



## Association of California Water Agencies

Leadership Advocacy Information *Since 1910*

June 10, 2011

Delta Stewardship Council  
980 Ninth Street, Suite 1500  
Sacramento, California 95814

Re: Alternate Delta Plan

Dear Chairman Isenberg and Members of the Council:

On behalf of a large and diverse coalition of urban and agricultural water agencies, water associations and statewide agricultural and business organizations, ACWA is submitting this Alternate Delta Plan for consideration by the Council in its environmental impact report (EIR) for the Delta Plan.

We request that the Alternate Delta Plan be considered as an alternative to the draft Delta Plan developed by Council staff and that it be considered as a whole.

In a separate transmittal, the Ag-Urban Coalition is submitting a letter to the Council that puts the Alternate Delta Plan in policy context. The letter, signed by representatives of more than 20 organizations and agencies, identifies key policy questions, describes how our plan answers those questions, and compares the Alternate Delta Plan's approach with the apparent policy direction in previous Council staff drafts.

We anticipate that the Alternate Delta Plan will be the subject of considerable comment and that it can be improved before a draft EIR is finalized. We look forward to working with you and Council staff as these alternative draft plans progress.

Thank you for your attention to this request. If you have any questions or require further information, please do not hesitate to call me at (916) 441-4545.

Sincerely,

Timothy H. Quinn  
Executive Director  
Association of California Water Agencies

# Draft Alternate Delta Plan

## **I. Chapter 1 – The Delta Plan**

Delta Reform Act § 85300. (a) On or before January 1, 2012, the council shall develop, adopt, and commence implementation of the Delta Plan pursuant to this part that furthers the coequal goals. The Delta Plan shall include subgoals and strategies to assist in guiding state and local agency actions related to the Delta. In developing the Delta Plan, the council shall consider each of the strategies and actions set forth in the Strategic Plan and may include any of those strategies or actions in the Delta Plan. The Delta Plan may also identify specific actions that state or local agencies may take to implement the subgoals and strategies.

(b) In developing the Delta Plan, the council shall consult with federal, state, and local agencies with responsibilities in the Delta. All state agencies with responsibilities in the Delta shall cooperate with the council in developing the Delta Plan, upon request of the council.

(c) The council shall review the Delta Plan at least once every five years and may revise it as the council deems appropriate. The council may request any state agency with responsibilities in the Delta to make recommendations with respect to revision of the Delta Plan.

(d) (1) The council shall develop the Delta Plan consistent with all of the following:  
(A) The federal Coastal Zone Management Act of 1972 (16 U.S.C. § 1451 et seq.), or an equivalent compliance mechanism.  
(B) Section 8 of the federal Reclamation Act of 1902.  
(C) The federal Clean Water Act (33 U.S.C. § 1251 et seq.).  
(2) If the council adopts a Delta Plan pursuant to the federal Coastal Zone Management Act of 1972 (16 U.S.C. § 1451 et seq.), the council shall submit the Delta Plan for approval to the United States Secretary of Commerce pursuant to that act, or to any other federal official assigned responsibility for the Delta pursuant to a federal statute enacted after January 1, 2010.

(e) The council shall report to the Legislature no later than March 31, 2012, as to its adoption of the Delta Plan.

Delta Reform Act § 85302. (a) The implementation of the Delta Plan shall further the restoration of the Delta ecosystem and a reliable water supply.

(b) The geographic scope of the ecosystem restoration projects and programs identified in the Delta Plan shall be the Delta, except that the Delta Plan may include recommended ecosystem projects outside the Delta that will contribute to achievement of the coequal goals.

(c) The Delta Plan shall include measures that promote all of the following characteristics of a healthy Delta ecosystem:

- (1) Viable populations of native resident and migratory species.
- (2) Functional corridors for migratory species.
- (3) Diverse and biologically appropriate habitats and ecosystem processes.

- (4) Reduced threats and stresses on the Delta ecosystem.
- (5) Conditions conducive to meeting or exceeding the goals in existing specie recovery plans and state and federal goals with respect to doubling salmon populations.

(d) The Delta Plan shall include measures to promote a more reliable water supply that address all of the following:

- (1) Meeting the needs for reasonable and beneficial uses of water.
- (2) Sustaining the economic vitality of the state.
- (3) Improving water quality to protect human health and the environment.

(e) The following subgoals and strategies for restoring a healthy ecosystem shall be included in the Delta Plan:

- (1) Restore large areas of interconnected habitats within the Delta and its watershed by 2100.
- (2) Establish migratory corridors for fish, birds, and other animals along selected Delta river channels.
- (3) Promote self-sustaining, diverse populations of native and valued species by reducing the risk of take and harm from invasive species.
- (4) Restore Delta flows and channels to support a healthy estuary and other ecosystems.
- (5) Improve water quality to meet drinking water, agriculture, and ecosystem long-term goals.
- (6) Restore habitat necessary to avoid a net loss of migratory bird habitat and, where feasible, increase migratory bird habitat to promote viable populations of migratory birds.

(f) The council shall consider, for incorporation into the Delta Plan, actions designed to implement the sub-goals and strategies described in subdivision (e).

(g) In carrying out this section, the council shall make use of the best available science.

(h) The Delta Plan shall include recommendations regarding state agency management of lands in the Delta.

Delta Reform Act § 85350. The council may incorporate other completed plans related to the Delta into the Delta Plan to the extent that the other plans promote the coequal goals.

Delta Reform Act § 29702. The Legislature further finds and declares that the basic goals of the state for the Delta are the following:

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

(b) Protect, maintain, and, where possible, enhance and restore the overall quality of the Delta environment, including, but not limited to, agriculture, wildlife habitat, and recreational activities.

(c) Ensure orderly, balanced conservation and development of Delta land resources.

(d) Improve flood protection by structural and nonstructural means to ensure an increased level of public health and safety.

Delta Reform Act § 85020. The policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

(a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.

(b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.

(c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.

(d) Promote statewide water conservation, water use efficiency, and sustainable water use.

(e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.

(f) Improve the water conveyance system and expand statewide water storage.

(g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.

(h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

## **A. Approach of this Plan**

The overarching tenet of the Delta Plan is the advancement of the coequal goals as defined in statute. Specifically, the Delta Plan must improve water supply for California and protect, restore and enhance the Delta ecosystem in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta, as an evolving place. These coequal goals are the basic objective of the Plan and must be of prime importance in the very function of the Delta Plan. No other standard or performance metric may be placed ahead of these legislatively defined "basic goals" of the Plan.

The Legislature created the Delta Stewardship Council (“Council”) to coordinate and synthesize the efforts of the many federal, state and local agencies that have at least some responsibility for the Delta’s resources.<sup>1</sup> As the Delta Vision Strategic Plan stated (p. vi):

More than 200 federal, state, and local government agencies have some jurisdiction in the Delta. Everyone is involved but no one is in charge. Moreover, the existing fragmentation of policies and projects guarantee failure in restoring the Delta ecosystem and in ensuring reliable water supplies for California.

Following this statement of need, in the 2009 Delta Reform Act, the Legislature required this Council to prepare a Delta Plan and identified the Delta Plan’s fundamental function in Delta Reform Act section 85001(c) as follows:

By enacting this division [the Delta Reform Act], it is the intent of the Legislature to provide for the sustainable management of the Sacramento-San Joaquin Delta ecosystem, to provide for a more reliable water supply for the state, to protect and enhance the quality of water supply from the Delta, and to establish a governance structure that will direct efforts across state agencies to develop a legally enforceable Delta Plan.

In section 85204 of the Delta Reform Act, the Legislature also required the following of the Council:

The council shall establish and oversee a committee of agencies responsible for implementing the Delta Plan. Each agency shall coordinate its actions pursuant to the Delta Plan with the council and the other relevant agencies.

While the Delta Reform Act states that the Council is to “direct efforts across state agencies” and to oversee agencies as they “coordinate” actions under the Delta Plan, the Legislature – in that same Act – was careful to state that the Council’s authority does not override other agencies’ regulatory authority. The Act states that it does not affect:

- the State Water Resources Control Board’s “existing authority to regulate the diversion and use of water” (Delta Reform Act § 85031(d));
- the Natural Community Conservation Planning Act, which is the statute under which the Bay-Delta Conservation Plan is being developed (Delta Reform Act § 85032(a));
- the California Endangered Species Act (Delta Reform Act § 85032(b));
- the Fish and Game Code (Delta Reform Act § 85032(c));

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<sup>1</sup> See the attached Glossary for a list of acronyms of Agencies and Terms used in this document

- the Porter-Cologne Water Quality Control Act, under which the State Water Resources Control Board (“SWRCB”) and the Regional Water Quality Control Boards (“RWQCB”) regulate water quality (Delta Reform Act § 85032(d));
- the California Environmental Quality Act, under which state and local agencies conduct environmental reviews of their projects (Delta Reform Act § 85032(f));
- the application of the public trust doctrine, which grants the state authority to protect, where feasible, the uses of navigable waters and their tributaries (Delta Reform Act § 85032(h)); or
- any water right (Delta Reform Act § 85032(i)).

By giving the Council the power to “direct efforts across state agencies” and coordinate implementation of the Delta Plan, but explicitly excluding the Council from exercising authority under the state’s major environmental and water-resource laws, the Legislature created a new, but nonetheless clear, role for the Council. The Delta Reform Act generally makes the Council the shepherd of state-agency actions – not state-agency regulations – that are necessary for the state to achieve the coequal goals.

Consistent with this legislative direction, the primary power of the Council is the authority to determine, on appeal, whether “covered actions” that occur at least in part in the Delta or Suisun Marsh are consistent with the Delta Plan. (Delta Reform Act §§ 85057.5(a); 85225-85225.30.)

To be successful, the Delta Plan must protect and enhance: (i) water supply reliability throughout the state; (ii) the health and sustainability of the Delta ecosystem for resident and migratory species; and (iii) the economic vitality of the Delta and other regions of the state. Improvements in Delta water quality, flood protection, and emergency preparedness are critical to the health and sustainability of the Delta ecosystem and the economy of the Delta and the rest of California. The only way to achieve these ambitious goals – as set forth in the 2009 legislation – is to base decisions on the best available science and to be able to adapt as conditions change.

The Delta Reform Act, accordingly, created two overarching roles for the Council:

**1. Leading and coordinating amongst agencies:** The Delta Plan needs to clearly articulate the role of the Council as a leader, facilitator, coordinator and integrator of policies, programs and actions amongst the various agencies that have jurisdiction in the Delta. As the entity that creates the Delta Plan, the Council has a role as a leader among agencies. As the facilitating and coordinating agency, the Council should define opportunities to advance the coequal goals of water supply reliability and Delta ecosystem restoration through the efficient and effective use of limited resources while ensuring consistency between agencies’ policies and programs.

**2. Defining metrics to measure “success”:** The Delta Plan needs to define how the Council will determine and measure success. Absent clearly defined metrics, it will be impossible to assess what progress has been made towards advancing the coequal goals, implement adaptive management, modify the Delta Plan, if warranted, and justify continued investments and participation in the implementation of the Delta Plan.

Based on the Delta Reform Act’s explicit terms, this Alternate Delta Plan’s fundamental purpose is to identify areas in which improved coordination, and integration among, the activities of federal, state and local agencies in the Delta is necessary to advance the coequal goals and to recommend or direct methods for achieving that objective. This Alternate Delta Plan also incorporates and is consistent with the Delta Reform Act’s requirement that improved management of existing water sources and development of new water sources respect water rights, water right priorities, area of origin protections and the protections provided to municipal water suppliers under Water Code sections 106 and 106.5. (Delta Reform Act §§ 85031(a); 85031(d); 85032(i).) In short, the local and regional efforts to improve management of existing water sources and develop new supplies can only succeed if water suppliers have assurances that they will, in fact, be able to use the resulting local and regional water supplies.

Accordingly, in addressing how the Council can interact with state agencies to collectively achieve the coequal goals, this Alternate Delta Plan uses the terms “Directs” and “Recommends” in the following context:

- “Directs” that state action agencies take specified actions to further programs that will promote the coequal goals’ achievement, meaning that the Council will seek to use its statutory authority, and its public oversight role, to ensure that those agencies take those actions.
- “Recommends” that state regulatory agencies take specified actions to address issues that affect the coequal goals that are within those agencies’ regulatory jurisdictions, meaning that, while the Council cannot require that such actions be taken, the Council will exercise its public oversight function to monitor those agencies’ activities.

In addition, this Alternate Delta Plan proposes numerous actions that the Council itself would take over the near, medium and long terms to advance the coequal goals.

## **B. Actions and Recommendations**

### Near Term Actions: by January 1, 2013

- No later than June 30, 2012, convene and chair an advisory committee comprised of key federal, state and local agencies that have jurisdictional authority within the Delta to develop strategic recommendations to facilitate coordination amongst the agencies, and identify opportunities to integrate programs to efficiently and effectively advance the coequal goals.
- No later than June 30, 2012, convene a working group of experts (e.g. ecologists, biologists, economists, engineers, and water managers) from academia, various levels of

government, and the public and private sectors to research and develop a set of metrics for measuring success in terms of achieving the coequal goals.

Medium Term Actions: by January 1, 2018

- Direct the advisory committee composed of key federal state and local agencies to submit its recommendations to the Council no later than December 31, 2013.
- Convene a public workshop to receive input on the advisory committee's report and recommendations, and will take action on the recommendations no later than June 30, 2014.
- Direct the expert working group to report its findings and recommendations to the Council no later than December 31, 2013. The Council will determine whether additional expert review is warranted.
- Conduct a public workshop and take final action on the proposed metrics no later than June 30, 2014.
- No later than December 31, 2015, and annually thereafter, prepare and issue an evaluation of progress in implementing the Delta Plan. The annual report will evaluate at least the following areas: (i) coordination and cooperation among federal, state and local agencies to achieve the coequal goals that include preservation of the unique values of the Delta, (ii) measurement (preferably using quantitative measures) of progress toward the coequal goals that include preservation of the unique values of the Delta, (iii) impediments encountered during the prior year as agencies have attempted to make progress toward achieving the coequal goals in a manner that includes the preservation of the unique values of the Delta, and (iv) recommendations for modifying existing programs based on progress towards meeting the coequal goals that include the preservation of the unique values of the Delta. As an appendix to the annual report, the Council will post the data used in preparing the annual report on its website to promote transparency and accountability.
- Adjust deadlines in the Delta Plan that are based on other agencies' actions (e.g., preparation of the Central Valley Flood Protection Plan) as may be needed so as to respect those parallel processes.

Long-Term Actions: after January 1, 2018

- Continued preparation of the annual report.
- Update the Delta Plan to reflect new scientific information and the experience of implementing the Delta Plan by means of adaptive management.



## II. Chapter 2 - Science and Adaptive Management for a Changing Delta

Delta Reform Act § 85308. The Delta Plan shall meet all of the following requirements:

- (a) Be based on the best available scientific information and the independent science advice provided by the Delta Independent Science Board.
- (b) Include quantified or otherwise measurable targets associated with achieving the objectives of the Delta Plan.
- (c) Where appropriate, utilize monitoring, data collection, and analysis of actions sufficient to determine progress toward meeting the quantified targets.
- (d) Describe the methods by which the council shall measure progress toward achieving the coequal goals.
- (e) Where appropriate, recommend integration of scientific and monitoring results into ongoing Delta water management.
- (f) Include a science-based, transparent, and formal adaptive management strategy for ongoing ecosystem restoration and water management decisions.

More than four years ago, the Public Policy Institute of California (“PPIC”) explained that, under “a program of water flow regulation . . . most such species (native and desirable alien species) . . . have not done well.”<sup>1</sup> Several years before the PPIC, Dr. W.J. Kimmerer bluntly warned “[t]he current state of knowledge about flow effects does not provide adequate support to decision making...”<sup>2</sup> Interestingly, Dr. Kimmerer provided the solution.

All of [the] problems are shortfalls of knowledge that can be addressed through a program of research coupled with experimental manipulation of some aspects of freshwater flow.<sup>3</sup>

The Delta Plan is the appropriate locus for a program of research to be developed, prioritized, and undertaken under the auspices of the Delta Science Program. Such a research program must center on life cycle models for each species of concern. It will support analyses of data and testing of hypotheses to increase the robustness of the models presently in use by state and federal natural resource and regulatory agencies. These life cycle models must then be coupled with other analytical tools, including hydrologic models. The Delta Science Program will thus be able to provide agencies, like the SWRCB, with the scientific tools they need to assess various stressors on the ecosystem, including constituents that may be impairing water quality in the Delta to the detriment of fish and wildlife and other beneficial uses, as well as how changes that might be proposed would affect the achievement of the coequal goals.

<sup>1</sup> Public Policy Institute of California, 2007. *Envisioning Futures for the Sacramento-San Joaquin Delta*, p.viii

<sup>2</sup> Kimmerer, W.J, 2002. *Physical, Biological, and Management Responses to Variable Freshwater Flow into the San Francisco Estuary*, *Estuaries* 25:1275-1290.

<sup>3</sup> *Id.*, p. 1286.

## **A. Actions and Recommendations**

### **(1) Science Plan**

#### Near Term

- Direct the Delta Science Program to identify all life cycle modeling available for each salmon, steelhead, and smelt species dependent on the Delta by February 1, 2012;
- Direct the Delta Science Program to present to the Council by May 1, 2012, a report that (1) prioritizes life cycle models that should be developed; (2) identifies statistical analyses of existing data, and makes recommendations on the need for additional data, that will either improve existing life cycle models or assist with the development of new life cycle models; (3) identifies hypotheses, which, when tested, will improve existing life cycle models or assist with the development of new life cycle models; and (4) describes how the results of analyses from life cycle models can be integrated with hydrologic analyses to ensure that the effects of actions are considered in context with the many species that are dependent upon the Delta during at least part of their lives.
- Direct the Independent Science Board (“ISB”) to review the Delta Science Program’s report and provide feedback and recommendations to the Council by July 1, 2012.
- Direct the Delta Science Program to develop, through a public process with stakeholder input, a long-term Delta Science Plan by August 1, 2012. The Delta Science Plan will include, among other subjects to be determined by the Delta Science Program: (1) a prioritized list of new life cycle models that should be developed; (2) investigation of the relationship between reducing various stressors on the system and the efficacy of flow management decisions for the purpose of ecosystem improvements; (3) identification of needed statistical analyses of existing data, studies to develop and analyze additional data, hypotheses to be tested; and (4) the manner in which the Council will provide adequate and reliable funding for implementation of the Delta Science Plan.
- Direct the ISB to review the work of the Delta Science Plan and make recommendations for improvement by October 1, 2012.
- Direct the Delta Science Program to develop and implement annual work-plans consistent with the Delta Science Plan.

#### Medium Term

- Monitor the Delta Science Program’s implementation of the Delta Science Plan.
- Direct the Delta Science Program, in collaboration with the review conducted by the ISB, to update the Delta Science Plan as necessary, but at least every four (4) years.
- Transmit results of Delta Science Plan implementation to local, state and federal agencies for use in their planning and regulatory processes, including the SWRCB for consideration in the development of Delta water quality objectives.

#### Long Term

- Repeat Medium Term steps

## **(2) Adaptive Management**

The Delta Reform Act emphasizes the importance of adaptive management, as the Act's section 85308(f) requires that the Delta Plan include such management measures. The Delta Plan itself should also be subject to adaptive management, with the Council changing the Plan's terms as new information becomes available. Only in this way will the Council be able to recognize what is working in the Delta and what is not.

### Near Term

- Utilize information obtained through Delta Science Plan implementation to revise the Delta Plan as appropriate.

### Medium Term

- Repeat Short Term actions as necessary.

### Long Term

- Repeat Short Term actions as necessary.

### III. Chapter 3 – Governance: Legally Enforceable Delta Plan

Delta Reform Act § 85225. A state or local public agency that proposes to undertake a covered action, prior to initiating the implementation of that covered action, shall prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with the Delta Plan and shall submit that certification to the council.

Delta Reform Act § 85225.5. To assist state and local public agencies in preparing the required certification, the council shall develop procedures for early consultation with the council on the proposed covered action.

Delta Reform Act § 85225.10. (a) Any person who claims that a proposed covered action is inconsistent with the Delta Plan and, as a result of that inconsistency, the action will have a significant adverse impact on the achievement of one or both of the coequal goals or implementation of government-sponsored flood control programs to reduce risks to people and property in the Delta, may file an appeal with regard to a certification of consistency submitted to the council.

(b) The appeal shall clearly and specifically set forth the basis for the claim, including specific factual allegations, that the covered action is inconsistent with the Delta Plan. The council may request from the appellant additional information necessary to clarify, amplify, correct, or otherwise supplement the information submitted with the appeal, within a reasonable period.

(c) The council, or by delegation the executive officer, may dismiss the appeal for failure of the appellant to provide information requested by the council within the period provided, if the information requested is in the possession or under the control of the appellant.

Delta Reform Act § 85225.30. The council shall adopt administrative procedures governing appeals, which shall be exempt from Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

Delta Reform Act § 85300. (a) On or before January 1, 2012, the council shall develop, adopt, and commence implementation of the Delta Plan pursuant to this part that furthers the coequal goals. The Delta Plan shall include subgoals and strategies to assist in guiding state and local agency actions related to the Delta. In developing the Delta Plan, the council shall consider each of the strategies and actions set forth in the Strategic Plan and may include any of those strategies or actions in the Delta Plan. The Delta Plan may also identify specific actions that state or local agencies may take to implement the subgoals and strategies.

(b) In developing the Delta Plan, the council shall consult with federal, state, and local agencies with responsibilities in the Delta. All state agencies with responsibilities in the Delta shall cooperate with the council in developing the Delta Plan, upon request of the council.

(c) The council shall review the Delta Plan at least once every five years and may revise it as the council deems appropriate. The council may request any state agency with responsibilities in the Delta to make recommendations with respect to revision of the Delta Plan.

- (d) (1) The council shall develop the Delta Plan consistent with all of the following:
- (A) The federal Coastal Zone Management Act of 1972 (16 U.S.C. Sec. 1451 et seq.), or an equivalent compliance mechanism.
  - (B) Section 8 of the federal Reclamation Act of 1902.
  - (C) The federal Clean Water Act (33 U.S.C. Sec. 1251 et seq.).
- (2) If the council adopts a Delta Plan pursuant to the federal Coastal Zone Management Act of 1972 (16 U.S.C. Sec. 1451 et seq.), the council shall submit the Delta Plan for approval to the United States Secretary of Commerce pursuant to that act, or to any other federal official assigned responsibility for the Delta pursuant to a federal statute enacted after January 1, 2010.
- (e) The council shall report to the Legislature no later than March 31, 2012, as to its adoption of the Delta Plan.

Consistent with the legislative mandate, this Alternate Delta Plan sets forth a comprehensive plan that will further the coequal goals through legally enforceable mechanisms. The Delta Plan's enforcing mechanisms include the required cooperation of state agencies and the Council's authority to determine whether covered actions are consistent with the Plan. Through these mechanisms, the recommended actions, promotions, and directions in the Alternate Delta Plan are enforceable without being regulatory.

## **A. Consultation and Cooperation of Federal, State, and Local Agencies**

The Council is required to consult with federal, state, and local agencies with responsibilities in the Delta to develop the Delta Plan. This consultation requirement mandates the Council take up the leadership role of coordinator, facilitator, integrator, and reporter for all existing regulation that occurs in the Delta. To fulfill this role, the Council must regularly meet with those other local, state and federal agencies carrying out activities that may advance or inhibit the coequal goals, understand all actions that are being taken by the various agencies, analyze whether the actions are effective at achieving their stated purpose, recommend efficiencies or streamlining processes where applicable, and recommend further actions where necessary.

Although the Act includes direction to pursue a Coastal Zone Management Plan type agreement with the federal government, or its equivalent, a much more effective, timely and flexible approach would be for the Council to seek to develop Memoranda of Agreement with the key federal agencies Interior (USFWS, Reclamation), Commerce (NMFS), USEPA, United States Army Corps of Engineers ("USACOE")) individually or collectively, to promote cooperation, collaboration, and coordination in implementation of the Delta Plan.

In turn, the Delta Reform Act requires state agencies to cooperate with the Council. Through this element of required cooperation, the Council can facilitate state agency consistency with the coequal goals and the Delta Plan by working with pertinent agencies to incorporate relevant actions and policy recommendations into their own work plans and policies, through a public and transparent process, thereby making such actions legally enforceable.

## **B. Consistency Determinations of Covered Actions**

The Alternate Delta Plan is enforceable through the Council's authority to hear appeals on consistency determinations of covered actions, as defined by Delta Reform Act section 85057.5. State or local agencies proposing to undertake a covered action must submit to the Council a written certification that the covered action is consistent with the Delta Plan. The Council shall work with state and local agencies to provide early consultation and guidance to assist the agencies in making the determination of whether a covered action is consistent with the Delta Plan.

Any person who claims that a proposed covered action is inconsistent with the Delta Plan and, as a result of that inconsistency, the action will have a significant adverse impact on the achievement of one or both of the coequal goals, may appeal the consistency determination to the Council. The appeal must be filed within 30 days after the submission of the certification of consistency and must clearly set forth the basis of the appeal.

The burden of producing evidence is on the party appealing a covered action to the Council, consistent with the Delta Reform Act. The Act specifically states, in section 85225.25, that consistency appeals will be determined under the "substantial evidence" standard. Decades of California administrative law have interpreted the "substantial evidence" standard to require that the person challenging an agency's decision produce the evidence necessary to support its case. Otherwise, the agency's decision is valid. Upon such appeal, the Council will consider a covered action to be inconsistent with the Delta Plan if it would significantly interfere with, or hinder, the implementation of a policy, action or program recommended by or incorporated into the Delta Plan. The Council must uphold a determination of consistency, so long as the determination is supported by substantial evidence.

#### Near Term

- Amend existing administrative procedures governing appeals to be consistent with Delta Reform Act § 85225 et seq. and the long-standing substantial evidence standard by December 31, 2012.
- No later than June 30, 2013 develop procedures for early consultation on covered action consistency.

#### Medium Term

- Provide project proponents with early consultation on consistency.
- Review appeals challenging consistency determinations.

#### **IV. Chapter 4 – A More Reliable Water Supply for California**

Delta Reform Act § 85020. The policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

- (a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.
- (b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.
- (c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.
- (d) Promote statewide water conservation, water use efficiency, and sustainable water use
- (e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.
- (f) Improve the water conveyance system and expand statewide water storage.
- (g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.
- (h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

Delta Reform Act § 85031. (a) This division does not diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed of origin, county of origin, or any other water rights protections, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law. This division does not limit or otherwise affect the application of Article 1.7 (commencing with Section 1215) of Chapter 1 of Part 2 of Division 2, Sections 10505, 10505.5, 11128, 11460, 11461, 11462, and 11463, and Sections 12200 to 12220, inclusive.

(b) For the purposes of this division, an area that utilizes water that has been diverted and conveyed from the Sacramento River hydrologic region, for use outside the Sacramento River hydrologic region or the Delta, shall not be deemed to be immediately adjacent thereto or capable of being conveniently supplied with water therefrom by virtue or on account of the diversion and conveyance of that water through facilities that may be constructed for that purpose after January 1, 2010.

(c) Nothing in this division supersedes, limits, or otherwise modifies the applicability of Chapter 10 (commencing with Section 1700) of Part 2 of Division 2, including petitions related to any

new conveyance constructed or operated in accordance with Chapter 2 (commencing with Section 85320) of Part 4 of Division 35.

(d) Unless otherwise expressly provided, nothing in this division supersedes, reduces, or otherwise affects existing legal protections, both procedural and substantive, relating to the state board's regulation of diversion and use of water, including, but not limited to, water right priorities, the protection provided to municipal interests by Sections 106 and 106.5, and changes in water rights. Nothing in this division expands or otherwise alters the board's existing authority to regulate the diversion and use of water or the courts' existing concurrent jurisdiction over California water rights.

Delta Reform Act § 85032. This division does not affect any of the following:

(a) The Natural Community Conservation Planning Act (Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code).

(b) The California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code).

(c) The Fish and Game Code.

(d) The Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000)).

(e) Chapter 8 (commencing with Section 12930) of Part 6 of Division 6.

(f) The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(g) Section 1702.

(h) The application of the public trust doctrine.

(i) Any water right.

(j) The liability of the state for flood protection in the Delta or its watershed.

Delta Reform Act § 85302(d). The Delta Plan shall include measures to promote a more reliable water supply that address all of the following:

- (1) Meeting the needs for reasonable and beneficial uses of water.
- (2) Sustaining the economic vitality of the state.
- (3) Improving water quality to protect human health and the environment.



Delta Reform Act § 85303. The Delta Plan shall promote statewide water conservation, water use efficiency, and sustainable use of water.

Delta Reform Act § 85304. The Delta Plan shall promote options for new and improved infrastructure relating to the water conveyance in the Delta, storage systems, and for the operation of both to achieve the coequal goals.

Delta Reform Act § 85309. The department, in consultation with the United States Army Corps of Engineers and the Central Valley Flood Protection Board, shall prepare a proposal to coordinate flood and water supply operations of the State Water Project and the federal Central Valley Project, and submit the proposal to the council for consideration for incorporation into the Delta Plan. In drafting the proposal, the department shall consider all related actions set forth in the [Delta Vision] Strategic Plan.

Improving water supply reliability is one of the two coequal goals that the Delta Plan must advance. The reliability of water has decreased significantly in the past decade due to increased regulation, infrastructure deficiencies, and hydrologic conditions. The lack of reliability adversely impacts water supply planning and has devastating impacts to the State's economy. The Delta Plan must provide a comprehensive Plan to address the regulatory, infrastructure, and consumptive use issues that result in increased water reliability throughout the State. Indeed, the Legislature found and declared in the Delta Reform Act § 85004 (b): "Providing a more reliable water supply for the state involves implementation of water use efficiency and conservation projects, wastewater reclamation projects, desalination, and new and improved infrastructure, including water storage and Delta conveyance facilities."

The key criteria the Delta Plan must address with respect to meeting the water supply prong of the coequal goals are set forth in § 85302 (d): "The Delta Plan shall include measures to promote a more reliable water supply that address all of the following: (1) Meeting the needs for reasonable and beneficial uses of water. (2) Sustaining the economic vitality of the state. (3) Improving water quality to protect human health and the environment." In accomplishing this, the Delta Plan must also protect and enhance the Delta as an evolving place and remain true to the environmental prong of the coequal goals as well.

California's water supply is, though subject to periodic droughts and a future of altered hydrology resulting from climate change, sufficient to serve its economic and environmental needs today and into the future. However, providing a reliable water supply for all reasonable and beneficial uses of the State will take improved management at the state, regional, and local level. These actions include, but are not limited to continued efforts to advance alternative local resource development, water use efficiency, conservation, water quality protection, and improved storage and conveyance facilities.

The Legislature has also determined that the Bay Delta Conservation Plan ("BDCP"), should it be approved as a Natural Communities Conservation Plan and meet certain other criteria, will become a major component of the Delta Plan that would address the legislatively specified requirements for improved conveyance while also providing significant progress in furthering both of the coequal goals.

## **A. Actions and Recommendations**

### **(1) Integration of Existing Water Data**

Water users and water agencies report a significant amount of water data to local and state agencies pursuant to existing regulations. Volumes of data are generated through Urban Water Management Plans, public water system statistics reports, monthly and annual water quality reports to the Department of Public Health, statements of water diversion and use and permittee and licensee progress reports to the SWRCB, California Urban Water Conservation Council annual conservation reports, Central Valley Project water service contractor water conservation plans, Waste Discharge Requirement reports, National Pollutant Discharge Elimination System reports, Surface Water Ambient Monitoring Program reports, California Data Exchange Center water flow data, United States Geological Survey water flow data, and Well Completion reports. This data is scattered among agencies and rarely coordinated, integrated, or analyzed to make water planning decisions. The state's understanding of how water resources are managed would be improved greatly if all of the existing data were integrated and made available to the public.

#### Near Term

- Direct the Department of Water Resources (“DWR”) to create and maintain a statewide database of integrated water information. In compiling the database, DWR should consult with the Bureau of Reclamation (“Reclamation”), DWR, the SWRCB, the Regional Water Quality Control Boards, the Department of Public Health, the U.S. Geological Survey and the California Urban Water Conservation Council and other agencies and associations, and use the information reported to them by local water and wastewater agencies.

#### Medium Term

- Conduct oversight over these agencies' and entities' integration of existing information sources.
- Direct DWR to make any necessary changes to integrated water data system.

#### Long Term

- Identify any additional sources of information that may be necessary following integration of existing sources of information available to the state.

### **(2) Water Conservation and Local Resource Development**

The conservation and efficient use of water can be an effective tool to manage water supply reliability, but it alone cannot resolve California's water supply challenges. The PPIC dispelled the myth that California can conserve its way out of its water problems, recognizing “water

conservation is important, but its effectiveness is often overstated.”<sup>2</sup> While there have been significant investments and improvements of water use efficiency in the vast majority of the state’s agricultural sector, water use efficiency practices lag in certain agricultural areas. Similarly, many of the State’s urban centers have implemented highly effective water conservation programs and have reduced the per capita use of water, but may still benefit from improvements in certain areas. The Council should use its coordination function to promote continuous improvement in cost-effective statewide water conservation.

#### Near Term

- Direct DWR to collate results of 2011 urban water management plans to provide estimate of water conservation planned to occur by 2020.
- Consult with DWR, SWRCB, other agencies and stakeholders to identify programs to promote additional local water conservation and water use efficiency projects that are not locally cost effective without additional financial incentives. Complete the consultation and hold a public hearing by June 2012. Prepare a report summarizing recommendations by September 2012, and begin implementation thereafter.

#### Medium Term

- Recommend that DWR convene public meetings in 2016 in conjunction with development of its report on implementation of SB 7. (Delta Reform Act § 10608.42.)
- Recommend that DWR convene public stakeholder meetings concerning DWR’s update of urban conservation option 4, which SB 7 requires by December 31, 2014. (Delta Reform Act § 10608.20(d).)
- Reconsult with DWR, SWRCB, other agencies and stakeholders, and update the relevant report as necessary to identify programs to promote additional local water conservation and water use efficiency projects that are not locally cost effective without additional financial incentives.

### **(3) Voluntary Water Transfers**

State and federal law promote the voluntary transfer of water from willing sellers to willing buyers, but significant transactions costs and other impediments prevent adequate utilization of this tool. As PPIC reports, the number of water transfers in California during the last decade has declined. California will need to improve conditions for voluntary water transfers to accomplish coequal goals in the future.

#### Near Term

- Direct DWR and SWRCB to work with stakeholders on water transfers to identify and implement measures that reduce impediments and facilitate implementation of water transfers that promote water supply reliability within existing law.

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<sup>2</sup> Public Policy Institute of California, 2009. *California Water Myths*, p.14.

#### **(4) Conveyance Related Actions for Interim Period prior to BDCP Implementation**

Improved conveyance facilities proposed in the BDCP, if constructed and permitted, will not be operational until after the “long-term” period of the Delta Plan begins. Consequently, consistent with the Act, which states that improvements to Delta conveyance are “inherent in the coequal goals for management of the Delta”, the Delta Plan should facilitate feasible improvements prior to BDCP implementation. There can be no delay in addressing the threats to Delta conveyance.

##### Near Term

- Direct DWR to undertake an assessment and review of the levee infrastructure critical to the current through Delta conveyance of export water supplies and to the protection of contractual and regulatory in-Delta water quantity and quality mandates and prioritize a preventive maintenance program to enhance the resiliency of those levees.
- Recommend the SWRCB modify permits to allow for the combined place of use for the Central Valley and State Water Projects provided there are appropriate protections for third parties and other legal users of water.

#### **(5) Groundwater**

Recent studies document that local and regional water agencies throughout California have implemented innovative groundwater management techniques in recent years.<sup>3</sup> This Alternate Delta Plan recognizes that furthering the coequal goals requires sustainable management of California’s groundwater basins. While some regions have made significant progress, others have not. The Council should take affirmative steps to encourage the implementation of sustainability-based groundwater management throughout California.

##### **General**

##### Near Term

- Recommend the SWRCB or, if necessary, the Legislature designates the use of surface water for groundwater recharge as a “beneficial use.”
- Recommend the SWRCB consider setting uniform guidance for regional water quality control boards relating to Aquifer Storage and Recovery programs and injection of water into groundwater basins serving potable uses.
- Direct the Department of Public Health to expedite, consistent with best available science, the development of criteria for the use of recycled water to supplement surface and groundwater storage.
- Review and prioritize the recommendations made in the Association of California Water Agencies Framework for Sustainable Groundwater Management.

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<sup>3</sup> Association of California Water Agencies, *Sustainability From the Ground Up, Groundwater Management in California – A Framework*, April 2011, and Nelson, Rebecca, *Uncommon Innovation, Developments in Groundwater Management Planning in California*, Stanford University, Water in the West Working Paper 1, March 2011.

## **Monitoring**

### Medium Term

- Recommend that DWR, in collaboration with USGS and other federal, state and local agencies, should update Bulletin 118 using field data, California Statewide Groundwater Monitoring Elevation Monitoring (“CASGEM”), groundwater agency reports, satellite imagery and other best available science by January 1, 2015. This information will be available for inclusion in the Urban Water Management Plans and Agricultural Management Plans that are required to be submitted to the state by December 31, 2015.

### Long Term

- Recommend DWR synthesize the collected groundwater data to make it publicly available and publish groundwater level data for all basins covered by the 2009 legislation’s groundwater bill (SB7x-6) on the Internet.

## **Storage**

### Near Term

- Direct the California Water Commission (“CWC”) and DWR undertake a review and prioritization of potential groundwater storage projects in the state that might serve statewide, regional or local interests in a manner that could contribute toward achievement of the coequal goals. Direct the CWC to consider the report for adoption after a public hearing.
- Convene and chair an inter-agency group including at least DWR, SWRCB, RWQCBs and DPH to catalog and resolve issues limiting increased groundwater storage. Direct the interagency group to submit its recommendations to the Council and to the CWC for consideration, review and adoption.

### Medium Term

- Participate in state agencies’ development of regulations and policies concerning groundwater storage.

## **(6) Surface Storage**

Increasing surface water storage is an integral component of meeting both coequal goals. Capturing more water is critical to water supply reliability; stored water from wet periods will provide a reliable water supply in times of drought. Similarly, stored water may provide a regime of variable water releases that is necessary to restore a healthy ecosystem. The State’s current system of storage is deficient; there are not sufficient storage capabilities to capture excess water. There are several local and regional opportunities to improve surface water

storage that have yet to be developed. Opportunities for increased surface storage must be investigated and analyzed to determine which storage solutions can be implemented.

The Delta Vision Blue Ribbon Task Force concluded that infrastructure investments in both conveyance solutions and new storage would be required to accomplish the coequal goals over the long-term. (DVBRTF Strategic Plan, p. 36.) In addition to conveyance solutions, the “Task Force called for the immediate completion of ... surface storage investigations and speedy implementation of any options that optimize the capture of wet period flows”. (DVBRTF Strategic Plan, p. 36.) The 2009 water legislative package included a water bond (Water Code § 79700), which, if passed in November 2012, would continuously appropriate \$3 billion to the California Water Commission for allocation through a competitive process to water storage projects that provide public benefits.<sup>4</sup> The California Water Commission is in the process of establishing means of quantifying public benefits from new storage infrastructure in order to fund the set of projects with the largest public benefit. Whether the public passes the 2012 water bond or not, California is entering an era which requires reconsideration of investment strategies and operation of new infrastructure to provide public and private benefits. The Alternate Delta Plan seeks to create forums in which these complex questions can be worked out.

### Near Term

- Report to Legislature and public concerning benefits and challenges related to increasing existing or developing new storage capacity.
- Convene and chair public meetings of DWR, Reclamation, university engineers and scientists and private experts to improve the state’s understanding of the benefits and challenges of increased storage and, in particular, new storage.
- Review of status of DWR’s pending storage investigations.
- Direct DWR complete its pending storage investigations by December 31, 2012. Studies should include analyses of the potential additional benefits of integrating operations of new storage with proposed Delta conveyance improvements.
- Direct DWR to initiate and conduct coordinated operations studies that include current operational parameters and coordination of current and potential future storage to optimize the benefits of new storage. Direct DWR to present the report to the Council and the CWC for their consideration, review and possible adoption by December 2013.
- Direct DWR to complete feasibility, environmental and planning documents necessary to meet the requirements of the Safe, Clean, and Reliable Drinking Water Supply Act of 2010 (2009 SBx7-2) so that the CWC can make decisions on storage funding by December 2014.
- Consult with DWR, Reclamation, the USACOE, FERC and other dam operators concerning whether new reservoir-operation rules can be developed that would allow reservoirs to be operated more flexibly in light of current weather-forecasting technology to increase water storage without compromising flood control.
- Conduct public hearings to develop protocols to maximize both storage and flood control performance.

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<sup>4</sup> Public benefits of new storage include flow-related ecosystem improvements, water quality improvements, flood control benefits, emergency response capabilities, and recreation, (Water Code Section 79743(a)).

## **(7) Investigate, Prevent, and Terminate Illegal Diversions**

The number and magnitude of illegal diversions in the Delta watershed is unknown and could be significant. Before there is any discussion of additional water management burdens for lawful water users, illegal diversions must be terminated. The SWRCB identified the need to investigate and take enforcement actions against illegal Delta diversions as a concern in its Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. The Delta Plan should include direction to investigate, prevent, and terminate illegal diversions, subject to all appropriate due process protections, necessary to achieve the coequal goals.

### Near Term

- Recommend the SWRCB seek investigate, prevent, and terminate all illegal water diversions, including through the statutory authorities of the Delta Watermaster. (Delta Reform Act § 85230 (b).)
- Recommend the SWRCB prioritize enforcement against illegal diversions that could significantly impact the achievement of the coequal goals.

### Medium Term

- Conduct public hearings on status of SWRCB and Delta Watermaster and Court enforcement action related to termination of illegal diversions.

### Long Term

- Repeat Medium Term action as necessary.

## **(8) BDCP**

The planning goals of the BDCP include providing for the conservation and management of species and for the restoration and protection of the water supply of water agencies in the Bay Area, the Central Valley and Southern California that serve approximately two thirds of California's population and millions of acres of the nation's most productive agricultural lands long into the future. The BDCP, if successful, will protect the rights of non-participants, improve water supplies of participants and enhance the Delta ecosystem. As a result, the Delta Reform Act requires the Council to incorporate BDCP into the Delta Plan if certain conditions are met. Therefore, this plan should not be predecisional or otherwise prejudice the BDCP outcome or impede BDCP's completion and implementation.

### Near Term

- State that BDCP should be completed and approved by January 1, 2014.

## Medium Term

- Incorporate the BDCP, if it satisfies the requirements of the Delta Reform Act section 85320, into the Delta Plan as part of the first review and update of the Delta Plan, to be consistent with the requirements of the Delta Reform Act.
- Monitor progress of BDCP and conduct any necessary public discussions of its status to the extent needed to coordinate with other related activities in the delta Plan.
- If BDCP is not completed by January 1, 2014, and there is no alternative process underway by an entity capable of pursuing conveyance solutions consistent with the Delta Reform Act, initiate and conduct public process to develop recommendations regarding improved Delta conveyance. In addition, in consultation with the Delta Conservancy, prioritize habitat projects that would have otherwise been undertaken by BDCP.

## **(9) Improve Grant Funding Effectiveness**

The commitment of matching State funds may make affordable projects that local agencies would like to implement for local, regional or statewide benefit, but are not justified under the strict rate-making rules that apply to local agencies under Proposition 218, among other laws. Those laws require that local rates be set to reflect local water costs, making it very difficult for local agencies to make significant contributions to projects that while beneficial to them predominantly create statewide and regional benefits, without supplemental state funding. It therefore is crucially important to further the coequal goals that the maximum water-supply and economic benefits be wrung from the available state funds.

## Near Term

- Consult with DWR and SWRCB concerning their grant-funding processes with the goal of reducing the costs associated with grant applications and recommend that grant-funded projects address key objectives in the Delta Plan.
- Direct DWR and the SWRCB to timely issue proposal solicitation packages for bond funding already allocated for projects that protect environmental and drinking water quality (Propositions 84 and 50) and reduce risk to people and property. (Proposition 1E.)
- Direct DWR, SWRCB, and other state grant funding agencies to prioritize funding of projects that are not locally cost effective and provide local, regional, or state benefit.
- Consult with DWR and the SWRCB regarding opportunities to assist disadvantaged communities improve their capacity to successfully apply for grants.
- Direct DWR, SWRCB, and other state agencies to file with the Council quarterly progress reports on the implementation of projects being funded from bonds. Prepare an annual report to the Legislature evaluating the progress of those projects.

## Medium Term

- Review DWR and SWRCB grant-funding guidelines and comment on whether those guidelines will ensure projects that advance the coequal goals and key objectives set forth in the Delta Plan and as described in Delta Reform Act section 85020 are prioritized.



- Monitor DWR and the SWRCB on efforts to improve grant-funding effectiveness, and as appropriate, issue an update report to the Governor and Legislature.

### Long Term

- Repeat Medium Term actions during each round of DWR's and SWRCB's development of grant-funding guidelines.

## **(10) Water Plan Sustainability Elements**

The Delta Reform Act includes a new state policy to “reduce reliance on the Delta in meeting California’s *future* water supply needs through a *statewide* strategy” of investment. (Delta Reform Act § 85021, emphasis added.) Under the Act, the Delta Plan addresses this policy by promoting “statewide water conservation, water use efficiency, and sustainable use of water” (Delta Reform Act § 85303.) This Alternate Plan proposes that DWR consult with local agencies to develop a water sustainability element for urban and agricultural water management plans.

### Near Term

- Direct DWR to consult with local agencies and stakeholders to develop guidelines for a voluntary water sustainability element of urban and agricultural water management plans to be incorporated in those plans beginning in 2015.

### Medium Term

- Direct DWR to evaluate guidelines and update where appropriate.
- Direct DWR to evaluate 2015 urban and agricultural water management plans to assess progress towards implementation of sustainable water supplies, and report assessment to the Council by December 31, 2016.

## V. Chapter 5 – Restoring the Delta Ecosystem

Delta Reform Act § 85020. The policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

- (a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.
- (c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.

Delta Reform Act § 85032. This division does not affect any of the following:

- (a) The Natural Community Conservation Planning Act (Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code).
- (b) The California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code).
- (c) The Fish and Game Code.
- (d) The Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000)).
- (e) Chapter 8 (commencing with Section 12930) of Part 6 of Division 6.
- (f) The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).
- (g) Section 1702.
- (h) The application of the public trust doctrine.
- (i) Any water right.
- (j) The liability of the state for flood protection in the Delta or its watershed.

Delta Reform Act § 85302(b). The geographic scope of the ecosystem restoration projects and programs identified in the Delta Plan shall be the Delta, except that the Delta Plan may include recommended ecosystem projects outside the Delta that will contribute to achievement of the coequal goals.

Delta Reform Act § 85302(c). The Delta Plan shall include measures that promote all of the following characteristics of a healthy Delta ecosystem:

- (1) Viable populations of native resident and migratory species.
- (2) Functional corridors for migratory species.
- (3) Diverse and biologically appropriate habitats and ecosystem processes.
- (4) Reduced threats and stresses on the Delta ecosystem.
- (5) Conditions conducive to meeting or exceeding the goals in existing species recovery plans and state and federal goals with respect to doubling salmon populations.

Delta Reform Act § 85302(e). The following subgoals and strategies for restoring a healthy ecosystem shall be included in the Delta Plan:

- (1) Restore large areas of interconnected habitats within the Delta and its watershed by 2100.
- (2) Establish migratory corridors for fish, birds, and other animals along selected Delta river channels.

(3) Promote self-sustaining, diverse populations of native and valued species by reducing the risk of take and harm from invasive species.

(4) Restore Delta flows and channels to support a healthy estuary and other ecosystems.

(5) Improve water quality to meet drinking water, agriculture, and ecosystem long-term goals.

(6) Restore habitat necessary to avoid a net loss of migratory bird habitat and, where feasible, increase migratory bird habitat to promote viable populations of migratory birds.

Delta Reform Act

(f) The council shall consider, for incorporation into the Delta Plan, actions designed to implement the subgoals and strategies described in subdivision (e).

(g) In carrying out this section, the council shall make use of the best available science.

(h) The Delta Plan shall include recommendations regarding state agency management of lands in the Delta.

Delta Reform Act §85066. “Restoration” means the application of ecological principles to restore a degraded or fragmented ecosystem and return it to a condition in which its biological and structural components achieve a close approximation of its natural potential, taking into consideration the physical changes that have occurred in the past and the future impact of climate change and sea level rise.

The Delta is a highly complex ecosystem, located at the boundary of salt and fresh water with daily tidal changes, unique resident species, fish and wildlife that migrate through it to other areas and hundreds of miles of winding channels whose flows can vary in direction. In the 150 years since California became a state, the Delta has been altered significantly. It is one of the most invaded ecosystems in the world, with – according to the Delta Vision Strategic Plan – 95 percent of its biomass being non-native. Flow patterns have been altered. Channels have been changed. It would be impossible to restore the Delta’s ecosystem to its natural state. The Legislature acknowledged this in the Delta Reform Act, which defines “restoration” to mean returning an ecosystem “to a condition in which its biological and structural components achieve a close approximation of its natural potential, taking into account the physical changes that have occurred in the past and the future impact of climate change and sea level rise.”

A successful ecosystem program must address all factors that affect the Delta as it exists today. Past efforts to address the Delta ecosystem have predominantly dealt with individual factors in isolation. In particular, streamflows have been the primary focus of regulatory activity in the last 20 years. These efforts have not been effective; the Delta’s ecosystem has continued to decline.

In contrast to past approaches, this Alternate Delta Plan seeks to harness all relevant state and federal agency actions to address all of the relevant factors in a comprehensive and coordinated way. Such an approach is not only consistent with the Delta’s complexity, but is also consistent with longstanding California constitutional law concerning water and the public trust doctrine. In decisions like *City of Lodi v. East Bay Municipal Utility District*, the California Supreme Court has long interpreted Article X, section two, of the California Constitution to require that

California's water resources be conserved in addressing problems related to them. In its seminal public trust decision, *National Audubon Society v. Superior Court*, that same Court declared that this policy applies to public trust uses, stating, "All uses of water, including public trust uses, must now conform to the standard of reasonable use." This Alternate Delta Plan therefore addresses streamflows as an important part of an overall plan to restore the Delta's ecosystem, consistent with the Delta Reform Act.

## **A. Actions and Recommendations**

### **(1) Wetlands Restoration**

A considerable amount of wetlands habitat in the Delta has been lost. Development of local Habitat Conservation Plans by each of the Delta Counties, as well as large-scale projects being developed as part of the BDCP, are indicative of a growing focus on the restoration of native habitat (marine, tidal, intertidal and upland) within the Delta. Such habitat restoration plans must address as many of the necessary ecosystem components as practicable.

#### Near Term

- Direct the California Department of Fish and Game ("DFG") to convene a working group to set goals, objectives and performance measures for restoration projects. The working group shall include United States Fish and Wildlife Service ("USFWS"), National Marine Fisheries Service ("NMFS"), local stakeholders and affected parties. The working group shall develop goals objectives and performance measures by March, 2012 and present them to the Council, which shall review them with at least one public hearing before considering whether to adopt them as part of the Delta Plan. Prior to adoption, the goals, objectives and performance measures shall be reviewed by the ISB. For consideration in the goals, objective and performance measures, the working group shall emphasize improving conditions for native species and avoiding where possible conditions that would enhance populations of non-native species.
- Direct resource agencies and local agencies to identify, and finalize plans for and implementation of in-Delta habitat restoration project plans as soon as possible on publicly-owned land as pilot efforts to assess the effectiveness of various techniques and determine the efficacy of hypotheses related to expected ecosystem benefits.
- Direct the Delta Science Program to work with state and federal resource and local agencies of interest to identify, prioritize and begin implementation of such projects.
- Recommended projects should be informed by the BDCP planning process and should not conflict with or duplicate ecosystem measures that are part of the BDCP. Promising projects include:
  - Prospect Island
  - Little Holland Tract
  - Dutch Slough
  - Yolo Ranch
  - Tule Red – Suisun Marsh
- Direct the Delta Conservancy and other state agencies to prioritize the implementation of the identified projects.

- Promote the development of institutional capacity of the Delta Conservancy to manage restored habitat in the Delta.
- Direct the Delta Science Program to develop basic monitoring protocols for habitat restoration projects to allow for assessment of efficacy and adaptive management.

### Medium Term

- Assess progress of Delta Conservancy, Natural Community Conservation Planning, and Habitat Conservation Plan activities in the Delta and facilitate further progress in their implementation as necessary.
- Ensure adaptive management of in-Delta habitat restoration projects, consistent with biological goals and compatibility with surrounding land uses.
- Identify further necessary in-Delta habitat restoration projects and develop implementation proposals for consideration by the Delta Conservancy.
- Recommend the Delta Science Program study reconfiguring Delta waterway geometry to increase variability in estuarine circulation patterns, while maintaining appropriate flood protection, water supply and flood management capabilities both within the Delta and in areas supplied from the Delta.

### Long Term

- Continued monitoring and receive progress reports from Delta Conservancy and others as to effectiveness and adaptive management of habitat projects in the Delta.
- Review the Delta Conservancy's and other proposed in-Delta habitat restoration projects for consistency with Delta Plan.

## **(2) Invasive Species Control/Removal and Predation Reduction**

The Delta is one of the most invaded estuaries in the world. More than 250 alien aquatic and plant species currently inhabit the Delta. Ninety-five percent of the biomass in the Delta is non-native and 28 of the 40 fish species now residing in the Delta are non-native. These invasive species substantially alter the Delta ecosystem by displacing and out-competing species that are native to the Delta.

Significant quantities of native fish species, including species protected by the Endangered Species Act, such as Chinook salmon, Delta smelt, steelhead, and longfin smelt, are eaten by non-native predatory fish each year. Radio telemetry tagging studies show that 90-98 percent of young salmon are lost to predation prior to reaching the ocean, which greatly exceeds natural predation rates. Predation by non-native species is one of the major contributors to the decline of Chinook salmon and smelt abundance in the Delta. Peer reviewed studies and actions in other aquatic ecosystems have shown that predation control and management are effective tools in recovery of native species.

Invasive species also adversely affect habitat for native fish that are not eaten by predators. For example, the Asian clam infestation dramatically reduces the availability of food sources by filtering the water column every 24 hours and the overgrowth of water hyacinth blocks light needed for photosynthesis and reduces dissolved oxygen in the water.

### Near Term

- Recommend the DFG remove bass fishing restrictions and bag limits.
- Direct DFG and the California Department of Boating and Waterways (“DBW”) to continue programs to discourage and remove *Egeria* and *Corbula* from the system.
- Recommend DFG work with stakeholders to obtain funding for predation removal/reduction programs and implement the programs as soon as possible.
- Identify other measures with best scientific basis to reduce riverine and in-Delta predation on salmonids.
- Identify other measures to remove invasive species or lessen the impact of native species to restore the Delta ecosystem.

### Medium Term

- Identify and recommend measures to address salmonid predation “hot spots,” including assessment of in-channel structures.
- Consult with fishery and resources agencies to develop comprehensive program to control salmonid predators to improve the Delta as a functional migratory corridor for native salmonid species.
- Identify and recommend measures to remove or reduce population of Asian clam and other invasive species that adversely impact ecosystem functions.

### Long Term

- Apply adaptive management to identify revised or additional predation-control measures.

### **(3) Ocean Harvest (per Delta Reform Act § 85302(b))**

The Delta ecosystem has recently experienced a significant decline in Chinook salmon species. Poor oceanic feeding conditions and commercial fishing have been identified as key causes of the collapse of fall run Chinook salmon, with the former being identified by experts as the “proximate cause” of the collapse. Prior to the halt on commercial salmon fishing in 2007, the Pacific Fisheries Management Council estimated that approximately 50 percent of adult fall-run salmon were being harvested by commercial fisherman, and, which because of current fishery practices resulted in large amounts of take of listed salmon.

### Near Term

- Recommend that NMFS, the Pacific Fisheries Management Council and DFG to develop regulations or rules for Central Valley salmon to selectively protect naturally-spawning fish, and older fish, from ocean harvest i.e. a “mark-select” fishery similar to that already in place in the Pacific Northwest, reducing the incidental take of threatened and endangered stocks.
- Recommend that NMFS prepare a report assessing the impact of ocean harvest relative to other activities that take salmon.

## Medium Term

- Consult with NMFS, the Pacific Fisheries Management Council and DFG to develop regulations or rules for Central Valley salmon to selectively protect naturally-spawning fish, and older fish, from ocean harvest.

### **(4) Delta Ecosystem (including streamflows within the watershed per Delta Reform Act § 85302(b))**

The flow of water to and through the Delta, from the tributary watersheds is regulated by the SWRCB, the Federal Energy Regulatory Commission, Department of Fish and Game, among other agencies. Despite the extensive regulation of Delta and upstream flows over the past 25 years, the extent to which flow benefits the ecosystem or fish abundance is not well understood.

In many Delta tributaries, there has been extensive scientific work that has greatly increased the understanding of the conditions that migratory fish such as salmon and steelhead need to thrive while they spawn and rear in those tributaries. Similar efforts must be undertaken to address the decline of native species in the Delta.

Specifically biological models, such as life-cycle models, need to be developed to determine how fish abundance is affected by various factors, including flow. Development of this important and currently absent scientific tool will inform existing regulatory processes and allow for a more refined and effective balancing of beneficial uses pursuant to the reasonable use doctrine under Article X, section two, of the California Constitution and the public trust doctrine consistent with the coequal goals.

Investigating whether addressing other stressors would improve the efficacy of those water investments is fundamental to developing the most efficient approach to the balancing decisions inherent in assessing achievement of the coequal goals.

## Near Term

- Review how other processes that significantly affect and, in many cases, control instream flows in the Delta watershed – including, but not limited to, the San Joaquin River Restoration program, the Yuba River Accord and the American River’s Water Forum Agreement – and assess those processes as possible models for achieving the coequal goals in the Delta.
- Direct the Delta Science Program to develop life cycle models for each species of concern to begin to uncover the mechanisms for species responses to environmental conditions.
- Direct the Delta Science Program to develop a Science Plan that prioritizes the investigation of questions regarding the relationship of the benefits of flow management to the reduction or other stressors and understanding whether undertaking the latter would reduce the magnitude of proscriptions related to the former.
- Direct the Delta Science Program to evaluate how changes in Delta geometry can positively affect locations of salinity gradients for given flows.

- Recognize that the “Area of Origin” statutes and the Delta Protection Act (Delta Reform Act § 12200 et seq.) were specifically enacted to protect in-basin and legal in-Delta water users.

#### Medium Term

- Consult with the SWRCB in its selection of “high priority” rivers and streams of significant magnitude within Delta watershed on which to conduct new streamflow studies to focus actions that will benefit fish migrating through the Delta but do so in the most fiscally and water efficient manner.
- Provide the ISB support to finalize peer-reviewed life cycle or other biological models developed by the Science Program.



## **VI. Chapter 6 - Improve Water Quality to Protect Human Health and the Environment**

Delta Reform Act § 85020. The policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

- (a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.
- (b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.
- (c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.
- (d) Promote statewide water conservation, water use efficiency, and sustainable water use.
- (e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.
- (f) Improve the water conveyance system and expand statewide water storage.
- (g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.
- (h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

Delta Reform Act § 85302. (a) The implementation of the Delta Plan shall further the restoration of the Delta ecosystem and a reliable water supply.

(b) The geographic scope of the ecosystem restoration projects and programs identified in the Delta Plan shall be the Delta, except that the Delta Plan may include recommended ecosystem projects outside the Delta that will contribute to achievement of the coequal goals.

(c) The Delta Plan shall include measures that promote all of the following characteristics of a healthy Delta ecosystem:

- (1) Viable populations of native resident and migratory species.
- (2) Functional corridors for migratory species.
- (3) Diverse and biologically appropriate habitats and ecosystem processes.
- (4) Reduced threats and stresses on the Delta ecosystem.

(5) Conditions conducive to meeting or exceeding the goals in existing species recovery plans and state and federal goals with respect to doubling salmon populations.

(d) The Delta Plan shall include measures to promote a more reliable water supply that address all of the following:

(1) Meeting the needs for reasonable and beneficial uses of water.

(2) Sustaining the economic vitality of the state.

(3) Improving water quality to protect human health and the environment.

(e) The following subgoals and strategies for restoring a healthy ecosystem shall be included in the Delta Plan:

(1) Restore large areas of interconnected habitats within the Delta and its watershed by 2100.

(2) Establish migratory corridors for fish, birds, and other animals along selected Delta river channels.

(3) Promote self-sustaining, diverse populations of native and valued species by reducing the risk of take and harm from invasive species.

(4) Restore Delta flows and channels to support a healthy estuary and other ecosystems.

(5) Improve water quality to meet drinking water, agriculture, and ecosystem long-term goals.

(6) Restore habitat necessary to avoid a net loss of migratory bird habitat and, where feasible, increase migratory bird habitat to promote viable populations of migratory birds.

(f) The council shall consider, for incorporation into the Delta Plan, actions designed to implement the subgoals and strategies described in subdivision (e).

(g) In carrying out this section, the council shall make use of the best available science.

(h) The Delta Plan shall include recommendations regarding state agency management of lands in the Delta.

The Delta presents complex water quality concerns. Along with the other ecosystem attributes, the quality of water in the Delta has changed significantly due to human influence. This influence includes the introduction of foreign chemical compositions. Discharges from municipal treatment plans and stormwater systems introduce constituents to those waterways that can affect their beneficial uses as well. Geographical and geomorphological changes also affect

water quality in the Delta. The regulation of Delta water quality is the authority of the SWRCB and the RWQCBs under the Porter-Cologne Water Quality Control Act, as well as, in some cases, the Department of Pesticide Regulation (“DPR”). The Council should direct the Delta Science Program to focus research on areas of concern in the Delta, the results of which research can support not only the terms of specific permits, but also broader planning efforts like basin plans. Additionally, the Council should identify ways to improve these agencies’ existing processes, which are often overburdened by the sheer volume of individual permits, and appeals of permits, that they must address. The Council should assist these agencies in identifying and addressing Delta-wide issues that may not receive due attention when individual permits are considered.

## **A. Actions and Recommendations**

### **(1) Nutrient Research**

There is substantial concern and dispute concerning the direct or indirect impact of discharges of ammonia and other nutrients on the Delta ecosystem and the Delta’s native fish species. One of the most significant contributions the Council can make on Delta water quality issues is to direct the Delta Science Program to refine the science concerning nutrients to support future consideration by the SWRCB and the San Francisco Bay and Central Valley RWQCBs under the Porter-Cologne Act.

#### Near Term

- Direct the Science Program to review existing studies, and if necessary, undertake or sponsor additional scientific studies on the effects of ammonia and other nutrient discharges on the quality of Delta water and food web that supports native species.

### **(2) Multi-Agency Water Quality Monitoring**

Achievement of the coequal goals will require an evolving understanding of how water quality in the Delta is affecting species of concern because limited water supplies must not be used to address water quality issues that impact the Delta’s ecosystem. Similarly, in cases like *Peabody v. City of Vallejo*, the California Supreme Court interpreted Article X, section two, of the California Constitution to prohibit the unreasonable use of water to address water quality issues. Accordingly, the Council should seek to coordinate state agencies’ actions to develop a monitoring program that will generate the necessary information for those agencies to react appropriately to the Delta’s evolving water quality.

#### Medium Term

- Recommend the DFG, SWRCB, Department of Toxic Substance Control, and DPR develop a monitoring program to assess chemical concentrations in delta water, sediment and wildlife tissue and evaluate the impacts of those concentrations on fish and wildlife populations in the Delta.

### **(3) Prompt NPDES Reviews**

Constituents in treated wastewater discharged from wastewater treatment plants in, near or upstream of the Delta may impact fish species of concern in, or migrating through, the Delta by directly impacting on fish, impacting on their food chain, promoting non-native fish or plants or other avenues. The National Pollutant Discharge Elimination System (“NDPES”) that the RWQCBs implement under the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act is constructed to address such issues because fisheries are designated beneficial uses of the Delta and its tributaries, water quality objectives are designed to protect such beneficial uses and NPDES permits are designed to implement those objectives. The federal Clean Water Act establishes a method for updating NPDES permits because the Act states that they must be renewed every five years.

In reality, however, the RWQCBs often do not review and revise individual NPDES permits every five years. In some cases, it may not be necessary to revise such permits every five years, as where a previous permit has required a permittee to construct new facilities that cannot be completed within five years.

#### Near Term

- Review, and issue a public report on, the timing of NPDES permit renewals relevant to the Delta by the San Francisco Bay and Central Valley RWQCBs.

#### Medium Term

- Consult with the San Francisco Bay and Central Valley RWQCBs to evaluate whether NPDES permits should be reviewed every five years.
- Conduct public reviews of NPDES permitting processes of San Francisco Bay and Central Valley RWQCBs if terms of NPDES permits relevant to the Delta are not being reviewed every five years.

### **(4) Coordination of Regional Water Quality Control Board Plans**

The division of the responsibilities of the San Francisco and Central Valley RWQCBs occurs at the western end of the Delta. Because of the tidal nature of the Bay-Delta system, discharges into the western end of Suisun Bay and the Carquinez Strait can affect the water quality and ecosystems in Suisun Bay, Suisun Marsh and the Delta. Currently, the San Francisco RWQCB and the Central Valley RWQCB may require different discharge standards with respect to discharges that are near each other, and effectively into the same waters when tides are taken into account. Improved coordination between the two RWQCBs is needed to ensure they are not working at odds with each other and with the water quality needs for the Delta.

#### Near Term Action

- Recommend that the SWRCB direct the San Francisco RWQCB and the Central Valley RWQCB to examine their Basin Plans to identify areas of inconsistency in the area between the Carquinez Strait and the Delta to ensure that discharge requirements are coordinated and consistent for the Suisun Bay, Suisun Marsh and Delta regions.

## **(5) Pyrethroids**

Pyrethroids are a class of pesticides that has been increasingly used by households in urban areas as other pesticides have become less acceptable. Pyrethroids reach Delta waterbodies through storm drainage. The use of pyrethroids may be affecting the Delta's ecosystem, but the particular effects are not well understood.

### Near Term

- Direct the Delta Science Program to develop a better understanding of the impacts of pyrethroids on the Delta's ecosystem.
- Conduct public hearings involving the DPR and local agencies to examine methods of ensuring that the use of pyrethroids in the Delta watershed is consistent with their label specifications and to expand integrated pest management ("IPM") programs for residential, agricultural and commercial sectors, including incentives (e.g. tax breaks, reduced permitting costs) to encourage IPM practices.

## **(6) Ensure that actions in the Delta do not conflict with the water quality goals**

Actions in the Delta can affect drinking water quality as well as water quality for the ecosystem. It is important that the SWRCB and RWQCBs consider these factors in addressing activities that can affect the Delta's water quality.

### Near Term

- Recommend that the SWRCB and the RWQCBs apply existing anti-degradation policies (SWRCB Resolution No. 68-16, SWRCB Resolution No. 88-63, 40 Code of Federal Regulations section 131.12) to ensure that activities that can affect the Delta's water quality address any impacts that they have on Delta water quality.
- Exercise the Council's authority as a responsible agency under CEQA to ensure that covered actions minimize or mitigate Delta water quality impacts consistent with CEQA.
- Recommend that the SWRCB, the San Francisco and Central Valley RWQCBs adopt policies giving incentives to improve to the quality of discharged water beyond that required through enhanced treatment or best management practices.
- Recommend the Central Valley RWQCB complete the Central Valley Drinking Water Policy, with appropriate protections for Delta water quality and anti-degradation, as part of its 2013 Basin Plan Amendment.

## VII. Chapter 7 - Reduce Risk to People, Property, and State Interests in the Delta

Delta Reform Act § 85305. (a) The Delta Plan shall attempt to reduce risks to people, property, and state interests in the Delta by promoting effective emergency preparedness, appropriate land uses, and strategic levee investments.

(b) The council may incorporate into the Delta Plan the emergency preparedness and response strategies for the Delta developed by the California Emergency Management Agency pursuant to Section 12994.5.

Delta Reform Act § 85306. The council, in consultation with the Central Valley Flood Protection Board, shall recommend in the Delta Plan priorities for state investments in levee operation, maintenance, and improvements in the Delta, including both levees that are a part of the State Plan of Flood Control and nonproject levees.

Delta Reform Act § 85307. (a) The Delta Plan may identify actions to be taken outside of the Delta, if those actions are determined to significantly reduce flood risks in the Delta.

(b) The Delta Plan may include local plans of flood protection.

(c) The council, in consultation with the Department of Transportation, may address in the Delta Plan the effects of climate change and sea level rise on the three state highways that cross the Delta.

(d) The council, in consultation with the State Energy Resources Conservation and Development Commission and the Public Utilities Commission, may incorporate into the Delta Plan additional actions to address the needs of Delta energy development, energy storage, and energy distribution.

Delta Reform Act § 85309. The department, in consultation with the United States Army Corps of Engineers and the Central Valley Flood Protection Board, shall prepare a proposal to coordinate flood and water supply operations of the State Water Project and the federal Central Valley Project, and submit the proposal to the council for consideration for incorporation into the Delta Plan. In drafting the proposal, the department shall consider all related actions set forth in the [Delta Vision] Strategic Plan.

Delta Reform Act § 29702. The Legislature further finds and declares that the basic goals of the state for the Delta are the following:

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

(b) Protect, maintain, and, where possible, enhance and restore the overall quality of the Delta environment, including, but not limited to, agriculture, wildlife habitat, and recreational activities.

(c) Ensure orderly, balanced conservation and development of Delta land resources.

(d) Improve flood protection by structural and nonstructural means to ensure an increased level of public health and safety.

The Delta Reform Act affirms the importance of improving flood protection to the continued sustainability of the Delta in furthering the coequal goals. Protecting the unique values of the Delta by means of both structural means (i.e., levees) and nonstructural means (i.e., floodplains and floodways) is a strategy that complements improved water supply reliability, ecosystem restoration, and the agricultural character of the Delta, for only with effective flood management can these various goals be attained. Specifically, maintenance of reliable flood system capacity is necessary for the future of rural communities and the agricultural viability in the Delta is dependent upon the ability to plan and maintain a resilient flood control system that is managed in a sustainable manner.

Flood protection must be the paramount purpose of the existing levees, bypasses, and Sacramento or San Joaquin River Flood Control Project facilities. To protect public safety, other elements of the Delta Plan or other uses of these facilities must not degrade, diminish or impair flood system performance, capacity or operations/maintenance. Moreover, other elements of the Delta Plan must not redirect mitigated flood impacts from one area to another. To meet these stringent standards for the protection of public safety, agricultural productivity, and infrastructure investments, the Delta Plan should use the forthcoming Central Valley Flood Protection Plan and the State Plan of Flood Control as the foundation for an integrated and comprehensive flood management program that encompasses facilities in the Delta and in upstream areas.

Levees and channels are the most apparent defining feature in the Delta. Levees are an essential structural component of the current configuration of the Delta region, providing protection to people, property and resources of statewide significance. Objectives declared as inherent in the coequal goals include protection and enhancement of the Delta's unique cultural, recreational and agricultural values of the Delta as an evolving place, and to reduce risks to people, property and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection. Delta levees carry with them a variety of risk factors that can result in levee failure with potentially significant local, regional and statewide negative impacts to the economy, habitat, water quality and supply. Risk reduction is an essential strategy in sustainably accomplishing the coequal goals, and critical so long as through Delta conveyance is the sole mechanism to transport water to the south Delta pumps.

## **A. Actions and Recommendations**

### **(1) Structural Measures**

### Near Term

- Recommend that the Legislature consider permanently authorizing the Delta Levee subventions program (Delta Reform Act §§ 12980 *et seq.*) incorporating the Central Valley Flood Protection Plan and State Plan of Flood Control when these become available. This program aligns local and state interests in flood control and cost-effective levee maintenance and has been a demonstrated success for the past 40 years.
- Recommend DWR consider the goal of elevating all Delta levees to the Hazard Mitigation Plan and then the PL 84-99 design criteria for the purpose of establishing a uniform baseline for flood protection, flood risk reduction, and establishing eligibility for federal assistance in levee rehabilitation and restoration.
- Recommend DWR consider the adoption of risk-based standards based on land use, with the PL 84-99 standard as the minimum goal for all land uses except habitat and wetlands. Agricultural areas should meet the PL 84-99 standard, rural communities should meet a FEMA 100-year standard, and urban areas should meet the new California 200-year standard.
- Recommend DWR evaluate the extent to which flood protection facilities provide benefits to those other than landowners.

### Medium Term

- Direct DWR and other grant funding agencies ensure that bond funds are being used to implement, in accordance with CWC §12986(b), projects needed to meet the risk-based standards.
- Recommend DWR and the USACOE seek additional funding for flood projects.
- Recommend DWR and the USACOE evaluate regulatory, financial and technical impediments to meeting the risk-based standards.
- Recommend DWR develop funding based on the beneficiary pays principle, including public beneficiaries.

### Long Term

- Continue Medium Term measures

#### **(2) Nonstructural Measures**

### Near Term

- Coordinate with the Delta Protection Commission and local governments to assure that development in the Delta conforms to the adopted Delta Land Use and Management Plan.
- Recommend that the Central Valley Flood Protection Board establish designated floodways as an integral part of the Central Valley Flood Protection Plan.
- Direct DWR to conduct an emergency response study to identify a suite of coordinated actions that would minimize water supply disruption following a catastrophic earthquake or flood in the Delta, including coordinated actions among agencies such as local



reclamation districts, DWR, the CVP and other responsible agencies. The study shall include a draft plan and shall be completed by March 2012 and shall be presented to the Council for its consideration. After review by the Council and the Delta Science Program, the Council shall consider the plan for adoption and if adopted, shall direct state agencies to implement the plan.

### Medium Term

- Continue Near Term actions.

### Long Term

- Continue Medium Term actions.

### **(3) Emergency Preparedness**

Emergency Preparedness is the essential component in minimizing the effects of flood. Four necessary components incorporated in an effective emergency response plan include: 1) Preparation, 2) Preemptive action, 3) Response, and 4) Recovery.

### Near Term

- Recommend the USACOE and DWR prepare, not later than December 31, 2012, a map of the Central Valley floodplain for various design storm events and various levels of sea level rise so that local agencies can engage in appropriate emergency planning.
- Recommend the USACOE, DWR, the RWQCB, NMFS, and USFWS, at least, develop a streamlined plan not later than December 31, 2012 for dredging Delta channels.
- Recommend the Legislature expand and fund the activities that were authorized under SB 27 and, in particular, should fund emergency response improvements such as the development of a coordinated and specific emergency response plan for the Delta and the creation of regional stockpiles of materiel and equipment for emergency response (e.g., medical supplies, drinking water, rock and other supplies needed to quickly close a breached levee).
- Recommend each local agency with emergency response and flood protection responsibilities prepare coordinated emergency response plans and submit those plans to the USACOE and the Central Valley Flood Protection Board for review and comments, no later than December 31, 2012. These plans could include the following: (a) a communication plan and authority matrix identifying parties responsible for specific emergency response actions; (b) a pre-drafted letters needed to authorize emergency responses or request assistance from other agencies and entities; (c) a coordinated action plan to minimize the disruption of essential public services; and (d) a discussion of logistical challenges potentially limiting emergency response (road flooding, transportation of stockpiled rock, barge limitations, etc) and strategies to minimize logistical obstacles. These plans should be updated every other year at least.
- Convene a working group composed of DWR, local governments, and the Little Hoover Commission to examine the processes that DWR (and other state agencies) have used to

award and distribute bond funds to determine whether and how the process can be streamlined to both distribute funds more quickly, and to identify projects with the greatest return on investment, while ensuring strict accountability for the use of public funds. The working group should report to the Council no later than December 31, 2013.

### Medium Term

- Continue Near Term actions.

### Long Term

- Continue Medium Term actions.

#### **(4) Financing of Local Flood Management Activities**

See Chapter 9.

#### **(5) Reservoir Reoperation**

See Chapter 4.

## **VIII. Chapter 8 - Protect and Enhance the Unique Cultural, Recreational, Natural Resources, and Agricultural Values of the California Delta as an Evolving Place**

Delta Reform Act § 85301. (a) The commission shall develop, for consideration and incorporation into the Delta Plan by the council, a proposal to protect, enhance, and sustain the unique cultural, historical, recreational, agricultural, and economic values of the Delta as an evolving place, in a manner consistent with the coequal goals. For the purpose of carrying out this subdivision, the commission may include in the proposal the relevant strategies described in the [Delta Vision] Strategic Plan.

(b) (1) The commission shall include in the proposal a plan to establish state and federal designation of the Delta as a place of special significance, which may include application for a federal designation of the Delta as a National Heritage Area.

(2) The commission shall include in the proposal a regional economic plan to support increased investment in agriculture, recreation, tourism, and other resilient land uses in the Delta. The regional economic plan shall include detailed recommendations for the administration of the Delta Investment Fund created by Section 29778.5 of the Public Resources Code.

(c) For the purposes of assisting the commission in its preparation of the proposal, both of the following actions shall be undertaken:

(1) The Department of Parks and Recreation shall prepare a proposal, for submission to the commission, to expand within the Delta the network of state recreation areas, combining existing and newly designated areas. The proposal may incorporate appropriate aspects of any existing plans, including the Central Valley Vision Implementation Plan adopted by the Department of Parks and Recreation.

(2) The Department of Food and Agriculture shall prepare a proposal, for submission to the commission, to establish market incentives and infrastructure to protect and enhance the economic and public values of Delta agriculture.

(d) The commission shall submit the proposal developed pursuant to subdivision (a) to the council. The council shall consider the proposal and may include any portion of the proposal in the Delta Plan if the council, in its discretion, determines that the portion of the proposal is feasible and consistent with the objectives of the Delta Plan and the purposes of this division.

A key goal of the Delta Reform Act is to maintain the economic vitality of the state, which depends on water that flows through the Delta. The portion of the Act that concerns the Delta Plan specifically requires that the Plan “promote a more reliable water supply” with a goal of “sustaining the economic vitality of the state.” (Delta Reform Act § 85302(d)(2).) This statewide goal applies to the Delta no less than to the rest of the state. Like the rest of the state, the Delta is evolving. The Act specifically recognizes that the Delta is an evolving place. (Delta

Reform Act § 85054.) As with the rest of the state, the Act seeks to promote not any specific economic activity in the Delta, but rather the Delta's economic vitality over the long-term.

A primary tool by which the Act seeks to address the Delta's economy is the Delta Protection Commission's development of an economic sustainability plan. The Act then states that the Council "may include any portion of the proposal in the Delta Plan if the council, in its discretion, determines that the portion of the proposal is feasible and consistent with the objectives of the Delta Plan and the purposes of this division." (Delta Reform Act § 85301(d).) The Delta Protection Commission has not yet submitted its plan to the Council, but, given that the Delta Reform Act states that the Delta Plan's objectives are relevant to the Council's review of the Commission's plan, this Alternate Delta Plan states certain objectives to be considered when the Council considers that plan. These objectives are as follows:

- A healthy and sustainable level of economic activity in the Delta that supports its unique cultural, recreational, natural resource and agricultural values, as identified in the Delta Reform Act; and
- Reflect that the Delta, because of its unique geographic location and history, its location at the center of California's water delivery system, and its place in California's dynamic economy, is a vital and evolving place. The Delta is especially subject to intense pressures related to land use, California's water delivery system, the need to restore its ecosystem, and risks associated with levees and climate change.

## **A. Actions and Recommendations**

### **(1) Economic Sustainability**

As noted above, the coequal goals must be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource and agricultural values of the Delta as an evolving place. These values rely, in large part, upon ensuring the Delta's economic health and sustainability over the long term, which must therefore be considered as a key measure of the success of the Delta Plan. Indeed, it is impossible to imagine the Delta Plan succeeding without a healthy and sustainable Delta economy. Success will require local involvement, input, and decision-making in the Delta.

Each of the unique values identified – cultural, recreational, natural resource and agricultural – are dependent on the maintaining a stable, expandable and robust economic climate within the Delta. The Delta Protection Commission is solely responsible for the development of an economic sustainability plan for the Delta with the Council reviewing that plan for inclusion in the Delta Plan. The Commission's economic sustainability plan must respect and seek to protect and enhance the Delta's economic vitality, as sustainability of the Delta's economy is necessary to achieve the coequal goals.

#### Near Term

- The Delta Protection Commission shall submit its Economic Sustainability Plan to the Council for its consideration.

- The Council should incorporate into the Delta Plan the elements of the Delta Protection Commission’s Economic Sustainability Plan that are feasible and consistent with the Delta Plan.
- The Council should recommend the Commission include the following elements in the Economic Sustainability Plan:
  - 1) The Commission should propose and the Council should consider for inclusion in the Delta Plan a statement that all Delta resources must be protected and enhanced in order to create a sustainable and viable Delta. (Water Code §85302)
  - 2) The Commission should prepare and the Council should consider for inclusion in the Delta Plan provisions to preserve agriculture as a primary land use and economic driver in the Delta, recognizing that traditional farming communities provide stability and economic sustainability for the Delta. The meandering channels of the Delta have been recognized as part of its character and part of its sense of “place” by the Legislature in Water Code §12981(b).
  - 3) The Commission should propose and the Council, working collaboratively with local governments in the Delta, should consider for inclusion in the Delta Plan provisions that develop a reliable and sustainable permanent mechanism and funding to replace local government revenues (i.e., taxes, assessments, fees/charges) that are lost if those losses occur as a result of the acquisition or conversion of lands to habitat, infrastructure and other activities identified in the Delta Plan, including, but not limited to BDCP.
  - 4) The Commission should propose and the Council should consider for inclusion in the Delta Plan provisions that explicitly acknowledge affected local governments’ authority over land uses, revenues, public health and safety, economic development within their boundaries.
  - 5) The Commission should propose and the Council should consider for inclusion in the Delta Plan provisions that explicitly acknowledge the role local governments (including counties, cities and special districts) have under California’s Constitution, as they are uniquely equipped to effectively manage these processes. Local governments are responsible to advocate for the interests of the represented communities.
  - 6) The Commission should propose and the Council should consider for inclusion in the Delta Plan provisions that acknowledge the important role of local governments does not detract from the Council’s role in overseeing consistency reviews; instead, acknowledging the role of local governments bolsters the Council’s role as the one agency looking at the “big picture” of the Delta from a statewide perspective, rather than attempting to replace or duplicate the functions of local government. In this way, collaboration with local governments is consistent with and implements the Delta Vision Strategic Plan.

### Medium Term

- Continue Medium Term actions.

### Long Term

- Continue Medium Term actions.

## **(2) Proactive Approaches to fulfilling ESA/CESA responsibilities in the Delta**

Currently, substantial portions of the Delta are owned by public agencies for the purpose of habitat restoration. Such projects should initially be implemented on those lands. Obtaining the voluntary assistance of landowners and other interests in the Delta will be important for making improvements to the Delta ecosystem. Such landowners and interests, however, may be unwilling to provide that assistance if their voluntary efforts could result in increased regulatory burdens under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). The primary means to address this concern is for state and federal resources agencies to provide ESA/CESA take protection to those landowners and interests, and assumption of the financial responsibility for relocations and protective devices necessary to meet obligations under of ESA/CESA that result from restoration activities of the BDCP and Delta Plan. The development and execution of such agreements should be part of the Delta Plan and BDCP restoration project permits and expedited.

### Near Term

- Convene a collaborative working group composed of representatives of Delta landowners, local governments, and the parties to BDCP to develop two forms of agreement for habitat restoration projects in the Delta: a “no surprises/safe harbor” implementing agreement for Delta landowners or local governments that wish to collaborate in the creation of habitat, and a “good neighbors” implementing agreement for Delta landowners or local governments that own property or which have facilities in the vicinity of proposed habitat restoration projects. This working group should be charged with reaching agreement on these forms of agreement no later than December 31, 2013. These implementing agreements should, in the case of “no surprises/safe harbor” provide substantial incentives to encourage voluntary participation in habitat restoration efforts, and in the case of “good neighbor” provide enforceable assurances that landowners or local governments will not be limited in the manner in which they can operate facilities or use property.
- There are a number of successful habitat projects already being implemented in the Delta, such as in Suisun Marsh, the Yolo Basin Wildlife Area and the Consumnes River area. In addition, the Delta counties have all developed habitat conservation plans/natural community conservation plans to protect the Delta ecosystem. The Delta Plan should not interfere with or impair these and other similar local programs.
- Recognize and honor the letter and spirit of existing Delta assurances such as the North Delta Water Agency’s contract with the State of California. The Delta Plan should

recommend that DWR and/or other state agencies enter into similar agreements with other agencies/interests in the Delta, for appropriate consideration, thereby providing those agencies with assurances that current legal activities, cultural practices, etc. can be maintained into the future.

#### Medium Term

- If incidental take protections are not being provided, recommend appropriate legislation.

#### Long Term

- Continue Medium Term actions.

## **IX. Chapter 9 – Finance Plan Framework to Support Coequal Goals**

Delta Reform Act 85210. The Council has all of the following powers:

- (a) To sue or be sued.
- (b) To enter into contracts.
- (c) To employ the services of public, nonprofit, and private entities.
- (d) To delegate administrative functions to council staff.
- (e) To employ its own legal staff or contract with other state or federal agencies for legal services, or both. The council may employ special legal counsel with the approval of the Attorney General.
- (f) To receive funds, including funds from private and local governmental sources, contributions from public and private sources, as well as state and federal appropriations.
- (g) To disburse funds through grants, public assistance, loans, and contracts.

[This language is found in Part 4, Chapter 2 of the Delta Reform Act under the Mission, Duties, and Responsibilities of the Council; there is no discussion of funding or finance in Delta Reform Act chapter dedicated to the Delta Plan.]

The finance plan supporting the Delta Plan must be consistent with the beneficiary pays principle, widely supported by those asked to pay for it, and capable of adjusting to changing circumstances. As part of the 2009 comprehensive water legislation package, the legislature placed an \$11.14 billion bond on the November 2012 ballot, which if passed would provide substantial funds for many activities called for in the Delta Plan. In addition, if the BDCP is incorporated into the Delta Plan consistent with the statutory requirements of the Act it will include a significant financing component for the actions to be undertaken under its auspices and pursuant to the long-term assurances it will provide to its permittees, which will provide a major proportion of the funds necessary under a long-term finance plan for the broader Delta Plan. The primary needs of the Delta Plan in the near-term is to develop a financing mechanism for the next few years until long-term finance requirements will be better understood and the voters' decision regarding the bond will be known.

### **A. Actions and Recommendations**

#### **(1) Beneficiary Pay**

##### Near Term

- The most important near-term action required for a successful long-term finance plan is the development of a Delta Plan that will significantly advance the coequal goals while protecting and enhancing Delta as an evolving place. For a successful finance plan, the Delta Plan must be broadly supported among those entities expected to pay for it.
- The 2012 water bond contains substantial financing for key elements of the Delta Plan, including local resource development and improvements to water use efficiency, environmental investments in habitat and watersheds, and the public benefits of storage. If the bond passes, the Council will need to develop recommendations for the effective expenditure of those funds to further the achievement of the coequal goals. This Alternate



Delta Plan contains many of the necessary recommendations. If the bond does not pass, the Council will need to develop a finance plan as part of an update to the Delta Plan.

- Ecosystem restoration/recovery actions, beyond specific project mitigation requirements, may provide general benefit to California and the nation and may be funded accordingly through General Obligation bonds (including the 2012 bond), General Fund revenues, federal appropriations or voluntary agency contributions.
- Ecosystem restoration/recovery actions linked to and a necessary part of a larger package (for example, a restoration activity taken in lieu of another activity that is thereby avoided) or are otherwise required should be paid for by the beneficiary of that activity.
- State agency actions to develop and advance the Delta Plan, including those of the Council, should be funded by the General Fund. In particular, the Council as a coordinating and integrating agency should not have a need for a large staff or budget. Because the activities of the Council and staff are intended to broadly benefit the environment and water supply throughout California, their expenses are appropriately paid for by the general fund.

#### Medium Term

- Prior to the first five (5) year update of the Delta Plan, regardless of the outcome of the bond election, targeted finance plans should be developed for major Delta Plan activities recognizing that a broad base of parties have responsibility for costs, not just water users:
  - a. Water quality improvements
  - b. Habitat restoration
  - c. Flood risk reduction
  - d. Regional self reliance improvements
  - e. Water conveyance
  - f. Roadway and utility service risk reduction
  - g. Sport and commercial fisheries
  - h. Wastewater discharges
- All Central Valley Flood Protection Plan and BDCP actions will be funded pursuant to those plans.

## Glossary of Agencies and Terms

<b>BDCP</b>	Bay-Delta Conservation Plan
<b>CASGEM</b>	California Statewide Groundwater Elevation Monitoring
<b>CESA</b>	California Endangered Species Act
<b>CVFPB</b>	Central Valley Flood Protection Board
<b>CVP</b>	Central Valley Project
<b>CWC</b>	California Water Commission
<b>DBW</b>	Department of Boating and Waterways
<b>DFG</b>	Department of Fish and Game
<b>DSP</b>	Delta Science Program
<b>DPH</b>	Department of Public Health
<b>DPR</b>	Department of Pesticide Regulation
<b>DTSC</b>	Department of Toxic Substance Control
<b>DWR</b>	Department of Water Resources
<b>ESA</b>	Federal Endangered Species Act
<b>FERC</b>	Federal Energy Regulatory Commission
<b>HCP</b>	Habitat Conservation Plan
<b>ISB</b>	Delta Independent Science Board
<b>NCCP</b>	Natural Community Conservation Plan
<b>NMFS</b>	National Marine Fisheries Service
<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>PFMC</b>	Pacific Fisheries Management Council
<b>Reclamation</b>	United States Bureau of Reclamation
<b>RWQCB</b>	Regional Water Quality Control Board
<b>SWRCB</b>	State Water Resources Control Board

**USACOE** United States Army Corps of Engineers  
**USGS** United States Geological Survey  
**USFWS** United States Fish and Wildlife Service