as the Coalition has become a cohesive group, its members have become very collaborative and like working together. They pointed out how much they prefer open conversations over dealing with litigations.

In response to a question about the Council's role and regulatory authority the Coalition members found that interactions between the Council and other agencies are minimal. They shared that beyond the engagement of California Department of Water Resources (DWR) and California Department of Fish and Wildlife, they hadn't seen the Council going beyond requirements.

Related to adaptive management, the Coalition believes it would be helpful for people to better understand that you adapt over time and evaluate success by results or progress towards desirable outcomes developed during the planning process. They agree that Adaptive Management is the only safety net down the road. They noted, however, that unsuccessful projects and/or adaptive management will come at the expense of the local jurisdictions and the environment. Coalition members suggested that the adaptive management approach should be focused on things that can be measured and need to be fixed now because it often can take time (sometimes decades) to determine if something is successful. They found that adaptive management often relies more on a trust than knowing that something might work based on a proven science perspective. Any plan, agreement or work must occur in good faith so this requires a high level of trust that the effort will be accounted for and failures in adaptive management outcomes not held against the project.

Coalition members also suggested that there are a lot of things that should be more fully considered. They believed there is a need to better consider effects of things like climate change, economic impacts, and local interests in developing adaptive management efforts. Also, because the Delta is fragile and vulnerable, lots of wasted time and money will be spent unless it's looked at holistically. They stated that we can't forget the Delta has a unique diverse culture and having its own unique representation and interaction with the water and it's uses is important.

Regarding the DPIIC, Coalition members pointed out that there is only one local representative for the five (5) Delta counties out of seventeen (17) total representatives of DPIIC. The Coalition has done its best to be part of DPIIC and feels that locals should be better represented at the DPIIC table. Coalition members also noted that since DPIIC members are high-level agency representatives they are not always involved or knowledgeable about Delta Plan implementation activities.

In closing, the participants reiterated the importance of local representation in all things Delta and expressed the hope that their comments will inform the Delta Plan Five-Year review.

Attachment 7. Written comments of the San Joaquin Council of Governments

In lieu of an interview the San Joaquin Council of Governments provided written comments. Following is a full copy of their correspondence.

Written Comments of the San Joaquin Council of Governments

1. What involvement do you have in activities relating to the Delta?

SJCOG has two primary roles relating to the Delta through its long-range transportation planning (Regional Transportation Plan/Sustainable Communities Strategy or RTP/SCS) and through administration of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

2. How do you or your agency engage or work with the Delta Stewardship Council and Delta Stewardship Council staff?

For the RTP/SCS process, SJCOG utilizes technical information and mapping from the Delta Plan as a resource when developing projected future land-use and transportation scenarios for its long-range transportation plan. Interaction with DSC staff has typically been through the state and federal agency consultation process. The process is iterative and has included formal comment letters from DSC staff on both the RTP/SCS and the associated EIR at both the Notice of Preparation (NOP) and draft plan stage. More recently, SJCOG staff and DSC staff have instituted a regular check-in to keep both staffs apprised of plans, initiatives, and studies.

For the SJMSCP, staff was a part of a county-wide coalition from interested parties (e.g. local jurisdictions, NGOs, water interests) with regards to the policies affecting San Joaquin County's interests. The SJMSCP interest was only regarding the county-wide habitat plan from the standpoint of habitat conservation easements and restoration projects. Otherwise, staff for the habitat plan were involved very little with the DSC and DSC staff.

3. How do you or your agency typically use the Delta Plan?

It is a technical resource.

4. The Delta Reform Act requires the Delta Stewardship Council to review the Delta Plan at least once every five years. This interview is part of the Delta Stewardship Council's efforts to assess Delta Plan performance and implementation. The Council is also conducting an initial technical assessment of the Delta Plan content and evaluating the need for changes.

Knowing this, what are your expectations for this Delta Plan Five-Year Review?

It is unclear what "initial technical assessment" of the plan content refers to. If this is referring to updating of technical data that has changed from the time the draft Delta Plan was completed, the expectation would be that changes to the technical

assumptions and, thus, changes to the plan would be clearly communicated to affected stakeholders before they are finalized. As far as performance and implementation, it appears that the status of performance measures for the plan are already updated on the Delta Plan website on a regular basis. Again, any deletion or additions to performance measures because of the five-year plan review should be clearly communicated to the public and stakeholders. Five years is a short time frame to be considering substantial changes to performance or implementation metrics.

1. The intent of the Delta Plan is to further the coequal goals for the Delta. A copy of the Delta Plan's coequal goals has been provided. To what extent does the intent of the Delta Plan align with that of you and/or your organization? What, if anything, should be changed to create better alignment?

Reliable water supply: is connected to SJCOG's RTP/SCS policy to "enhance the environment for existing and future generations and conserve energy." While water supply is not directly within the agency's mission, strategies to encourage efficient development patterns, enhance the land-use/transportation connection through projects supporting water efficiency, and improving air quality through reducing transportation emissions do have a connection to water supply reliability in their overall effect in reducing greenhouse gas emissions.

Protecting, restoring, and enhancing the Delta ecosystem:

The agency's mission aligns with the Delta Plan in protecting and enhancing the Delta through the SJCMSCP's activities to preserve lands in the Delta through easement acquisition (natural, agricultural, and other open space land) and in its mission to "provide for the management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Federal Endangered Species Act of the California Endangered Species Act."

2. The Delta Stewardship Council was created in legislation to support achievement of the state mandated coequal goals for the Delta. "Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." (CA Water Code §85054)

How would you describe the Delta Plan's success in achieving the coequal goals? What, if any, are the specific chapters or sections of the Delta Plan that support this?

See Q4. The plan's success is tracked sufficiently through updates on the status of existing performance metrics.

3. What factors or issues create the most significant barriers to achieving the coequal goals?

No specific barriers to achieving the coequal goals noted.

4. What recommendations, changes, or revisions should the Council consider to facilitate the Delta Plan achieving the coequal goals?

No specific recommendations.

5. What do you view as the role of the Delta Stewardship Council? Do you consider the Delta Stewardship Council's role and regulatory authority well-defined?

The role of the Delta Stewardship Council is well-defined in its enabling legislation.

6. In thinking about the Delta Stewardship Council's role and regulatory authority, to what extent has the Council been effective in executing those responsibilities? What, if anything, should be changed?

The Council's regulatory authority is well-defined in its enabling legislation. No changes are recommended.

7. To what extent are the Delta Plan strategies and related policies and recommendations in the Delta Plan supportive of your agency or organization's work on the Delta?

Underlying technical data are useful to our agency's planning efforts. The approach of the DSC has been one of regional and local agencies supporting implementation of the Delta Plan, not having the Delta Plan support regional and local efforts.

8. A copy of the Delta Stewardship Council's definition of adaptive management has been provided How well do the Delta Stewardship Council and Delta Plan support adaptive management in the Delta?

This five-year review appears to be the main tool in the adaptive management process. However, use of the adaptive management process should not supersede stakeholder input prior to changes in the monitoring, evaluation, or implementation components of the Delta Plan.

9. A copy of the Delta Stewardship Council's definition of best-available-science has been provided How well does the Delta Stewardship Council incorporate use of best-available science into its decision-making or policy development process?

Our agency's involvement in incorporation of best-available science into decisions made or policy developed for the Delta Plan has been minimal. However, DSC staff have been extremely helpful in sharing data and expertise for use in our own planning processes. This is one of the most helpful aspects of The Delta Plan for regional and local agencies.

10. To what extent and in what ways has the Delta Plan Covered Action Certification Process changed or altered a project(s) led by your agency or organization?

The covered action process added an additional consideration to the agency's development of its RTP/SCS. Because of previous close coordination with local agency general plans, relatively minor adjustments in the projected land-use pattern for the RTP/SCS were needed related to the covered action process and DSC staff plan review.

11. How familiar are you with the Delta Plan performance measures? Do you have any recommendations on how the performance measures could be improved to

increase awareness and enhance the utility of Delta Plan implementation and performance?

The performance measures have been reviewed by SJCOG staff. The list is extensive; however, most are not directly relevant to SJCOG's work. We do note; however, that many have relevance to SJCOG's member (local) agencies. SJCOG has previously discussed engaging local agency staff in San Joaquin County to increase awareness of Delta Plan implications and provide a forum for dialogue with local agency staff. Beyond implementation of this idea, we have no other comments on performance measures.

12. Are you aware of the Delta Plan Interagency Implementation Committee (DPIIC)? If so, is DPIIC meeting expectations set forth in the Delta Reform Act?"

We have only recently become aware of the work of this group and have not previously engaged with the committee.

13. Do you have any other comments or suggestions related to Delta Plan performance and implementation that you would like to share?

No additional observations or suggestions.

**Submitted by Kim Anderson, Senior Regional Planner
On behalf of the San Joaquin Council of Governments**

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