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2012 Delta Vision Report Card

June 2012



Delta Vision Foundation

The Delta Vision Foundation was established by members of the Delta Vision Blue Ribbon Task Force, the independent body established under Governor's Executive Order S-17-06. The Blue Ribbon Task Force held more than 30 days of public meetings over two years, and involved hundreds of stakeholders, scientists, and members of the public in the process. It issued *Our Vision for the California Delta* in 2007 and the *Delta Vision Strategic Plan* in 2008. The Delta Vision Committee, composed of Cabinet Officers, issued the *Delta Vision Committee Implementation Report* (2008) supporting almost all of the Delta Vision recommendations.

The mission of the Delta Vision Foundation (DVF) is to encourage enactment of the *Delta Vision Strategic Plan* and subsequent authorizing legislation to achieve the Two Co-Equal Goals: (1) Restore the Delta Ecosystem; and (2) Ensure Water Supply Reliability. The Delta Vision Foundation monitors, evaluates, and provides information to government officials, policymakers, and the public about the progress of the State of California in implementing the *Delta Vision Strategic Plan* recommendations as a set of integrated and linked actions.

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Acronyms

AWMC Agricultural Water Management Council

BDCP Bay-Delta Conservation Plan

BFA State Board of Food and Agriculture

BTH California Business, Transportation, and Housing Agency

Cal EMA California Emergency Management Agency
CalEPA California Environmental Protection Agency

Caltrans Department of Transportation CCWD Contra Costa Water District

CDFA California Department of Food and Agriculture
CDPR California Department of Parks and Recreation

cfs cubic feet per second

CUWCC California Urban Water Conservation Council

CVP Central Valley Project

CVFPB Central Valley Flood Protection Board CVFPP Central Valley Flood Protection Plan

Central Valley Regional Board Central Valley Regional Water Quality Control Board

CWC California Water Commission

Conservancy Sacramento-San Joaquin Delta Conservancy

CZMA Coastal Zone Management Act
Delta Sacramento-San Joaquin River Delta
DFG California Department of Fish and Game

DOC

U.S. Department of Commerce
U.S. Department of the Interior
DPC

Delta Protection Commission
DSC

Delta Stewardship Council
DSP

Delta Science Program
DVF

Delta Vision Foundation
DVSP

Delta Vision Strategic Plan

DWR California Department of Water Resources

EIR Environmental Impact Report
EIS Environmental Impact Statement
ERP Ecosystem Restoration Program

ESA Endangered Species Act
ESP Economic Sustainability Plan

FEMA Federal Emergency Management Agency

IEP Interagency Ecological Program

IRWM Integrated Regional Water Management

ISB Independent Science Board
MOU Memorandum of Understanding
NMFS National Marine Fisheries Service

NPDES National Pollution Discharge Elimination System

NRCS Natural Resources Conservation Service

NTA Near-term Action

OCAP Operational Criteria and Plan Reclamation Bureau of Reclamation

Regional Board Regional Water Quality Control Board California Natural Resources Agency

SLC State Lands Commission



State Board California State Water Resources Control Board

SWP State Water Project

TMDL Total Maximum Daily Load
USACE U.S. Army Corps of Engineers
USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey



Section 1 Introduction and Background

Delta Vision Foundation

The mission of the Delta Vision Foundation (DVF) is to encourage enactment of the *Delta Vision Strategic Plan* and subsequent authorizing legislation. DVF monitors, evaluates, and provides information to government officials, policymakers, and the public about the progress of the State of California in implementing the recommendations as a set of integrated and linked actions to achieve the Two Co-Equal Goals: (1) Restore the Delta Ecosystem; and (2) Ensure Water Supply Reliability. The *2012 Delta Vision Report Card* assesses the progress and effectiveness of State agencies and appointed governing bodies, Federal agencies, and other organizations in implementing the actions recommended in the *Delta Vision Strategic Plan* and the status of the Delta and water supply reliability to measure results.

The Delta Vision Foundation was established by members of the Delta Vision Blue Ribbon Task Force, the independent body established under Governor's Executive Order S-17-06. The Blue Ribbon Task Force held more than 30 days of public meetings over two years, and involved hundreds of stakeholders, scientists, and members of the public in the process. It issued *Our Vision for the California Delta* in 2007 and the *Delta Vision Strategic Plan* in 2008. The Delta Vision Committee, composed of Cabinet Officers, issued the *Delta Vision Committee Implementation Report* (2008) supporting almost all of the Delta Vision Task Force recommendations.

In 2009, the Legislature and Governor approved legislation in response to the *Delta Vision Strategic Plan*, including the following bills: SBX7-1 (Simitian) Delta Governance: Delta Stewardship Council, Delta Conservancy, Delta Protection Commission; SBX7-2 (Cogdill) Water/Ecosystem Bonds (currently on the November 2012 ballot, but expected to be deferred to November 2014); SBX7-6 (Steinberg) Groundwater Elevation Monitoring; SBX7-7 (Steinberg) Water Conservation; and SBX7-8 (Steinberg) Water Rights Enforcement.

Delta Vision Report Card on Progress and Effectiveness Purpose

The 2012 Delta Vision Report Card provides a broad assessment of actions and organizations so that elected officials, agency executives and staff, and stakeholders and the public can understand the opportunities and barriers for achieving the Two Co-Equal Goals. The Report Card also includes recommendations for action and improvement to accelerate implementation and ensure that strategies and actions are comprehensive, coordinated, and integrated.

Evaluation Approach

The 2012 Delta Vision Report Card is based on information gathered from elected officials' staff, agency executives and staff, and stakeholders and the public. Delta Vision Foundation staff conducted 47 interviews with 60 leaders to review progress and effectiveness (see Appendix A). The staff also prepared an online survey, which was available on the DVF website and announced three times to approximately 1,000 interested parties on the DVF contact list. The staff also researched the status of actions as reported on State and Federal agency websites and through conversations with agency staff.



Organization of Report Card

The 2012 Delta Vision Report Card is organized in five sections:

Section 1. Introduction and Background

Section 2. Actions Progress – An assessment of the progress of the 85 actions recommended in the *Delta Vision Strategic Plan*.

Section 3. Leadership and Effectiveness – An evaluation of the leadership and effectiveness of the State agencies with primary responsibility for implementing the *Delta Vision Strategic Plan*, the cooperation of Federal agencies, and the constructive cooperation among stakeholders and other interested parties.

Section 4. Status of the Two Co-Equal Goals – An assessment of the status of achieving the Two Co-Equal Goals.

Section 5. Conclusions and Recommendations – Five top-level recommendations and a compilation of recommendations for programs and organizations from sections 2 and 3.

The *Report Card* provides a framework for reporting progress by implementing agencies and increasing transparency and accountability. It is intended to serve as a positive dynamic to improve performance and ensure success in achieving the Two Co-Equal Goals. The 2011 and 2012 Report Cards give credit for the intensity of effort by all parties since the *Delta Vision Strategic Plan*. However, ultimately, only action and results will address the historic problems and conflicts that have defied solution for decades. Future report cards will increase the focus and expectation for action, implementation, and results.

The Delta Vision Foundation intends this *Report Card* as a snapshot in time to highlight significant issues, opportunities, and recommendations. The DVF Board of Directors and staff welcome suggestions for improvements and information to improve the accuracy of future reports. In addition, responses and comments from public agencies, stakeholders, or the public will be posted on the DVF website as part of the public record for the *2012 Delta Vision Report Card*.

Acknowledgements

Special thanks go to the leaders and staff of public agencies and organizations who gave generously of their time to be interviewed for the 2012 Delta Vision Report Card and to the stakeholders and members of the public who provided input through the online survey. This Report Card would not be possible without their candid assessments of what has been accomplished and what needs improvement.

The Delta Vision Foundation and the *2012 Delta Vision Report Card* are supported by grants from the S.D. Bechtel, Jr. Foundation and the David and Lucille Packard Foundation.

For More Information

Additional information about the Delta Vision Foundation and the *Delta Vision Strategic Plan* is available on the Delta Vision Foundation website: www.deltavisionfoundation.org.

The following appendices to the 2012 Delta Vision Report Card are also available on the website:

- Appendix A Agency and Stakeholder Interviews
- Appendix B Actions Status by Lead Agency
- Appendix C Actions Status by Evaluation Topic
- Appendix D Online Survey Quantitative Results
- Appendix E Online Survey Open-ended Question Responses
- Appendix F Suggestions and Recommendations from Interviews



Section 2 Actions Progress

Introduction

One of the important measures of progress toward achieving the Two Co-Equal Goals is the advancement of the actions identified in the *Delta Vision Strategic Plan (DVSP)*. This section assesses the progress of the 85 actions recommended in the *DVSP*. Of the 85 actions, ten near-term actions are recommended to address immediate threats as soon as possible and 16 legal and procedural milestones are identified as key administrative actions required to advance the recommendations of the *DVSP*.

The *DVSP* actions were originally grouped under seven goals developed by the Delta Vision Task Force (Task Force). The Delta Vision Foundation has regrouped these seven goals into four evaluation topics: (1) Governance; (2) Ecosystem Restoration and Recovery; (3) Delta Vitality and Security; and (4) Water Supply Reliability, as shown in Figure 2-1. These topics are designed to align with the way most people understand the comprehensive solutions for the Sacramento-San Joaquin Bay-Delta.

This section begins with a discussion of the progress and recommendations for the ten near-term actions. The remainder of the section evaluates and makes recommendations for the four evaluation topics. Within each of these topics, the evaluation discusses the legal and procedural milestones and other *DVSP* actions.

Evaluation Approach

The Delta Vision Foundation assessed the status of each action in the *DVSP* using the following ten-point scale (0 to 10).

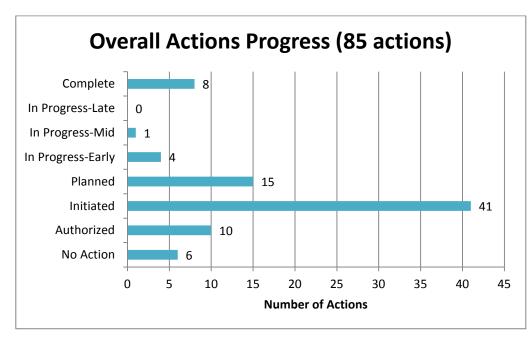
Progress and Completion		
0 points	No action	No action by Governor, Legislature, or Agency Director to initiate
1 point	Authorized	Legislative authority granted and Administrative direction and initial funding provided
2 points	Initiated	Purpose defined, work plan and schedule developed, team assembled
3 points	Planned	Planning complete, ready for implementation.
4 points	In Progress Early	Implementation begun, funding authorized, workforce mobilized
6 points	In Progress Mid	Implementation substantially underway
8 points	In Progress Late	Implementation nearing completion
10 points	Completed	Action completed, ongoing adaptive management and maintenance

For each evaluation topic, the points achieved for each action in the evaluation topic were summed and divided by the total points available if all actions were completed (10 points for each action). The resulting number is shown as a percent complete for the evaluation topic. A bar graph shows the number of actions in each stage of completion.



Implementation Progress

Overall, the 85 actions recommended in the *Delta Vision Strategic Plan* are 28% complete. This is a slight improvement compared with the 25% complete reported in the *2011 Delta Vision Report Card*. The graph below shows the number of actions in each progress category.





Listed below are the summary grades for near-term actions and each of the four evaluation topics.

Near-Term Actions

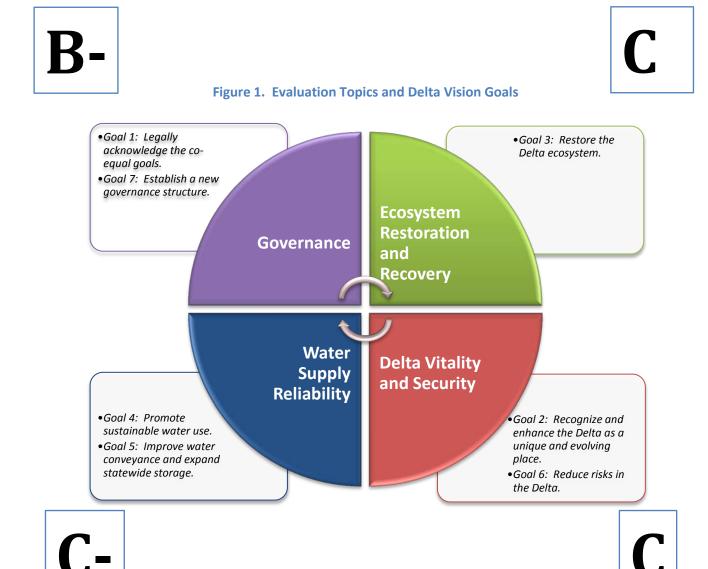


There is a continued lack of action to address near-term Delta risks and ecosystem restoration. The progress on near-term actions continues to be entirely inadequate, particularly related to securing the existing water supply infrastructure, and beginning ecosystem improvements. There has been some action to improve emergency response planning and readiness, but those efforts have not addressed potential catastrophic flooding of Delta islands from multi-island levee failures caused by an earthquake or major flood event. The progress grade declined from a "D" in 2011 to a "D-" in 2012.



Actions Progress

New governance structures have been established and additional planning is underway, but implementation is lagging in all areas. The Governance grade declined from a "B+" in 2011, to a "B" this year, due to ongoing failure to provide funding for critical activities. Grades for Ecosystem Restoration and Recovery and Delta Vitality and Security increased from "C-" for both elements in 2011, to a "C" this year. The Water Supply Reliability grade increased from a "D+" in 2011, to a "D" this year. These increases recognize the significant and commendable efforts made to advance plans and policy making in all areas. However, few "on-the-ground" actions have actually been implemented to improve water supply reliability, ecosystem restoration, or Delta vitality and security.





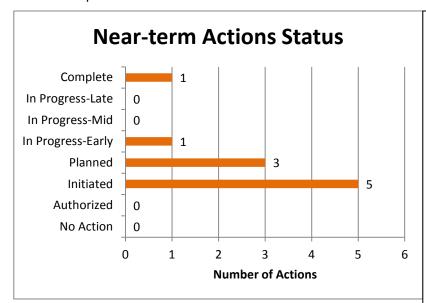
Near-Term Actions

The *DVSP* recommends ten actions to be undertaken and completed as soon as possible. Each of these ten near-term actions (NTA) is needed either to foster more effective policymaking or to address immediate threats to Delta inhabitants, the Delta ecosystem, or water conveyance systems. No ranking of priority is suggested.

Near-term Progress 33%

Progress and Accomplishments

The Delta Vision Foundation assessment of near-term actions shows only a slight improvement from 2011, with only 33% overall progress, compared to 30% in 2011. Planning activities are underway for all actions and implementation has begun for a few of them. One action, the construction of a new water supply intake for the Contra Costa Water District (NTA 5), is complete. Other actions remain stuck in planning work. Because many of these near-term actions were identified and already in the works before the 2008 Delta Vision Strategic Plan was published, the one might expect to see much more rapid action toward completion.



Vital Policy Making Information is Being Collected (NTAs 1 and 2)

Several important data collection programs are in place to assemble physical, ecosystem, and socioeconomic information in the Delta. This information is needed for policymaking and project decisions, including drought planning and water allocation. The State Water Resources Control Board (State Board) has developed a computer database and online information system for water rights reporting. The Delta Watermaster has established effective communications and enforcement to increase compliance with water diversion reporting requirements. The Department of Water Resources (DWR) has developed a

Near-Term Actions

- Obtain needed information on water diversion and use.
- Initiate collection of improved socioeconomic, ecosystem, and physical structure data about the Delta to inform policy processes and project level decision making by all public agencies, local, State, and Federal.
- 3. Accelerate completion of in-stream flow analyses for the Delta watershed by DFG.
- 4. Conduct a Middle River Corridor Two Barrier pilot project.
- 5. Complete construction of an alternative intake for the Contra Costa Water District.
- 6. Evaluate the effectiveness of a Three Mile Slough Barrier project.
- 7. Construct a demonstration fish protection screen at Clifton Court Forebay.
- 8. Advance near-term ecosystem restoration opportunities.
- 9. Stockpile rock and other emergency response materials.
- 10. Assess and improve State capacity to respond to catastrophic events in the Delta.

groundwater monitoring program designed to collect statewide groundwater elevations and make the data available online. The Interagency Ecological Program (IEP) has initiated an inventory of research and monitoring in the Delta and its tributaries. This inventory will improve information sharing and facilitate decision-making. The Delta Protection Commission has assembled foundational socioeconomic data for the Delta in the Economic Sustainability Plan. DWR has provided flood mapping information to local officials.



Delta Emergency Preparedness Activities Are Underway (NTAs 9 and 10)

The two biggest threats to personal safety of Delta residents are flooding and earthquakes, because either could lead to multiple levee failures in the region. Initial emergency planning activities have begun. The Delta Multi-Hazard Task Force was authorized by legislation and developed an emergency response plan, which is available now. In spring 2011, the California Emergency Management Agency (Cal EMA) and other agencies conducted emergency response exercises for a simulated flood event. Cal EMA and others are initiating a catastrophic flood plan, which will be complete in fall 2013. The Delta Stewardship Council (DSC) has recommended that responsible State, Federal, and local agencies continue coordination efforts to implement the Task Force recommendations. CalEMA and the Federal Emergency Management Agency (FEMA) have initiated a Catastrophic Flood Plan to be complete in fall 2013.

Water Conveyance and Utility Systems Protection Has Been Upgraded (NTAs 9 and 10)

DWR continues to expand stockpiles of rock and plastic throughout the Delta in order to have these materials available in the event of levee failures. DWR is nearing completion of a siting process to identify three or more locations in the Delta for transfer facilities, which would be constructed by mid-2013. Delta levee improvements continue through the Levees Subventions Program and the Special Projects Program, both funded through recent State bonds with local matching funds. Emergency response coordination has been improved through the release of the Sacramento-San Joaquin Delta Multi-Hazard Coordination Task Force Report, which was required by Senate Bill 27. However, for unexplained reasons, the report was withheld from public release from late 2010 until May 2012. The DSC has recommended that DWR, in consultation with local agencies, continue to expand emergency stockpiles, make them regional in nature, facilitate their use by a larger number of agencies, and "over-reinforce" western Delta levees.

Near-term Actions to Protect the Delta Ecosystem Have Stalled (NTAs 3, 4, 6, 7, and 8)

DFG completed its report on the biological needs and flow requirements for the Delta in November 2010. Concurrently, the State Board submitted its schedule and estimated costs to complete in-stream flow studies for Delta tributaries. Since 2010, DFG has received money from Proposition 84, hired three new staff (in 2011) and initiated one flow study. Nevertheless other studies have been delayed by further work planning, additional research needs, and State and Federal contracting problems.

The 2011 Delta Vision Report Card noted that early action was continuing on low volume fish screens at Clifton Court and the Three Mile Barrier. There has been no progress on either of these actions in the past year. On a positive note, a scientific review of the proposed Two Gates Project, intended to protect delta smelt in the south Delta, revealed that there was not enough evidence to support the investment at this time. Additional research is underway on the relationship of turbidity to delta smelt movement and survival.

Some Delta ecosystem restoration activities continue, but planning and design are not complete on most projects. Liberty Island, which became an unplanned ecosystem restoration project due to the 1997 levee failure, is the subject of ongoing monitoring and assessment of tidal habitat restoration. Other projects have not moved to construction, including Dutch Slough, Prospect Island, McCormack-Williamson Tract, Lindsay Slough, Meins Landing, Hill Slough, and Rush Ranch. Many of these projects have been planned for ten years or more. Delays have resulted from a variety of issues, including funding, partnerships, design constraints, permitting, and concerns of adjacent landowners.



Assessment

Hopeful But Inadequate

Overall, the progress on near-term actions continues to be inadequate. All of the near-term actions have been initiated, but only one is complete. The Delta Vision Foundation expected that near-term actions would have moved more quickly from planning to implementation. This is particularly true for actions that were identified and planned before the completion of the *Delta Vision Strategic Plan* in 2008. In spite of a bit of progress, the grade for near-term actions has been lowered from a "D" in 2011 to a "D-" in 2012.



As noted in 2011, actions to protect life, property, and the water supply system are crucial. Without substantial and prompt action, loss of life and serious damage to the State's economy is inevitable. Progress continues on stockpiling materials and developing emergency response plans. These actions primarily address single levee failures from flood events or seepage. While these actions are sorely needed, they are not, in themselves, sufficient preparation for catastrophe.

The State, particularly DWR and DSC, have failed to develop priorities and programs to protect critical statewide infrastructure, including protection of Delta water supplies from potential multi-island failures from flood or earthquake. Realistic preparations for responding to a seismic event in the Delta are woefully lacking. This is especially true with regard to life safety activities, including preparation, rescue, and response. In the case of an earthquake, the State's water, transportation, and utility infrastructure could well be in peril for days, weeks, or even longer. A seismic event could produce many tens of miles (possibly hundreds of miles) of levee failure owing to soil liquefaction and slumping of long, continuous frontage. The preparations needed to respond to a seismic event remain undone. Additional, immediate work is needed to secure the water delivery system, transportation infrastructure critical for evacuation and response actions, and Delta land uses from catastrophic failure in the event of an earthquake.

Ongoing Commitment Needed

To maximize crisis preparedness, State and local leaders must maintain their commitment to, and support for, preparatory actions. Specifically, emergency operations procedures, transfer facilities, and private sector agreements are all essential preparedness needs. Exercises to test public notification, evacuation, rescue, and response are key preparations for a multi-levee failure. Public education of earthquake risks and consequences should continue and expand.

Advancing near-term ecosystem restoration is a difficult and complex task. State and Federal agencies are to be commended for efforts to advance ecosystem planning; the level of initial effort is promising. However, inadequate implementation cannot be overlooked. Projects originally identified by the Delta Vision Task Force as Near-Term Actions were thought to be close to implementation in 2008; none has yet advanced beyond planning. Focus, commitment, funding, and problem solving are needed for immediate implementation.

New Knowledge Needed

Improved data collection efforts have gotten off to a good start. Agencies must continue to assemble socio-economic, ecosystem, and physical structure data about the Delta. Next, it must be synthesized into useful information for planners and decision-makers. Data about water diversions, water use, water quality, economic activity, flood risks, and other topics is useful only if it enhances understanding of the Delta system.

Several pilot projects have produced valuable information, but more pilots are needed to really advance ecosystem restoration and improve water management. Pilots provide essential, new knowledge for future larger scale restoration. Responsible State agencies must identify implementation barriers and escalate them to executives and elected officials for prompt resolution.



Near-Term Action Recommendations

The Delta Vision Foundation recommends the following actions to improve and accelerate implementation of the ten Near-term Actions.

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Emergency Management Agency, in partnership with other agencies, should conduct a formal assessment of regional capacity to respond to catastrophic events in the Delta, including multiple levee failures from an earthquake. This assessment should include, among other agencies: the Business, Transportation, and Housing Agency; Department of Fish and Game; Department of Water Resources; and Delta Protection Commission. A report of the results should be presented to the Governor, Delta local governments, and Delta Protection Commission.

Note: The Emergency Management Agency has begun preparing a Catastrophic Flood Plan for the Delta.

2. The Department of Fish and Game should develop and implement a work plan, budget, and schedule for expanding in-stream flow analyses upstream of the Delta to meet the State Water Resources Control Board implementation schedule. The Legislature should provide the resources to implement the plan.

Note: The Department of Fish and Game has developed a work plan. Closer alignment of schedule commitments with the State Water Resources Control Board and dedication of sufficient resources to meet the schedule are needed.

2011 Recommendations Repeated in 2012 (Little or No Action)

- 3. The Department of Fish and Game should secure funding from the State and other sources for tidal marsh restoration in Dutch Slough, on Meins Landing, and for floodplain improvements in the Yolo Bypass.
- 4. The Department of Water Resources should develop and implement a work plan and schedule to accelerate consideration of low flow fish screening alternatives at the Clifton Court Forebay.
- 5. The Department of Water Resources and the Bureau of Reclamation should reinitiate the review of the Franks Tract and Three Mile Slough Barrier projects.

New Recommendations in 2012

6. The Delta Stewardship Council and Natural Resources Agency should immediately convene a Near-Term Actions Implementation Team, including the Department of Water Resources, Department of Fish and Game, Emergency Management Agency, Delta Protection Commission, Delta Conservancy, and other relevant agencies. The team could develop and accelerate an action plan to reduce risks of catastrophic failure, bolster emergency response, implement habitat restoration, and secure critical infrastructure.

Completed 2011 Recommendations

None.



Governance

Goals

A key strategy in achieving the Two Co-Equal Goals was the creation of new governance structures—ones with needed legal authority and competencies to achieve the Two Co-Equal Goals. The existing governance structure for water and the Delta had failed. The *DVSP* recognizes two goals related to governance:

Goal 1: Legally acknowledge the co-equal goals of restoring the Delta ecosystem and creating a more reliable water supply for California.

Goal 7: Establish a new governance structure with the authority, responsibility, accountability, science support, and secure funding to achieve these goals.

Progress and Accomplishments

The *DVSP* lists 16 actions to achieve the governance goals. Overall, these 16 actions are 41% complete, which is the same as progress in 2011.





Legal and Procedural Milestones (6)

Two Co-Equal Goals Now State Policy

Because governance was such a foundational issue for achieving the Two Co-Equal Goals, the *DVSP* specifies six actions as legal and procedural milestones. Four of the six milestones were implemented by the 2009 water legislation (SBX7-1), which included the Delta Reform Act. The Two Co-Equal Goals have been codified as State policy, to be considered and incorporated into agency, stakeholder, and legal actions.

New Agencies Formed—Funding Inadequate

The DSC has been established as an independent State agency, with

its primary purpose to attain the Two Co-Equal Goals. The Delta Conservancy (Conservancy) was established to act as a primary State agency to implement ecosystem restoration in the Delta. The DPC was restructured and assigned the task of developing an Economic Sustainability Plan for the Delta. The two legal and

Governance Legal and Procedural Milestones

- 1.1: Make the co-equal goals the foundation of Delta and water policy making.
 - 1.1.1 Statutory Co-Equal Goals
- 7.1: Establish a new Delta Stewardship Council. Abolish the Bay-Delta Authority, transferring CALFED programs to the DSC. Establish a Delta Conservancy and increase the powers of the Delta Protection Commission.
 - 7.1.1 Delta Stewardship Council
 - 7.1.2 Delta Conservancy
 - 7.1.3 Delta Protection Commission
- 7.2: Require the Delta Stewardship Council to prepare a Delta Plan to ensure sustained focus and enforceability among State, Federal, and local entities.
 - 7.2.1 Delta Plan
- 7.4: Optimize use of the CALFED Record of Decision and Coastal Zone Management Act to maximize participation of Federal agencies in implementation of the California Delta Plan.
 - 7.4.1 Coastal Zone Management Act Consistency



procedural milestones that are not yet complete are preparation of the *Delta Plan* and the Coastal Zone Management Act consistency. The Legislature directed DSC to prepare the *Delta Plan* by January 1, 2012. DSC released the *Final Staff Draft Delta Plan* on May 14, 2012 and expects to complete the final *Delta Plan* by late fall 2012. The DSC reports that the final *Delta Plan* will be submitted to the Department of Commerce for approval under the Coastal Zone Management Act, which, if approved, would then allow the DSC to review certain Federal actions in the Delta for consistency with the *Delta Plan*.

The Legislature has not provided adequate funding for the agencies addressing the Delta. This lack of resources is critical for prioritizing and coordinating action now and implementing solutions in the years ahead.

Other Strategies and Actions (10)

The *DVSP* lists ten other actions to improve ongoing governance needed to achieve the Two Co-Equal Goals. It is difficult to determine precisely whether the Two Co-Equal Goals have been incorporated into all mandated duties and funding for Delta activities. Without question, the Two Co-Equal Goals are being discussed at all levels of the Governor's Administration, the Legislature, and in Federal agencies; the Two Co-Equal Goals now influence all planning and decision-making. However, defining what the Two Co-Equal Goals mean for directing policy and how they can be achieved remains elusive and an excuse for inaction.

Agencies Take Early Action

The DSC has established the Delta Science Program (DSP) and appointed an Independent Science Board (ISB) and the State Board established the office of the Delta Watermaster. The Legislature mandated development of the *Delta Plan* with 5-year updates. DSC has initiated the *Delta Plan* process, which is expected to be completed in later 2012. The DSP and ISB designed the adaptive management framework. The DSP is taking steps to add engineering capability to the ISB. Federal agencies are active participants in the both the *Delta Plan* and Bay-Delta Conservation Plan (BDCP) processes.

Funding and Financing Lag

The Legislature did not address financing principles or long-term funding for the State agencies working on Delta issues. An \$11 billion water bond was included in the 2009 water legislation (SBX7-2), but it has been deferred until November 2012 and likely will be deferred to November 2014. The Legislature has not provided adequate funding for the Conservancy or the DPC to fulfill the early planning requirements established by the Legislature. The BDCP Finance Plan relies on water contractor funding for facilities construction and operation and the 2009 water bond and other unspecified sources for habitat restoration. The DSC *Delta Plan* proposes that DSC will initiate a finance plan following completion of the *Delta Plan*, with no specified schedule or deadline.

Governance Other Strategies and Actions

- 1.1: Make the co-equal goals the foundation of Delta and water policy making.
 - 1.1.2 Administrative Co-Equal Goals
 - 1.1.3 Funding Co-Equal Goals
- 7.1: Establish a new Delta Stewardship Council. Abolish the Bay-Delta Authority, transferring CALFED programs to the DSC. Establish a Delta Conservancy and increase the powers of the Delta Protection Commission.
 - 7.1.4 Delta Science and Engineering Program
 - 7.1.5 Water Diversion Compliance
- 7.2: Require the Delta Stewardship Council to prepare a Delta Plan to ensure sustained focus and enforceability among State, Federal, and local entities.
 - 7.2.2 Delta Plan Adaptive Management
 - 7.2.3 Adaptive Management Program
- 7.3: Finance the activities called for in the Delta Plan from multiple sources.
 - 7.3.1 Financing Principles
 - 7.3.2 Delta Governance Funding
 - 7.3.3 New Funding Sources
- 7.4: Optimize use of the CALFED Record of Decision and Coastal Zone Management Act to maximize participation of Federal agencies in implementation of the California Delta Plan.
 - 7.4.1 Federal Participation



Assessment

The 2012 assessment of Governance progress earns a grade of "B-," compared to the 2011 grade of "B+." In 2009 and 2010, the State demonstrated initiative and action in addressing Delta governance issues. Since that time, progress has stalled, particularly in critical governance areas of funding and performance management. Near-term funding has been inadequate to implement requirements of the 2009 water legislation and long-term funding



has been deferred and remains unaddressed. The lack of leadership by the Governor's Administration in defining and articulating performance outcomes and measures of success has slowed planning activities and generated unnecessary conflict.

Crucial Lack of Agency Funding

The water legislation of 2009 was an historic achievement—codifying the Two Co-Equal Goals and establishing a revised and strengthened governance structure for the Delta. Unfortunately, the Legislature has not yet addressed near-term or long-term funding and financing needed to complete the assigned responsibilities of the Conservancy, DPC, the State Board, and DFG. Funding is more uncertain for future years.

With respect to Delta planning, Resources and DSC continue the disturbing practice of developing plans, policies, and recommendations with little or no consideration of costs, funding sources, or allocation of costs. Planning is done without a clear definition of goals and objectives. The BDCP program has recently taken steps to outline the costs of facilities and restoration and potential funding sources. However, uncertainty about the 2009 water bond and the Legislature's inadequate funding of Delta planning efforts casts doubt on the realism of efforts to fund long-term improvements. DSC has developed six drafts of the *Delta Plan*. It proposes to complete the plan before beginning any real discussions about how the recommendations and actions will be funded.

Performance Outcomes Undefined

More disturbing than the lack of funding for specific nearterm actions and long-term implementation is the lack of performance targets and measurement. The DSC has begun developing the narrative definition of the Two Co-Equal Goals but specific performance measures are only partially developed. Likewise, BDCP planning has taken significant steps to define biological goals and objectives, (which need

"If you don't know where you are going, any road will get you there." Lewis Carroll

more work) but objectives for water supply reliability remain elusive. The *Final Staff Draft Delta Plan* notes that expected State and Federal expenditures for 2012-2013 for Delta program elements is \$444 million (\$262 million for the State of California and \$182 million for the Federal Government). The *Delta Plan* does not delineate between planning and implementation expenditures, but regardless, this a staggering sum to spend annually without transparent performance outcomes and progress measures.



Governance Recommendations

The Delta Vision Foundation recommends the following actions to improve and accelerate implementation of the Governance actions.

Recommendations Initiated Since 2011 (More Progress Needed)

- 1. The Governor's Administration should develop a unified and coordinated approach to align the *Delta Plan* with implementation planning and action by the Natural Resources Agency.
 - Note: The Natural Resources Agency has initiated a Water Policy Coordination Group. Stronger leadership, accountability, and transparency is needed to focus on action and results.
- 2. The Legislature and the Delta Stewardship Council should expand the Delta Science Program and the Independent Science Board to include engineering and construction perspectives.
 - Note: The Delta Stewardship Council has initiated steps to add engineering capability to the Independent Science Board.

2011 Recommendations Repeated in 2012 (Little or No Action)

- 3. The Legislature should immediately provide five years of funding for the Delta Stewardship Council, Delta Protection Commission, Delta Conservancy, State Water Resources Control Board, and Department of Fish and Game. A reliable source of money is essential for implementing their Legislatively mandated responsibilities towards achieving the Two Co-Equal Goals.
- 4. The Governor and the Legislature, working with stakeholders, should develop a process to define funding and financing principals and approaches.

New Recommendations in 2012

5. The Legislature and the Delta Stewardship Council should expand the Delta Science Program and the Independent Science Board to include economics expertise.

Completed 2011 Recommendations

None.



Ecosystem Restoration and Recovery

Goals

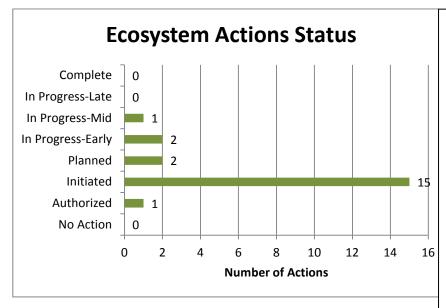
Ecosystem restoration and recovery actions are at the heart of achieving the Two Co-Equal Goals. The *DVSP* establishes a seminal goal for Ecosystem Restoration and Recovery:

Goal 3: Restore the Delta ecosystem as the heart of a healthy estuary.

Progress and Accomplishments

The *DVSP* identifies 19 actions to achieve ecosystem restoration and recovery. For evaluation purposes, this report has divided one of the actions into three parts, bringing the total number of actions evaluated to 21. These 21 actions are 24% complete, a slight improvement over a 19% completion rate in 2011.





Legal and Procedural Milestones (7)

Limited But Helpful Progress Made

The State has made only limited progress on the *DVSP* legal and procedural milestones related to ecosystem restoration and recovery.

Ecosystem Restoration and Recovery

Legal and Procedural Milestones

- 3.1: Initiate large scale habitat consistent with the overall goals of the *DVSP* by 2010.
 - 3.1.2 Tidal Habitat Restoration
- 3.2: Establish migratory corridors along river channels.
 - 3.2.2 Fish Migration Flows
- 3.4: Adopt appropriate Delta Flow standards by the State Board, DFG, and other agencies by 2012.
 - 3.4.1 In-stream Flows
 - 3.4.2 Wet Period Diversions
 - 3.4.3 Delta Outflow
 - 3.4.5 San Joaquin River Flow Objectives
- 3.5: Improve water quality to meet long-term goals.
 - 3.5.1 Adopt by 2010 water quality standards by Central Valley Regional Board

Habitat Restoration Lags

Since the *DVSP* was presented in 2008, not a single new large-scale habitat restoration has been started in the Delta. But activity is continuing on previously established projects. One pilot restoration project was tested in 2011, primarily to determine the effectiveness of increasing floodplain habitat for salmonids in the Yolo Bypass. Planning and implementation continues for smaller habitat restoration projects. The BDCP process serves as the primary forum for identifying large-scale habitat needs for the Delta. To identify the benefits of habitat restoration for targeted species, the BDCP team has developed biological goals and objectives and prepared a draft effects analysis.

New Flow Criteria Suggested

To address the goals of increased Delta outflow and wet period diversions, a variety of work is underway. In August 2010, the State Board issued its report, *Development of Flow Criteria for the Sacramento-San Joaquin*



Delta Ecosystem Prepared Pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009. In November 2010, DFG completed its report on the biological objectives and flow needs for the Delta. The State Board is reviewing San Joaquin River flow objectives, which it expects to complete by fall 2012. The State Board has established a schedule for completing the entire update to the 2006 Bay-Delta Plan in 2014 with updated flow objectives for Delta tributaries due by 2018.

Lower Effluent Limitations Imposed

The water boards have been reexamining effluent limitations. In December 2010, the Central Valley Regional Board issued a new discharge permit to the Sacramento Regional Wastewater Treatment Plant. The permit imposes new ammonia effluent limits, requires tertiary treatment, and mandates nitrogen removal. The Regional Board is focused on the Central Valley Drinking Water Policy. In February 2012, the Central Valley Drinking Water Policy Workgroup (a group of stakeholders formed to facilitate development of the policy) finalized a report documenting and synthesizing the results of technical studies. The Regional Board is scheduled to consider a draft Policy by July 2013.

Other Strategies and Actions (12)

Planning Well Underway

The category of "Other Strategies and Actions" considered necessary to restore aquatic and terrestrial habitat in the Delta include: restoring floodplains; reestablishing migratory corridors along river channels; increasing appropriate water flow; encouraging native species; enhancing waterway geometry; and improving water quality. The planning phase for these actions is underway at several State agencies.

Ecosystem Restoration Planning Has Begun

DGF has issued quantifiable biological objectives and flow criteria for species of concern dependent on the Delta, recommending that floodplain inundation be increased in four floodplains: (1) Sacramento River/Yolo Bypass; (2) Mokelumne River; (3) San Joaquin River; and (4) Upstream Floodplains. By issuing its quantifiable biological objectives and flow criteria, DFG has taken the first step in increasing inundation of, and providing ecosystem benefits to, the four areas identified by the *DVSP*.

In coordination with other Ecosystem Restoration Program (ERP) implementation agencies (e.g., U.S. Fish & Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS)), DFG is finalizing the ERP Conservation Strategy for release in June 2012. It is intended as a single blueprint for ecosystem restoration in the Delta. The ERP has identified near-term land acquisition and habitat enhancement priorities and the ERP Implementing Agencies have designed a framework through which they will implement the ERP. Annual reports will document spending and accomplishments.

The BDCP Program has identified Conservation Measure 2 as one that will improve floodplain habitat in the Yolo Bypass. To create the implementation plan, planning and coordination meetings are underway.

Ecosystem Restoration and Recovery Other Strategies and Actions

- 3.1: Initiate large scale habitat restoration consistent with the overall goals of the *DVSP* by 2010
 - 3.1.1 Floodplain Inundation
- 3.2: Establish migratory corridors along river channels
 - 3.2.1 Habitat Corridors
 - 3.2.3 Flood Conveyance Capacity Expansion
 - 3.2.4 Delta Recreational Investment
- 3.3: Promote native and valued species
 - 3.3.1 Fish Entrainment
 - 3.3.2 Invasive Species
- 3.4: Adopt appropriate Delta Flow standards by the State Board, DFG, and other agencies by 2012
 - 3.4.4 Fall Delta Outflow
 - 3.4.6 San Joaquin Fall Pulse Flows
 - 3.4.7 Delta Waterway Geometry
- 3.5: Improve water quality to meet long-term goals
 - 3.5.2 Drinking Water Intake Relocation
 - 3.5.3 Mercury TMDL Programs
 - 3.5.4 Comprehensive Delta Monitoring



Ecosystem restoration is also underway through the Fish Restoration Program Agreement (October 2010). The Agreement is part of the Biological Opinions with respect to operating the State and Federal export pumps. The initial focus of the Agreement is on development of 8,000 acres of delta smelt habitat and 800 acres of longfin smelt habitat. The implementation plan was approved by DFG, NMFS, and USFWS in March 2012.

Habitat corridor improvements are expected to be implemented through the DFG ERP, DWR FloodSafe Environmental Stewardship Program, and Delta Conservancy Strategic Plan.

Delta Heritage Area and Recreation Opportunities Identified

The DPC prepared a feasibility study on establishing a National Heritage Area designation for the Delta, to be finalized by the DPC in July 2012 and submitted to Congress after that. DPC also prepared the *Delta Economic Sustainability Plan (ESP)* and submitted it to DSC for inclusion in the *Delta Plan*. Both the *ESP* and *Delta Plan* incorporate the Department of Parks and Recreation (CDPR) recommendations from the *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*.

Delta Flows Evaluations Underway

The Courts have implemented changes to the diversion requirements for the State Water Project (SWP) and Central Valley Project (CVP). DWR and the Bureau of Reclamation (Reclamation) are implementing the measures stipulated in the biological opinions.

The State Board has developed a work plan and schedule for the Bay-Delta Basin Plan Update. They expect to be considering flow objectives on the San Joaquin River by fall 2012 and the full *Bay-Delta Plan Update* by April 2014. The State Board is looking to develop revised flow objectives for Delta tributaries, with a goal of completing major tributaries in 2018. To prioritize these flow evaluation efforts, the State Board has reassigned staff.

As of July 21, 2010, the DFG ERP Conservation Strategy Report for the Delta included proposed actions for channel geometry. These actions included: (1) conducting further Delta cross channel operational studies; (2) experimenting with salinity control gates in Suisun Marsh; (3) studying Two-Gates and the effectiveness of barges as barriers; and (4) evaluating bubble curtain effectiveness as barriers and their effects on other species.

Alternate Intake Projects Completed

Contra Costa Water District completed its Alternate Intake Project in July 2010 (Near-term Action #5).

The initial phase of the City of Stockton Delta Water Project is complete. The project will divert and treat 30 million gallons per day (mgd) from the San Joaquin River on Empire Tract, serving approximately one-third of Stockton's water needs. At full capacity in 2050, the plant will be able to treat 160 mgd.

DWR has proposed implementing the North Bay Aqueduct Alternate Intake Project to reduce fish entrainment, improve water quality, and provide reliable deliveries of SWP supplies to its contractors. Contractors include the Solano County Water Agency and the Napa County Flood Control and Water Conservation District. Public Scoping for the EIR was completed in January 2010; the Draft EIR is expected in late 2012.

Water Quality Improvements are Ongoing

In October 2011, the Central Valley Regional Board and the State Board approved amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. The Plan now includes a program for the control of methylmercury and total mercury in the Delta estuary. Other Mercury TMDLs are underway in the American River, Cache Creek, Bear Creek, Sulphur Creek, and Harley Gulch.

Numerous other agencies and programs are collecting data related to water quality and Delta fish and wildlife health, including the U.S. Environmental Protection Agency, the State Board, the Central Valley Regional Board, DWR, DFG, and IEP.



Assessment

Since the 2011 Delta Vision Report Card, ecosystem planning and coordination has improved, resulting in an improved grade from a "C-" in 2011 to "C" in 2012. However, a critical need still exists for streamlining and implementing pilot projects and smaller-scale restoration projects. These pilots will build knowledge and capacity essential to implementation of the larger-scale restoration plans.



Planning Underway, Implementation Needed

Several agencies and organizations have made substantial and commendable efforts to plan habitat restoration in, and upstream of, the Delta and Suisun Marsh. Science programs have improved the understanding of ecosystem functions in the Delta to support a multi-stressor approach to ecosystem restoration. Land has been acquired and several restoration projects and pilot studies are underway. However, to address urgent habitat and species needs in the Delta in a way that informs additional future restoration projects, implementation must go faster. More pilot projects are needed, complete with monitoring and evaluation. Agency coordination has improved, but a complex mix of implementation responsibilities and approvals slows down project actions. Strong project management expertise is needed to drive projects to completion. Executive leadership must find ways to remove roadblocks and streamline implementation.

Flows Are a Critical Dilemma

Flows for the Delta ecosystem are a critical and controversial issue. The State Board is embarking on an aggressive schedule to update the *Bay-Delta Plan* and develop new flow objectives for Delta tributaries. The Governor, Legislature, Resources, DFG, DWR, and DSC must provide the support and resources such that this effort can develop the appropriate, balanced flows to meet beneficial uses. The Governor and Legislature should provide the people and resources to ensure the State Board can meet the schedule. Resources, DFG, and DWR should provide the necessary fisheries, habitat, and water management expertise. The DSC must provide the vision of how to achieve the Two Co-Equal Goals and the independent science to ensure objective analysis. With a strong commitment from all of these organizations, the State Board will be capable of fashioning a balanced update the *Bay-Delta Plan*, with associated flow objectives, that meets the Two Co-Equal Goals.

Funding for ecosystem restoration comes from various sources. Funding must be aligned and integrated to advance understanding and increase the ability to scale projects. Moreover, funding must also be tied to specific performance outcomes. Monitoring and evaluation will be integral to determining progress toward the outcomes.



Ecosystem Restoration and Recovery Recommendations

The Delta Vision Foundation recommends the following actions to improve and accelerate restoration of the Delta ecosystem.

Recommendations Initiated Since 2011 (More Progress Needed)

The Natural Resources Agency, State Water Resources Control Board, and Delta Stewardship Council
should immediately develop a joint approach for setting the restoration objectives for the Delta.
Additionally, to guide planning and decision-making for water supply reliability and ecosystem restoration
the agencies should establish standards and requirements.

Note: The three agencies have improved coordination in the past year. They must continue to define and describe how the *Bay-Delta Plan Update*, Bay-Delta Conservation Plan, and *Delta Plan* contribute to and achieve the Two Co-Equal Goals in an integrated manner. Only in this way, will stakeholders recognize the policy tradeoffs and opportunities for success.

2. The Delta Conservancy, in cooperation with other agencies, should develop a comprehensive list of restoration projects along with a method for tracking and reporting priorities, progress, funding, and implementation.

Note: The Delta Conservancy is working with the Department of Water Resources and other agencies to develop a comprehensive list of projects and actions.

2011 Recommendations Repeated in 2012 (Little or No Action)

3. The State implementing agencies (Department of Fish and Game, Department of Water Resources, Delta Conservancy, and Department of Food and Agriculture) should develop an agreement (such as an MOU) to address coordination, funding, and implementation of near-term and mid-term ecosystem restoration actions. Other parties could include Federal agencies, local governments, water districts, non-governmental organizations, and others as appropriate.

Note: Several interagency agreements were developed in the past year, but the ecosystem restoration implementation process still lacks a coherent strategy for managing implementation and streamlining approval processes.

4. The State implementing agencies (Department of Fish and Game, Department of Water Resources, Delta Conservancy, and Department of Food and Agriculture) should identify several immediate restoration projects for joint execution through the Delta Conservancy. This is good practice for to developing coordinated approaches and funding mechanisms in the future.

Note: As a continuation of the MOU suggested above, specific project implementation plans should be developed for high priority pilot projects and restoration actions, particularly those that have been planned for five years or more.

New Recommendations in 2012None.

Completed 2011 RecommendationsNone.



Delta Vitality and Security

Goals

The *DVSP* establishes two goals needed to maintain the livelihoods and survival of Delta residents and support the broader State interests in risk reduction:

Goal 2: Recognize and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place, an action critical to achieving the Two Co-Equal Goals.

Goal 6: Reduce risks to people, property, and State interests in the Delta by effective emergency preparedness, appropriate land uses, and strategic levee investments.

Delta Is an Evolving Place

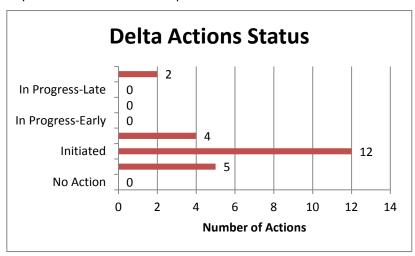
Strategies to achieve Goal 2 include: (1) applying for a Federal designation of the Delta as a National Heritage Area and expanding the State Recreation Area network in the Delta; (2) establishing market incentives and infrastructure to protect, refocus, and enhance the economic and public values of Delta agriculture; (3) developing a regional economic plan to support increased investment in agriculture, recreation, tourism, and other resilient land uses; and (4) establishing a Delta Investment Fund to provide funds for regional economic development and adaptation.

Risks Must Be Reduced

Risk reduction strategies of Goal 6 are three-fold: (1) significantly improve levels of emergency protection for people, assets, and resources; (2) discourage inappropriate land uses in the Delta region; and (3) prepare a comprehensive long-term levee investment strategy that matches the level of protection provided by Delta levees and the uses of land and water enabled by those levees.

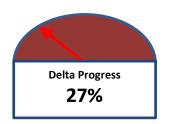
Progress and Accomplishments

The *DVSP* identifies 23 actions to achieve the goals for Delta vitality and security. These 23 actions are 27% complete, which is a slight improvement over 25% completion in 2011.



Delta Vitality and Security Legal and Procedural Milestones

- 2.1: Apply for Federal designation of the Delta as a National Heritage Area, and expand the State Recreation Area network in the Delta.
 - 2.1.1 Apply by 2010 for the designation as a National Heritage Area.
- 2.4: Establish a Delta Investment Fund to provide funds for regional economic development and adaptation.
 - 2.4.1 Delta Investment Fund
 - 2.4.2 Delta Investment Fund Structure
 - 2.4.3 Delta Investment Fund Management
- 6.1: Significantly improve levels of emergency protection for people, assets, and resources.
 - 6.1.1 Delta EmergencyResponse Plan6.1.2 Emergency
 - 6.1.2 Emergency Management Actions





Legal and Procedural Milestones (6)

Five of the six Delta vitality and security recommendations have been initiated; none is complete. The DPC conducted a feasibility study of a proposed NHA designation. The final report is expected in July 2012, to then be forwarded to Congress for consideration. The Legislature established the Delta Investment Fund and granted management authority to the DPC with an initial allocation of \$250,000. As recommended by the Delta Vision Task Force, the fund is structured to accept revenues from Federal, State, local, and private sources. Cal EMA and other agencies have prepared a Delta Multi-Hazard Mitigation Plan, which has just been released to the public, and conducted an emergency response exercise in 2011 for a Delta flood event. Cal EMA and FEMA are beginning a Catastrophic Flood Plan for the Delta, expected to be completed by fall 2013.

Other Strategies and Actions (17)

The *DVSP* recommends many activities to maintain the economic, cultural, recreational, geomorphologic, and agricultural vitality and security of the Delta.

Agencies Taking Action

DPC prepared the *Economic Sustainability Plan* for the Delta (ESP) and submitted it to the DSC. The ESP considered the actions identified in Goal 2 of the DVSP. The ESP includes 33 recommendations to protect and support development of the agricultural economy and other sectors in the Delta. DSC has incorporated many of the recommendations into the Delta Plan. The ESP and Delta Plan also incorporate recommendations from the DPR report on recreation opportunities in the Delta (April 2011).

Delta Vitality and Security Other Strategies and Actions

- 2.1: Apply for Federal designation of the Delta as a National Heritage Area, and expand the State Recreation Area network in the Delta.
 - 2.1.2 State Recreation Area Network
- 2.2: Establish market incentives and infrastructure to protect, refocus, and enhance the economic and public values of Delta agriculture.
 - 2.2.1 Agricultural Support Programs
 - 2.2.2 Agricultural Sustainability Research and Development
 - 2.2.3 New Agricultural Markets
- 2.3: Develop a regional economic plan to support increased investment in agriculture, recreation, tourism, and other resilient land uses.
 - 2.3.1 Regional Economic Development Plan
 - 2.3.2 Special Enterprise Zones
- 6.1: Significantly improve levels of emergency protection for people, assets, and resources.
 - 6.1.3 Highway protection strategies
 - 6.1.4 Infrastructure protection strategies
- 6.2: Discourage inappropriate land uses in the Delta region.
 - 6.2.1 Land Use Oversight Cosumnes/Mokelumne floodway and the San Joaquin/South Delta lowlands
 - 6.2.2 Land Use Oversight Bethel Island, the city of Isleton, and Brannan-Andrus Island
 - 6.2.3 Local Response Plans
 - 6.2.4 Land Use Strategy Sherman, Twitchell, and Jersey Islands
- 6.3: Prepare a comprehensive long-term levee investment strategy that matches the level of protection provided by Delta levees and the uses of land and water enabled by those levees.
 - 6.3.1 Delta Levee Investment Plan
 - 6.3.2 Delta Levee Priorities for \$750 million of Bond Funds
 - 6.3.3 Delta Levees Classification Table
 - 6.3.4 DWR Levee Subventions Program
 - 6.3.5 Continuing Authority for Levee Priorities and Funding

In December 2010, DPC completed its evaluation of proposed expansion of the Delta Primary Zone as directed by the Legislature. Following the completion of the *ESP*, DPC elected not to recommend any change in the Delta Primary Zone to the Legislature.

DWR prepared the Central Valley Flood Protection Plan (CVFPP) and submitted it to the Central Valley Flood Protection Board (CVFPB) for review and approval.

No new Delta-specific Enterprise Zones have been established, although much of San Joaquin County already lies in an Enterprise Zone and new Enterprise Zones were designated for the City of Pittsburg (within the legal Delta) and the City of Sacramento, adjacent to the Delta.



The DSC has included regulations in the draft *Delta Plan* to control land use in potential flood plain areas (as well as other areas to be reserved for Delta habitat or conveyance).

Caltrans completed an analysis of the costs and benefits of highway protection strategies and adopted a policy based on its findings on May 16, 2011. The report is intended for use by Caltrans Planning staff and Project Development Teams to determine whether and how to incorporate sea level rise into the programming and design of projects.

Important Actions Deferred

The levee classification table has been removed from the *Final Staff Draft Delta Plan*. A preliminary review of the *Final Staff Draft Delta Plan* did not identify an equivalent level of requirement for implementing flood protection to replace the levee classification table.

In 2010, DWR prepared a draft Delta levees investment framework for the DSC. The *Final Staff Draft Delta Plan* includes a policy in which DSC will work with DWR and the CVFPB to develop a levee investment strategy by January 2015.

To date, there has been no apparent action on efforts to establish market incentives and infrastructure to protect, refocus, and enhance the economic and public values of Delta agriculture.

Assessment

In spite of the difficult economy and limited State funding, planning for protection and enhancement of the Delta as an evolving place has advanced since the *2011 Delta Vision Report Card*, resulting in a grade improvement from a "C-" to a "C" for 2012. However, critical planning activities have been deferred, notably efforts to identify Delta levee investment priorities.



Delta Economic Issues Identified

The DPC did substantial work in the *ESP* that contributes to the understanding of the Delta economy and how it might be improved. The report also highlights the needs for levee improvements to protect the local economy and important infrastructure. It also discusses the potential impacts of water management and ecosystem restoration actions in the Delta. The *ESP* is a valuable contribution to Delta planning; DPC must continue to expand coordination of the *ESP* recommendations with the *Delta Plan*, BDCP, *Delta Conservancy Strategic Plan*, and the *Ecosystem Restoration Plan*. This will encourage alignment strategies that will maximize benefits and minimize adverse impacts. The Department of Food and Agriculture (CDFA) and the U.S. Department of Agriculture (USDA) should provide a stronger leadership role in Delta economic development.

Emergency Management and Levee Investment Strategy Stall

In 2010, Cal EMA, DWR, DPC, and the five Delta counties coordinated effectively in developing emergency management recommendations in the Delta Multi-Hazard Mitigation Plan, as required by SB 27. Since that time, the report was inexplicably held in the Governor's office until May 2012, which has slowed efforts to implement the recommendations. DWR continues coordination and implementation to improve materials stockpiles and construction of materials transfer facilities in the Delta. DWR expects to have three facilities built by the end of 2013. This emergency response planning should continue in an effort to address Delta flood risks.

Increased attention and focus is needed for catastrophic Delta risks, particularly from seismic events. The Catastrophic Flood Plan for the Delta is getting underway, but the scope and scale of the effort may not adequately address response and recovery. Catastrophic events in New Orleans, Australia, Japan, Pakistan, and elsewhere demonstrate the far-reaching human life and health, economic, infrastructure, and environmental consequences. California must consider and prepare for such an event in the Delta.



The State should convene, in collaboration with Federal agencies, a broad group of experts, including levee engineers with seismic experience and disaster experience, construction and cost-estimation experts, hydraulics and hydrology experts, military personnel, FEMA, and other disaster response experts. This group can consider and evaluate projected response to actual, realistic disaster scenarios for high water event levee failures (which are preceded by forecasts) and a major seismic event (which is not preceded by a forecast). This effort would provide: (1) vastly better response and rescue planning (likely saving thousands of lives); (2) a far better understanding of likely consequences of such disasters and the real <u>value</u> of short-term preparations and comprehensive long-term solutions; (3) insight for "user pays" distribution of financial responsibilities; and (4) knowledge of the types of near-term actions, planning, and rehearsal that would reduce the impact of such disasters.

DWR prepared a draft framework for levee investment priorities in 2010. Since that time, the DSC and DWR have focused efforts on the *Delta Plan* and the *CVFPP*, which both anticipate developing levee investment priorities over the next three to five years. The DSC has failed to develop any investment priorities to be included in the *Delta Plan*, as required by the 2009 Delta Reform Act. As a result, the State will continue to invest funds in levee improvements without a coordinated plan and without priorities until at least 2015. As the *2011 Delta Vision Report Card* noted, because of the substantial risk associated with many Delta levees and the urgent need to protect and secure these levees and the infrastructure they protect, DWR and DSC should immediately identify the near-term levee priorities and investment strategies to guide action. The agencies can update the priorities and strategies as other plans and studies are completed.

Some Actions Lag

Several agencies have not yet demonstrated action or progress on assigned actions. DWR is coordinating with the five local communities specified (Walnut Grove, Locke, Clarksburg, Courtland, and Terminous), but no risk reduction plans have been developed for these communities. DWR and Cal EMA should immediately work with these five communities to assess response needs and assist the communities in preparing risk reduction plans. The *DVSP* recommends that the Department of Transportation (Caltrans) conduct a comparative costs and benefits analysis of highway protection strategies. DSC has noted that it will consult with Caltrans. Caltrans has identified the risks of sea level rise for State Routes 12 and 160, but immediate plans and actions are needed to address those risks and risks on State Route 4.

The Legislature directed CDFA to develop an agricultural enhancement proposal for the Delta. The CDFA submitted to the DSC the report *Evaluations of Policy Alternatives to Benefit Agriculture in the Sacramento-San Joaquin Delta of California*. The Report was prepared by the University of California at Davis in February 2011. CDFA needs to pay more attention to the needs and opportunities in the Delta.



Delta Vitality and Security Recommendations

The Delta Vision Foundation recommends the following actions to improve and accelerate actions to increase Delta vitality and security.

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Delta Protection Commission should increase coordination and cooperation among the DPC, Delta Conservancy, Department of Food and Agriculture, Federal Natural Resource Conservation Service, and others regarding economic development opportunities in the Delta.

Note: The Economic Sustainability Plan is a solid initial effort. Improved coordination is needed among all agencies to work with the community to develop and implement economic development strategies.

2011 Recommendations Repeated in 2012 (Little or No Action)

- 2. The Department of Water Resources, in coordination with the Emergency Management Agency and the U.S. Army Corps of Engineers, should develop and implement a work plan and schedule for completing local risk reduction plans for the five priority communities in the Delta (Walnut Grove, Locke, Clarksburg, Courtland, and Terminous).
- 3. The Delta Stewardship Council and the Delta Protection Commission should jointly convene a work group comprised of themselves, the California Public Utilities Commission, California Energy Commission, and all public utilities that own facilities in the Delta. The goal of this work group should be to develop and implement a long-term strategy for utility relocation and/or levee reinforcement in the Delta.

Note: The *Final Staff Draft Delta Plan* includes a recommendation that the California Public Utilities Commission establish a fee schedule for investor-owned utilities that have facilities in the Delta in order to pay for flood and disaster prevention.

- 4. Caltrans should complete the analysis of highway protection strategies for the Delta and construct improvements.
- 5. The Legislature should identify and commit to reliable funding sources for compensation for landowners and counties, including taxes, fees, and levee assessments, that might be modified by other actions.

New Recommendations in 2012

- 6. The Delta Stewardship Council should implement an accelerated, iterative evaluation process, with stakeholder engagement, for preliminary levee investment priorities by December 2012 and final levee investment priorities by July 2013.
- 7. The Governor and the Legislature should immediately appropriate money from Proposition 1E to fund levee improvements needed to protect water delivery infrastructure in the Delta and through-Delta water conveyance channels.
- 8. The State should convene, in collaboration with Federal agencies, a broad group of experts, including levee engineers with seismic experience and disaster experience, construction and cost-estimation experts, hydraulics and hydrology experts, military personnel, FEMA, and other disaster response experts, and others to consider and evaluate projected response to actual, realistic disaster scenarios for high water event levee failures and a major seismic event.

Completed 2011 Recommendations

None.



Water Supply Reliability

Goals

wet years.

The DVSP establishes two goals needed to ensure water supply reliability:

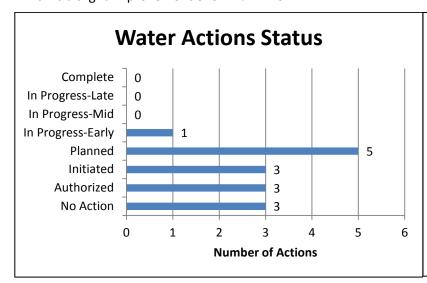
Goal 4: Promote statewide water conservation, efficiency, and sustainable use.

Goal 5: Build facilities to improve the existing water conveyance system and expand statewide storage, and operate both to achieve the Two Co-Equal Goals.

The supply of water in California, almost all from rain and snowfall, has not increased in more than a century. But, as California's population continues to grow, water demand will continue to increase. This means that future water supply reliability in California can only be ensured if: (1) per capita water use is reduced; (2) water is more effectively stored; and (3) it is reliably conveyed through, and around, the Delta to where it is needed. Increased water supply reliability can be achieved through diversifying regional water supply portfolios and expanding options for water conveyance, storage, and improved reservoir operations. New and existing water facilities can be operated to increase water supply reliability <u>and</u> restore the Delta ecosystem by reducing demand on the Delta in dry years and increasing diversion and storage in

Progress and Accomplishments

The *DVSP* identifies 15 actions to achieve the water supply reliability goals. These actions are 19% complete, which is a slight improvement over 14% in 2011.



Water Supply Reliability Legal and Procedural Milestones

- 4.1: Reduce urban, residential, industrial, and agricultural water demand through improved water use efficiency and conservation starting by achieving a statewide 20 percent per capita reduction in water use by 2020.
 - 4.1.2 Urban Water Demand
- 5.1: Expand options for water conveyance, storage, and improved reservoir operations.
 - 5.1.1 Dual Conveyance Feasibility5.1.2 Storage and Conveyance
 - 5.1.2 Storage and Conveyance Recommendations

Legal and Procedural Milestones (3)

Guidance Issued to Reduce Urban Water Demands

The legislature established statewide urban water conservation goals. To help local water agencies meet these goals, DWR issued guidelines for preparing Urban Water Management Plans. For the 2010 update, urban water suppliers submitted a total of 386 Urban Water Management Plans. DWR developed regulations defining the measurement of commercial, industrial, and institutional process water. The California Water Commission approved the regulations in February 2011.



Dual Conveyance Feasibility Study Advances

The Natural Resources Agency continued evaluation of conveyance alternatives as part of the BDCP process. The proposed project includes construction and operation of a north of Delta diversion up to 15,000 cubic feet per second (cfs) to be operated in conjunction with, and preferentially to, south Delta diversion facilities, (except at times necessary to meet fish conservation goals). Other dual conveyance alternatives have been listed in draft documents, but not evaluated to the same level of detail.

Storage Planning Deferred

The 2009 water legislation provides general statements regarding the importance of storage for improving water supply reliability, but there is no additional direction to DWR. The proposed water bond (SBX7-2) would provide funding for the public benefits associated with storage and conveyance. The *Final Staff Draft Delta Plan* recommends completion of the CALFED storage investigations by December 31, 2012.

In November 2010, DWR published a progress report on the CALFED storage investigations. That report notes that the four storage projects discussed could produce a long-term average increase in annual yield of approximately 800,000 acre-feet. Funding for storage investigations from Proposition 50 has ended. With funding from Proposition 204, the North of Delta Offstream Storage Project will release a public draft

feasibility study in December 2012.. The Bureau of Reclamation continues studies for Shasta Reservoir Enlargement and Temperance Flat.

Other Strategies and Actions (12)

The other strategies and actions to achieve water supply reliability goals include those that promote urban and agricultural water conservation, increase regional water supply self-sufficiency, or provide for enhancements to storage and conveyance systems.

Conservation Actions Taken

DWR is working with the State Board, California Public Utilities Commission, and other agencies to develop a common water use reporting form in 2012. In addition, DWR developed, and the Water Commission approved conservation regulations regarding industrial process water and agricultural water measurement.

In May 2012, the Federal Departments of the Interior and Agriculture announced they will provide \$8.8 million in funding to agricultural water districts and users through two programs to save water, improve water management, and develop new supplies for agricultural irrigation.

Diversification of Regional Water Portfolios SupportedRegional water portfolio diversification focuses on selfsufficiency through flexible water management strategies. These strategies include optimizing available water supplies, developing new local supplies, and managing demand.

As part of the State Water Plan Update 2013, DWR is updating the statewide drought contingency plan, which will serve as a model for regional and local water agencies.

Water Supply Reliability Other Strategies and Actions

- 4.1: Reduce urban, residential, industrial, and agricultural water demand through improved water use efficiency and conservation starting by achieving a statewide 20 percent per capita reduction in water use by 2020.
 - 4.1.1 Statewide Water Use Efficiency and Conservation
 - 4.1.3 Agricultural Water Use Efficiency
- 4.2: Increase reliability through diverse regional water supply portfolios.
 - 4.2.1 Water Recycling
 - 4.2.2 Desalination
 - 4.2.3 Stormwater
 - 4.2.4 Surface Water and Groundwater Diversion Data Collection
 - 4.2.5 Drought Contingency Plans
 - 4.2.6 Integrated Water Management
- 5.1: Expand options for water conveyance, storage, and improved reservoir operations.
 - 5.1.3 Surface and Groundwater Storage and Conveyance Facilities
- 5.2: Integrate Central Valley flood management with water supply planning.
 - 5.2.1 Reservoir Operations
 - 5.2.2 Lower San Joaquin River Flood Bypass
 - 5.2.3 Watershed Infiltration



In February 2011, DWR awarded \$22 million in Integrated Regional Water Management (IRWM) planning grants. In May 2011, DWR announced \$200 million of IRWM implementation grants to support \$1 billion of project implementation. In September 2011, DWR recommended 18 projects to receive \$168 million from the Stormwater Flood Management Grant Program. Local and regional matching funds bring the total project value to approximately \$390 million. DWR will award \$9 million for additional IRWM planning grants in July 2012. Local Groundwater Assistance Grants will be awarded in fall 2012, Round 2 Stormwater Flood Management Grants in July 2013, and Round 2 Implementation Grants in September 2013.

More water reporting data is being collected. The State Board has initiated water diversion reporting requirements. The Legislature directed, and DWR has developed, a monitoring and reporting program for groundwater levels across the state.

Storage Investigations Ongoing

In the past decade, DWR conducted a number of integrated storage investigations to evaluate how surface storage and conveyance could be improved. With their status report released in November 2010, the agency described the steps necessary to complete the investigations.

A number of other actions are continuing to improve storage. Construction of an expansion of Los Vaqueros reservoir began in April 2011. DWR is conducting a study of re-operating the SWP to achieve multiple objectives of improved water supply reliability, flood risk reduction, ecosystem restoration, and reducing groundwater overdraft as directed by Proposition 84. This study is coordinated with the Bureau of Reclamation to evaluate similar improvements with CVP facilities.

DWR FloodSafe and the U.S. Army Corps of Engineers (USACE) are evaluating revised reservoir flood storage requirements. DWR evaluated and recommended flood bypass improvements as part of the Central Valley Flood Protection Plan. DWR is testing a nonphysical barrier at Georgiana Slough. Studies of nonphysical barriers at the Head of Old River in 2009 and 2010 indicated that they were effective at redirecting fish although predation at the structures was high under low water conditions.

BDCP Administrative Draft Documents Released

As a step towards increasing the transparency of the BDCP process, Resources made a commitment to release preliminary evaluation documents to the public at the same time the agencies are reviewing them. Substantial pieces of the administrative draft conservation plan and environmental review were released in 2011 and 2012. The documents describe and evaluate proposed conveyance alternatives, habitat restoration measures, and a finance plan. The public draft environmental review documents are planned for 2012.

Assessment

The completion of regulations and guidelines for implementing water use efficiency and the completion of the Intertie Project between the SWP and CVP are small but important steps to improving water supply reliability. These improvements have resulted in an improved grade from water supply reliability from a "D+" in 2011 to a "C-" in 2012. At the same time, planning and evaluation of the BDCP has advanced. However, continued and ongoing failure to integrate storage with conveyance and flood management with water supply indicate that the State is not planning or implementing a water management system to achieve the Two Co-Equal Goals. Ongoing delays with interim actions, such as improved through-Delta conveyance, continue unabated.



"Soft-side" Solutions Underway

Action by DWR, the Water Commission, and DSC to improve regional self-sufficiency through water use efficiency regulations and guidelines, integrated regional water management guidelines and incentives, and draft Delta Plan policies is commendable. Monitoring and reporting procedures are being established for diversions, agricultural water use, groundwater, and urban conservation.



Long-term Solutions Lack Integration for Success

The State lacks a coherent strategy to improve water management facilities needed to improve water supply reliability and restore the Delta ecosystem. Critical gaps in strategy exist for near-term, interim, and long-term facilities planning. The BDCP planning process, which is demanding the vast majority of staff resources and expending tens of millions of dollars per year, has failed to effectively plan for the fundamental facilities necessary to make it successful. That is, without both upstream and downstream storage linked to conveyance facilities, DWR (and Reclamation) will be unable to manage water for families, farms, factories, and fish. With storage they could decrease diversion in dry years to protect fish and increase diversion in wet years to store water for people.

The only way to stabilize water supplies for water users <u>and</u> increase flows at critical times in the Delta is to increase the flexibility in the water management system. Surface and groundwater storage are critical for increasing flexibility in the system to reduce flood flows, capture surplus water, and store water for both people and the environment. Unfortunately, storage investigations are underfunded, proceed slowly, and are not linked effectively to conveyance facility sizing and operations. Water contractors have given little or no commitment or assurances that they will increase local or regional surface or groundwater storage to reduce dry year demands. Without these components, long-term solutions will not achieve the Two Co-Equal Goals.

Near-term and Interim Actions Ignored

Critical near-term and interim actions to protect Delta water supplies are not advancing. The State lacks a coherent plan for securing or improving through-Delta water supplies. There are no plans, priorities, or actions to secure critical levees that protect water supply from the risk of earthquake failure. With a thoughtful strategy and plan, the State could reduce risks to high priority islands that protect water supply, critical infrastructure, local land uses, and the Delta ecosystem. Studies of potential near-term actions to reduce fish entrainment at the south Delta pumps have stalled. The investigation of Franks Tract and channel barriers to improve water quality and potentially improve fish migration has also stalled. There is encouraging work on pilot studies to improve water management for delta smelt and salmon migration, but these potential actions must be linked to measures that improve water supply reliability.



Water Supply Reliability Recommendations

The Delta Vision Foundation recommends the following actions to improve and accelerate actions to increase water supply reliability.

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Department of Water Resources should compile and report quantifiable information on how each region of the state uses Delta watershed water and how each region plans to reduce annual reliance on the Delta in meeting their future water needs.

Note: Improved reporting of water use efficiency established through recent guidelines and regulations and ongoing support of integrated regional water management will help. Additional synthesis and reporting will inform policy makers on progress and accomplishment.

2011 Recommendations Repeated in 2012 (Little or No Action)

2. The Natural Resources Agency, State Water Resources Control Board, and Delta Stewardship Council should develop a joint approach for defining water supply reliability and setting the objectives for the Delta right away. The agencies should further establish standards and requirements to guide planning and decision-making about water supply reliability and ecosystem restoration.

Note: Unfortunately, the historical debate about more or less export from the Delta continues. The State must establish a unified statement of principles, goals, and measurable objectives.

3. The Delta Stewardship Council and Natural Resources Agency should re-establish the critical linkage of storage and conveyance. This linkage will enable them to evaluate and demonstrate the benefits of operational flexibility in achieving the Two Co-Equal Goals, and ensure the right-sizing of planned facilities.

Note: The State continues to advance a narrowly focused facilities plan without assurances and commitments to implement critical linked actions such as storage and regional self-sufficiency. This approach will not increase water operations flexibility to achieve the Two Co-Equal Goals.

New Recommendations in 2012

4. The Natural Resources Agency, Department of Water Resources, and Delta Stewardship Council, working with Federal partners and local interests, should immediately develop a strategy and work plan for accelerating actions to secure and improve through-Delta conveyance.

Completed 2011 Recommendations

None.



Section 3 Leadership, Effectiveness and Cooperation

Introduction

This section describes the Delta Vision Foundation (DVF) assessment of, and recommendations for, leadership and effectiveness of the Governor's administration, the Legislature, and State agencies with primary responsibility for achieving the Two Co-Equal Goals. This report reviews the following State agencies:

- Delta Stewardship Council (DSC)
- Natural Resources Agency (Resources)
- Department of Water Resources (DWR)
- Department of Fish and Game (DFG)
- Sacramento-San Joaquin Delta Conservancy (Conservancy)
- Delta Protection Commission (DPC)
- State Water Resources Control Board (State Board)
- Central Valley Regional Water Quality Control Board (Regional Board)
- California Water Commission (CWC)
- Emergency Management Agency (Cal EMA)
- Science Programs

The section includes recommendations for Federal agency cooperation and coordination. It also includes an evaluation of stakeholder cooperation.

Measuring State Leadership and Effectiveness

For each State agency evaluated, DVF considered the essential elements of effective program planning and accomplishment listed below. For the 2012 Delta Vision Report Card, the DVF placed particular emphasis on four elements with respect to Delta solutions: Leadership, Management, Coordination, and Accountability.

Element	State Leadership and Effectiveness Questions
Leadership	Has the agency identified leaders who have carefully identified responsibilities and accountability for producing and implementing policies, programs, and actions?
Management	Has agency leadership defined the goals, prepared a work plan, established a schedule, and designed a project plan for adapting to change?
Capacity	Does the agency have the right funding, capable people, and tools to be effective?
Science	Is the agency identifying, developing, and using objective data, information, and knowledge to evaluate actions and consequences?
Coordination	Is the agency communicating with others, aligning programs, and detecting needs to ensure that links to other actions have been considered and maintained?
Action	Is the agency moving forward decisively with recommendations, decisions, and actions to advance the <i>Delta Vision Strategic Plan</i> goals?
Accountability	Has the agency established processes to evaluate their progress? Are they using this information to improve their effectiveness?



As part of the effort to identify a letter grade for each agency or organization, DVF prepared a qualitative scoring methodology for each of the core elements. Each of the seven elements has been ranked on a five-point, color-coded scale (as shown in the box to the right). Figure 3.1 shows an example summary graphic. A summary graphic for each agency follows below.



Excellent
Good
Fair
Poor
Inadequate
No Information

Performance Scale

Figure 3-1. Example Agency Performance Summary

Evaluation Grades

The 2012 grades for agencies and stakeholder organizations reflect the evolution of the DVF performance expectations. The 2011 Delta Vision Report Card acknowledged and gave credit for the intensity of effort and renewed focus on planning to meet the Two Co-Equal Goals in all organizations. In 2011, DVF implementation expectations were limited to the 10 *Delta Vision Strategic Plan (DVSP)* "near-term actions."

For 2012, however, grades reflect increasing expectations of leadership, management, and performance accountability. There is no question that the Delta poses numerous complex challenges, but compartmentalizing these challenges will not achieve the sought after results. Therefore, the 2012 grades also consider coordination with others and integration of programs. The grades acknowledge the continued intensity of effort, in some cases with very limited resources. However, nearly four years after the completion of the *DVSP*, the State should be demonstrating action, implementation, and results, particularly for actions identified and initiated before the *DVSP* was released in 2008.

Next year's *Delta Vision Report Card* will look forward to more action, more implementation, and more results. In 2013, DVF will also expect to see more organizational implementation capacity. The State of California, Federal agencies, and stakeholders need to display decisiveness and results in achieving the Two Co-Equal Goals, while protecting and enhancing the Delta as an evolving place.



Summary Report Card on State Leadership and Effectiveness

As with the 2011 Delta Vision Report Card, the Delta Vision Foundation (DVF) in 2012 wishes to recognize and acknowledge the State's dedicated efforts to implement the Delta Vision Strategic Plan (DVSP). Across all agencies, managers and staff are working diligently to find the means to achieve the Two Co-Equal Goals, while protecting and enhancing the Delta as an evolving place. The 2012 Delta Vision Report Card praises the efforts shown over the past three years. However, the tenuous ecological conditions in the Delta, and precarious statewide water supply stability, demand renewed commitment in the face of challenging odds. Accordingly, the State must continue to demonstrate leadership. Successful action will depend on unambiguous goals, tactics, coordination, and measurement of results.

The 2012 Delta Vision Report Card evaluated implementing agencies for their leadership, strategic direction, coordination, results, and accountability.

Organization	2011	2012	Comments
Legislature	B +	C-	Some oversight of Delta actions established. Almost no movement to address near- and long-term funding needs of implementing agencies.
Governor's Administration	B+	C-	Strong, but significantly delayed, leadership appointments. No apparent vision or strategy to link actions, develop workable programs, and secure funding.
Delta Stewardship Council	B+	B-	Strong leadership and transparent process. <i>Delta Plan</i> has improved, but lacks direction as to how the State can link actions to achieve the Two Co-Equal Goals. Not enough progress on performance measures.
Natural Resources Agency	B+	C	Increased outreach and transparency. Decision-making lacks responsiveness and coordination of linked actions to develop a workable solution. Insufficient focus on near-term actions.
Department of Water Resources	В-	C	Improvements in emergency preparedness and levee maintenance. Consumed by BDCP planning at the expense of critical near-term investments in levees and conveyance.
Department of Fish and Game	C+	B-	New leadership with refocused resources and mission to address Delta. Good coordination of ecosystem restoration planning. Needs continued strong leadership to drive on-the ground implementation.
Sacramento-San Joaquin Delta Conservancy	B+	A-	Solid leadership and effective engagement on strategic plan and developing partnerships with others. Needs near-term projects and performance measures to demonstrate implementation success.
Delta Protection Commission B+		B+	Good representation of Delta interests. Sound research and analysis of economic issues. Needs to work towards even better coordination with others to maximize benefits for all.



Organization	2011	2012	Comments	
State Water Resources Control Board	В	A -	Operates from a strategic plan with performance reporting mechanisms. Substantive reorganization to focus Delta planning, regulation, and enforcement. Established Needs to expand outcome-based metrics.	
Central Valley Regional Water Quality Control Board	_	A- Capable leadership. Balanced approach to water que planning, management, and regulation. Solid science foundation for decision-making. Good collaboration developing solutions.		
California Water Commission	В	В	Provides valuable guidance to shape and improve DWR actions and regulations. Needs to define purpose and action on water storage, levees, and the SWP.	
Emergency Management Agency	_	B- Effective coordination of Delta Emergency Management Task Force. Needs to strengthen leadership and partnerships to plan and mitigate for possible catastrophic failure.		
Science Programs B		B+	Strong foundation for coordination, independent reviews, and policy guidance. Need to expand attention on engineering and economics, establish science plan and performance measures, and synthesize science efforts.	

Leadership is Essential

In the 2011 Delta Vision Report Card, DVF stressed the urgency for action and the essential importance of leadership. In 2012, the need for action and leadership remains urgent. Strong and decisive leadership is needed at all levels for coordination of actions, even if another organization is the implementation lead. In 2011, the DVF highlighted the special leadership requirements for the Governor, Legislature, State agencies, Federal agencies, and stakeholders. Fortunately, there has been improvement in leadership and coordination over last year in all agencies. There is more shared knowledge and a better understanding of the inherent interconnectedness of the agencies with regards to the Delta.

However, better leadership has not translated into quicker program rollout and results. For example, the BDCP program has not fashioned a workable program that links actions through commitments and assurances. The Delta Plan has improved, but does not yet describe a long-term vision and plan that builds on the *Delta Vision Strategic Plan* and inspires coordination, collaboration, and commitment. The Delta Economic sustainability Plan provides sound economic information and analysis, but is based on the premise that the Two Co-Equal Goals and Delta protection and enhancement are mutually exclusive.

In spite of these examples, the Delta Vision Foundation finds reason for optimism. Leaders and staff across all organizations are working earnestly and with the best intentions to make positive contributions.



Governor's Administration and Legislature

Overview

The Governor's Administration and the California Legislature are responsible for establishing the overall policy direction for the State's water, environmental, and Delta issues. They do this through leadership decisions, legislation, funding, and executive appointments.



Accomplishments

The 2009 legislative package on water, the environment, and the Delta was signed into law in November 2009. Its goal was to address challenges in the Sacramento-San Joaquin Bay-Delta and implement the *Delta Vision Strategic Plan (DVSP)*. The legislation established, as the official policy of the State, the Two Co-Equal Goals: (1) Restore the Delta Ecosystem; and (2) Ensure Water Supply Reliability. The 2009 water legislation also acknowledged the importance of achieving these goals in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. The legislation addressed Delta governance, ecosystem restoration, water supply, economic vitality, and security. It also spoke to statewide water use efficiency and groundwater monitoring.

Governor Brown appointed the directors of DFG and DWR in August 2011 and April 2012, respectively. In December 2011, January 2012, and April 2012, Governor Brown appointed six members of the eight-member CVFPB. In May 2012, the Governor announced two appointments to fill vacancies on the five-member State Water Resources Control Board (State Board).

A number of important hearings were held. The California Assembly Water, Parks, and Wildlife Committee held five oversight hearings relevant to Delta activities: Delta Governance and the Delta Plan (May 2011), Proposed State Park Closures (June 2011 and November 2011), Bay-Delta Conservation Plan (October 2011), and Water Reuse (May 2012). The California Senate Natural Resources and Water Committee held four informational hearings related to the Delta: Delta Update (March 2011), Public Financing for Water Investments (March 2011), Update on Delta Plans (February 2012), and Delta Plan and Bay-Delta Conservation Plan (March 2012).

Challenges and Constraints

There is no doubt that the State fiscal crisis remains a major challenge for the Governor and Legislature. They are faced with State budget issues that affect all State spending and revenues, including those that benefit the Delta.

Assessment

The 2009 legislative package was an historic achievement in setting a new policy direction for the Delta and establishing the Two Co-Equal Goals as State policy. The legislative package inspired renewed focus on water management, ecosystem restoration, and Delta protection and enhancement. However, strong and assertive leadership was required from the Governor's Administration. Funding support and legislative oversight is necessary to ensure implementation of workable solutions to carry out the new laws.

The Governor's Administration has yet to communicate a sense of urgency, overall vision, coordinated management, and streamlined decision-making processes to implement workable solutions. Nowhere is this truer than with critical near-term actions to improve levees, protect water supplies, and restore Delta habitat. Appointments to important water management agencies were delayed. A singular focus on the Bay-Delta Conservation Plan blurred the urgency about immediate action and the need for stronger leadership to promote linked actions to achieve the Two Co-Equal Goals.

The Legislature has conducted several informational and oversight hearings of Delta activities, particularly regarding the BDCP program. However, legislative leadership on both sides of the aisle must move forward to



address the issues of funding and financing. Budgets and staffing of Delta agencies are inadequate for them to meet their mandated responsibilities. The State relies too heavily on bond funds and water contractors' payments for water resources and ecosystem restoration planning. This ad hoc funding approach is poor fiscal management. It lacks leadership in that it does not propose funding in exchange for results. The Legislature should secure funding for Delta activities for



Figure 3-2. Governor's Administration and Legislature Performance Summary

the next five years. Core Delta agencies need money for basic science, Performance Scale
Excellent
Good
Fair
Poor
Inadequate
No Information

development of performance outcomes, independent planning, keen analysis, near-term implementation, and performance monitoring. The core Delta planning agencies include the Delta Stewardship Council (DSC), Delta Conservancy, the Delta Protection Commission (DPC), the State Board, and the Department of Fish and Game (DFG), and DWR.

The Legislature should immediately appropriate funds from Proposition 1E for construction of a Strategic Delta Levee System. This is the baseline for protecting water supplies and critical infrastructure in the Delta. As noted in the 2011 Delta Vision Report Card, discussion and evaluation of long-term funding and financing to implement the 2009 water legislation should begin right

now by the Legislature and the Governor's administration. In addition, the Governor and Legislature should identify and eliminate barriers to timely contracting and efficient performance reporting in the Department of Finance, Department of General Services, and other agencies.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve State leadership and direction for implementing the actions in the *Delta Vision Strategic Plan* and subsequent legislation.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Immediately coordinate action and align policy direction for Delta planning to achieve the Two Co-Equal Goals, particularly as it relates to near-term actions to protect water supply and critical infrastructure and restore Delta habitat.

Note: The State demonstrates some improved coordination, but there is no clear plan or leadership for implementing near-term actions.

2. Request stronger Federal leadership and support from Washington, DC. Seek their partnership with the State in implementing the near-term and mid-term actions to achieve the Two Co-Equal Goals.

Note: There is improved coordination on long-term planning, focus, funding, and planning needed for near-term actions.

3. Take immediate steps to fill critical staff positions and provide funding needed to maintain the existing infrastructure and implement the planning and oversight responsibilities defined in the 2009 legislation.

Note: Funding for the State Water Resources Control Board, Department of Fish and Game, Delta Protection Commission, Delta Conservancy, and Delta Investment Fund is inadequate. Consider measures to accelerate approvals of fee-funded positions. Reopen bargaining agreements so that workers at the contractor-funded State Water Project receive competitive pay.



2011 Recommendations Repeated in 2012 (Little or No Action)

4. Begin fact-finding hearings to develop appropriate and directed mechanisms for funding and financing State planning, oversight, and implementation of the *Delta Vision Strategic Plan*, consistent with the "beneficiary pays" principle.

Note: Long-term funding mechanisms are critical as available bond funds are spent.

5. Immediately identify ways to simplify State contracting procedures and remove barriers to meaningful performance reporting.

Note: Long and cumbersome contracting procedures and inaccessible budget numbers performance data cause unnecessary delay, additional cost, and poor performance accountability.

New Recommendations in 2012

None.

Completed 2011 Recommendations

6. Appoint or confirm executive leadership and board members at the agencies that have primary responsibility for implementing the *Delta Vision Strategic Plan*, as soon as the State budget is resolved.

Note: Appointments were slow, but are now complete.



State Agencies with Primary Implementation Responsibilities Delta Stewardship Council

Overview

The Delta Stewardship Council (DSC) was established by the 2009 water legislation (SBX7-1). It consists of seven members: four appointed by the Governor, one by the Speaker of the Assembly, one by the Senate Committee on Rules; the seventh is the Chair of the Delta Protection Commission (DPC). The legislation directs the DSC to develop, adopt, and implement by January 1, 2012, a legally enforceable, comprehensive, long-term management plan for the Sacramento-San Joaquin Delta and the Suisun Marsh—the Delta Plan—to further the Two Co-Equal Goals. The legislation also directs the DSC to review and



Plan—to further the Two Co-Equal Goals. The legislation also directs the DSC to review and consider the strategies and actions of the *Delta Vision Strategic Plan (DVSP)*.

Accomplishments

The DSC initiated an iterative planning process to guide development of the *Delta Plan*. To date, six successive drafts of the document have been published. There have been opportunities for public review and comment on each draft. The DSC published the initial draft environmental documents in November 2011. Public comments due in early February, following public meetings around the state. The DSC now plans final approval of the *Delta Plan* for fall 2012.

In the *Delta Plan*, the DSC incorporates all of the elements required by the legislation: ecosystem restoration; water supply reliability; water quality; Delta risk reduction; protection and enhancement of the Delta as a place; science and adaptive management; a finance plan framework; and performance measures. In mid-2010, the DSC appointed the Independent Science Board (ISB) and provided it with direction.

Challenges and Constraints

The legislation directs DSC to complete the *Delta Plan* (and associated environmental review) in just 18 months—an unprecedented timetable. The DSC has a lead role (and a substantial challenge) in defining what the Two Co-Equal Goals mean for the Delta, and how they will be achieved.

Assessment

Given the urgent need for action, the DSC is to be commended for an aggressive schedule for developing the *Delta Plan*. It has presented a sincere effort to achieve the legislative deadline. The DSC has effectively marshaled resources and information to develop the draft plan. It has done this through an open, iterative planning process, allowing all interested parties to participate, see, and comment on the *Delta Plan* as it has developed. The DSC leadership led the Council, other agencies, and stakeholders through a rigorous process to address critical issues affecting the Delta. The DSC staff has been thorough and conscientious in considering public comments and improving the *Delta Plan* through each draft.

The DSC has been an effective forum for identifying and highlighting the critical challenges affecting the Delta. It has addressed and challenged many of the common positional perspectives about problems and possible solutions. However, the structure of the *Delta Plan* does not effectively emphasize the important linkages among agencies, actions, and programs to achieve the Two Co-Equal Goals. The DSC began development of the *Delta Plan* with too much emphasis on the legally enforceable jurisdiction of the DSC, which bogged down development of a comprehensive vision and clear objectives for the *Delta Plan*. Since then, the *Delta Plan* has improved, but it is not what it could be. For example, regional self-sufficiency must be linked by policy, contract, and regulation to new conveyance and storage. The DSC should explicitly identify these linkages, stressing that they are the only way to address the Delta challenges. The DSC must lay out a well-lighted path towards achievement of the Two Co-Equal Goals.



The *Delta Plan* should describe a water management system that will ensure water supply reliability <u>and</u> ecosystem success. The DSC should continue to provide direction on how the State and stakeholders can reduce water demand on the Delta in dry years. Conservation is needed to support ecosystem restoration. Increasing diversion and storage in wet years will improve water supply reliability throughout the state. It is essential to include parameters for conveyance, storage, and regional self-sufficiency (i.e., size, location, general operations, and expected benefits). A careful and comprehensive explanation will reinforce that (1) new conveyance is necessary, (2) conveyance and storage must be linked to maximize benefits for people and the environment, and (3) regional self-sufficiency is essential to reduce reliance on the Delta for future water supply needs. For example, it is not sufficient to simply recommend that DWR complete the storage



Figure 3-3. Delta Stewardship Council Performance Summary

investigations. DSC must describe the State's role in developing a water management system to achieve water supply reliability and ecosystem health, which must include more storage south of the Delta. The *Delta Plan* should closely describe ecosystem restoration objectives (e.g., composition, structure, function, and amount) and water flow parameters (e.g., location, type, quantity, and timing). This description will reinforce that water flows (quantity and timing), connected and linked habitats, water quality, and food web productivity are all critical for ecosystem restoration and recovery.

While the DSC has been an effective forum for highlighting critical, and often unaddressed, challenges affecting the Delta, the DSC has been less effective in developing workable approaches and actions that earn the support of stakeholders and other agencies. Endorsable solutions are critical to long-

term success. The DSC can and should play a stronger role in helping resolve those conflicts. First, the DSC should convene stakeholder forums, with professional facilitation. These forums can address high priority, tough issues and foster greater alignment on steps forward. Potential long-range forum topics include further refinement of definitions and performance measures that enhance water reliability and ecosystem health. Forums can also sort out near-term issues, such as levee investment priorities. Second, the DSC can and should serve an important coordinating function among State agencies and others, as directed by the Legislature. To date, the DSC agency coordination has not had the focus and direction necessary to ensure coordinated action and results. The DSC should play a leadership role in the State "action team" described in the 2011 Delta Vision Report Card recommendations and repeated in this year's recommendations.

Three areas of DSC responsibilities need accelerated attention: (1) Delta levee investment priorities; (2) performance measures; and (3) a funding and financing plan. The DSC should be aggressive and bold in its recommendations in these three areas. The DSC should develop a work plan and stakeholder engagement process to develop recommendations in each area by the end of 2013, if not sooner. Levee investment priorities must consider the multiple benefits of each island, including for the system as a whole, any improvements needed to protect those benefits, and an allocation of costs to the beneficiaries. More work is also needed to develop clear performance outcomes at all levels—policy, performance, and outcomes. That is, the DSC should refine the overall direction and definition of the Two Co-Equal

Performance Scale		
Excellent		
Good		
Fair		
Poor		
Inadequate		
No Information		

Goals. The Legislature, State Administration, Federal agencies, and stakeholders must understand and endorse top-level performance measures. Leaders should be evaluated on the progress made towards water supply reliability, ecosystem health, economic vitality, risk reduction, and water quality.



Recommendations and Observations

The Delta Vision Foundation recommends the following actions to enhance the effectiveness of the Delta Stewardship Council in implementing the actions in the *Delta Vision Strategic Plan* and subsequent legislation.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Incorporate an unambiguous, concise description of expected outcomes and measurable objectives for the Two Co-Equal Goals to guide actions by others.

Note: More work is needed to define overall direction and develop quantifiable metrics.

2. Continue efforts to promote floodplain protection from development.

Note: Initial policies are included in the *Draft Delta Plan*; align policies with Delta Protection Commission Resource Management Plan and local General Plans.

3. Develop or improve policies to link water storage, water conveyance, regional self-sufficiency, and ecosystem restoration through improved water management.

Note: Policies and recommendations do not yet sufficiently encourage or require the necessary linkages.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Immediately establish monthly meetings of implementing agencies (accessible to the public) to report on agency actions, progress, and barriers, and to increase accountability and transparency.

Note: Agency coordination is not action-oriented and lacks transparency and accountability.

5. Establish cross-functional workgroups and stakeholder engagement to resolve core issues and enhance the results and recommendations for levee investment priorities, performance measures, and funding and financing.

Note: Action and engagement on these critical topics has been deferred.

6. Establish joint use of floodplains for flood protection, habitat creation, and agricultural production. Work with the Delta Protection Commission and local government to identify high priority areas for economic development that should be protected from conversion to less economic uses.

Note: Important coordination is needed to define high priority economic development zones.

New Recommendations in 2012

7. Immediately convene a Near-Term Actions Implementation Team, including the Natural Resources Agency, Department of Water Resources, Department of Fish and Game, Emergency Management Agency, Delta Protection Commission, Delta Conservancy, and other relevant agencies to develop and accelerate an action plan to reduce risks of catastrophic failure, bolster emergency response, implement habitat restoration, and secure critical infrastructure.

Note: Implementation actions lack effective coordination and reporting.

Completed 2011 Recommendations



California Natural Resources Agency

Overview

The California Natural Resources Agency (Resources) manages the State efforts to restore, protect, and manage natural, historical, and cultural resources. The departments and organizations within Resources with primary responsibility for Delta issues include: the Department of Water Resources (DWR); Department of Fish and Game (DFG); Delta Protection Commission (DPC); and Sacramento-San Joaquin Delta Conservancy (Conservancy). The California Water Commission (CWC) is a subsidiary entity of DWR.

Accomplishments

Resources leadership moved quickly to continue planning and analysis for the Bay-Delta Conservation Plan (BDCP). They restructured the planning process to increase transparency. BDCP program leadership took the unusual step of releasing the administrative draft of the Conservation Plan and the environmental review documents. They also established 13 working groups to address important elements of the plan, including habitat restoration, facility sizing, water operations, governance, and financing. Public meetings have been scheduled every four to six weeks to report progress and receive comments. The draft EIR is planned for fall 2012. Resources reestablished the Water Policy Coordination Group to improve coordination of Delta activities among State agencies. Resources also convened stakeholders in the San Joaquin River system to coordinate input about the State Water Resources Control Board proceedings on the San Joaquin River flow objectives.

Challenges and Constraints

Fundamentally, Resources is challenged to resolve internal conflicts between its departments, particularly among DWR, DFG, DPC, and the Conservancy. Resolution has to comply with State law and support the Two Co-Equal Goals: Restore the Delta ecosystem and ensure a more reliable water supply for California. Specifically, Resources must develop a plan for BDCP that protects and restores multiple Delta species while providing long-term certainty for water export operations. Moreover, Resources is the focal point for balancing investment for immediate and near-term Delta actions against long-term planning for conveyance and ecosystem restoration.

Assessment

Resources increased openness and transparency of the BDCP planning process by releasing early draft materials for public review and conducting numerous outreach meetings. The leadership team reached out to all interests and listened carefully for issues and concerns. The coordination efforts and engagement with local interests on planning for restoration actions in the Yolo Bypass have been particularly valuable and productive. Resources has also effectively brought forward the valuable science and analysis from the previous administration. Resources continues to improve scientific research and analysis. Of particular value is the advancement of biological goals and objectives for the Delta. Furthermore, Resources and the BDCP team have evaluated, and subsequently incorporated, recommendations from independent science reviews.

However, there is little substantive evidence that outreach to all interested stakeholders and synthesis of independent science reviews has resulted in improvements to the BDCP. None of these actions make for a more workable and permittable project. From the public's standpoint, Resources is not providing feedback that lets the public know how comments were considered and how program activities were changed as a result. Work group meetings and public meetings have lacked purpose and focus and were frequently cancelled. Effective stakeholder engagement, consideration, revision, and response have been underresourced for a program of the scale of BDCP. Resources has assumed a leadership role for outreach and engagement, but, Reclamation and DWR, as permittees, and State and Federal water contractors are equally responsible for engaging with and responding to all interests.



As highlighted in the 2011 Delta Vision Report Card, conveyance facilities and habitat restoration cannot be integrated unless Resources assures stakeholders that facility operations will protect and restore the ecosystem by reducing dry year diversions and improve water supply reliability by increasing wet year diversions. These assurances cannot be made without tying them to increased water storage and regional self-sufficiency. Resources must provide the leadership to advance a BDCP program that includes these linkages and operates to achieve the Two Co-Equal Goals.



Figure 3-4. Natural Resources Agency Performance Summary

The BDCP is only one part of achieving the Two Co-Equal Goals. Resources must provide effective direction to its direct reporting agencies and to the DPC and Conservancy, about how to link programs and actions to achieve the Two Co-Equal Goals. Near-term actions to secure the existing water supply system and accelerate ecosystem restoration are more important now than ever. Resources has not closely managed levee improvement programs that protect water supplies and critical infrastructure. Resources should issue directives to its reporting departments to accelerate levee improvements, ecosystem restoration projects, and pilot projects. In addition, Resources should provide guidance to the DPC and Conservancy, in collaboration with CDFA, USDA, and others, to accelerate economic development opportunities in the Delta. Resources also has not provided guidance in support of the Strategic Vision process conducted at DFG. Bold action was needed to improve organizational effectiveness, but

Resources executives did not rise to the challenge.

As noted in the 2011 Delta Vision Report Card, Resources should have the decisive leadership role in implementing Delta actions. All of the primary State implementing agencies, and some of the regulatory

agencies (DWR, DFG, DPC, the Conservancy, and DPR), report to Resources. Resources has taken some initial steps to establish the "action team" DVF recommended in 2011. Specifically it has reestablished the Water Policy Coordination Group. However, more focus and action is needed. With authority delegated by the Governor, Secretary Laird (in cooperation with Phil Isenberg, DSC Chairman) should further improve the Water Policy Coordination Group. Together, they can ensure that specific performance measures, work plans, timetables, and interagency agreements are executed as required by the *Delta Vision Strategic Plan*, the 2009 water legislation, and the *Delta Plan*. To increase transparency and accountability the Water Policy Coordination Group should hold public meetings and publish quarterly progress reports.





Recommendations and Observations

The Delta Vision Foundation recommends the following actions to enhance the effectiveness of the Natural Resources Agency in implementing the actions of the *Delta Vision Strategic Plan* and subsequent legislation.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Define clear, measurable objectives for Delta water system operations to achieve the Two Co-Equal Goals, in coordination with the Delta Stewardship Council and State Water Resources Control Board.

Note: There is inadequate definition of near-term and long-term goals and objectives to reduce dry year Delta diversions and store more water in wet years.

2. Improve feedback and response to all stakeholders on the development and refinement of BDCP alternatives, effects analysis, Delta science, and environmental analysis.

Note: Communication and transparency have improved; increase capacity to support work groups and manage constructive engagement.

3. Improve coordination and alignment of actions within and among the Natural Resources Agency and its departments, and the State Water Resources Control Board and Delta Stewardship Council.

Note: Establishing the Water Policy Coordinating Group is a positive step; increased reporting and public accountability is needed.

4. Implement an iterative document development process for the BDCP process. Document all work products, including agreements, purpose and need statements, alternatives descriptions, analytical tools, effects analysis, work group deliberations, governance, and financing.

Note: Increased transparency of document iterations was a very positive step; improve capacity to support work groups, build agreements, and address critical issues.

2011 Recommendations Repeated in 2012 (Little or No Action)

5. Include for any BDCP alternatives effects analysis an evaluation of the benefits for supply reliability and ecosystem enhancement from increased storage north and south of the Delta.

Note: Integration of storage with conveyance to achieve Two Co-Equal Goals has largely been ignored.

6. Establish appropriate and transparent funding mechanisms for planning, design, and implementation of the BDCP to assure objectivity and independence.

Note: Improved accountability of governance is needed for both planning and implementation.

New Recommendations in 2012

7. Direct and coordinate departments and organizations within Resources to accelerate implementation of near-term Delta levee improvements, water conveyance improvements, and ecosystem restoration actions.

Note: Near-term actions are not prioritized for action.

8. Improve the functions of the Water Policy Coordination Committee as an action team with public transparency and accountability.

Note: Public reporting of plans, progress, and results is needed.

Completed 2011 Recommendations



Department of Water Resources

Overview

The Department of Water Resources (DWR) has a number of important responsibilities in implementing the 2009 water legislation. DWR prepares the California Water Plan, which is updated every five years. It also provides grants, guidance, and technical support for Integrated Regional Water Management (IRWM) planning across the state. DWR operates the State Water Project (SWP) and implements actions to improve its operations and compliance with permit requirements, including ecosystem protection. DWR also manages California's flood management program, including the levee subvention program. Lastly, it coordinates the Central Valley Flood Protection Plan (CVFPP) with the Central Valley Flood Protection Board (CVFPB).

Accomplishments

DWR has continued or initiated planning and implementation actions in all areas of its responsibility:

Flood Management – DWR supported and implemented emergency preparedness and response actions. It prepared the draft CVFPP (now before the CVFPB for approval). DWR continues grant programs to maintain and improve Delta levees. It has prepared a draft framework for levee investments. DWR has also initiated a system reoperations study for flood management.

Storage and Conveyance – DWR continues planning for BDCP and CALFED storage projects.

Operations – DWR modified operations to comply with court orders and is investigating delta smelt protection measures. DWR is testing barriers at Georgiana Slough.

Regional Self-Sufficiency – DWR continues planning and implementation grants for IRWM. DWR developed guidelines and regulations for urban and agricultural water conservation. As part of California Water Plan Update 2013, DWR is updating the statewide drought contingency plan.

Ecosystem Restoration – DWR is planning and implementing restoration projects at Dutch Slough, Meins Landing, Twitchell Island, McCormack-Williamson Tract, Liberty Island, and Prospect Island.

Challenges and Constraints

Because DWR has so many programs related to the Delta, cross program coordination and cooperation with other agencies is challenging. However, it is also particularly important for success in the Delta. There are potential inherent conflicts between DWR's statewide water planning role in and its role as operator of the SWP. The cumbersome contracting process at DWR is a significant impediment to action and effectiveness.

Assessment

DWR planning work for the State Water Plan Update 2013 and its support and incentives for regional water management planning (through grants and technical support) are models for State and local partnering on critical water issues. The preparation of the CVFPP followed a similar planning and engagement model and effectively identified a long-term strategy for managing floods in the Central Valley. The grant programs to support Delta levee maintenance and improvement have effectively partnered with reclamation districts and others to increase the stability of the levees and provide habitat benefits. DWR emergency planning activities continue to improve preparation and resources to respond to floods and levee failures.

DWR is the central entity in planning and implementing effective conveyance and storage programs that will accomplish the Two Co-Equal Goals. DWR leadership has demonstrated earnest and sincere commitment to advancing the BDCP and developing a long-term conveyance solution. BDCP planning links facilities, operations, and habitat into a single process. It has also advanced development of biological goals and objectives. However, DWR must remain accountable for the vast sums of money spent on BDCP planning and facilities design (along with other agencies within Resources and the State and Federal water contractors). The



single-purpose focus on specific conveyance facilities has not considered the linkages to storage options, regional self-sufficiency assurances, and water operations requirements that would achieve the Two Co-Equal Goals. The considerable resources that were available over the last six years could have focused on more integrated solutions to address both water supply reliability and ecosystem restoration. DWR must reevaluate alternatives that incorporate the linkages to ensure a workable solution.

DWR has important planning and implementation responsibilities for near-term actions. These actions would secure California's water supplies in a way that protects and enhances the Delta ecosystem. DWR has an



Figure 3-5. Department of Water Resources Performance Summary

organizational structure in place to support levee improvements and habitat restoration through bondfunded grant programs. These programs are effective on a limited scale, but lack an overall plan to protect the State's interests in the Delta. DWR should accelerate efforts, working with DSC, to develop levee investment priorities by the end of 2013 or sooner. DWR should also arrange to begin the highest priority projects very soon.

Activities to improve existing SWP operations and through-Delta conveyance have not been effective. Projects and programs related to fish screen operations at Clifton Court, physical and non-physical barriers, south Delta improvements, Cross-channel operations, and associated ecosystem improvements have not been implemented. DWR must improve its focus on gaining approvals and permits for critical near-term actions. It must build its capacity to implement projects in a timely

manner. DWR should conduct an independent review of its implementation capabilities for actions in the Delta. DWR and Resources should submit their organizational plans for implementing BDCP to an independent peer review panel. This panel can identify the most efficient implementation model for design and construction of a program of that scale.

Performance Scale

Significant responsibilities for retooling California's water management lie with DWR. The organization can and must change to meet these challenges. DWR has taken steps to reorganize and realign its programs to coordinate its efforts better. These efforts should lead to a refocused mission for the organization. As DVF noted in the 2011 Delta Vision Report Card, DWR, with support from Resources, should re-evaluate its mission, vision and goals and prepare a strategic plan, with implementation recommendations, to support and achieve the Two Co-Equal Goals in water supply reliability, flood management, Delta security, and regional self-sufficiency. DWR should submit the plan

Excellent
Good
Fair
Poor
Inadequate
No Information

to the Governor and the Legislature and address critical organizational issues such as management options for the SWP. DWR should establish a special work team to develop and describe a strategy for coordinated operations of the State and Federal water system to achieve interim water management and ecosystem goals for the Delta. The work team can draw upon the expertise of the California Water Plan team and the DSC. The strategy should include new and existing reservoirs, conveyance, and north and south of Delta storage options, as well as improved regional self-sufficiency.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the effectiveness of the Department of Water Resources in implementing the actions in the *Delta Vision Strategic Plan* and subsequent legislation:



Recommendations Initiated Since 2011 (More Progress Needed)

1. Immediately conduct a strategic analysis of the organization, its mission, and responsibilities and develop recommended organizational and management strategies to improve operations, planning, and implementation.

Note: Strategic planning and coordination of planning activities has improved; implementation leadership and capacity are needed.

2. Prepare an analysis of the water needs of Delta water users. This analysis will assist the Delta Stewardship Council and other agencies in defining water supply reliability.

Note: Technical contributions are needed for long-term water supply reliability goals and objectives.

3. Work with the Delta Conservancy, Department of Fish and Game, Delta Stewardship Council, BDCP, and other water, environmental, and Delta interests to develop a coordinated Delta ecosystem restoration plan that meets the objectives defined in the *Delta Plan*.

Note: A coordinated strategy is needed for near-term and mid-term restoration actions.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Immediately complete local risk reduction plans in the Delta and develop priorities for strategic levee system investment in coordination with Delta interests. Develop a work plan for construction of a strategic levee system and accelerate implementation of critical actions to secure the water supply system to protect Delta resources.

Note: Risk reduction plans are needed for Walnut Grove (including the residential area on Grand Island), Locke, Clarksburg, Courtland, and Terminous.

5. Prepare an evaluation and implementation plan to accelerate the investigation and implementation of through-Delta conveyance improvements, including fish screen options at Banks Pumping Station, barriers, dredging, levee improvements, and other near-term improvements in conveyance and supply reliability.

Note: Critical near-term actions are stalled.

6. Immediately update and present information on the operations, benefits, and costs of storage alternatives (north and south of the Delta, surface and groundwater) with and without consideration of Delta conveyance alternatives. Establish milestones and deadlines for storage investigations, to coincide with the BDCP planning process and/or any subsequent process to design and engineer isolated conveyance.

Note: Storage and conveyance integration is needed.

7. Immediately identify and implement steps to simplify Department of Water Resources contracting procedures. Develop unambiguous conflict of interest guidelines that balance the need for knowledge of Delta issues with appropriate independence and objectivity.

Note: Eliminate implementation delays and promote greater trust and transparency.

New Recommendations in 2012

8. Conduct an independent review of the implementation strategy for design and construction of the BDCP program. Conduct a management review, with outside peer review, of organizational constraints that impede planning, decision-making, and implementation of Delta projects.

Note: Determine the most cost-effective implementation model with outside review.

Completed 2011 Recommendations



Department of Fish and Game

Overview

The Department of Fish and Game (DFG) is responsible for the protection of native fish, wildlife, and plant species and their habitats. It does so to ensure the survival of all species and natural communities. DFG has important responsibilities for in-stream flows, habitat restoration, and invasive species management.



Accomplishments

DFG completed its report on the biological objectives and flow needs for the Delta in November 2010, as directed by the 2009 water legislation. In August 2011, Governor Brown appointed new leadership at DFG. DFG assumed responsibility for the CALFED Ecosystem Restoration Program (ERP) and continues to coordinate restoration actions in the Delta and upstream tributaries and report on program accomplishments. DFG is coordinating with the State Board on plans and priorities for in-stream flow analyses on tributaries upstream of the Delta. DFG is an active participant in the BDCP process and efforts to define the ecosystem restoration components. DFG leadership established a leadership position to coordinate Delta activities and provide a single point of contact. DFG is a participant and supporter of Delta monitoring efforts, including the Interagency Ecological Program (IEP) and the Delta Regional Monitoring Program (RMP) for water quality. DFG completed an organization-wide assessment of it purpose, mission, and structure with input from stakeholders and other agencies. Of all of the agencies evaluated in the 2011 Delta Vision Report Card, DFG has been the most responsive to the report card and recommendations. DFG is the only agency to actively seek guidance on how to improve their performance and grade for Delta leadership and effectiveness.

Challenges and Constraints

The most significant challenge for DFG is limited staff and resources to support and implement the actions in the 2009 water legislation.

Assessment

The new DFG leadership has brought an improved organization, focus, and decision-making capability to DFG efforts related to the Delta. The DFG strategic vision process provided valuable input from diverse stakeholders and resulted in greater alignment and clarity of DFG activities. As DVF noted in the 2011 Delta



Figure 3-6. Department of Fish and Game Performance Summary

Vision Report Card, DFG should continue to refine its strategic plan for its actions related to the Delta ecosystem, including both restoration actions and enforcement to advance ecosystem restoration to achieve the Two Co-Equal Goals. Without a definitive statement of purpose, priorities, plans, and performance metrics, DFG will not be able to use its resources and authorities effectively.

DFG has been a constructive participant in the BDCP process, particularly in efforts to develop a multi-species approach for managing Delta resources. DFG should continue this constructive engagement in BDCP to develop a workable program and with the

Performance Scale		
Excellent		
Good		
Fair		
Poor		
Inadequate		
No Informatio	n	

State Board to develop appropriate flow objectives that provide additional dry year protection for the Delta ecosystem and allow increased wet year diversions for water supply reliability.



In cooperation with NMFS and USFWS, DFG continues to manage the ERP for in-Delta and upstream restoration and recovery plans for specific species. The program prepares an annual report on projects and accomplishments. DFG, along with other agencies, have improved coordination and reporting on progress of Delta restoration actions. Additional work and resources are needed to improve monitoring and reporting on the effectiveness of restoration actions and evaluating the potential for increasing the scale of projects to provide more substantial ecosystem restoration.

DFG has initiated activities to complete instream flow analyses by establishing the Instream Flow Program in 2010 and identified statewide priorities. DFG began a ten-year program to conduct instream flow analyses for Delta tributaries in 2011 and hired three staff scientists and two assistants. This team coordinates activities with the State Board priorities identified in *Instream Flow Studies for the Protection of Public Trust Resources:* A Prioritized Schedule and Estimate of Costs (2010). Studies are already underway for the San Joaquin River tributaries under Federal Energy Regulatory Commission (FERC) actions (Tuolumne River, Merced River, and Stanislaus River (current USFWS study)). Current DFG priorities for the Sacramento River tributaries include Lower Butte Creek, Auburn Ravine, Battle Creek, Clear Creek, Antelope Creek, and Bear River; the Middle Fork Feather River; the Shasta River upstream of the Canyon Reach; and the Scott River.

The completion of the strategic vision process is a promising first step to realigning the organization to fulfill its regulatory and implementation responsibilities. DFG leadership should continue this positive direction by further developing the purpose, objectives, and performance measures for DFG work in the Delta, drawing on internal resources and the expertise of the Delta Science Program and independent reviews.

DFG and other agencies must continue to define and describe how a coordinated ecosystem management implementation strategy will work in the Delta. DFG should continue work with DWR, the Delta Conservancy, State Board, Federal agencies, and stakeholders to bring together ecosystem restoration programs by various agencies into a unified roadmap for the *Delta Plan* and BDCP. DFG should play a lead role in defining the timeline and performance expectations for implementation.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the effectiveness of the Department of Fish and Game in implementing the action in the *Delta Vision Strategic Plan* and subsequent legislation:

Recommendations Initiated Since 2011 (More Progress Needed)

1. Develop a strategic plan for Department of Fish and Game leadership and involvement in Delta ecosystem restoration with priorities, plans, and performance measures for enforcement and restoration. Seek direction and funding from the Governor and Legislature to implement the plan.

Note: Strategic Vision process is now complete, focused strategy to accelerate implementation and approvals for Delta actions is needed.

2. Work with the Delta Conservancy, Department of Water Resources, Delta Stewardship Council, BDCP, and other water, environmental, and Delta interests to develop a coordinated Delta ecosystem restoration implementation plan to meet objectives defined in the *Delta Plan*.

Note: Coordinated strategy is needed for near-term and mid-term restoration actions.

3. Provide dedicated staff and funding to prepare and implement a work plan and schedule for evaluating and recommending in-stream flow needs.

Note: Work is underway; focus, funding, and performance accountability are needed.



4. Work with Federal resource agencies to prepare or further clarify recovery plans for fish species and the actions that can be implemented by BDCP, Central Valley Project Improvement Act, and other restoration programs consistent with the *Delta Plan*.

Note: There is substantial progress through Ecosystem Restoration Plan and BDCP; continued coordination and alignment is needed.

2011 Recommendations Repeated in 2012 (Little or No Action) None.

New Recommendations in 2012

1. Continue work with the State Water Resources Control Board to prioritize instream flow studies and recommendations. Update the work plan and identify necessary resources to accelerate evaluation and recommendations for instream flow needs.

Note: Coordination and resource commitments are necessary to ensure progress and results.

Completed 2011 Recommendations



Sacramento-San Joaquin Delta Conservancy

Overview

The Sacramento-San Joaquin Delta Conservancy (Conservancy) was established as part of the 2009 water package (SBX7-1) "as a State agency to work in collaboration and cooperation with local governments and interested parties and act as a primary State agency to implement ecosystem restoration in the Delta and support efforts that advance



environmental protection and the economic well-being of Delta residents." The Conservancy Board includes five representatives of Delta Counties (5), the Natural Resources Agency (1), the Director of Finance (1), and appointments by the Governor (2), the Senate Rules Committee (1), and the Speaker of the Assembly (1). SBX7 1 requires consistency with *Delta Plan*, DPC Resource Management Plan, Central Valley Flood Protection Plan, Suisun Marsh Preservation Act and management plan. The legislation establishes the expectation of working closely with Delta interests and being a partnership for the Delta community.

Accomplishments

The Conservancy Board and staff initiated developing the Strategic Plan and released a draft Strategic Plan for public comment in May 2012. The development of the plan included extensive public outreach and coordination with Delta interests and State agencies. The Conservancy convened a Delta workshop in fall 2011 focusing on new approaches to Delta problem solving. This workshop led to an ongoing series of monthly interest-based discussion meetings among local interests, the Conservancy, State agencies, environmental organizations, and water contractors. Through this outreach and other activities, the Conservancy has begun building partnerships and relationships. The Conservancy has secured an additional \$500,000 in grant funding for local projects and outreach.

Challenges and Constraints

The Conservancy is significantly constrained by the lack of funding from the State Legislature. The anticipated funding from the Water Bond has not materialized and the State Legislature has not provided interim funds. To date, the Conservancy has relied on borrowed funds from the DSC and grant funds from other sources.

Assessment

In spite of significant resource challenges, the Conservancy continues to build relationships and credibility among agencies and community members. The strategic planning process was well structured to reach out to the community, listen to needs and interests, and fashion a workable plan. The Board and staff are committed



Figure 3-7. Sacramento-San Joaquin Delta Conservancy Performance Summary

to the Conservancy mission and taking important initial steps to establish the Conservancy as an important coordinator and implementer of ecosystem restoration and economic development in the Delta. The Conservancy is just beginning to implement several initiatives that will further advance the Strategic Plan and implementation, including establishing a Restoration Network, discussion on Delta branding, and continued interest-based discussions.

Establishing the funding and resources for success, continuing to build relations in the community and with State and Federal agencies, and identifying early projects to demonstrate success are three ongoing challenges. The Conservancy must quickly demonstrate an ability to implement projects.



Performance Scale

Excellent

Inadequate

No Information

Good

Fair

Poor

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to enhance the effectiveness of the Sacramento-San Joaquin Delta Conservancy in implementing the actions in the *Delta Vision Strategic Plan* and subsequent legislation.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Complete the Delta Conservancy Strategic Plan by January 2012.

Note: The Strategic Plan is nearing completion.

2. Work with local interests and the Department of Fish and Game, Department of Water Resources, Delta Stewardship Council, BDCP and other water, environmental, and Delta interests to develop a coordinated Delta ecosystem restoration implementation strategy to meet objectives defined in the *Delta Plan*.

Note: A coordinated strategy is needed for near-term and mid-term restoration actions.

3. Establish the Delta Conservancy as the central information source for economic development and ecosystem restoration projects in the Delta by collecting, synthesizing, and reporting information on the objectives, status, location, and effectiveness of Delta projects.

Note: Work has been initiated; funding is needed.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Continue work with U.S. Department of Agriculture Natural Resource Conservation Service and California Department of Food and Agriculture to identify and apply agricultural programs that can support and advance ecosystem restoration and economic development in the Delta.

Note: Identify near-term economic development opportunities and resources.

New Recommendations in 2012

None.

Completed 2011 Recommendations



Delta Protection Commission

Overview

The Delta Protection Commission is a State agency with responsibility to protect, maintain, enhance, and restore the overall quality of the Delta environment, including agriculture, wildlife habitat, and recreational activities. The goal of the Commission is to ensure orderly, balanced conservation and development of Delta land, resources, and improved flood protection. The 2009 water legislation (SBX7-1) restructured the DPC to include 15 members: Delta Counties



(5), Delta cities (3), Reclamation Districts in the Primary Zone of the Delta (3), State agencies (4 – Food and Agriculture, State Lands, Resources, and Business, Transportation, and Housing). The 2009 water legislation also established the Delta Investment Fund to promote economic development in the Delta.

Accomplishments

As directed by the 2009 water legislation, the DPC initiated the Economic Sustainability Plan (ESP) in 2010 and published a draft ESP in October 2011. The ESP compiled valuable economic data about the Delta; it includes benefits and impacts of actions in the Delta, and the value of resources protected by Delta levees. The plan included 33 recommendations in eight issue areas. Following public comment and peer review, DPC forwarded the final ESP to the DSC in January 2012 for potential incorporation of the ESP into the Delta Plan. Many of the recommendations have now been incorporated into the Delta Plan. DPC has prepared a draft feasibility study of the designation of the Delta as a National Heritage Area (NHA). The study examined NHA designations in other states and recommended a boundary area for a Delta NHA. Following public review and a preliminary review by the National Park Service, DPC will consider the feasibility study at its July meeting and, if approved, submit it to regional Congressional representatives to propose as legislation. As directed by the 2009 legislation, the DPC completed a study of the potential expansion of the Delta Primary Zone in December 2010. Following completion of the ESP, the DPC recommended no changes to the Primary Zone.

The DPC also participated in a task force, which was led by the Emergency Management Agency and included DWR and the five Delta Counties. The Task Force ultimately prepared a "Strategy for Delta-wide Emergency Planning – Phase I" as required by Senate Bill 27 (Simitian). The Task Force report calls for improved coordination and joint planning for emergency preparedness and response in the Delta. In 2011, the Commission approved becoming a lead agency for the Delta to participate in a regional planning effort for emergency planning, preparedness and response. The SB 27 Task Force report, which was recently released, served as the basis for a joint regional grant application. The grant requests funds for the implementation of an improved regional response system to be funded by State bonds and the Federal Emergency Management Agency.

Challenges and Constraints

The DPC has been constrained by its lack of resources in completing its responsibilities as assigned by the 2009 legislation. The State hiring and contracting process slowed down access to needed resources to meet mandated deadlines.

Assessment

The DPC has taken an important leadership role in compiling and reporting valuable information about the Delta economy, land uses, infrastructure, and natural resources. The ESP is a well-researched, peer-reviewed document. It presents opportunities and impacts of economic development as well as protection of Delta resources. In preparing the ESP, the NHA feasibility study, and the evaluation of changes to the Delta Primary Zone, DPC has conducted effective outreach and engagement. DPC reached out to the Delta communities to synthesize diverse viewpoints into cohesive, cogent recommendations. With these documents, the DPC has established itself as an important representative of Delta interests in near- and long-term planning. DPC has made a strong contribution towards achieving the Two Co-Equal Goals, while working to protect and enhance



the Delta as an evolving place. DPC should continue this role through constructive engagement with other State agencies. In particular, DPC should consult with the DSC on the *Delta Plan*, the State Board on water quality and flow objectives, DWR on near-term levee investments, and Resources on the BDCP.



Figure 3-8. Delta Protection Commission Performance Summary

The SB 27 Task Force Report is a valuable framework for improving emergency preparedness and response in the Delta. DPC should continue its efforts to advance its grant proposal. Other coordination with local, State, and Federal agencies will be important to DPC's success. Such agencies include Cal EMA, DWR, and DSC. Actions such as these will ensure that the increased responsibilities of the DPC for regional emergency preparedness and response are well coordinated. Continued communication will ensure that DPC actions are not duplicative of Cal EMA responsibilities, for example. The DPC ought to work with DWR to accelerate preparation of the local response plans for the five Delta communities identified in the *DVSP*: Walnut Grove (including residential areas on Grand

Island), Locke, Clarksburg, Courtland, and Terminous.



Recommendations and Observations

The Delta Vision Foundation recommends the following actions to enhance the effectiveness of the Delta Protection Commission in implementing the actions of the *Delta Vision Strategic Plan* and subsequent legislation:

Recommendations Initiated Since 2011 (More Progress Needed)

To support and expand economic development opportunities for the Delta, the

Food and Agriculture, and the U.S. Department of Agriculture. With its high

in emergency preparedness and response planning in the Delta.

DPC might increase its partnerships with the departments of Parks and Recreation,

visibility in the community, the DPC can and should play a stronger leadership role

1. Work with the Department of Water Resources, Central Valley Flood Protection Board, Delta Stewardship Council, and others to identify priority areas for levee protection through a strategic levee system.

Note: Build on work in *Economic Sustainability Plan* to develop coordinated levee plan to address local and State needs.

2011 Recommendations Repeated in 2012 (Little or No Action)

2. Obtain needed funding from the Legislature and other sources to continue and expand economic development planning and implementation for the Delta through the Delta Investment Fund.

Note: The Economic Sustainability Plan lays the foundation; legislative action is needed.

3. Work with U.S. Department of Agriculture, Natural Resource Conservation Service, and California Department of Food and Agriculture to identify and apply agricultural support programs that can advance the *Delta Economic Sustainability Plan*.

Note: Identify near-term economic development opportunities and resources.

4. Work with the Department of Water Resources to complete local risk reduction plans for Delta communities.

Note: Risk reduction plans are needed for Walnut Grove (including the residential area on Grand Island), Locke, Clarksburg, Courtland, and Terminous.



New Recommendations in 2012

5. Coordinate with the California Emergency Management Agency to identify emergency planning and response roles and responsibilities and avoid duplication.

Note: Proposals for improved regional management may conflict with State responsibilities.

Completed 2011 Recommendations



State Water Resources Control Board

Overview

The State Water Resources Control Board (State Board) was established by the Legislature in 1967 with joint authority over water allocation and water quality protection for California's waters. The State Board consists of five full-time salaried members. The 2009 water legislation directed the State Board to complete several actions, such as establishing a Delta Watermaster, improving water diversion information, and completing a report on Delta flow criteria. Nine regional boards develop and enforce water quality objectives. These regional boards oversee implementation plans for protecting the State's waters. Another task for the regional boards is maintaining information about



local differences in climate, topography, geology, and hydrology.

Accomplishments

The State Board completed its Delta Flow Criteria report on schedule in August 2010. Subsequently, the agency requested that BDCP evaluate an alternative that substantially follows the Delta flow needs identified in the report. The State Board has initiated updates to the 2006 Bay-Delta Plan and is reviewing south Delta salinity standards and San Joaquin River flow criteria. In April 2011, the State Board issued a revised Notice of Preparation (NOP) for the San Joaquin flows and southern Delta salinity objectives. Draft environmental documents are expected soon, with a State Board decision planned for fall 2012. In January 2012, the State Board released an NOP for the update to the Bay-Delta Plan and conducted a scoping meeting in May 2012. The staff proposed to complete draft environmental documents in May 2013, with a State Board decision planned for April 2014. In December 2010, the State Board submitted to the legislature a prioritized schedule and estimate of costs to complete in-stream flow studies for the Delta and for high priority rivers and streams in the Delta watershed and Sacramento River watershed by 2018. As directed by the 2009 water legislation, the State Board has also established the Delta Watermaster position. Another accomplishment is the rollout of an online reporting tool for water rights diversion reporting. The Delta Watermaster has achieved 100 percent reporting compliance for Delta diverters required to file statements of use (most Delta diverters) and those with State Board permits. The Watermaster has also established a 95 percent compliance for water rights licensees. The State Board operates under a five-year strategic plan, with the last plan adopted in September 2008 and updated in June 2010.

Challenges and Constraints

The State Board has been constrained by the lack of funding and resources to implement its water rights responsibilities. Completing these assignments from the 2009 water legislation, particularly related to water rights enforcement, is a continual challenge.

Assessment

The State Board has substantially reorganized and refocused its staff to address critical issues in the Delta. These issues include diversion reporting, enforcement action, San Joaquin River flow objectives, southern Delta salinity objectives, Bay-Delta Plan update, and Delta tributary flow objectives. The staff have committed to an aggressive schedule to address the Bay-Delta Plan update and flow objectives. The State Board has also established a solid program of scientific analysis, with peer review and independent reviews. This is sure to improve the State Board's foundation for sound decision-making.

The State Board has prepared and is guided by a strategic plan, which it updated in 2010 to incorporate new governance approaches and reporting requirements for the Delta. The strategic plan is a valuable tool for setting priorities and committing resources. The State Board has also initiated a comprehensive effort to develop outcome-based performance measures for its water quality and water rights responsibilities. Staff have built on these performance measures by assessing progress and reporting results on the State Board website. The website postings have increased the State Board's transparency and accountability. The State



Board is a model for performance management and reporting that all other agencies working in the Delta should follow.

In 2010, the State Board realigned resources to complete its report on Delta flow criteria and establish the Delta Watermaster. Since that time, the Delta Watermaster has effectively combined outreach and coordination, staff research,



Figure 3-9. State Water Resources Control Board Performance Summary

field investigations, and enforcement actions. This information is essential in informing Delta diverters of new requirements and increasing compliance with existing and new requirements.

Performance Scale		
Excellent		
Good		
Fair		
Poor		
Inadequate		
No Information		

In May 2012, the Governor appointed two new members to fill long-vacant seats on the State Board. This action is a significant step to advance the State Board's decision-making capability on the critical water quality and flow issues affecting the Delta. The Legislature should immediately provide the State Board with the funding and positions to successfully complete the Delta-related Board proceedings and expand enforcement efforts.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to enhance the effectiveness of the State Water Resources Control Board in implementing the actions in the *Delta Vision Strategic Plan* and subsequent legislation.

Recommendations Initiated Since 2011

1. Increase resources and funding for water rights enforcement and establishing flow standards based on transparent goals and objectives for personnel and organizational productivity and efficiencies.

Note: There has been substantial action since 2010; continue to identify resource needs.

2011 Recommendations Repeated in 2012 (Little or No Action)

2. Immediately prepare a report identifying actions and resources necessary to streamline procedures for establishing flow standards and water rights permits, including the potential use of administrative law judges.

Note: Improved processes will be needed to complete planned regulations and implementation on the proposed schedule.

New Recommendations in 2012

None.

Completed 2011 Recommendations

3. Consider modifications to simplify diversion-monitoring reporting to reduce equipment costs to diverters.

Note: Policies have been established to consider options for individual diverters.



Central Valley Regional Water Quality Control Board

Overview

The Central Valley Regional Water Quality Control Board (Regional Board) has responsibility for regulating water quality throughout the Central Valley and the Delta. The Regional Board develops and modifies Basin Plans for water quality management and Total Maximum Daily Load (TMDL) requirements for specific contaminants. Examples of these contaminants include mercury, pesticides, nutrients, and salinity. The Basin Plans are implemented through permits and requirements issued by the Regional Board for point and non-point sources of pollutants and contaminants. The Regional Board also coordinates water quality monitoring programs throughout the Central Valley and Delta. Moreover, the Regional Board manages regulatory programs to protect groundwater quality and oversee groundwater cleanup.

Accomplishments

The Regional Board has taken significant steps to control nutrients and contaminants affecting the Delta. Over the last ten years, the Regional Board has implemented new permit requirements for nitrogen discharges from all major wastewater treatment plants in the Delta. The Regional Board developed TMDLs for pesticides, mercury, and dissolved oxygen in the Delta and selenium and salts in the San Joaquin River. Over the next five

years, the Regional Board will implement requirements needed to meet these objectives. The Regional Board also acts in a key role in the Regional Water Monitoring Program, coordinating and integrating water quality data collection and evaluation. The Regional Board coordinates its work in the Delta by way of the Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Strategic Workplan). In 2008, the State Board, the Central Valley Regional Board, and the San Francisco Bay Regional Board adopted the Strategic Workplan.



Challenges and Constraints

The Regional Board has substantial responsibilities for planning and regulating water quality over the entire Central Valley affecting the Delta. Unfortunately, it has limited resources to address science, planning,



Figure 3-10. Central Valley Regional Water Quality Control Board Performance Summary

permitting, monitoring, and enforcement. Inherent in managing water quality is the sometimes conflicting objectives that influence Delta water quality. An example is the fact that increased wetlands restoration may increase the conversion of elemental mercury to a form that can enter the food chain. The Regional Board's work relies heavily on the basic Delta science work done by others.

Assessment

The Regional Board has done an admirable job managing its resources for planning, regulation, monitoring, and enforcing improvements in Delta water quality. Updated wastewater permit requirements, when applied to Delta wastewater treatment plants, have resulted in immediate improvements to water quality when new facilities go online. For example, new requirements for the Stockton wastewater treatment plant resulted in immediate improvements in dissolved

oxygen in the Stockton Deepwater Ship Channel. Additional improvement will be forthcoming due to more recently approved permits, such as the Sacramento Regional Wastewater Treatment Plant. Improvements will continue when new treatment facilities are constructed.



The Regional Board's TMDL activities are also showing results. More than fifty-eight miles of waterways in and upstream of the Delta have been de-listed as contaminated streams for diazanon per the diazanon TMDL. Work is underway to further improve the management of other pesticides such as pyrethroids.

The Regional Board's work in the Irrigated Lands Program, Basin Planning, Stormwater Management, and improved waste discharge requirements have each established regulatory programs and partnerships that address the different water quality issues affecting the Delta. Specific to Delta programs, the Regional Board has coordinated with DSC, BDCP, and the Independent Science Board to ensure alignment of planning, performance, and monitoring.

The Regional Board's actions and decisions rely on a sound foundation of scientific research. The Regional Board acts in cooperation with the State Board, the San Francisco Bay Regional Board, IEP, and others. The Regional Board has also taken big steps to coordinate and align Delta monitoring activities. This has resulted in a comprehensive program to fill data gaps and measure performance. In March 2011, the Central Valley Regional Board, along with other agencies, issued *The Pulse of The Delta 2011: Monitoring and Managing Water Quality in the Sacramento—San Joaquin Delta. Re-Thinking Water Quality Monitoring.* The Regional Board should continue these activities. The Regional Board should identify mechanisms to streamline monitoring and work towards establishing sustainable funding sources from all regulated entities and beneficiaries.

In cooperation with the State Board and the San Francisco Bay Regional Board, the Central Valley Regional Board should continue to improve the *Strategic Workplan* and reporting progress and accomplishments. The performance reporting and dashboard approach of the three agencies is substantially better than other agencies addressing Delta issues. This is true even though it is not easy to get information from the Regional Board website. The three agencies might consider developing improved metrics and reports about water use and water quality. These efforts would increase transparency and accountability.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the effectiveness of the Central Valley Regional Water Quality Control Board.

Recommendations Initiated Since 2011

None. DVF did not evaluate the Central Valley Regional Board in 2011.

2011 Recommendations Repeated in 2012 (Little or No Action)

None. DVF did not evaluate the Central Valley Regional Board in 2011.

New Recommendations in 2012

- Continue leadership and coordination with other agencies to establish thorough and efficient water quality monitoring for the Delta. Work with these agencies to develop a stable, long-term funding plan and proposal.
- 2. Provide guidance on scientific research needed for water quality management in the Delta Science Plan developed by Delta Science Program and the Independent Science Board.

Completed 2011 Recommendations

None. DVF did not evaluate the Central Valley Regional Board in 2011.



California Water Commission

Overview

The nine-member California Water Commission (CWC) advises the Director of DWR on matters within DWR jurisdiction, approves rules and regulations, and reports on the status of the State Water Project (SWP). The 2009 water legislation included an \$11 billion bond measure (SBX7-2) for water resources (expected to be postponed to the November 2014 ballot). As part of the bond measure, the CWC was supposed to develop criteria for determining the public benefits of various water storage projects. The bond allocated \$3 billion to maximize achievement of those



benefits. The CWC also reviews and approves proposed special projects grants for Delta levees. Until the 2009 water legislation was passed, the CWC had been all but inactive for about 10 years.

Accomplishments

Since the CWC was re-established in September 2010, the CWC has re-initiated oversight of the SWP, reviewed proposed DWR water use efficiency regulations, and begun studies of public benefits of water storage. The CWC has initiated a strategic plan to establish purpose and focus of the CWC. In May 2011, the CWC approved final industrial process regulations for water conservation. In May 2012, the CWC approved agricultural water use measurement regulations as required under the 2009 Water Conservation legislation (SBX7-7); the Office of Administrative Law is expected to approve these regulations in June 2012. In fall 2011, the CWC conducted two public workshops on water storage opportunities, investigations, and potential public benefits. The CWC also spent significant time over the past year reviewing and approving resolutions of necessity for eminent domain actions. These resolutions are needed to gain temporary access to geotechnical investigations in the Delta.

Challenges and Constraints

As with other State agencies, the CWC is constrained by funding and resource limitations.

Assessment

The CWC provides important oversight and guidance for DWR activities. In this role, the CWC has taken initial steps to provide guidance on critical issues related to the Delta. The CWC has provided counsel to the DWR on issues that include the operation and



Figure 3-11. California Water Commission **Performance Summary**

maintenance of the SWP, Federal appropriations for water and flood management projects, and determining the public benefits of water storage investments. The CWC is still seeking to establish its purpose, direction, and focus. The CWC ought to



continue to deepen its involvement in DWR issues and serve as a vehicle that provides public perspective to DWR on important topics. The CWC assessment of the public benefits of water storage will be a valuable contribution as they apply to the water bond. In spite of uncertainty about the proposed water bond, the CWC work on public benefits would be valuable input to DWR's current storage investigations and to the DSC. The CWC should coordinate more closely with these programs and accelerate efforts to

provide constructive input for advance planning and implementation. The CWC missed an opportunity to provide guidance to the DSC for the Delta Plan.



The CWC took important steps in approving two water use efficiency regulations, industrial process water and agricultural water use measurement. These regulations are essential to the State's management of water resources. The agricultural water use measurement regulation involved particularly protracted discussions, but resulted in a strong, effective regulation. In reviewing resolutions of necessity for access to private property in the Delta, the CWC provided thoughtful public guidance to DWR about communications and negotiation. Both the resolutions of necessity and the agricultural water use measurement regulation required long and repeated actions by the CWC. DWR would be well served to learn from the guidance provided by the CWC. This knowledge would help to improve DWR's public outreach and engagement processes in the future.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the effectiveness of the California Water Commission in implementing the action in the *Delta Vision Strategic Plan* and subsequent legislation.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Develop and implement a work plan and schedule to complete final public benefits criteria for storage by December 2011.

Note: Work has been initiated, but the water bond is likely to be delayed to 2014; develop recommendations for the Department of Water Resources and Delta Stewardship Council.

2. Conduct public hearings and seek independent analysis to assure creativity and applicability of public benefits criteria.

Note: Initial workshops were conducted; additional policy and technical input needed.

3. Develop preliminary definitions for the public benefits of storage by August 2011 to be incorporated into the Delta Stewardship Council *Delta Plan*.

Note: Recommendations remain important for *Delta Plan* and storage investigations and should be developed quickly.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Immediately develop recommendations to address operations and maintenance staffing issues for the State Water Project.

Note: The Commission provided a letter; more investigation and recommendations are needed.

New Recommendations in 2012

5. Accelerate development of preliminary definitions for the public benefits of storage to be considered by the Delta Stewardship Council and the Department of Water Resources.

Note: Continue work to identify and recommend definitions of public benefits to support discussions of funding and financing for water projects.

Completed 2011 Recommendations



Emergency Management Agency

Overview

The California Emergency Management Agency (Cal EMA) improves safety and preparedness for all Californians. The agency protects lives and property by preparing for, preventing, responding to, and recovering from crimes, hazards, and emergencies.



Accomplishments

The Emergency Management Agency coordinates emergency preparedness and response for the Delta as part of the statewide emergency management system. Cal EMA was the task force chair for preparing the draft emergency preparedness and response strategy for the Delta, as directed by Senate Bill 27 in 2009. Other partners included DWR, DPC, and the five Delta counties. The Task Force Report describes actions to improve regional coordination and response in the event of a Delta emergency, such as flood, earthquake, or levee

failure. The final report was released in May 2012. In cooperation with the Federal Emergency Management Agency, Cal EMA is initiating a Delta Catastrophic Flood Plan in July 2012.

In cooperation with DWR, Delta Counties, and others, Cal EMA coordinated the Golden Guardian exercise in 2011. The goal of the exercise was to test response plans using a simulated Delta flood event. One of the results of the Golden Guardian exercise was the development of a Multi-Agency Coordination System (MACS) for the Delta. MACS is a management system originally developed to manage firefighting teams. The system was later retooled for oversight of flood fight teams, as in the Delta exercise. MACS has subsequently been enhanced for statewide use.



Challenges and Constraints

The greatest challenge for Cal EMA in the Delta is that other agencies and organizations focus on making plans. Conversely, Cal EMA develops executive control systems that are intended to respond to and manage a potential incident. As a consequence, emergency management is usually a secondary issue for Delta planners. Aligning people, organizations, systems, and terminology requires continuous communication with the entities Cal EMA serves.



Figure 3-12. Emergency Management Agency Performance Summary

Assessment

The Delta Multi-Hazard Coordination Task Force was a valuable and productive effort that improved communication and coordination among State and local agencies and resulted in proposals to improve preparation and response. The release of the report was delayed by review in the Governor's office, but participating organizations have been proceeding as per its most high priority recommendations.

Following the end of the State hiring freeze, Cal EMA has been able to reassign or hire resources it needs to address Delta emergency response. Cal EMA management systems keep track of the activities of emergency response teams. These systems are intended to address management and response gaps identified during planning and exercises. Cal EMA should continue to serve in a leadership and coordination role for Delta emergency management, with



close coordination with DWR, DPC, and Delta counties. That is, these organizations should continue the model established by the Delta Multi-Hazard Coordination Task Force.

The management techniques used by emergency management organizations are highly organized, yet flexible and adaptive. This type of system could have high value in addressing other Delta challenges. For example, a system such as this could be used for programs that require flexibility and adaptability, such as ecosystem restoration projects. Cal EMA could be a valuable resource to DSC, Resources, and other agencies by offering to demonstrate its executive monitoring techniques.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the effectiveness of the Emergency Management Agency.

Recommendations Initiated Since 2011 (More Progress Needed)

None. DVF did not evaluate the Emergency Management Agency in 2011.

2011 Recommendations Repeated in 2012 (Little or No Action)

None. DVF did not evaluate the Emergency Management Agency in 2011.

New Recommendations in 2012

1. Continue regional emergency management coordination with the Department of Water Resources, Delta Protection Commission, and Delta counties.

Note: Implement the recommendations of the Delta Multi-Hazard Coordination Task Force.

2. Ensure that seismic events are considered and appropriate response and recovery measures are identified in the Catastrophic Delta Flood Plan. Include independent review of risks and consequences.

Note: Address conflicting perspectives on risks, consequences, response, and mitigation for catastrophic flood and seismic events.

3. Coordinate with the Delta Stewardship Council and Delta Protection Commission to ensure that emergency management roles and responsibilities are clear and without conflict.

Note: Proposals for improved regional management may conflict with State responsibilities.

Completed 2011 Recommendations

None. DVF did not evaluate the Emergency Management Agency in 2011.



Science Programs

Overview

Numerous science programs contribute to the research and body of knowledge of the Delta ecosystem, water quality, and flows. These programs include:

- The DSC Delta Science Program (DSP) Continued forward from the CALFED Science Program and operated with the DSC.
- The Independent Science Board (ISB) Established by the Legislature and whose members are appointed by the DSC.
- The Interagency Ecological Program (IEP) Developed as a joint State and Federal agency monitoring and research program (primarily focused on aquatic habitat and species).
- The California Water Quality Monitoring Council (Monitoring Council) Established by the Legislature in 2006.

DSP coordinates the Science Fellows program whose goal is to develop the next generation of Delta scientists. Additional research and monitoring is conducted by a variety of organizations, including State and Federal agencies, State and Federal water contractors, and academic institutions. The National Academy of Sciences (NAS) and the National Research Council (NRC) provide further independent science reviews.

Accomplishments

Scientific research over the last 20 years has contributed substantially to the understanding of the complex ecosystem and hydrodynamics of the Bay-Delta system. Specifically, targeted research has provided valuable information for policy makers in Pelagic Organism Decline, ammonia, and turbidity. Independent reviews by ISB, NAS, and NRC have been completed for the delta smelt and salmon Biological Opinions, the BDCP process, and State Board flow objectives. Long-term scientific research has also made important contributions in other areas, such as dissolved organic carbon and mercury/mercury methylation. Other research grants are producing new information about factors affecting water quality and the ecosystem, such as the performance of constructed tidal habitats and pilot studies of fall X2 modifications.

Challenges and Constraints

As with other programs, funding and resource constraints for long-term research, monitoring, and research synthesis hinder the ability of science programs to cover all issues affecting the Delta. This is especially true for complex research needed to understand the full implications of future actions in the Delta ecosystem. Funding the DSP is currently provided solely from bond funds.

Assessment

The DSC and the DSP have demonstrated active leadership in support of scientific investigations that inform Delta policy decisions. DSC and DSP have supported sound science, conducted independent reviews, and successfully challenged actions that were based on inadequate science.

Independent science reviews conducted by ISB, NAS, and NRC have been quite constructive. These reviews have set a high bar for the quality of the science to be used in Delta programs. These reviews have masterfully taken into account the complex interplay of science and policy. They have also highlighted how important it is for policy makers and scientists to develop definitions of goals and objectives jointly. For example, the science peer review of the Two Gates barrier project in the south Delta concluded that the scientific data did not justify constructing the project. So, the project has been deferred; additional research is underway to improve understanding of the relationship between turbidity and delta smelt habitat.





The DSP coordinated the external science community in developing an adaptive management framework for the Delta, which is being incorporated in the *Delta Plan*. Further work is needed to shape and refine the *Delta*



Figure 3-13. Science Program Performance Summary

Plan as an adaptive management plan. The DSP also worked with other science programs to implement several pilot projects. Of note is the work implemented in 2011 to test fall X2 modifications and measure impacts on delta smelt habitat and location. DSP is an important leader in adaptive management and should work with other science programs to develop and implement smaller scale pilot projects. These pilots must be based on adaptive management principles to test hypotheses, gather new information, and build adaptive management capacity.

As a result of science research, several new trends are developing. Regulatory requirements are beginning to build in flexibility that allows for adaptive management. Planning programs are seeking out additional independent reviews to improve the quality of the science. Policy makers are recognizing that water management and

ecosystem restoration programs must address multiple stressors.

The science programs are important contributors to defining performance outcomes and metrics for all Delta

activities. Work on performance measures has been initiated for the *Delta Plan* and BDCP, but significant additional work is needed. These plans must develop top-level measures that are meaningful to policy makers, stakeholders, and the public. The performance measures must then be tied to monitoring and analysis efforts that collect and synthesize relevant data. The DSP and other science programs should work together with policy makers to define meaningful performance measures and coordinated monitoring and evaluation programs by June 2013.



The DSP has committed to develop a coordinated Science Plan for the Delta by the end of 2013. The plan should be developed iteratively, with interim work products

and reviews by policy makers, stakeholders, and the public. The plans should include a process for identifying priority policy issues to be addressed by science and specific actions for synthesizing and reporting science results to policy makers and the public.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the effectiveness of the science programs for the Delta.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Expand the Independent Science Board and other independent review panels to include engineering and construction professional expertise to ensure cost-effective implementation plans and risk management strategies to address ecosystem, water supply reliability, levee security, and other needs.

Note: Efforts are underway to add engineering expertise to the Independent Science Board.

- 2. Accelerate coordination of Delta monitoring, research, and synthesis regarding flows, water quality, habitat, and species.
 - a. Continue improvements and coordination of water quality monitoring programs through the California Water Quality Monitoring Council and Delta Regional Monitoring Program.
 - b. Obtain funding for the Delta Science Center at Rio Vista.



c. Assign science managers with particular skills in research synthesis for each of the critical research areas (flows, water quality, habitat, and species).

Note: Action is underway in all areas.

3. Work with responsible agencies to identify, prioritize, and implement specific projects (restoration, operational changes, etc.) to test hypotheses, measure changes, apply adaptive management, and report results.

Note: Several pilot projects were initiated in 2011, additional projects and reporting are needed.

4. Establish performance-based management and budgeting for all science programs with an explicit process for monitoring and performance reporting.

Note: Zero-based budget approach for the Delta Stewardship Council and Delta Science Program began with 2011 budget.

2011 Recommendations Repeated in 2012 (Little or No Action)

5. Prepare a strategic science plan to establish science and research priorities for the Delta, with guidance from policy makers and input from stakeholders.

Note: Science plan is scheduled to be complete in 2013.

New Recommendations in 2012

6. Ensure that engineering and economics perspectives are included in Delta Science Program and Independent Science Board activities and reviews.

Note: Continue to expand expertise of science programs to address all aspects of Delta challenges.

Completed 2011 Recommendations



Other State Agencies with Implementation Responsibilities

Several other State agencies have important implementation responsibilities to achieve the goals in the *DVSP*. These State agencies include the following:

- Business, Transportation and Housing Agency (BTH)
 - o Department of Transportation (Caltrans)
- Department of Food and Agriculture (CDFA)
- Department of Parks and Recreation (DPR)
- State Lands Commission (SLC)
- Central Valley Flood Protection Board (CVFPB)

The Delta Vision Foundation has not yet evaluated these agencies. Future progress reports and report cards will assess the leadership and effectiveness of these agencies in implementing the *DVSP*. However, the following are some brief highlights of actions by these agencies.

The Department of Transportation (Caltrans) issued "Corridor Improvement Strategies – Final Technical Memorandum Corridor Improvement Strategies for SR-12" in October 2011. The final report, including short-term and long-term recommendations, is due after June 2012. As a first step in developing a SR-160 Corridor Management Plan (CMP), the Transportation Concept Report for SR-160 was issued August 29, 2011. The Concept Report notes that, according to the 2009 "Vulnerability of Transportation Systems to Sea Level Rise Preliminary Assessment," the SR-160 Delta corridor is most likely to be affected by an expected 55-inch rise in the sea level by 2100.

The Department of Food and Agriculture (CDFA) coordinates with agricultural interests in the Delta and across the state. CDFA provides input to the *Delta Plan*, BDCP, *Delta Economic Sustainability Plan*, and other planning efforts on the economic benefits of agriculture and potential impacts of proposed actions.

The Department of Parks and Recreation released the draft *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh* for public review in April 2011. The main elements of this proposal have been incorporated into the *Delta Economic Sustainability Plan* and the *Delta Plan*.

The Central Valley Flood Protection Board is reviewing the Central Valley Flood Protection Plan, prepared by DWR, and expects to adopt the plan in June 2012.



Federal Agency Leadership and Cooperation

Overview

Leadership and cooperation from the Federal agencies with management responsibility and/or regulatory authority for the Delta are critical for the long-term success of the *DVSP*. Historically, the advancement of solutions in the Delta has occurred when the State of California and the Federal Government have worked in a close partnership that focuses on finding workable solutions. This section provides a brief overview and assessment of Federal actions, cooperation, and coordination and recommendations for improving the partnership between the State and Federal governments. The following agencies are discussed:



- Department of the Interior (DOI)
 - o U.S. Bureau of Reclamation (Reclamation)
 - o U.S. Fish and Wildlife Service (USFWS)
 - U.S. Geological Survey (USGS)
- Department of Commerce (DOC), National Marine Fisheries Service (NMFS)
- Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (USEPA)

Accomplishments

In September 2009, the six Federal agencies (DOI, DOC, USDA, USACE, USEPA, and the Council on Environmental Quality) signed a Memorandum of Understanding (MOU) to coordinate and streamline activities related to the Bay-Delta. The MOU established a Federal Leadership Committee to coordinate activities. In December 2009, the Leadership Committee released its Interim Federal Action Plan, which committed the six Federal agencies to work closely with the State, promote science-based decisions and actions, establish milestones and success measures, and coordinate with tribal organizations. The Interim Plan identifies four priorities:

- 1. Work with the State and local authorities in producing the BDCP and developing joint planning activities.
- 2. Encourage smarter water supply and use of Bay-Delta water.
- 3. Ensure healthy Bay-Delta ecosystems and improve water quality.
- 4. Help deliver drought relief and ensure integrated flood risk management.

In June 2010, DOI and DOC developed a joint Near-term Science Strategy to address scientific issues associated with the Biological Opinions for delta smelt and salmon. With the goal of increasing Federal cooperation, the Secretary of the Interior has appointed a special representative just for California water issues. Reclamation and USFWS have established Bay-Delta program offices to coordinate activities.

Federal law now incorporates the Two Co-Equal Goals. The Federal Energy and Water Development Appropriations Act of 2012 (Title II of the Consolidated appropriations Act of 2012 (PL 112-074)) contains, in pertinent part, the following:

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)

USACE is coordinating several flood management and levee programs in the Delta with DWR and local partners, including: Delta Islands and Levees Feasibility Study; CALFED Levee Stability Program; Central Valley



Integrated Flood Management Study; and Lower San Joaquin Feasibility Study. USACE is also coordinating dredging programs with the Central Valley Regional Board, DWR, USEPA, and local partners.

USGS provides science guidance to State and Federal agencies. It has conducted or is conducting monitoring and research on issues such as mercury methylation, organic carbon and drinking water, and turbidity.

USFWS, NMFS, USACE, and NRCS have all been active participants in the BDCP process. The USEPA has issued an Advanced Notice of Proposed Rulemaking regarding environmental water quality in the Delta, with the intent of providing a water quality regulatory complement to the BDCP process. DOI has been an active supporter and participant in the IEP.

Several projects are under construction that will improve ecosystem protection, system flexibility, and water supply reliability, including the Red Bluff pumping plant and the Intertie Project between the SWP and the Central Valley Project (CVP). The Intertie Project was completed in May 2012. DOI and USDA have coordinated efforts and provided grants to support agricultural water use efficiency in the Central Valley—\$9.1 million in 2011 and \$8.8 million in 2012.

Challenges and Constraints

The Federal agencies are challenged to coordinate activities across six Federal agencies, especially with differing, and sometimes overlapping, responsibilities. Aligning policies in California with those established in Washington is also a challenge. For example, the USACE national policy disallowing vegetation on levees is the subject of extensive debate. The issue is whether levees in the Delta can be rehabilitated in order to provide joint benefits for flood protection and habitat. The Federal fisheries agencies have to transition the typical single species regulatory approach to the coordinated multi-species regulatory process for the BDCP. Also associated with the regulatory process for BDCP (under Section 10 of the Endangered Species Act) is the need for certainty of outcomes, for both water supply and ecosystem benefits. The long-term nature of the decisions (50-year permits) and uncertainty of Delta science result in a complex decision-making situation. In addition, advanced budget planning cycles limit the Federal agencies' ability to adapt resources to the everchanging priorities in California.

Assessment

The Federal agencies have improved coordination among themselves and also with the State Administration. The MOU, Federal Action Plan, and Near-term Science Strategy provide a solid foundation for continued improvement and leadership. Federal agency focus and attention has centered primarily on support and decision-making for the BDCP process and the Biological Opinions for operating the Central Valley Project.

Federal leadership on California water and environmental issues has been strengthened through the greater involvement of the Commissioner of the Bureau of Reclamation. The Commissioner has taken a leadership role in identifying workable options and approaches that will achieve the Two Co-Equal Goals. Decision-making remains a critical challenge for the BDCP program. The Federal agencies are beginning to develop a decision tree methodology to address decision uncertainty. This approach should expand to include independent and public review.

The Reclamation and USFWS are demonstrating improved program management approaches. Establishing Bay-Delta program offices for each organization has helped improve planning and accountability for all Delta-related issues. USGS continues to provide important research support on Delta issues such as turbidity and delta smelt. The Federal agencies are important contributors to the IEP science program, which collects and researches valuable information about the Delta and water operations.

The Federal agencies prepared a progress report on the Interim Federal Action Plan in 2010. The agencies are developing an updated progress report, which is not yet available. This type of reporting and transparency should be improved through an annual progress report and public review meeting. Key contacts for USACE



and NMFS did not respond to requests for information, so the 2012 Delta Vision Report Card does not evaluate their performance or cooperation.

Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the leadership and cooperation of the Federal agencies in supporting the Two Co-Equal Goals and implementing the actions in the *Delta Vision Strategic Plan*.

Recommendations Initiated Since 2011 (More Progress Needed)

1. Identify and appoint a representative of the Federal Bay-Delta Leadership Committee with specific authority to represent the Committee and guide Federal recommendations and actions related to the *Delta Plan* and BDCP.

Note: Federal coordination has improved; important leadership has been provided by the Department of the Interior and the Bureau of Reclamation.

2. Provide leadership direction and funding to develop and implement a coordinated science plan for the Delta, as described in the review of Science Programs.

Note: Federal funding of science programs continues; coordination and funding of the Delta Science Program Science Plan is needed.

2011 Recommendations Repeated in 2012 (Little or No Action)

 Immediately develop a report and recommendations on Federal consistency for the *Delta Plan*, including the Coastal Zone Management Act and other potential means for ensuring Federal consistency and funding.

Note: Action is needed to advance Federal consistency mechanisms.

4. Accelerate surface storage feasibility studies to support and integrate with conveyance investigations.

Note: Storage investigations are lagging; integrated analysis with conveyance is needed.

New Recommendations in 2012

- 5. Establish centralized, multi-agency program team to coordinate, plan and implement near-term Delta improvement actions for levee improvements, through-Delta conveyance, habitat improvement, and water quality.
- 6. Immediately develop permit streamlining process and centralized permitting office for review and approval of Delta actions.
- 7. Improve progress reporting and transparency for the Interim Federal Action Plan.

Completed 2011 Recommendations

None.



Stakeholder Cooperation

The issues, ideas, and information about the Bay-Delta are of deep interest to people and non-governmental organizations across the state—those that seek change and those that may be affected by it. At the same time, the positions and interests of these stakeholders influence action and progress toward the Two Co-Equal Goals by the State and Federal elected officials and agencies. Constructive cooperation, alignment, and support among the diverse interests who care about the Delta are critical for success.



Since completion of the *DVSP* and passage of the 2009 water legislation, cooperation among stakeholders has become even more important. It is vital to developing and implementing workable solutions that meet multiple objectives. However, the Delta Vision Foundation sees disturbing trends in constructive cooperation. As one stakeholder noted, the level and frequency of constructive dialogue between the environmental community and the water users has not been this low since the early 1990s. In part, this is a result of the lack of cohesive leadership by State and Federal agencies noted above and the "shuttle diplomacy" approach used for several planning processes. However, stakeholder leadership and cooperation can lead improvement. On a positive note, stakeholders initiated and got funding for professional facilitation for a series of discussions on "Delta projects we can all agree on." These discussions include an array of stakeholders and agencies; they are just getting underway.

Several major interest groups have taken steps to improve cooperation and alignment within their interest group and improve advocacy. For example, the water community has organized the Ag-Urban Coalition. The Delta Counties Coalition and the San Joaquin Valley Partnership have helped align local government interests in the Delta and San Joaquin Valley. Business and labor has been largely absent from the discussions of Delta solutions. At the same time, the continual repetition of the same positions and proposals—more water versus less water from the Delta; big, little, or no isolated conveyance; and local versus State decision-making about Delta levees and land use—has delayed action. These delays encourage and continue the unsustainable use of the Delta. Leaders from all stakeholder communities must stand up, identify near-term actions and workable long-term solutions that achieve multiple benefits. They must work with other interests to get them done.

The DVF also notes several bold actions in the past year that undermine constructive engagement about Delta challenges. Specifically, House Resolution 1837, which would impose a legislative solution for many water and ecosystem challenges, and threats to pull participation and funding for the BDCP are not constructive. These efforts are counterproductive to moving forward with multi-benefit actions needed to achieve the Two Co-Equal Goals. However, these actions express a frustration with the slow pace and repetitive discussions that impede action. State and Federal agencies must take these actions as a wake-up call; they must demonstrate leadership, decision-making, performance, and action. All stakeholder interests (including those sounding the alarm) must step back and look for a different path to get to workable solutions, implementation, and results.

In the 2011 Delta Vision Report Card, the DVF set the following expectations:

- Water and environmental interests working together to develop a water management system that supports a healthy ecosystem
- Delta interests working with fisheries and habitat interests to develop restoration projects that support the Delta economy
- Water interests working with Delta interests to develop a levee investment strategy that protects the Delta economy and the water conveyance system

These expectations remain true today. Stakeholder leadership is needed to make these a reality so California can achieve the Two Co-Equal Goals while protecting and enhancing the Delta as an evolving place.



Recommendations and Observations

The Delta Vision Foundation recommends the following actions to improve the leadership and constructive cooperation of stakeholder interests in supporting the Two Co-Equal Goals and implementing the actions in the *Delta Vision Strategic Plan*.

Recommendations Initiated Since 2011 (More Progress Needed)

None. DVF did not make stakeholder recommendations in the 2011 Delta Vision Report Card.

2011 Recommendations Repeated in 2012 (Little or No Action)

None. DVF did not make stakeholder recommendations in the 2011 Delta Vision Report Card.

New Recommendations in 2012

- 1. Continue leadership participation in and provide funding for "Delta Projects We Can All Agree On" to develop and accelerate near-term actions.
- 2. Establish a multi-interest stakeholder discussion of funding and financing mechanisms for long-term water infrastructure, emergency management, and ecosystem restoration. Prepare a joint report to the Governor and Legislature.

Completed 2011 Recommendations

None. DVF did not make stakeholder recommendations in the 2011 Delta Vision Report Card.



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Section 4 Status of the Two Co-Equal Goals

Assessment of Co-Equal Goals

Previous sections describe the progress of implementing the *Delta Vision Strategic Plan (DVSP)* and the leadership, effectiveness, and cooperation of State and Federal agencies responsible for implementation and stakeholders who support and influence action. However, the most important aspect of implementing the *DVSP* is achieving actual results that improve conditions in the Delta and for the state as a whole. The actions and behaviors are valuable as meaningful "inputs" to the major "outcome" of achieving the Two Co-Equal Goals, but it will be the results that matter for the people, businesses, habitats, and species that depend on the Delta and a reliable water supply.

The Delta Vision Foundation (DVF) does not intend to develop specific performance measures for the ecosystem, water supply reliability, Delta vitality and security, or other important components of the *DVSP* or *Delta Plan*. In fact, as part of the *Delta Plan*, the Delta Stewardship Council (DSC) is developing the specific performance measures for each element of the Delta Plan, including these topics. State and Federal agencies are also developing biological goals and objectives for the Bay-Delta Conservation Plan, which will guide much of the ecosystem restoration in the Delta.

In the near term, DVF is most concerned about results that reduce the risk of failures or losses related the Delta ecosystem and water supply reliability. Failures or losses might include seismic events that disrupt the State and Federal water supply delivery system for an extended period, the extinction of a species or loss of critical habitat, or substantial economic losses resulting from the inability of the water

The State of California is one earthquake, one extended drought, or one series of heavy spring storms away from catastrophic environmental and economic losses for the people and species that depend on the Delta.

supply infrastructure to adapt to droughts, floods, sea level rise, or other changes in California's weather and climate. Therefore, DVF developed the following assessment based on the risk of failure for the Two Co-Equal Goals.

Similar to wildfire risk, the DVF assessment of the status of the Two Co-Equal Goals describes the risk that substantial, undesirable outcomes could occur for California. The evaluation is based on the observations and perspectives provided by agency representatives, stakeholders, and others who provided input to DVF.

The Delta Vision Foundation concludes that the situation remains <u>critical</u>. In fact, the lack of urgency and implementation since the 2008 *Delta Vision Strategic Plan* means the conditions are inching toward <u>extreme</u>. The State of California is one earthquake, one extended drought, or one series of heavy spring storms away from catastrophic environmental and economic losses for the people and species that depend on the Delta. In the recent past around the globe, there have been catastrophic events that devastated people, demolished infrastructure, decimated habitats, and disrupted national and global economies—hurricane Katrina in New Orleans, droughts and floods in Australia, floods in Pakistan, earthquake and tsunami in Japan, and the Gulf oil spill. It would be a tragedy of unimaginable regret if the people of California looked back on a Delta catastrophe and said, "We should have done more."

Following the assessment of the Two Co-Equal Goals is a brief discussion of the critical linkages among the actions and strategies in the *DVSP* that must be maintained to achieve the Two Co-Equal Goals. Section 5 provides the Delta Vision Foundation "Five Overall Recommendations" for the State and other organizations working to achieve the Two Co-Equal Goals.



Delta Ecosystem

The Delta ecosystem remains at critical risk of failure. Since the Delta Vision Task Force began its work in early 2007, substantial effort has been expended to develop the *DVSP*, implementing legislation, implementation guidelines, and project plans, including the *Delta Plan*, *Delta Economic Sustainability Plan*, *Delta Conservancy Strategic Plan*, *Central Valley Flood Protection Plan*, and administrative draft *Bay-Delta Conservation Plan*. While effort and attention on the Two



Co-Equal Goals and plans to achieve them is commendable, there have been few "on-the-ground" changes to protect and restore the Delta ecosystem.

The court-ordered changes in export operations have provided some measure of protection for fish and habitat, but the risks to habitat and species are broader and more complex than water export operations alone. Recent fish population numbers have shown improvement, but it remains uncertain if those improvements are the result of increased flows from recent wetter years or from other actions. Several Delta restoration projects remain in planning and design, even after ten or more years of planning. Some tidal marsh restoration has been completed at Liberty Island and riparian habitat enhancement has been included in many Delta levee maintenance projects. Several pilot tests of water operations to improve delta smelt and salmon habitat and salmon migration have been conducted, notably evaluation of fall X2 management, Yolo Bypass floodplain management, and Delta Cross Channel barriers. These pilot projects are encouraging first steps toward adaptive management, but much more action is needed, now.

The urgency for action cannot be understated. The scope and scale of necessary actions to restore and recover a functioning ecosystem in the Delta is substantial. Habitat improvements of all types and revised water management strategies are needed. Restoration planning must now move rapidly into implementation and adaptive management. Additional pilot projects, with monitoring and performance evaluation, are needed immediately. The core agencies (Department of Fish and Game, Department of Water Resources, Delta Conservancy, and State and Federal Water Contractors Agency), along with Federal agencies and non-governmental organizations and in coordination with local landowners, must develop an implementation focus to accelerate habitat restoration and demonstrate measurable improvements in ecosystem function.

Water Supply Reliability

Water supply reliability statewide also remains at critical risk of failure. The 2011 water year was wet and 2012 was dry until late season rain improved the outlook. These two years together demonstrate the inadequacy of California water management and infrastructure. In 2011, there was more water available than could be stored for future use. In 2012, water users were faced with substantial cutbacks, just a year after all the reservoirs filled.



Pumping restrictions to protect delta smelt and other species further highlight the facilities and operational constraints in the system, particularly in the three drought years from 2008 to 2010. In spite of decades of recognition that California water infrastructure is inadequate to meet the needs of families, fish, farms, and factories, few significant actions have improved the long-term reliability of water supplies from the Delta, on which most of California depends. Together, the last five years demonstrate that California's water supply system lacks the flexibility to adapt to variable precipitation and meet the needs of people and the environment.

The complexity and challenge of increasing flexibility and security in the State water supply system is daunting. As with ecosystem restoration, the urgency for action cannot be understated. Rainfall in the last two years has provided a little "breathing room" to prepare and improve. This year, the Bureau of Reclamation completed



the long-planned Intertie Project between the SWP and CVP, adding some flexibility to export water operations. New State guidelines and regulations for water use efficiency were implemented in the last year, notably new guidelines for Urban Water Management Plans and new regulations for agricultural water use measurement. Over time, these actions will help improve water supply reliability, but immediate action is still needed to improve drought contingency planning, streamline water transfer procedures, and implement other immediate-term water management actions. Design, implementation, and testing of through-Delta conveyance improvements have stalled and storage studies have moved to the back burner. Concerted, focused action is needed to finalize and implement these interim actions. At the same time, long-term conveyance and storage studies must be integrated to identify workable solutions that increase water availability and storage for people and the economy in wet years and leave water in the Delta and its tributaries for fish and habitat in dry years. Regional water management planning and implementation must continue as a collaborative effort between the State and local government because it has proven to be the most effective means for developing water supply flexibility.

Linkages

The *DVSP* described a comprehensive set of integrated and linked goals, strategies, and actions to achieve the Two Co-Equal Goals. Many of the actions will take decades to implement, but to be successful, the State, Federal agencies, water users, and stakeholders must advance the Two Co-Equal Goals by maintaining the linkages among actions in planning and implementation, now and in the future. Just as the Two Co-Equal Goals are inextricably linked, several planning and implementation linkages are now particularly critical for success:

- Governance and Funding
- Science and Policy
- Storage and Conveyance
- Water and Habitat
- Delta Economic Development and Levee Security
- Water Supply Reliability and Ecosystem Funding
- Action and Performance Results

The urgency for decisions on specific components of the solution, continued litigation about current operations, and ongoing positional advocacy are taking precedence over the near-term actions and linked, integrated approaches that will actually solve problems, improve conditions, and build capacity for long-term success. Delta levee improvements are not planned and implemented to protect both local resources and critical statewide infrastructure. Development of Delta flow objectives, the Bay-Delta Conservation Plan, and the Delta Plan is coordinated, but integration and linkages are not developed. Storage and conveyance plans are not integrated and linked to develop the most effective and efficient infrastructure. Near-term actions to advance the Two Co-Equal Goals are largely ignored, rather than implemented in a way that links to and supports long-term solutions. Plans and policies are not effectively linked to performance, monitoring, and accountability. Success in these and other areas is impossible without leadership from the Governor and Legislature to provide near-term and long-term funding to balance public benefits and beneficiary pays.

These linkages are some of the core issues that have eluded resolution for decades. There are signs of positive, constructive coordination to link actions to achieve multiple benefits, such as the Yolo Bypass Working Group and the discussions of "Delta Projects We Can All Agree On." However, this type of coordination and linkage is lacking in broader planning and implementation by the State and others. State and Federal agencies and stakeholders must refocus efforts to develop policies, assurances, and commitments that link actions and incent performance to achieve the Two Co-Equal Goals while protecting and enhancing the Delta as an evolving place.

2011 Delta Vision Report Card



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Section 5 Conclusions and Recommendations

Introduction

The *Delta Vision Strategic Plan (DVSP)* recommended a comprehensive set of integrated and linked actions to achieve the Two Co-Equal Goals: (1) Restore the Delta Ecosystem; and (2) Ensure Water Supply Reliability. It also underscored a sense of urgency for action and implementation. Since the *Delta Vision Strategic Plan* was completed in 2008, the Legislature approved, and the Governor signed into law, a landmark package of water bills to revise governance of Delta issues and refocus State agencies on addressing the complex, interrelated problems of the Delta. The Delta Vision Foundation (DVF) monitors the progress of efforts to implement the recommendations included in the *Delta Vision Strategic Plan* and the requirements of the 2009 water legislation and other laws.

The Delta Vision Foundation openly and widely invited input from stakeholders and the public and interviewed 60 key individuals in the Administration, Legislature, Federal agencies, and stakeholders to gather information in formulating this Report Card. To recognize and honor the time and expertise that all of the participating individuals contributed to the development of this 2012 Delta Vision Report Card, their assessments and a complete inventory of their comments and recommendations are summarized in Appendix F (available on the DVF website).

Conclusions

The Delta Vision Foundation identified the following overall conclusions about efforts to achieve the Two Co-Equal Goals while protecting and enhancing the Delta as an evolving place. Three conclusions offer hope for the State's ability to address the complex Delta problems that have defied solution for decades.

The level of effort is impressive. Across all agencies and organizations, there is an honest and sincere commitment to completing assignments, coordinating with other organizations, and identifying solutions to complex problems. This commendable effort is underway at a time when State resources are declining and staffing levels at all agencies are at critically low levels.

The Two Co-Equal Goals influence discussion and decision-making across all organizations. Establishing the Two Co-Equal Goals as State policy and now as Federal policy for California has reshaped the discussion of Delta problems. All participants are discussing the tradeoffs in efforts to achieve the Two Co-Equal Goals while protecting and enhancing the Delta as an evolving place and the opportunities that can maximize accomplishment of these goals at the same time.

Major plans are advancing. The State has made significant strides in developing the major plans described in the *DVSP* and subsequent legislation—the Delta Plan, Bay-Delta Conservation Plan, Economic Sustainability Plan, Delta Conservancy Strategic Plan. While some participants are frustrated about the pace or quality of these plans, they form a solid foundation for future work.

However, as noted in Section 4, Co-Equal Goals, the status of the Two Co-Equal Goals both remain in critical condition, threatening California's environmental and economic future. The State, Federal agencies, and stakeholders have made little, if any, progress in reducing the risks to water supplies and the environment. The 2011 Delta Vision Report Card noted, "The lack of tangible progress in implementing the Delta Vision Strategic Plan (submitted in 2008) and resulting authorizing legislation (passed in 2009) is sobering." This statement is still true a year later. The following are five factors that demonstrate the underlying reasons for the overall lack of progress and results.

Near-term actions are stalling. Planning and implementation of near-term actions to improve through-Delta conveyance, secure critical infrastructure, reduce fish impacts, and restore habitat have stalled. The focus and



effort on long-term planning activities have diverted leadership, staff, funding, and decision-making away from establishing near-term priorities, completing evaluation and permitting, and implementing actions that could produce near-term benefits and increase understanding to improve long-term plans.

Performance outcomes are missing. Substantive development of performance outcomes has been deferred in favor of efforts to develop policies, facilities plans, and environmental reviews. The State must develop a narrative statement of water supply reliability and ecosystem goals supported by quantifiable measures of progress toward those goals.

The State lacks focus and capacity for implementation. Across all relevant State agencies, the State does not have the capacity or experience to implement major water supply and ecosystem restoration projects. Planning, evaluation, regulations, and guidelines proceed, but on-the-ground implementation stalls. Near-term projects and streamlined permitting processes would build experience and capacity to implement.

Funding considerations have been deferred. The Governor and the Legislature have failed to address funding needs for near-term actions and assignments and deferred discussions of funding and finance approaches for long-term plans. Planning activities such as the *Delta Plan* and BDCP have proceeded with little attention on the costs or cost allocations for implementation.

Linkages are broken. As the State Administration has implemented the guidance of the *DVSP* and requirements of the 2009 water legislation, planning and projects have become increasingly compartmentalized to avoid complexity: storage is not linked to conveyance, planning is not linked to funding for implementation, actions are not linked to performance outcomes. The Two Co-equal Goals can only be achieved through a linked and integrated approach to immediate, near-term, mid-term, and long-term actions.

Stronger leadership is needed to re-energize the urgency for action reflected in the *Delta Vision Strategic Plan* and subsequent water legislation. There is not sufficient overall intensity of focus on water issues in the State Administration and Legislature, nor enough effective coordination to integrate efforts and link implementation actions in a manner that will achieve the Two Co-Equal Goals. Strong and decisive leadership is needed to ensure both action and linkage. The Governor must provide that leadership and the Legislature must provide the resources to implement actions and linkages. Federal agencies and Congress must be active partners to help develop and implement workable solutions. Stakeholders must show leadership beyond their specific interests to support, and pay for, solutions that provide multiple benefits and contribute to the Two Co-Equal Goals.

Overall Recommendations

The following "Five Overall Recommendations" provide a roadmap for the State Administration, Legislature, Federal agencies, and stakeholders to act with the necessary urgency to advance the Two Co-Equal Goals while protecting and enhancing the Delta as an evolving place. These recommendations build on and incorporate recommendations from the 2011 Delta Vision Report Card.

1. Intensify Focus and Immediately Implement Near-Term Actions – Strategic Levee System

The Governor and Legislature must elevate the importance of implementing the *Delta Vision Strategic Plan* and authorizing legislation with a sense of urgency. This can be accomplished through an explicit focus on a Strategic Levee System—a coordinated, integrated plan of near-term actions to address the Two Co-Equal Goals and protect and enhance the Delta as an evolving place.

The Delta levee system remains in critical need of attention and focus, in spite of substantial improvements implemented through State investment and local action. The Delta levee system also presents the best immediate opportunity to advance the Two Co-Equal Goals and build State and regional implementation



capacity. However, the State lacks a cohesive plan for addressing risks to Delta levees that affect statewide interests. The State, in partnership with Delta interests, water management agencies, and infrastructure owners, should immediately set priorities, establish performance outcomes, and implement projects to secure Delta water supplies, protect critical infrastructure, increase protection for Delta land uses, and initiate habitat restoration actions. This Strategic Levee System for the Delta would include the following actions.

Performance Outcomes – Immediately define near-term performance outcomes and schedules to reduce risk for Delta water supplies and infrastructure of statewide importance.

Immediate Levee Priorities – Working with all affected interests, establish immediate levee priorities to achieve performance outcomes for securing water supply and protecting the most vulnerable infrastructure of statewide importance.

Funding and Resource Commitment – Commit Proposition 1E dollars and agency resources to accelerate planning, permitting, and construction.

Habitat Enhancement – Identify linked habitat enhancements, consistent with the Ecosystem Restoration Program and Fish Restoration Program Agreement.

Water Conveyance – Immediately identify, prioritize, and permit near-term actions in the south Delta to improve water conveyance capacity and reduce ecosystem impacts such as channel dredging, physical and non-physical barriers, and fish screen improvements.

Delta Economy – Continue levee investments through the Levees Subventions Program and Special Projects Program to ensure that all Delta islands are protected to a level that makes them eligible for Federal disaster assistance by 2014.

Funding Allocation – For immediate priority levee and habitat projects, convene the Department of Water Resources, Delta Stewardship Council, Delta Protection Commission, Delta Conservancy, Department of Fish and Game, Public Utilities Commission, local reclamation districts, infrastructure owners, and water supply interests to negotiate an appropriate allocation of costs consistent with beneficiary pays principles.

The Governor should delegate responsibility for overall leadership and coordination of a Near-term Action Team to a single individual and agency (such as the Secretary of the Natural Resources Agency) and require development of a comprehensive action plan and publication of a progress report at least annually for the Legislature and public. The action plan should consider and include the *Delta Vision Strategic Plan* 10 Near-Term Actions that focus on emergency preparedness for the Delta communities, readily doable ecosystem habitat improvements, and through-Delta conveyance improvements. The action team should also identify actions to streamline planning and permitting and make recommendations to the Governor and Legislature if necessary. The Legislature should appropriate funds from Proposition 1E and other sources to fund accelerated planning and construction. The Legislature should consider streamlining recommendations and conduct oversight hearings to review the work plan, monitor progress, and make recommendations for course corrections as necessary.

The Administration should begin construction of levee improvements, improved through-Delta conveyance, and strategic habitat improvements in the next year. This can be accomplished with leadership, focus, and commitment.

2. Link Strategies and Actions for a Workable Solution - BDCP Plus

The Administration must understand the rationale and importance of linked actions as set forth in the *Delta Vision Strategic Plan* and direct responsible agencies to maintain those linkages. It is only through integrated implementation that the State can implement workable solutions to California's water resource management problems and achieve the Two Co-Equal Goals. Specifically, the following linked actions are fundamental: (a) existing and new facilities must be required to operate consistent with Delta ecosystem restoration; (b)



optimization of conservation and efficient water use must be required of any user, exporter or diverter of water from the Delta watershed; and (c) new "water banking" surface and groundwater storage facilities must be coupled to expanded conveyance (particularly to an isolated facility). The following description of an improved BDCP Plan—BDCP Plus—describes how these linked features can create a workable solution.

The Bay-Delta Conservation Plan is a critical component of the long-term plan to achieve the Two Co-Equal Goals and protect the Delta. It must be developed and designed in a way that incorporates the linkages and assurances necessary to meet ecosystem restoration needs while improving water supply reliability. State and Federal agencies, working in cooperation with water users, environmental interests, and Delta communities must redesign the BDCP preferred project to include critical linkages, assurances, and phasing that ensure that water is managed reliably for both people and fish, and ecosystem restoration actions contribute to species recovery.

Through Delta Conveyance – Identify and evaluate measures to improve through-Delta conveyance in a manner that protects and enhances Delta water quality and the Delta ecosystem.

Isolated Conveyance – Identify the appropriate size and phasing of isolated conveyance facilities to operate in conjunction with improved through-Delta conveyance such that water diversions and exports are reduced during dry years and increased during wet years.

Habitat Improvements – Identify the location and phasing of Delta habitat improvements such that ecosystem benefits can be identified before scaling and adapting large-scale restoration programs.

Storage – Link the phasing of conveyance improvements and expanded export operations to improvements and expansions of surface and groundwater storage such that wet year water can be captured and used to reduce dry year demand for Delta diversions and exports.

Regional Self-Sufficiency – Link the phasing of conveyance improvements and expanded export operations to measurable reductions in water demand from the Delta watershed, in export areas and upstream of the Delta, particularly in dry years.

Act and Adapt – Elected and executive leadership for the State and Federal Governments must insist on balanced evaluation of reasonable, workable approaches based on current scientific knowledge and understanding. Where there is uncertainty that is impeding action, State and Federal leaders must act and adapt – decide a course of action with phasing and assurances and incorporate additional learning and adaptation. Where there is conflict and controversy, State and Federal leaders must bring the parties together to resolve differences and develop the course of action.

Actions can and must be legally linked through: adopting comprehensive plans (by the Delta Stewardship Council, California Water Commission, State Water Resources Control Board, Delta Protection Commission, and Delta Conservancy) with integrated actions certified as the environmentally-preferred alternative; adding explicit intent language and linkage requirements to bond covenants and contracts; and enacting clarifying legislation, if needed.

3. Improve Coordination Among Agencies and Appointed Bodies - State Action Team

The Administration needs to establish a mechanism in the form of an "action team" to coordinate the activities of all agencies, departments, and appointed governing bodies (policy, planning, and regulatory) responsible for implementing the *Delta Vision Strategic Plan* and authorizing legislation. The action team must align the two important and parallel functions of the Natural Resources Agency, which includes many of the implementing agencies for the Delta, and the Delta Stewardship Council, which was assigned an agency coordination function by the Legislature. A joint approach in which the Delta Stewardship Council establishes the overall plan, direction, and performance outcomes for the Delta and the Natural Resources Agency directs implementation



actions would create the coordinated leadership to meet the challenge. The action team must include and align the State agencies that have planning, permitting, management, and implementation responsibilities for water, ecosystem, infrastructure, and economic development in the Delta. The Water Policy Working Group established by the Natural Resources Agency could serve this function with improvement and additional accountability and transparency.

The urgency of the problems and the importance of the coordinated action will require the "action team" to meet frequently (such as monthly) and be held accountable for significant, measureable progress on at least a quarterly basis. Without this kind of planned and purposeful leadership and coordination coupled with accountability, there will not be sufficient linkage and integration of actions to produce the requisite results. In addition, the "action team" should establish a process for input from all the stakeholders so that there is an efficient and convenient way for the public to provide input to the overall effort. Stakeholders must include all affected and interested parties (including but not limited to): local governments (Counties and Areas of Origin as well as active representatives from local governments and communities in the Sacramento Valley, Delta, San Joaquin Valley, Southern California, and Bay Area), agriculture, urban water agencies, environmental organizations, employers, labor, and environmental justice groups.

4. Optimize the Value of Independent Science - Pilot Projects

State and Federal agencies, science programs, and stakeholders must commit to and expand efforts to test ideas and hypotheses for water management, ecosystem restoration, engineering, and economic development. Increased focus on pilot tests and small projects coupled with a commitment to monitor and evaluate will increase knowledge and understanding, improve long-term planning, and build implementation capacity. The results from expanded pilot tests, as well as ongoing basic research, must be synthesized and communicated to elected officials, policy makers, the scientific community, and stakeholders. These efforts will form the practical foundation of adaptive management for long-term implementation. The science programs should continue to obtain independent scientific peer review of qualitative and quantitative outcomes and metrics for the Two Co-Equal Goals that will guide "adaptive management." The independent review process must be expanded to include broader perspectives, such as engineering, hydrology, and economics. In addition, independent reviews and peer reviews of scientific findings should be broadened across all science programs.

5. Refine Funding and Financing Plan - Applying Beneficiary Pays

Additional work is needed to refine a fair and prudent funding and financing plan for implementing all components of the *Delta Vision Strategic Plan*. The Administration and Legislature need to consult one another and stakeholders to delineate an appropriate process to accomplish this task. There needs to be greater clarity as to the meaning and practical interpretation of the concept of "beneficiaries pay." This concept needs to be coupled with a commitment to the principle of collecting revenues statewide only to the extent that statewide interests are served. The Strategic Levees Program described above (Recommendation #1) is the scale of program where planners, participants, and policy makers could make real progress in defining the appropriate mix of Federal, State, and local funding according to beneficiary pays concepts and the appropriate mechanisms for collecting funds or requiring action. In addition to General Obligation Bonds, which are appropriate to fund and finance public-interest capital improvements, the use of Revenue Bonds backed by user fees should be optimized in a refined plan to assist with facilities that benefit primarily beneficiaries or specific water users. Further, the Administration should prioritize the sequence of projects to fund and finance with General Obligation bonds when submitting capital budgets to the Legislature to ensure that the highest needs are addressed first in time.



Specific Recommendations

Actions Progress

Near-term Actions

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Emergency Management Agency, in partnership with other agencies, should conduct a formal assessment of regional capacity to respond to catastrophic events in the Delta, including multiple levee failures from an earthquake. This assessment should include, among other agencies: the Business, Transportation, and Housing Agency; Department of Fish and Game; Department of Water Resources; and Delta Protection Commission. A report of the results should be presented to the Governor, Delta local governments, and Delta Protection Commission.

Note: The Emergency Management Agency has begun preparing a Catastrophic Flood Plan for the Delta.

2. The Department of Fish and Game should develop and implement a work plan, budget, and schedule for expanding in-stream flow analyses upstream of the Delta to meet the State Water Resources Control Board implementation schedule. The Legislature should provide the resources to implement the plan.

Note: The Department of Fish and Game has developed a work plan. Closer alignment of schedule commitments with the State Water Resources Control Board and dedication of sufficient resources to meet the schedule are needed.

2011 Recommendations Repeated in 2012 (Little or No Action)

- 3. The Department of Fish and Game should secure funding from the State and other sources for tidal marsh restoration in Dutch Slough, on Meins Landing, and for floodplain improvements in the Yolo Bypass.
- 4. The Department of Water Resources should develop and implement a work plan and schedule to accelerate consideration of low flow fish screening alternatives at the Clifton Court Forebay.
- 5. The Department of Water Resources and the Bureau of Reclamation should reinitiate the review of the Franks Tract and Three Mile Slough Barrier projects.

New Recommendations in 2012

6. The Delta Stewardship Council and Natural Resources Agency should immediately convene a Near-Term Actions Implementation Team, including the Department of Water Resources, Department of Fish and Game, Emergency Management Agency, Delta Protection Commission, Delta Conservancy, and other relevant agencies. The team could develop and accelerate an action plan to reduce risks of catastrophic failure, bolster emergency response, implement habitat restoration, and secure critical infrastructure.

Completed 2011 Recommendations

None.

Governance

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Governor's Administration should develop a unified and coordinated approach to align the *Delta Plan* with implementation planning and action by the Natural Resources Agency.

Note: The Natural Resources Agency has initiated a Water Policy Coordination Group. Stronger leadership, accountability, and transparency is needed to focus on action and results.



2. The Legislature and the Delta Stewardship Council should expand the Delta Science Program and the Independent Science Board to include engineering and construction perspectives.

Note: The Delta Stewardship Council has initiated steps to add engineering capability to the Independent Science Board.

2011 Recommendations Repeated in 2012 (Little or No Action)

- 3. The Legislature should immediately provide five years of funding for the Delta Stewardship Council, Delta Protection Commission, Delta Conservancy, State Water Resources Control Board, and Department of Fish and Game. A reliable source of money is essential for implementing their Legislatively mandated responsibilities towards achieving the Two Co-Equal Goals.
- 4. The Governor and the Legislature, working with stakeholders, should develop a process to define funding and financing principals and approaches.

New Recommendations in 2012

5. The Legislature and the Delta Stewardship Council should expand the Delta Science Program and the Independent Science Board to include economics expertise.

Completed 2011 Recommendations

None.

Ecosystem Restoration and Recovery

Recommendations Initiated Since 2011 (More Progress Needed)

The Natural Resources Agency, State Water Resources Control Board, and Delta Stewardship Council
should immediately develop a joint approach for setting the restoration objectives for the Delta.
Additionally, to guide planning and decision-making for water supply reliability and ecosystem restoration
the agencies should establish standards and requirements.

Note: The three agencies have improved coordination in the past year. They must continue to define and describe how the *Bay-Delta Plan Update*, Bay-Delta Conservation Plan, and *Delta Plan* contribute to and achieve the Two Co-Equal Goals in an integrated manner. Only in this way, will stakeholders recognize the policy tradeoffs and opportunities for success.

2. The Delta Conservancy, in cooperation with other agencies, should develop a comprehensive list of restoration projects along with a method for tracking and reporting priorities, progress, funding, and implementation.

Note: The Delta Conservancy is working with the Department of Water Resources and other agencies to develop a comprehensive list of projects and actions.

2011 Recommendations Repeated in 2012 (Little or No Action)

3. The State implementing agencies (Department of Fish and Game, Department of Water Resources, Delta Conservancy, and Department of Food and Agriculture) should develop an agreement (such as an MOU) to address coordination, funding, and implementation of near-term and mid-term ecosystem restoration actions. Other parties could include Federal agencies, local governments, water districts, non-governmental organizations, and others as appropriate.

Note: Several interagency agreements were developed in the past year, but the ecosystem restoration implementation process still lacks a coherent strategy for managing implementation and streamlining approval processes.



4. The State implementing agencies (Department of Fish and Game, Department of Water Resources, Delta Conservancy, and Department of Food and Agriculture) should identify several immediate restoration projects for joint execution through the Delta Conservancy. This is good practice for to developing coordinated approaches and funding mechanisms in the future.

Note: As a continuation of the MOU suggested above, specific project implementation plans should be developed for high priority pilot projects and restoration actions, particularly those that have been planned for five years or more.

New Recommendations in 2012

None.

Completed 2011 Recommendations

None.

Delta Vitality and Security

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Delta Protection Commission should increase coordination and cooperation among the DPC, Delta Conservancy, Department of Food and Agriculture, Natural Resource Conservation Service, and others regarding economic development opportunities in the Delta.

Note: The Economic Sustainability Plan is a solid initial effort. Improved coordination is needed among all agencies to work with the community to develop and implement economic development strategies.

2011 Recommendations Repeated in 2012 (Little or No Action)

- 2. The Department of Water Resources, in coordination with the Emergency Management Agency and the U.S. Army Corps of Engineers, should develop and implement a work plan and schedule for completing local risk reduction plans for the five priority communities in the Delta (Walnut Grove, Locke, Clarksburg, Courtland, and Terminous).
- 3. The Delta Stewardship Council and the Delta Protection Commission should jointly convene a work group comprised of themselves, the California Public Utilities Commission, California Energy Commission, and all public utilities that own facilities in the Delta. The goal of this work group should be to develop and implement a long-term strategy for utility relocation and/or levee reinforcement in the Delta.

Note: The *Final Staff Draft Delta Plan* includes a recommendation that the California Public Utilities Commission establish a fee schedule for investor-owned utilities that have facilities in the Delta in order to pay for flood and disaster prevention.

- 4. Caltrans should complete the analysis of highway protection strategies for the Delta and construct improvements.
- 5. The Legislature should identify and commit to reliable funding sources for compensation for landowners and counties, including taxes, fees, and levee assessments, that might be modified by other actions.

New Recommendations in 2012

 The Delta Stewardship Council should implement an accelerated, iterative evaluation process, with stakeholder engagement, for preliminary levee investment priorities by December 2012 and final levee investment priorities by July 2013.



- 7. The Governor and the Legislature should immediately appropriate money from Proposition 1E to fund levee improvements needed to protect water delivery infrastructure in the Delta and through-Delta water conveyance channels.
- 8. The State should convene, in collaboration with Federal agencies, a broad group of experts, including levee engineers with seismic experience and disaster experience, construction and cost-estimation experts, hydraulics and hydrology experts, military personnel, FEMA, and other disaster response experts, and others to consider and evaluate projected response to actual, realistic disaster scenarios for high water event levee failures and a major seismic event.

Completed 2011 Recommendations

None.

Water Supply Reliability

Recommendations Initiated Since 2011 (More Progress Needed)

1. The Department of Water Resources should compile and report quantifiable information on how each region of the state uses Delta watershed water and how each region plans to reduce annual reliance on the Delta in meeting their future water needs.

Note: Improved reporting of water use efficiency established through recent guidelines and regulations and ongoing support of integrated regional water management will help. Additional synthesis and reporting will inform policy makers on progress and accomplishment.

2011 Recommendations Repeated in 2012 (Little or No Action)

2. The Natural Resources Agency, State Water Resources Control Board, and Delta Stewardship Council should develop a joint approach for defining water supply reliability and setting the objectives for the Delta right away. The agencies should further establish standards and requirements to guide planning and decision-making about water supply reliability and ecosystem restoration.

Note: Unfortunately, the historical debate about more or less export from the Delta continues. The State must establish a unified statement of principles, goals, and measurable objectives.

3. The Delta Stewardship Council and Natural Resources Agency should re-establish the critical linkage of storage and conveyance. This linkage will enable them to evaluate and demonstrate the benefits of operational flexibility in achieving the Two Co-Equal Goals, and ensure the right-sizing of planned facilities.

Note: The State continues to advance a narrowly focused facilities plan without assurances and commitments to implement critical linked actions such as storage and regional self-sufficiency. This approach will not increase water operations flexibility to achieve the Two Co-Equal Goals.

New Recommendations in 2012

4. The Natural Resources Agency, Department of Water Resources, and Delta Stewardship Council, working with Federal partners and local interests, should immediately develop a strategy and work plan for accelerating actions to secure and improve through-Delta conveyance.

Completed 2011 Recommendations

None.



Leadership, Effectiveness, and Cooperation

Governor's Administration and Legislature

Recommendations Initiated Since 2011 (More Progress Needed)

1. Immediately coordinate action and align policy direction for Delta planning to achieve the Two Co-Equal Goals, particularly as it relates to near-term actions to protect water supply and critical infrastructure and restore Delta habitat.

Note: The State demonstrates some improved coordination, but there is no clear plan or leadership for implementing near-term actions.

2. Request stronger Federal leadership and support from Washington, DC. Seek their partnership with the State in implementing the near-term and mid-term actions to achieve the Two Co-Equal Goals.

Note: There is improved coordination on long-term planning, focus, funding, and planning needed for near-term actions.

3. Take immediate steps to fill critical staff positions and provide funding needed to maintain the existing infrastructure and implement the planning and oversight responsibilities defined in the 2009 legislation.

Note: Funding for the State Water Resources Control Board, Department of Fish and Game, Delta Protection Commission, Delta Conservancy, and Delta Investment Fund is inadequate. Consider measures to accelerate approvals of fee-funded positions. Reopen bargaining agreements so that workers at the contractor-funded State Water Project receive competitive pay.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Begin fact-finding hearings to develop appropriate and directed mechanisms for funding and financing State planning, oversight, and implementation of the *Delta Vision Strategic Plan*, consistent with the "beneficiary pays" principle.

Note: Long-term funding mechanisms are critical as available bond funds are spent.

5. Immediately identify ways to simplify State contracting procedures and remove barriers to meaningful performance reporting.

Note: Long and cumbersome contracting procedures and inaccessible budget numbers performance data cause unnecessary delay, additional cost, and poor performance accountability.

New Recommendations in 2012

None.

Completed 2011 Recommendations

6. Appoint or confirm executive leadership and board members at the agencies that have primary responsibility for implementing the *Delta Vision Strategic Plan*, as soon as the State budget is resolved.

Note: Appointments were slow, but are now complete.

Delta Stewardship Council

Recommendations Initiated Since 2011 (More Progress Needed)

1. Incorporate an unambiguous, concise description of expected outcomes and measurable objectives for the Two Co-Equal Goals to guide actions by others.

Note: More work is needed to define overall direction and develop quantifiable metrics.

2. Continue efforts to promote floodplain protection from development.



Note: Initial policies are included in the *Draft Delta Plan*; align policies with Delta Protection Commission Resource Management Plan and local General Plans.

3. Develop or improve policies to link water storage, water conveyance, regional self-sufficiency, and ecosystem restoration through improved water management.

Note: Policies and recommendations do not yet sufficiently encourage or require the necessary linkages.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Immediately establish monthly meetings of implementing agencies (accessible to the public) to report on agency actions, progress, and barriers, and to increase accountability and transparency.

Note: Agency coordination is not action-oriented and lacks transparency and accountability.

5. Establish cross-functional workgroups and stakeholder engagement to resolve core issues and enhance the results and recommendations for levee investment priorities, performance measures, and funding and financing.

Note: Action and engagement on these critical topics has been deferred.

6. Establish joint use of floodplains for flood protection, habitat creation, and agricultural production. Work with the Delta Protection Commission and local government to identify high priority areas for economic development that should be protected from conversion to less economic uses.

Note: Important coordination is needed to define high priority economic development zones.

New Recommendations in 2012

7. Immediately convene a Near-Term Actions Implementation Team, including the Natural Resources Agency, Department of Water Resources, Department of Fish and Game, Emergency Management Agency, Delta Protection Commission, Delta Conservancy, and other relevant agencies to develop and accelerate an action plan to reduce risks of catastrophic failure, bolster emergency response, implement habitat restoration, and secure critical infrastructure.

Note: Implementation actions lack effective coordination and reporting.

Completed 2011 Recommendations

None.

Natural Resources Agency

Recommendations Initiated Since 2011 (More Progress Needed)

1. Define clear, measurable objectives for Delta water system operations to achieve the Two Co-Equal Goals, in coordination with the Delta Stewardship Council and State Water Resources Control Board.

Note: There is inadequate definition of near-term and long-term goals and objectives to reduce dry year Delta diversions and store more water in wet years.

2. Improve feedback and response to all stakeholders on the development and refinement of BDCP alternatives, effects analysis, Delta science, and environmental analysis.

Note: Communication and transparency have improved; increase capacity to support work groups and manage constructive engagement.

3. Improve coordination and alignment of actions within and among the Natural Resources Agency and its departments, and the State Water Resources Control Board and Delta Stewardship Council.

Note: Establishing the Water Policy Coordinating Group is a positive step; increased reporting and public accountability is needed.



4. Implement an iterative document development process for the BDCP process. Document all work products, including agreements, purpose and need statements, alternatives descriptions, analytical tools, effects analysis, work group deliberations, governance, and financing.

Note: Increased transparency of document iterations was a very positive step; improve capacity to support work groups, build agreements, and address critical issues.

2011 Recommendations Repeated in 2012 (Little or No Action)

5. Include for any BDCP alternatives effects analysis an evaluation of the benefits for supply reliability and ecosystem enhancement from increased storage north and south of the Delta.

Note: Integration of storage with conveyance to achieve Two Co-Equal Goals has largely been ignored.

6. Establish appropriate and transparent funding mechanisms for planning, design, and implementation of the BDCP to assure objectivity and independence.

Note: Improved accountability of governance is needed for both planning and implementation.

New Recommendations in 2012

7. Direct and coordinate departments and organizations within Resources to accelerate implementation of near-term Delta levee improvements, water conveyance improvements, and ecosystem restoration actions.

Note: Near-term actions are not prioritized for action.

8. Improve the functions of the Water Policy Coordination Committee as an action team with public transparency and accountability.

Note: Public reporting of plans, progress, and results is needed.

Completed 2011 Recommendations

None.

Department of Water Resources

Recommendations Initiated Since 2011 (More Progress Needed)

1. Immediately conduct a strategic analysis of the organization, its mission, and responsibilities and develop recommended organizational and management strategies to improve operations, planning, and implementation.

Note: Strategic planning and coordination of planning activities has improved; implementation leadership and capacity are needed.

2. Prepare an analysis of the water needs of Delta water users. This analysis will assist the Delta Stewardship Council and other agencies in defining water supply reliability.

Note: Technical contributions are needed for long-term water supply reliability goals and objectives.

3. Work with the Delta Conservancy, Department of Fish and Game, Delta Stewardship Council, BDCP, and other water, environmental, and Delta interests to develop a coordinated Delta ecosystem restoration plan that meets the objectives defined in the *Delta Plan*.

Note: A coordinated strategy is needed for near-term and mid-term restoration actions.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Immediately complete local risk reduction plans in the Delta and develop priorities for strategic levee system investment in coordination with Delta interests. Develop a work plan for construction of a strategic levee system and accelerate implementation of critical actions to secure the water supply system to protect Delta resources.



Note: Risk reduction plans are needed for Walnut Grove (including the residential area on Grand Island), Locke, Clarksburg, Courtland, and Terminous.

5. Prepare an evaluation and implementation plan to accelerate the investigation and implementation of through-Delta conveyance improvements, including fish screen options at Banks Pumping Station, barriers, dredging, levee improvements, and other near-term improvements in conveyance and supply reliability.

Note: Critical near-term actions are stalled.

6. Immediately update and present information on the operations, benefits, and costs of storage alternatives (north and south of the Delta, surface and groundwater) with and without consideration of Delta conveyance alternatives. Establish milestones and deadlines for storage investigations, to coincide with the BDCP planning process and/or any subsequent process to design and engineer isolated conveyance.

Note: Storage and conveyance integration is needed.

7. Immediately identify and implement steps to simplify Department of Water Resources contracting procedures. Develop unambiguous conflict of interest guidelines that balance the need for knowledge of Delta issues with appropriate independence and objectivity.

Note: Eliminate implementation delays and promote greater trust and transparency.

New Recommendations in 2012

8. Conduct an independent review of the implementation strategy for design and construction of the BDCP program. Conduct a management review, with outside peer review, of organizational constraints that impede planning, decision-making, and implementation of Delta projects.

Note: Determine the most cost-effective implementation model with outside review.

Completed 2011 Recommendations

None.

Department of Fish and Game

Recommendations Initiated Since 2011 (More Progress Needed)

1. Develop a strategic plan for Department of Fish and Game leadership and involvement in Delta ecosystem restoration with priorities, plans, and performance measures for enforcement and restoration. Seek direction and funding from the Governor and Legislature to implement the plan.

Note: Strategic Vision process is now complete, focused strategy to accelerate implementation and approvals for Delta actions is needed.

2. Work with the Delta Conservancy, Department of Water Resources, Delta Stewardship Council, BDCP, and other water, environmental, and Delta interests to develop a coordinated Delta ecosystem restoration implementation plan to meet objectives defined in the *Delta Plan*.

Note: Coordinated strategy is needed for near-term and mid-term restoration actions.

3. Provide dedicated staff and funding to prepare and implement a work plan and schedule for evaluating and recommending in-stream flow needs.

Note: Work is underway; focus, funding, and performance accountability are needed.

4. Work with Federal resource agencies to prepare or further clarify recovery plans for fish species and the actions that can be implemented by BDCP, Central Valley Project Improvement Act, and other restoration programs consistent with the *Delta Plan*.

Note: There is substantial progress through Ecosystem Restoration Plan and BDCP; continued coordination and alignment is needed.



None.

New Recommendations in 2012

1. Continue work with the State Water Resources Control Board to prioritize instream flow studies and recommendations. Update the work plan and identify necessary resources to accelerate evaluation and recommendations for instream flow needs.

Note: Coordination and resource commitments are necessary to ensure progress and results.

Completed 2011 Recommendations

None.

Sacramento-San Joaquin Delta Conservancy

Recommendations Initiated Since 2011 (More Progress Needed)

1. Complete the Delta Conservancy Strategic Plan by January 2012.

Note: The Strategic Plan is nearing completion.

2. Work with local interests and the Department of Fish and Game, Department of Water Resources, Delta Stewardship Council, BDCP and other water, environmental, and Delta interests to develop a coordinated Delta ecosystem restoration implementation strategy to meet objectives defined in the *Delta Plan*.

Note: A coordinated strategy is needed for near-term and mid-term restoration actions.

3. Establish the Delta Conservancy as the central information source for economic development and ecosystem restoration projects in the Delta by collecting, synthesizing, and reporting information on the objectives, status, location, and effectiveness of Delta projects.

Note: Work has been initiated; funding is needed.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Continue work with U.S. Department of Agriculture Natural Resource Conservation Service and California Department of Food and Agriculture to identify and apply agricultural programs that can support and advance ecosystem restoration and economic development in the Delta.

Note: Identify near-term economic development opportunities and resources.

New Recommendations in 2012

None.

Completed 2011 Recommendations

None.

Delta Protection Commission

Recommendations Initiated Since 2011 (More Progress Needed)

1. Work with the Department of Water Resources, Central Valley Flood Protection Board, Delta Stewardship Council, and others to identify priority areas for levee protection through a strategic levee system.

Note: Build on work in *Economic Sustainability Plan* to develop coordinated levee plan to address local and State needs.



2. Obtain needed funding from the Legislature and other sources to continue and expand economic development planning and implementation for the Delta through the Delta Investment Fund.

Note: The *Economic Sustainability Plan* lays the foundation; legislative action is needed.

3. Work with U.S. Department of Agriculture, Natural Resource Conservation Service, and California Department of Food and Agriculture to identify and apply agricultural support programs that can advance the *Delta Economic Sustainability Plan*.

Note: Identify near-term economic development opportunities and resources.

4. Work with the Department of Water Resources to complete local risk reduction plans for Delta communities.

Note: Risk reduction plans are needed for Walnut Grove (including the residential area on Grand Island), Locke, Clarksburg, Courtland, and Terminous.

New Recommendations in 2012

5. Coordinate with the California Emergency Management Agency to identify emergency planning and response roles and responsibilities and avoid duplication.

Note: Proposals for improved regional management may conflict with State responsibilities.

Completed 2011 Recommendations

None.

State Water Resources Control Board

Recommendations Initiated Since 2011

1. Increase resources and funding for water rights enforcement and establishing flow standards based on transparent goals and objectives for personnel and organizational productivity and efficiencies.

Note: There has been substantial action since 2010; continue to identify resource needs.

2011 Recommendations Repeated in 2012 (Little or No Action)

2. Immediately prepare a report identifying actions and resources necessary to streamline procedures for establishing flow standards and water rights permits, including the potential use of administrative law judges.

Note: Improved processes will be needed to complete planned regulations and implementation on the proposed schedule.

New Recommendations in 2012

None.

Completed 2011 Recommendations

3. Consider modifications to simplify diversion-monitoring reporting to reduce equipment costs to diverters.

Note: Policies have been established to consider options for individual diverters.

Central Valley Regional Water Quality Control Board

Recommendations Initiated Since 2011

None. DVF did not evaluate the Central Valley Regional Board in 2011.



None. DVF did not evaluate the Central Valley Regional Board in 2011.

New Recommendations in 2012

- 1. Continue leadership and coordination with other agencies to establish thorough and efficient water quality monitoring for the Delta. Work with these agencies to develop a stable, long-term funding plan and proposal.
- 2. Provide guidance on scientific research needed for water quality management in the Delta Science Plan developed by Delta Science Program and the Independent Science Board.

Completed 2011 Recommendations

None. DVF did not evaluate the Central Valley Regional Board in 2011.

California Water Commission

Recommendations Initiated Since 2011 (More Progress Needed)

1. Develop and implement a work plan and schedule to complete final public benefits criteria for storage by December 2011.

Note: Work has been initiated, but the water bond is likely to be delayed to 2014; develop recommendations for the Department of Water Resources and Delta Stewardship Council.

2. Conduct public hearings and seek independent analysis to assure creativity and applicability of public benefits criteria.

Note: Initial workshops were conducted; additional policy and technical input needed.

3. Develop preliminary definitions for the public benefits of storage by August 2011 to be incorporated into the Delta Stewardship Council *Delta Plan*.

Note: Recommendations remain important for *Delta Plan* and storage investigations and should be developed quickly.

2011 Recommendations Repeated in 2012 (Little or No Action)

4. Immediately develop recommendations to address operations and maintenance staffing issues for the State Water Project.

Note: The Commission provided a letter; more investigation and recommendations are needed.

New Recommendations in 2012

5. Accelerate development of preliminary definitions for the public benefits of storage to be considered by the Delta Stewardship Council and the Department of Water Resources.

Note: Continue work to identify and recommend definitions of public benefits to support discussions of funding and financing for water projects.

Completed 2011 Recommendations

None.

Emergency Management Agency

Recommendations Initiated Since 2011 (More Progress Needed)

None. DVF did not evaluate the Emergency Management Agency in 2011.



None. DVF did not evaluate the Emergency Management Agency in 2011.

New Recommendations in 2012

1. Continue regional emergency management coordination with the Department of Water Resources, Delta Protection Commission, and Delta counties.

Note: Implement the recommendations of the Delta Multi-Hazard Coordination Task Force.

2. Ensure that seismic events are considered and appropriate response and recovery measures are identified in the Catastrophic Delta Flood Plan. Include independent review of risks and consequences.

Note: Address conflicting perspectives on risks, consequences, response, and mitigation for catastrophic flood and seismic events.

3. Coordinate with the Delta Stewardship Council and Delta Protection Commission to ensure that emergency management roles and responsibilities are clear and without conflict.

Note: Proposals for improved regional management may conflict with State responsibilities.

Completed 2011 Recommendations

None. DVF did not evaluate the Emergency Management Agency in 2011.

Science Programs

Recommendations Initiated Since 2011 (More Progress Needed)

1. Expand the Independent Science Board and other independent review panels to include engineering and construction professional expertise to ensure cost-effective implementation plans and risk management strategies to address ecosystem, water supply reliability, levee security, and other needs.

Note: Efforts are underway to add engineering expertise to the Independent Science Board.

- 2. Accelerate coordination of Delta monitoring, research, and synthesis regarding flows, water quality, habitat, and species.
 - a. Continue improvements and coordination of water quality monitoring programs through the California Water Quality Monitoring Council and Delta Regional Monitoring Program.
 - b. Obtain funding for the Delta Science Center at Rio Vista.
 - c. Assign science managers with particular skills in research synthesis for each of the critical research areas (flows, water quality, habitat, and species).

Note: Action is underway in all areas.

3. Work with responsible agencies to identify, prioritize, and implement specific projects (restoration, operational changes, etc.) to test hypotheses, measure changes, apply adaptive management, and report results.

Note: Several pilot projects were initiated in 2011, additional projects and reporting are needed.

4. Establish performance-based management and budgeting for all science programs with an explicit process for monitoring and performance reporting.

Note: Zero-based budget approach for the Delta Stewardship Council and Delta Science Program began with 2011 budget.

2011 Recommendations Repeated in 2012 (Little or No Action)

5. Prepare a strategic science plan to establish science and research priorities for the Delta, with guidance from policy makers and input from stakeholders.

Note: Science plan is scheduled to be complete in 2013.



New Recommendations in 2012

6. Ensure that engineering and economics perspectives are included in Delta Science Program and Independent Science Board activities and reviews.

Note: Continue to expand expertise of science programs to address all aspects of Delta challenges.

Completed 2011 Recommendations

None.

Federal Agencies

Recommendations Initiated Since 2011 (More Progress Needed)

1. Identify and appoint a representative of the Federal Bay-Delta Leadership Committee with specific authority to represent the Committee and guide Federal recommendations and actions related to the *Delta Plan* and BDCP.

Note: Federal coordination has improved; important leadership has been provided by the Department of the Interior and the Bureau of Reclamation.

2. Provide leadership direction and funding to develop and implement a coordinated science plan for the Delta, as described in the review of Science Programs.

Note: Federal funding of science programs continues; coordination and funding of the Delta Science Program Science Plan is needed.

2011 Recommendations Repeated in 2012 (Little or No Action)

3. Immediately develop a report and recommendations on Federal consistency for the *Delta Plan*, including the Coastal Zone Management Act and other potential means for ensuring Federal consistency and funding.

Note: Action is needed to advance Federal consistency mechanisms.

4. Accelerate surface storage feasibility studies to support and integrate with conveyance investigations.

Note: Storage investigations are lagging; integrated analysis with conveyance is needed.

New Recommendations in 2012

- 5. Establish centralized, multi-agency program team to coordinate, plan and implement near-term Delta improvement actions for levee improvements, through-Delta conveyance, habitat improvement, and water quality.
- 6. Immediately develop permit streamlining process and centralized permitting office for review and approval of Delta actions.
- 7. Improve progress reporting and transparency for the Interim Federal Action Plan.

Completed 2011 Recommendations

None.

Stakeholder Organizations

Recommendations Initiated Since 2011 (More Progress Needed)

None. DVF did not make stakeholder recommendations in the 2011 Delta Vision Report Card.

2011 Recommendations Repeated in 2012 (Little or No Action)

None. DVF did not make stakeholder recommendations in the 2011 Delta Vision Report Card.



New Recommendations in 2012

- 1. Continue leadership participation in and provide funding for "Delta Projects We Can All Agree On" to develop and accelerate near-term actions.
- 2. Establish a multi-interest stakeholder discussion of funding and financing mechanisms for long-term water infrastructure, emergency management, and ecosystem restoration. Prepare a joint report to the Governor and Legislature.

Completed 2011 Recommendations

None. DVF did not make stakeholder recommendations in the 2011 Delta Vision Report Card.