

State of California Delta Stewardship Council

California Code of Regulations, Title 23. Water Division 6. Delta Stewardship Council Chapter 2. Consistency with Regulatory Policies Contained in the Delta Plan Article 1. Definitions Section 5001. Definitions and

Article 3. Consistency with the Regulatory Policies Contained in the Delta Plan Section 5012. Prioritization of State Investments in Delta Levees and Risk Reduction

Initial Statement of Reasons

Summary of Proposal

The Delta Stewardship Council (Council) proposes to amend California Code of Regulations, Title 23, section 5012 (“Section 5012”) *Prioritization of State Investments in Delta Levees and Risk Reduction* to incorporate the Delta Levees Investment Strategy (DLIS). The Council also proposes to amend California Code of Regulations, Title 23, section 5001 (“Section 5001”) *Definitions* to add definitions for terms used in Section 5012.

Background and Authority

This proposed rulemaking action implements, interprets, and makes specific certain provisions of the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) (Wat. Code, § 85000 *et seq.*). The Delta Reform Act requires the Council to adopt and implement a legally enforceable long-term management plan for the Sacramento-San Joaquin Delta (Delta) to further the coequal goals for the Delta of “providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem” to “be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.” (Wat. Code, §§ 85001(c) and 85300(a); the coequal goals are set forth in Wat. Code, § 85054.) The Delta Plan also furthers the State of California (State) policies specified in Water Code sections 85020 through 85023 of the Delta Reform Act, which include: providing for the sustainable management of the Delta ecosystem, a more reliable water supply for the State, and protecting and enhancing the quality of water supply from the Delta, as well as reducing risks to people, property, and State interests through appropriate land use and flood protection. State interests in the Delta include the economic and social well-being of Californians, environmental protection, use and conservation of resources, public access and recreation, habitat restoration and enhancement, water quality, and flood protection.¹

¹ Delta Stewardship Council (Council). *The Delta Plan: Ensuring a reliable water supply for California, a healthy Delta ecosystem, and a place of enduring value*. May 2013.

Pursuant to the Delta Reform Act, the Council adopted the Delta Plan as a comprehensive, long-term management plan for the Delta. The Delta Plan provides guidance and recommendations to State and local agencies on actions they may take to further the coequal goals for the Delta and implement the subgoals and strategies for the Delta set forth in the Delta Reform Act. (Wat. Code, §§ 85059 and 85300.) The Delta Plan also includes regulatory policies with which State and local public agencies are required to comply. (Wat. Code, § 85210(i).) The Reform Act grants the Council regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh, which are referred to as covered actions; State and local agencies are required to demonstrate consistency with the applicable regulatory policies (which are incorporated into the Delta Plan) when carrying out, approving, or funding a covered action. (Wat. Code, §§ 85022(a) and 85057.5.)

The Delta Reform Act also requires the Delta Plan to 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 (Wat. Code, § 85305(a)) and to recommend priorities for State investments in levee operation, maintenance, and improvements in the Delta, including both project levees (which are a part of the State Plan of Flood Control) and nonproject levees (which are not a part of the State Plan of Flood Control). (Wat. Code, § 85306.)

Water Code section 85210(i) authorizes the Council to adopt regulations or guidelines as needed to carry out its powers and duties; Water Code section 85210(h) grants the Council the power “to request reports from state, federal, and local governmental agencies on issues related to the implementation of the Delta Plan”; Water Code section 85306 authorizes the Council, in consultation with the Central Valley Flood Protection Board (CVFPB), to recommend priorities for state investments in levee operation, maintenance, and improvements in the Delta. This action is proposed to implement, interpret, and make specific the following: sections 85020, 85022, 85054, 85057.5, 85225, 85300, 85305, 85306, 85307, and 85309 of the Water Code.²

Problem Description for the Proposed Regulatory Amendments

The proposed amendments to Section 5001 and Section 5012 address the Delta Reform Act requirement, set forth in Water Code section 85306, for the Council to recommend priorities for State investments in Delta levee operation, maintenance, and improvements to reduce the likelihood and consequences of levee failures, and to protect people, property, and State interests, while advancing the coequal goals of improving water supply reliability, restoring the Delta ecosystem, and protecting and enhancing the values of the Delta as an evolving place.

The Delta is the largest estuary on the west coast of the Americas and is the hub of the State's major water supply systems. The Delta is home to about 500,000 people and comprises approximately 1,300 square miles of low-lying, flood-prone lands bound by 1,100 miles of levees. Before the Delta was modified by levees and other human

² Sacramento – San Joaquin Delta Reform Act of 2009

structures, the natural flows of the San Joaquin and Sacramento rivers overflowed the Delta's low-lying islands and floodplains for long periods each spring. Today, flooding of the Delta's complex labyrinth of islands and waterways is prevented by levees.

The Suisun Marsh, located immediately downstream from the Delta and north of Grizzly Bay, is the largest contiguous brackish wetland on the west coast of North America. The Suisun Marsh is a critical part of the San Francisco Bay-Delta estuary ecosystem encompassing 116,000 acres, including 52,000 acres of managed wetlands, 30,000 acres of bays and sloughs, 27,700 acres of uplands, and 6,300 acres of tidal wetlands. Suisun Marsh includes about 230 miles of levees that reduce flood risk and help manage flows for wetlands; about 80 miles of these levees protect Delta water quality and terrestrial and aquatic habitat of statewide importance.³

The Delta and Suisun Marsh levees reduce flood risk to people, property, water supply, the Delta ecosystem, and infrastructure of statewide importance. However, levee failure (such as a levee breach) can cause catastrophic flooding, and can potentially cause injury or loss of life, disrupt water supplies, and possibly damage property, infrastructure, and environmental resources of importance to the entire State. Though levee maintenance and improvements over the past three decades have reduced the frequency of levee failures, the State does not have a comprehensive method to prioritize its investments in operations, maintenance, and improvement projects for levees in the Delta and Suisun Marsh. Without a prioritization methodology, the apportionment of public resources into levees may not occur in a manner that reflects a broader, long-term approach.⁴

Water Code section 85306 requires that the Council, in consultation with the CVFPB, recommend priorities for State investments in levee operations, maintenance, and improvements in the Delta, including project levees constructed and maintained under the State Plan of Flood Control (see Wat. Code, § 9602(c)) and non-project levees that are constructed and maintained by local agencies. The proposed regulations identify the priorities for Delta levee investments described in Water Code section 85306, targeting the islands and tracts that present the greatest risk to State interests.

Existing Regulations

The existing Section 5001 defines words and phrases used in the Delta Plan policies and associated regulations and the Delta Reform Act. These definitions are necessary to clarify the meaning of terms used in the regulations.

The Council adopted Section 5012,⁵ incorporated into the 2013 Delta Plan,⁶ to implement Water Code section 85306 and guide discretionary State investments prior to the completion and adoption of the updated priorities included in this amendment.

³ Council. *Delta Levees Investment Strategy. Final Report*. July 2017. p. 1.

⁴ Council. *The Delta Plan: Ensuring a reliable water supply for California, a healthy Delta ecosystem, and a place of enduring value*. May 2013. p. 271

⁵ Section 5012 is also referred to in the Delta Plan as Risk Reduction Policy 1 or RR P1.

⁶ Council. *The Delta Plan: Ensuring a reliable water supply for California, a healthy Delta ecosystem, and a place of enduring value*. May 2013.

Establishing priorities for State investment in Delta levees during the Delta Plan's development required extensive discussions with State agencies, levee maintaining districts, stakeholders and members of the public, as well as additional time due to the complexity of the Delta's flood control systems. The Council's approach was to develop a prioritization methodology based on sound scientific and engineering principles, incorporating appropriate economic and hydrologic data.

Consequently, the 2013 Delta Plan and Section 5012 outline a process to prioritize State investments in levee operation, maintenance, and improvements in the Delta and set forth "interim" priorities for State investment in Delta flood risk management while longer-term guidelines were being established. Section 5012 sets these interim priorities as follows:

(a) Prior to the completion and adoption of the updated priorities developed pursuant to Water Code section 85306, the interim priorities listed below shall, where applicable and to the extent permitted by law, guide discretionary State investments in Delta flood risk management. Key priorities for interim funding include emergency preparedness, response, and recovery as described in paragraph (1), as well as Delta levees funding as described in paragraph (2).

(1) Delta Emergency Preparedness, Response, and Recovery: Develop and implement appropriate emergency preparedness, response, and recovery strategies, including those developed by the Delta Multi-Hazard Task Force pursuant to Water Code section 12994.5.⁷

(2) Delta Levees Funding: The priorities shown in the table are meant to guide budget and funding allocation strategies for levee improvements. The goals for funding priorities are all important, and it is expected that, over time, the California Department of Water Resources (DWR) must balance achievement of those goals. Except on islands planned for ecosystem restoration, improvement of nonproject Delta levees to the Hazard Mitigation Plan (HMP) standard may be funded without justification of the benefits. Improvements to a standard above HMP, such as that set by the U.S. Army Corps of Engineers under Public Law 84-99, may be funded as befits the benefits to be provided, consistent with the DWR's current practices and any future adopted investment strategy.

⁷ Water Code section 12994.5 was repealed by Senate Bill 1443 (Stats. 2010, c.293, §1.)

Categories of Benefit Analysis Table

Goals	Localized Flood Protection	Levee Network	Ecosystem Conservation
1	Protect existing urban and adjacent urbanizing areas by providing 200-year flood protection.	Protect water quality and water supply conveyance in the Delta, especially levees that protect freshwater aqueducts and the primary channels that carry fresh water through the Delta.	Protect existing and provide for a net increase in channel-margin habitat.
2	Protect small communities and critical infrastructure of statewide importance (located outside of urban areas).	Protect flood water conveyance in and through the Delta to a level consistent with the State Plan of Flood Control for project levees.	Protect existing and provide for net enhancement of floodplain habitat.
3	Protect agriculture and local working landscapes.	Protect cultural, historic, aesthetic, and recreational resources (Delta as Place).	Protect existing and provide for net enhancement of wetlands.

(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that involves discretionary State investments in Delta flood risk management, including levee operations, maintenance, and improvements.⁸ Nothing in this policy establishes or otherwise changes existing levee standards.

In addition to the interim priorities set forth in Section 5012, the Delta Plan indicates that as long-term priorities for State investments in levee operation, maintenance, and improvements are developed, State funds for Delta levee projects should focus on the following actions:

- Provide a 200-year level of flood protection for existing urban and adjacent urbanizing areas. (Wat. Code, §9600 *et seq.*)
- Improve the levees that protect aqueducts crossing the Delta and the freshwater pathway to Clifton Court Forebay to improve the reliability of these water supplies.
- Improve other Delta levees not specifically planned for ecosystem restoration to the FEMA HMP guidance level to ensure that the Delta's reclamation districts (RDs) are eligible for public funding for emergency flood fighting, emergency repair, permanent restoration, and/or replacement of eligible damaged nonproject levees.

⁸ Note: Authority cited: Section 85210(i), Water Code. Reference: Sections 85020, 85300, 85305 and 85306, Water Code. California Code of Regulations, Title 23. Waters; Division 6. Delta Stewardship Council; Chapter 2. Consistency with Regulatory Policies Contained in the Delta Plan; Article 3. Consistency with the Regulatory Policies Contained in the Delta Plan.

- Continue to fund and implement the Delta Levees Maintenance Subventions Program to maintain Delta levees.⁹

Application of the interim priorities set forth in Section 5012 allows for the development of a more coordinated, effective approach to reducing Delta flood risk and prioritizing both immediate and long-term State investments, while taking future actions that may be proposed through other planning efforts into account.

Approach to Funding Prioritization for State investments in Delta Levees

In addition to outlining a process to prioritize State investments in levee operation, maintenance, and improvements in the Delta while longer-term guidelines were being established, the Delta Plan also recommended that the Council, in consultation with the DWR, the CVFPB, the Delta Protection Commission, local agencies, and the California Water Commission, implement Water Code section 85306 by developing funding priorities for State investments in Delta levees (Delta Plan Recommendation RR R4).¹⁰ The 2013 Delta Plan described a framework for the DLIS to assess Delta flood risk and included recommendations to: assess existing Delta levee conditions; develop an economics-based risk analysis for each Delta tract and island; conduct ongoing Delta flood risk analyses in an open manner for the public; and develop an updated understanding of Delta hydrology.¹¹

In 2014, the Council began formulating a comprehensive analysis of State interests and risks in the Delta. The analysis began with the development of the document: *State Investment in Delta Levees: Key Issues*,¹² which summarizes relevant statutes and key issues to consider in developing updated priorities for State investment in Delta levees. Following a March 11, 2015, Council workshop with nationally recognized flood management experts, Council staff drafted the *Delta Flood Management Investment Principles*, a document which outlined 12 principles to guide the development of State flood investments.¹³ These principles are:

1. The goals of State law and the Delta Plan—and, therefore, the DLIS—are to better protect life, property, and the State’s coequal goals for the Delta.
2. State funding should not assist further urbanization of flood-prone Delta land.
3. Expenditures should reduce risk. Reducing the probability of flood damage, for example, by improving levees or creating floodways, and lowering the consequences of flooding with actions like evacuation planning or floodproofing are both important.

⁹ Council. 2013. *The Delta Plan: Ensuring a reliable water supply for California, a healthy Delta ecosystem, and a place of enduring value*. May 2013. p. 263.

¹⁰ Council. 2013. *The Delta Plan: Executive Summary, Delta Plan Policies and Recommendations*.

¹¹ Council. 2013. *The Delta Plan: Ensuring a reliable water supply for California, a healthy Delta ecosystem, and a place of enduring value*. May 2013. pp. 262-263.

¹² Council. 2015. *State Investments in Delta Levees. Key Issues for Updating Priorities*. January 2015

¹³ Council. 2015. *Delta Flood Management Investment Strategy Principles Approved as Interim Guidance on July 24, and August 27, 2015*.

4. State flood management investment to protect urban areas is the first priority.
5. Water conveyance and diversion infrastructure is a high priority.
6. State funds must enhance the ecosystem even if projects cost more to the State and to reclamation districts. A programmatic approach that locates ecosystem enhancements where they provide high benefits is preferable.
7. Consider systemwide needs. Specific recommendations of the Delta Plan and the State Plan of Flood Control should be considered. These include the proposed Paradise Cut Bypass recommended in the Delta Plan, and other specified non-project levees.
8. Impacts to the Delta's unique values should be taken into account. These include the Delta's farmlands, historic communities, and natural and cultural resources.
9. State investments in the Delta's flood management system must consider post-flood recovery responses by local, state, and federal agencies and the efficacy and likelihood of financial assistance after flood damage.
10. Owners of non-project levees seeking State funding have the burden to prove that they protect many people and/or assets or help achieve the coequal goals.
11. The DLIS should be based on the Delta Plan principle that beneficiaries pay. The State share of levee improvements should reflect the State interests at stake. Levee maintenance is primarily the responsibility of local reclamation districts and their property owners, not the State. The State should also take into account the ability of local agencies to pay.
12. The State should create a Delta Flood Risk Management Assessment District with the authority to charge all beneficiaries.

In addition to the independent peer review panel, the Council deployed an extensive public engagement process for the development of its methodology for DLIS. Council staff hosted over 70 workshops and public meetings with Delta residents, reclamation district engineers, water supply and ecosystem interests, and other Delta stakeholders. Overall, the development of the DLIS was discussed at over 47 Council meetings.¹⁴ In 2016, in response to the independent peer review panel's recommendations, the Council adopted the report *Risk Analysis Methodology: Delta Levees Investment Strategy*.¹⁵

The DLIS combines risk analysis, economics, engineering, and decision-making techniques to identify funding priorities and assemble a comprehensive investment strategy for Delta levees. The DLIS is based on a methodology that quantifies risk by

¹⁴ Additional information about the strategy development can be found at <http://deltacouncil.ca.gov> or is available by request by contacting Erin Mullin (erin.mullin@deltacouncil.ca.gov).

¹⁵ Council. 2016. *Delta Levees Investment Strategy. Risk Analysis Methodology*. Revised August 2016.

considering the threats to Delta levees and the assets protected by these levees. Specifically, risk is the probability that an adverse event (such as a flood or earthquake) will occur, multiplied by the consequences of that event:

$$\text{Risk} = \text{Probability} * \text{Consequences}$$

Building on the results of previous Delta levee planning efforts, Council staff collected and used existing data and information from numerous sources to evaluate risks to State interests in the Delta. State interests in the Delta are defined by risk to public safety; property and infrastructure; water supply reliability; the Delta ecosystem; and the unique attributes of the Delta as an evolving place.¹⁶

This methodology formed the foundation for the Council to develop a Decision Support Tool (DST) to enable the Council and stakeholders to review and update the data and analysis that form the basis of the risk evaluation. The DST supports deliberations by summarizing information about baseline and future risks, aggregating and displaying risks to State interests.

The DLIS team, with information provided by the DST, identified the islands and tracts that represent at least 80 percent of the total risk to people, property, habitat and water supply. The islands and tracts with the highest risk to State interests were identified as the following:

- People – 17 islands or tracts with expected annual fatalities (EAF) greater than 0.02 lives per year (at least 90 percent of Delta-wide EAF).
- Property – 19 islands or tracts with expected annual damages (EAD) greater than \$900,000 per year (at least 80 percent of Delta-wide EAD).
- Habitat – 20 islands or tracts with more than 89 acres of expected annual loss of habitat (at least 80 percent of Delta-wide expected loss of high-value, non-tidal habitat).
- Water Supply – 23 important water supply islands or tracts with a probability of flooding greater than 0.5 percent per year (1-in-200-year probability).

Using the risk analysis methodology described above and applying a deliberation-with-analysis approach to DST outputs, the Council established a three-tiered priority list for State investments in levee improvements for Delta islands: Very-High Priority islands or tracts, High Priority islands or tracts, and Other Priority islands or tracts. The Very-High Priority islands or tracts category consists of islands characterized as high risk for more than one category of State interest, the High Priority islands or tracts category consists of islands characterized as high risk for at least one category of State interest, and all remaining islands and tracts are categorized as Other Priority islands or tracts.

Through the deliberation-with-analysis process, the Council also identified the following special considerations to further clarify and assign priorities. The special considerations accounted for issues that could go uncaptured by a computer algorithm. They took into

¹⁶ Ibid. Page 10.

account a systems approach of flood risk, State plans for future land use and intrinsic value of legacy communities and prime agricultural farmland. Issues considered were:

- Hydraulic connection between adjacent islands,
- Ecosystem restoration opportunities,
- Delta as a place,
- Suisun Marsh levees, and
- Socially vulnerable communities that are disproportionately at risk from climate change.

Considering the DST outputs and accounting for these special considerations, the Council developed a list of State levee investment priorities that included 33 islands and tracts in the Very-High Priority islands or tracts category, and 50 islands and tracts in the High Priority islands or tracts category for State investments in levee improvements in the Delta and Suisun Marsh.¹⁷

At its August 26, 2021 meeting, the Council adopted Resolution 2021-2 (Resolution) for “Approval of the Delta Plan Amendments Program Environmental Impact Report Addendum and Rulemaking Authorization for Delta Plan Policy RR P1”¹⁸ In the Resolution, the Council (among other things) adopted revisions to the policy set forth in Section 5012, approved an addendum to the Environmental Impact Report for the Delta Plan Amendments,¹⁹ and directed the initiation of this rulemaking process to amend Section 5012 and Section 5001.

Benefits of the Proposed Amendments to the Existing Regulation

The proposed regulations Sections 5001 and 5012 provide a prioritization for investments in levee operation, maintenance, and improvements that targets islands and tracts that pose the greatest risk to State interests. In addition, the proposed regulation, would establish a reporting process that would provide transparency, and a mechanism to track progress towards the State’s risk reduction goals. Other benefits of the proposed amendments include:

- Reduced risk of damage to property and infrastructure, including reduced cost to repair failed levees (19 Very-High Priority or High Priority islands or tracts with expected annual damages (EAD) greater than \$900,000 million per year (at least 80 percent of Delta-wide EAD));
- Reduced annual risk of fatalities from a levee failure (17 Very-High Priority or High Priority islands or tracts with an expected annual fatality rate (EAF) greater

¹⁷ Council. 2021. Council Staff Report, Action Item, *Delta Levees Investment Strategy Update, California Environmental Quality Act Addendum Approval, and Rulemaking Authorization Final Report*.

¹⁸ Council. 2021. *Resolution 2021-02. Approval of the Delta Plan Amendments Program Environmental Impact Report Addendum and Rulemaking Authorization for Delta Plan Policy RR P1* August 26, 2021. Available at: <http://deltacouncil.ca.gov>

¹⁹ Council. 2021. *Delta Plan Amendments Program Environmental Impact Report-Delta Levee Investment Strategy Addendum*. August. Available at: <http://deltacouncil.ca.gov>

than 0.02 lives per year (at least 90 percent of Delta-wide EAF);

- Increased workers' safety by prioritizing the islands and tracts with the largest in-Delta workforce.
- The proposed amendments would prioritize islands and tracts that currently have less than 200-year flood protection and provide a water supply function, increasing State water supply reliability benefits (23 Very-High or High Priority islands or tracts with a probability of flooding greater than 0.5 percent per year (1-in-200-year probability));
- Cultural, recreational, and natural resource, and agricultural qualities that distinguish the "Delta as a Place"; and
- Improving transparency and public awareness of State levee funding decisions via an annual report from DWR on their levee investments.
- Protected high-value non-tidal habitat such as non-tidal marsh, managed marsh, riparian forest and shrub, vernal pools and alkaline seasonal wetlands.

Purpose and Necessity of the Proposed Amendments to the Existing Regulation

Section 5001

The purpose of the proposed amendment to Section 5001 is to add definitions for five new terms used in the proposed amendment to Section 5012: Levee Improvement, Levee Operation and Maintenance, Very-High Priority islands or tracts, High Priority islands or tracts, and Other Priority islands or tracts. Inserting these definitions would adjust the subsequent subsection letters for other terms defined in this Section. The insertion of the new definitions, in order of appearance in the new regulation text, required renumbering of the existing definitions still in use. (5001.v., w., x., y., z., aa., bb., cc. and dd. are now 5001.z., aa., cc., dd., ee., ff., gg., hh., and ii., respectively).

The proposed regulations include the following definitions within Section 5001:

"High Priority islands or tracts" means the tracts of land listed under "High Priority" in the Table (Proposed)²⁰ from the proposed amendment to Section 5012 and depicted in Appendix P to the Delta Plan. This definition is necessary to provide a nexus between the proposed language in section 5012(b) and Table 1.

"Levee improvement" is defined in the proposed amendment as "any activity that is not levee operation and maintenance, and that is intended to reduce the probability of flooding or the addition of a feature that did not previously exist." The definition also provides examples of levee improvement activities. The definition of levee improvement is necessary because the DLIS priorities in section 5012(b) apply to State discretionary investments in Delta levee improvement projects.

²⁰ The figure referred to as Table (Proposed) in this document is the proposed Table 1 in the proposed Section 5012.

“Levee operation and maintenance” is defined as “any activity to retain or maintain the intended functions of flood control facilities and of existing encroachments or needed to keep the system functioning properly.” The definition also provides examples of levee operation and maintenance activities. The proposed definition of levee operation and maintenance is necessary because section 5012(a) excludes levee operation and maintenance from the DLIS priorities.

“Other Priority islands or tracts” means the tracts of land listed under “Other Priority” in the Table (Proposed) from the proposed amendment to Section 5012 and depicted in Appendix P to the Delta Plan. This definition is necessary to provide a nexus between the proposed language in section 5012(b) and Table 1.

“Very-High Priority islands or tracts” means the tracts of land identified under “Very-High Priority” in the Table (Proposed) from the proposed amendment to Section 5012 and depicted in Appendix P to the Delta Plan. This definition is necessary to provide a nexus between the proposed language in 5012(b) and Table 1.

Water Code sections 85210(h) and 85306 are identified in the authorities and references for the proposed amendments to Section 5001. Water Code section 85210(h) gives the Council the authority to request reports from state, federal and local agencies, which is needed for the proposed regulation in section 5012(c). Water Code section 85306 gives the Council the authority to revise the priorities proposed in Sections 5012(a) and 5012(b).

Section 5012

The purpose of the proposed amendment to Section 5012 is to implement and make specific Water Code section 85306 authority to set priorities for State investments in levee operation, maintenance, and improvements.

Section 5012(a): This section is being amended and is necessary because the Council completed the updated priorities pursuant to Water Code section 85306. It states that funding for levee operation and maintenance is a priority. For project levees, funding should be prioritized to ensure that levees are operated and maintained in accordance with federal regulations. For non-project levees, funding should be prioritized to ensure that levees are operated and maintained to protect the Delta’s physical characteristics.

Section 5012(a)(1): This section is being amended and is necessary because the Council completed the updated priorities pursuant to Water Code section 85306. This section prioritizes the operation and maintenance of federally owned levees to meet the State’s obligations under Code of Federal Regulations, Title 33, Part 208.10, applicable federal Operation and Maintenance manuals.

Section 5012(a)(2): This section is being amended and is necessary because the Council completed its adoption of the updated priorities pursuant to Water Code section 85306. This section prioritizes the operation and maintenance of nonproject levees to protect the Delta’s physical characteristics.

Section 5012(b): This section is being amended and is necessary because the Council completed the updated priorities pursuant to Water Code section 85306. It sets forth the DLIS, including levee improvement prioritization identified in Table 1 of the proposed amendment to Section 5012 and depicted in the proposed Appendix P to the Delta Plan (Appendix P provides a map of the DLIS priorities set forth in Table 1, below, of proposed Section 5012; proposed Appendix P, which is composed of Figure 1, is part of this proposed rulemaking as it is expressly referenced in the text of proposed Section 5012(b), and therefore is incorporated into, and made a part of, proposed Section 5012 as if fully set forth herein. Figures 2, 3, and 4, are not included in Appendix P of this rulemaking action.). Table 1 identifies: (1) specific islands or tracts that are located within the legal boundaries of the Delta (defined in Wat. Code, § 12220) and the Suisun Marsh (defined in Pub. Res. Code, § 29101) which are subject to the proposed regulation; and (2) identifies the DLIS priority for each specific island or tract. The maps that illustrate the priorities set forth in Table 1 are depicted in this Initial Statement of Reasons (ISOR), below, as Figures 1 through 4. These maps (Figures 1 through 4) correspond to those in the proposed Appendix P to the Delta Plan and are part of this rulemaking.

To identify specific islands or tracts of property subject to the proposed regulation and identified in Table 1, Council staff reviewed several previous Delta and Suisun Marsh studies, including the following maps and documents:

- Sacramento-San Joaquin Delta Atlas²¹
- Delta Risk Management Strategy, Phase 1. Risk Analysis Report²²
- Map of the Sacramento-San Joaquin Delta and Suisun Marsh prepared by the Flood SAFE Environmental Stewardship and Statewide Resources Office (FESSRO)²³
- Inspection and Local Maintaining Agency Report of the Central Valley State-Federal Flood Protection System²⁴
- Economic Sustainability Plan for the Sacramento-San Joaquin Delta²⁵
- Suisun Marsh Properties Map²⁶
- Map of the Sacramento-San Joaquin Delta²⁷

Additionally, Council staff consulted with reclamation district engineers to develop a comprehensive inventory of islands and tracts, described in detail in the DLIS Risk

²¹ State of California Department of Water Resources (DWR). 1995. *Sacramento San-Joaquin Delta Atlas*.

²² DWR. 2009. *Delta Risk Management Strategy, Phase 1. Risk Analysis Report*. Section 2, p. 17.

²³ DWR. 2013. *Map of the Sacramento-San Joaquin Delta and Suisun Marsh*. Prepared by the Flood SAFE Environmental Stewardship and Statewide Resources Office (FESSRO).

²⁴ DWR. 2013. *Inspection and Local Maintaining Agency Report of the Central Valley State-Federal Flood Protection System*.

²⁵ Delta Protection Commission. 2012. *Economic Sustainability Plan for the Sacramento-San Joaquin Delta*. pp. 61-62.

²⁶ Suisun Marsh Resource Conservation District. 2015. *Suisun Marsh Properties Map*.

²⁷ Council. 2014. *Map of the Sacramento-San Joaquin Delta*.

Analysis Methodology Report.²⁸ Council staff considered all islands, tracts, and boundaries that are located within the legal description of the Delta, Suisun Marsh, and the Federal Emergency Management Agency (FEMA) delineated 0.2 percent annual exceedance probability (AEP) floodplain boundary, often referred to as the “500-year” floodplain boundary. Council staff used a hydrologic unit, or polder, subject to flooding in the event of a levee breach as the unit of analysis. The polders, commonly referred to as islands and tracts, generally conform to islands and tracts with common names on Delta maps, and to Local Maintaining Agencies, or reclamation district boundaries, but not in all cases. Islands and tracts identified as “DLIS-##” in Table 1 from the proposed amendment to Section 5012 and in Delta Plan, Appendix P, are polders in the study area that do not have common names. Once the list was developed, it was again reviewed and refined with input from Council staff, reclamation district engineers, and DWR. Suisun Marsh Resource Conservation District (RCD) staff provided support in delineating islands and tracts in Suisun Marsh.

The project team identified 176 islands and tracts – 131 in the Delta and 45 in Suisun Marsh – to be included in the proposed regulation²⁹. The project team did not include all property within the legal boundaries of the Delta. Examples of tracts of property not included in the inventory include property that is not protected from flooding, such as unleveed in-channel islands, or high ground not subject to flooding in the south Delta. Islands and tracts were grouped into three categories based on their risk, and considering all metrics with equal weights: Very-High Priority islands or tracts, High Priority islands or tracts, and Other Priority islands or tracts based on these criteria:

- Very-High Priority islands or tracts: These islands or tracts are identified as the highest priority because their levees pose the highest risk to lives and property and State interests. Very-High Priority polders have significant risk to more than one category of State interest, or are the subject of special considerations.
- High Priority islands or tracts: These islands or tracts are identified as High Priority because threats to levees protecting these islands and tracts pose lower risks to lives and property and State interests than on the Very-High Priority islands and tracts. High Priority polders have significant risk to at least one category of State interest, or are the subject of special considerations.
- Other Priority islands or tracts: These islands or tracts pose lower risk to lives and property and State interests, either because they have better levees that are less likely to fail, and pose a lower risk due to their lower probability of failure, or because they do not protect significant life, property, or State interests, compared to higher ranked islands and tracts.

²⁸ Council. 2017. *Delta Levees Investment Strategy. Risk Analysis Methodology*. Revised July 2017.

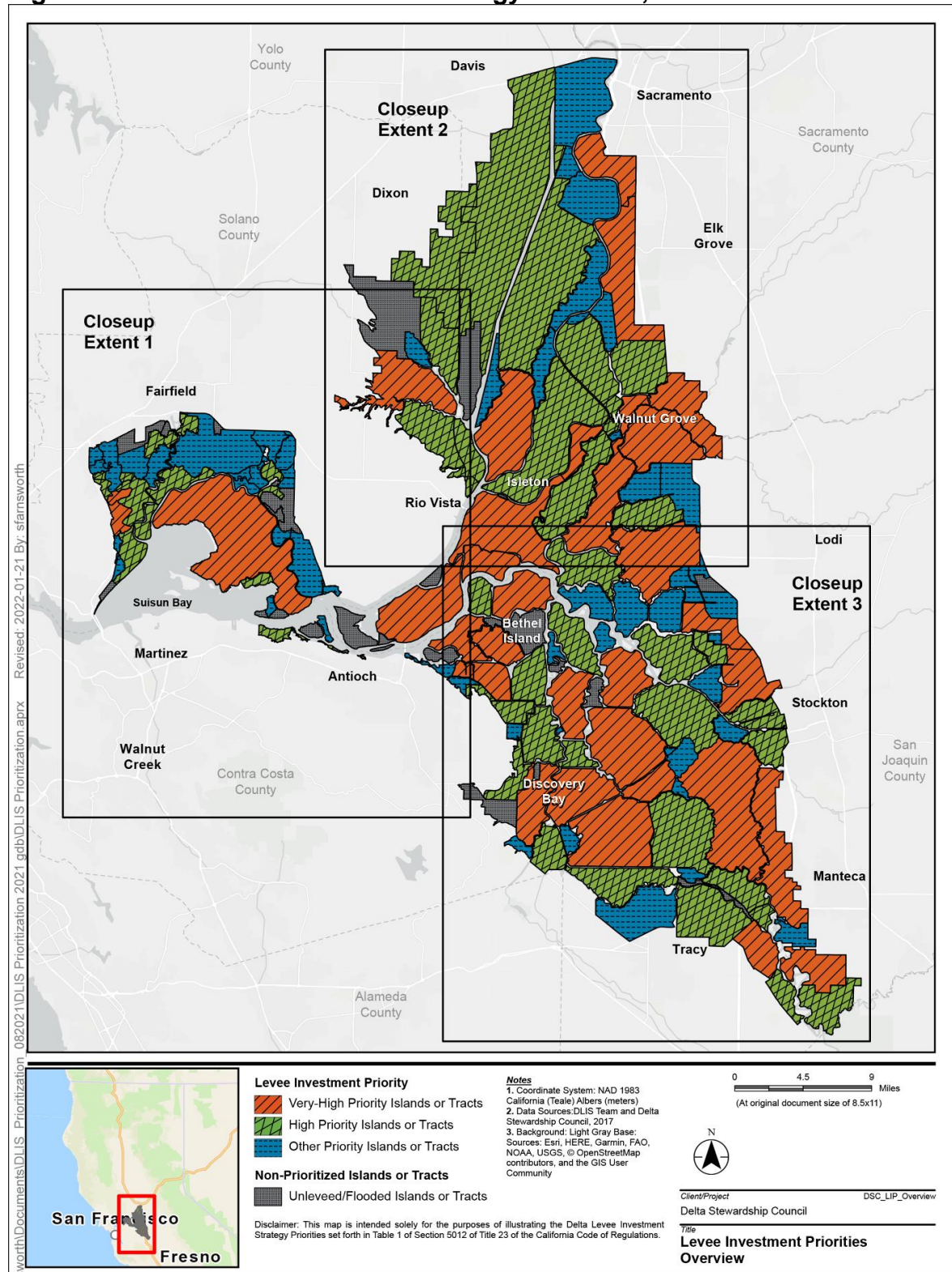
²⁹ More information on how the project team identified the islands and tracts can be found in the *Delta Levees Investment Strategy. Final Report*. July 2017 p. 2.

Table 1 Delta Levee Investment Strategy Priorities³⁰

Very-High Priority	Bacon Island, Bethel Island, Bishop/DLIS-14 (North Stockton), Brannan-Andrus, Byron Tract, DLIS-19 (Grizzly Slough Area), DLIS-28, DLIS-33, DLIS-63 (Grizzly Island Area), Drexler Tract, Dutch Slough, Hasting Tract, Hotchkiss Tract, Jersey Island, Jones Tract (Upper and Lower), Maintenance Area 9 North, Maintenance Area 9 South, McCormack-Williamson Tract*, McDonald Island, McMullin Ranch, Middle and Upper Roberts Island, New Hope Tract, North Stockton, Paradise Junction Reclamation District 17, Ryer Island, Sherman Island, Staten_Island, Terminous Tract, Twitchell Island, Upper Andrus Island, Victoria Island, Webb Tract.
High Priority	Bouldin Island, Brack Tract, Bradford Island, Cache Haas Area, Central Stockton, Clifton Court Forebay, DLIS-01 (Pittsburg Area), DLIS-07 (Knightsen Area), DLIS-08 (Discovery Bay Area), DLIS-20 (Yolo Bypass), DLIS-22 (Rio Vista), DLIS-26 (Morrow Island), DLIS-29, DLIS-30, DLIS-31 (Garabaldi Unit), DLIS-32, DLIS-39, DLIS-41 (Joice Island Area), DLIS-44 (Hill Slough Unit), DLIS-55, DLIS-59, Egbert Tract, Fabian Tract, Glanville, Grand Island, Holland Tract, Honker Bay, Kasson District, Libby McNeil, Little Egbert Tract, Lower Roberts Island, Mandeville Island, Mossdale Island, Netherlands, Palm-Orwood, Paradise Cut, Pearson District, Pescadero District, Rindge Tract, River Junction, Shima Tract, Stewart Tract, Sunrise Club, Tyler Island, Union Island East, Veale Tract, Walnut Grove, Woodward Island, Yolano.
Other Priority	Atlas Tract, Bixler Tract, Canal Ranch Tract, Chipps Island, Coney Island, Dead Horse Island, DLIS-06 (Oakley Area), DLIS-10, DLIS-15, DLIS-17, DLIS-18, DLIS-25, DLIS-27, DLIS-34, DLIS-35, DLIS-36, DLIS-37 (Chadbourne Area), DLIS-40, DLIS-43 (Potrero Hills Area), DLIS-46, DLIS-47, DLIS-48, DLIS-49, DLIS-50, DLIS-51, DLIS-52, DLIS-53, DLIS-54, DLIS-56, DLIS-57, DLIS-62, Drexler Pocket, Ehrheardt Club, Empire Tract, Fay Island, Glide District, Holt Station, Honker Lake Tract, King Island, Lisbon District, Medford Island, Mein's Landing, Merritt Island, Peters Pocket, Pico-Naglee, Prospect Island, Quimby Island, Randall Island, Rio Blanco Tract, Rough And Ready Island, Shin Kee Tract, Stark Tract, Sutter Island, Venice Island, Walthall, West Sacramento, Wetherbee Lake, Winter Island, Wright-Elmwood Tract.

³⁰ This figure is the proposed Table 1 in the proposed Section 5012.

Figure 1. Delta Levee Investment Strategy Priorities, Overview³¹



³¹ Figures 2-4 are for illustrative purposes only and are not included in Appendix P

Figure 2. Delta Levee Investment Strategy Priorities, Extent 1

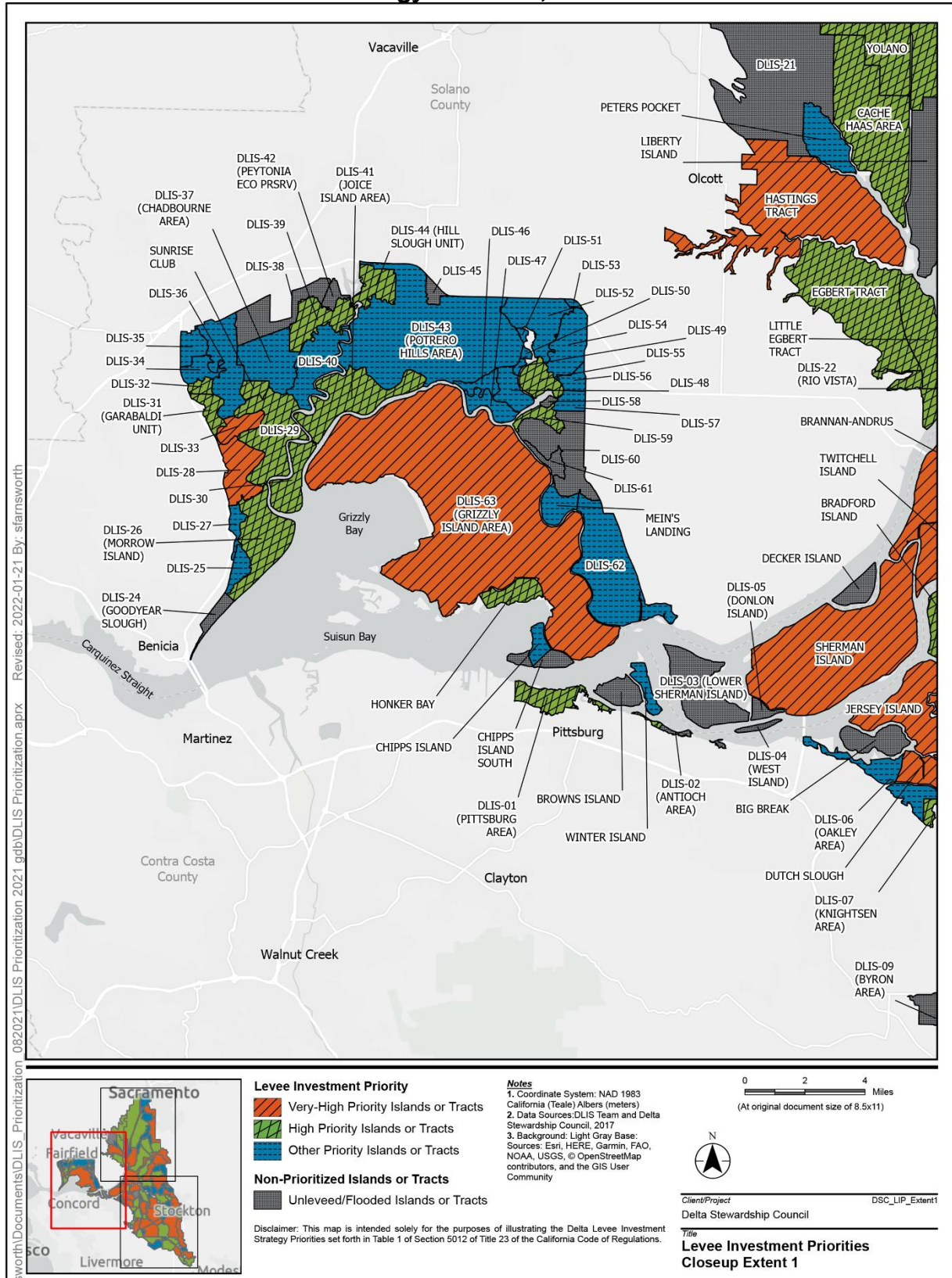


Figure 3. Delta Levee Investment Strategy Priorities, Extent 2

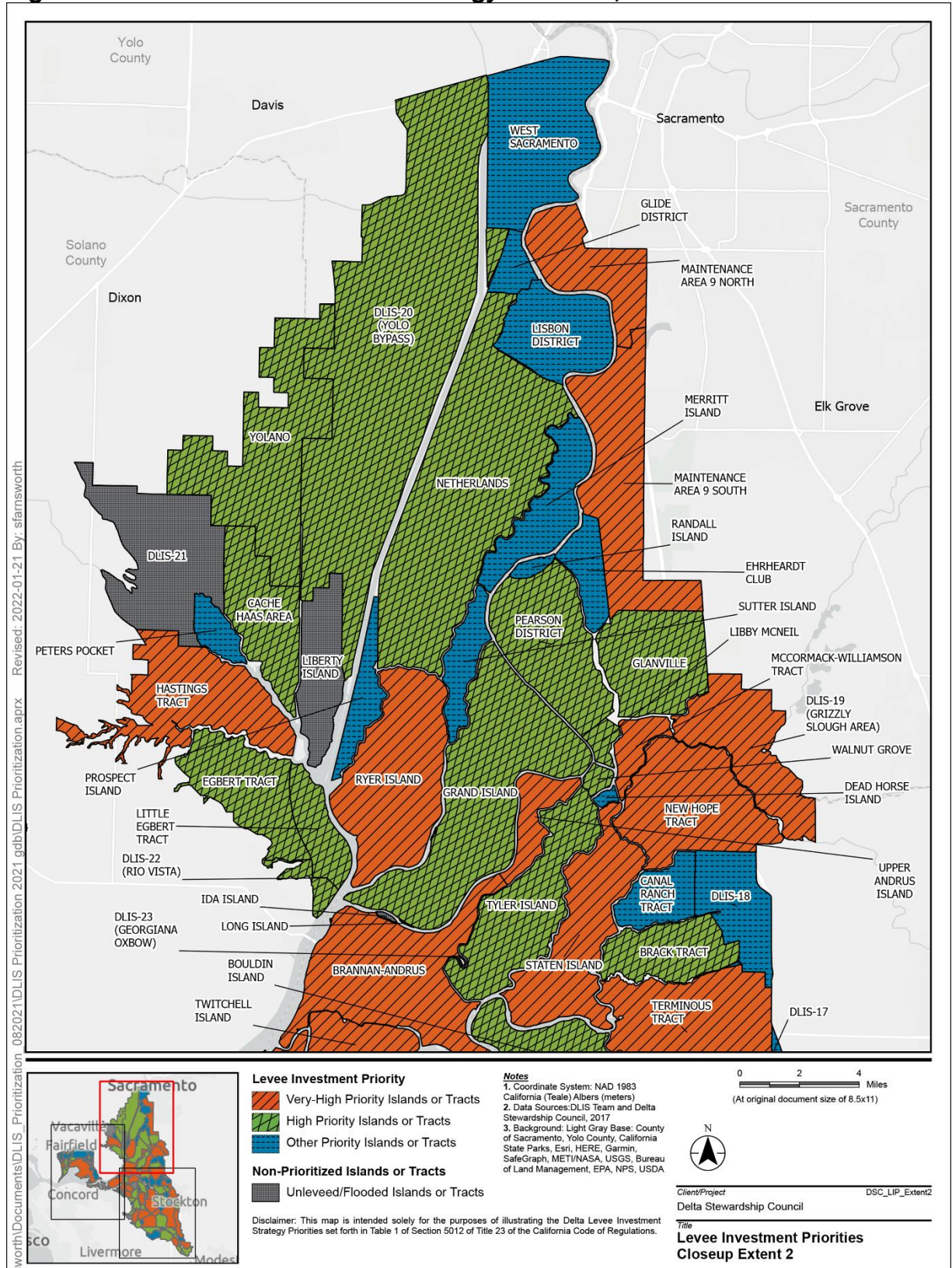
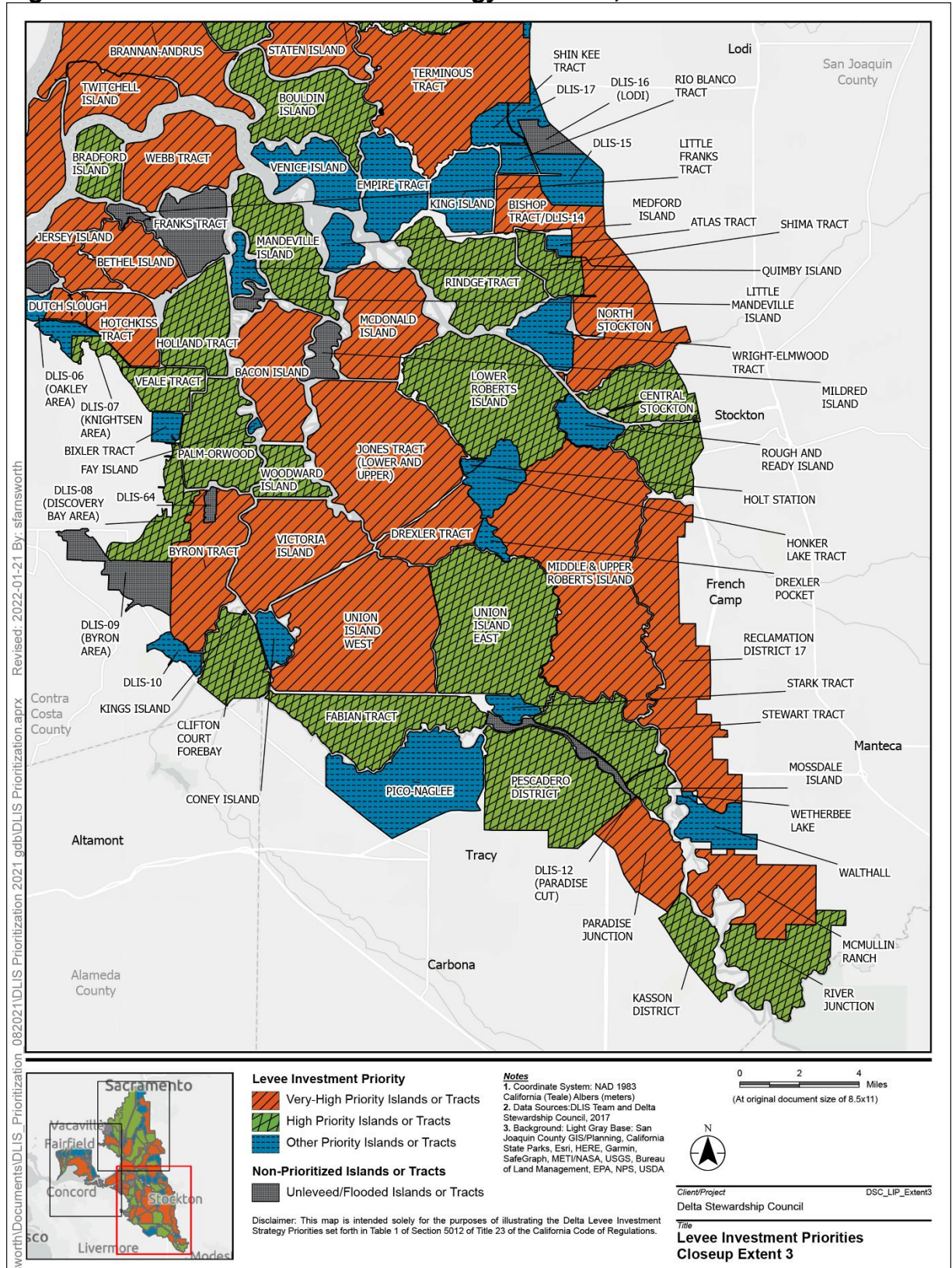


Figure 4. Delta Levee Investment Strategy Priorities, Extent 3



Under the proposed amendment to Section 5012(b), DWR would fund levee improvement projects at Very-High Priority islands or tracts identified in the Table (Proposed) before funding levee improvement projects at High Priority or Other Priority islands or tracts. The proposed amendment also provides that if available funds are sufficient to fully fund levee improvement projects at the Very-High Priority islands or tracts, then levee improvement projects on High Priority islands or tracts may be funded, and after those projects have been fully funded, then levee improvement projects at Other Priority islands or tracts may be funded. Other factors that DWR considers when making levee improvement funding decisions include, but are not limited to, restrictions on the type of project that can be funded with a given authority, a proposed change in land use, or the local agency's ability to share costs.

Table 1 and Figure 1: The purpose of the proposed amendments for Table 1 and Figure 1 is to identify the islands and tracts assigned to each priority, including the physical location of each island and tract. The table and maps are necessary to provide a nexus between the process for funding improvements discussed in Section 5012(b) and the physical locations of the prioritized islands and tracts.

Section 5012(c)(1): This section is being amended and is necessary because the Council completed the updated priorities pursuant to Water Code section 85306. It requires DWR to annually submit a written report to the Council, as well as present the report to the Council, identifying its decisions to award State funds for Delta levee operation, maintenance, repair, rehabilitation, replacement and improvement projects within the legal Delta. Section 5012(c)(1) also requires DWR to submit the written annual report to the Council at least 45 days prior to presenting before the Council. The 45 days allows time for Council staff and the public to review the reduction in risk to State interests before DWR presents the report to the Council.

Section 5012(c)(2): This section is being amended because the Council completed the updated priorities pursuant to Water Code section 85306. It provides language that describes what the report described in section 5012(c)(1) must include. This is necessary so that both DWR and the Council understand what the report must contain. The contents of the report will provide transparency regarding State risk reduction investments and will allow the Council to analyze the benefits of the investments.

Section 5012(c)(2)(A): This section is being amended because the Council completed the updated priorities pursuant to Water Code 85306. It explains that the report described in section 5012(c)(1) shall include a description of State funds provided for each levee operation, maintenance, repair, rehabilitation, replacement, and improvement program funded during the reporting year. This is necessary to provide transparency regarding how the State is investing in risk reduction activities in the Delta.

Section 5012(c)(2)(B): This section is being amended because the Council completed the updated priorities pursuant to Water Code section 85306. It explains that the report described in section 5012(c)(1) shall include a list of each levee improvement project proposal submitted to DWR for funding, regardless of whether DWR awarded funding to the project. This is necessary to provide the Council and the public with an

understanding of the range of proposed projects that DWR considered that fiscal year, and to provide information necessary to describe any variations from the DLIS priorities as specified in section 5012(c)(2)(E) below.

Section 5012(c)(2)(C): This section is being amended because the Council completed the updated priorities pursuant to Water Code section 85306. It explains that the report described in section 5012(c)(1) shall include a list of the improvement projects awarded funding, the funding level awarded, the local cost share, and the applicable DLIS priority of the island or tract where the levee improvement project is located. This is necessary to provide the Council and the public with an understanding of how DWR made its funding awards during that fiscal year, and to provide information necessary to describe any variations from the DLIS priorities as specified in section 5012(c)(2)(E) below.

Section 5012(c)(2)(D): This section is being amended because the Council completed the updated priorities pursuant to Water Code section 85306. It explains that the report described in section 5012(c)(1) shall include a description, for each awarded project, of changes (when completed) to levee geometry, the specific locations of those changes, and expected changes in the level of flood protection provided or standard achieved. This is necessary to allow the Council and the public to understand the flood risk benefits associated with each funding decision.

Section 5012(c)(2)(E): This section is being amended because the Council completed the updated priorities pursuant to Water Code section 85306. It specifies that if DWR awards funds for any levee improvement project that is inconsistent with the DLIS priorities, the report described in section 5012(c)(1) must identify for each project:

- how the funding awarded is inconsistent with the priorities – this is necessary to facilitate Council and public understanding of DWR’s funding decisions;
- why variation from the priorities is necessary – this is necessary to provide transparency regarding DWR’s levee funding decisions, and,
- how the funding nevertheless protects lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities – this is necessary to provide justification for the variation from the DLIS priorities.

Section 5012(c)(2)(F): This section is being amended because the Council completed the updated priorities pursuant to Water Code section 85306. It explains that the report described in section 5012(c)(1) shall include an explanation of DWR’s rationale for projects that were not selected for funding during the reporting year. This is necessary to provide transparency regarding DWR’s levee funding decisions.

Section 5012(c)(2)(G): This section is being amended because the Council completed the updated priorities pursuant to Water Code 85306. It explains that the report described in section 5012(c)(1) shall include a summary of the previously funded levee improvements that were completed during the reporting year. This is necessary to allow the Council to update the DLIS decision support tool with the best available levee conditions to inform future DLIS risk analysis.

Section 5012(d): This section renumbers existing 5012 subdivision (b) to subdivision (d). This is necessary to accommodate proposed changes to the existing regulatory text.

Water Code sections 85210(h) and 85306 are identified in the authorities and references for the proposed amendments to Section 5012. Water Code section 85210(h) gives the Council the authority to request reports from state, federal and local agencies, which is needed for the proposed regulation in section 5012(c). Water Code section 85306 gives the Council the authority to revise the priorities proposed in Sections 5012(a) and 5012(b).

Rationale for Regulatory Amendment

Section 5001

Section 5001 defines terms and phrases used in the Delta Plan regulations and the Delta Reform Act. Proposed amendments to Section 5001 specifically add the following terms used in proposed amendments to Section 5012: “High Priority islands or tracts,” “Levee improvement,” “Levee operation and maintenance,” “Other Priority islands or tracts,” “Very-High Priority islands or tracts,” These new definitions are necessary to clarify the meaning of the terms used in the proposed Section 5012. The definitions will also assist State program managers in determining the prioritization for a proposed activity when funding decisions are being made.

Water Code sections 85210(h) and 85306 are identified in the authorities and references for the proposed amendments to Section 5001. Water Code section 85210(h) gives the Council the authority to request reports from state, federal and local agencies, which is needed for the proposed regulation in section 5012(c). Water Code section 85306 gives the Council the authority to revise the priorities proposed in Sections 5012(a) and 5012(b).

Section 5012

The proposed amendment to Section 5012 is necessary to implement Water Code section 85306, which requires the Council, in consultation with the CVFPB, to recommend priorities for State investments in levee operation, maintenance, and improvements in the Delta, including both project and nonproject levees; carry out the legislative requirement that the Council adopt a legally enforceable long-term management plan for the Delta (Wat. Code § 85001); and carry out the legislative intent of achieving the coequal goals and objectives specified in Water Code sections 85020 through 85023 and 85054. The Delta Reform Act states that, inherent in the coequal goals for management of the Delta, the policy of the State is to achieve the objective of reducing risks to people, property, and State interests in the Delta through effective emergency preparedness, appropriate land uses, and investments in flood protection. (Wat. Code § 85305.)

Proposed Section 5012(a) prioritizes funding for levee maintenance and operation. For project levees, funding should be prioritized to ensure that the levees are operated and maintained to the level required by federal regulations. For nonproject levees, funding

should be prioritized to ensure levees are operated and maintained to protect the Delta's physical characteristics. This provision implements Water Code section 85306, which, in part, directs the Council to recommend priorities for State investments in levee operation and maintenance, including both project and nonproject levees.

Proposed Section 5012(b) sets forth the Delta levees investment strategy, including levee improvement priorities identified in Table 1 and depicted in Appendix P to the Delta Plan. Under the proposed amendment, DWR would fund projects at the Very-High Priority islands or tracts identified in Table 1 before approving projects at High Priority or Other Priority islands or tracts. This provision is necessary because it implements Water Code section 85306, which, in part, directs the Council to recommend priorities for State investments in levee improvements in the Delta, including both project and nonproject levees. The purpose of the proposed amendments for Table 1 and Figure 1 within Section 5012(b) is to identify the islands and tracts assigned to each priority, including the physical location of each island and tract.

Proposed Section 5012(c)(1)) requires DWR to submit a written report to the Council annually identifying its decisions to award State funds for Delta levee operation, maintenance, repair, rehabilitation, replacement, and improvement projects and include specific information in the report. The reporting requirements provide a means for the Council to evaluate whether State investments in Delta levees align with the DLIS priorities, Delta Plan, Delta Reform Act, and coequal goals. The reporting requirement allows the Council to track and ascertain if the DLIS priorities are achieving the intended purpose. The requirement to provide the written report to the Council 45 days before DWR presents the report to the Council is necessary to provide the Council and public with adequate time to review and evaluate the report. This provision implements Water Code section 85210(h), which grants the Council the power, in part, to request reports from state governmental agencies on issues related to the implementation of the Delta Plan.

Proposed Section 5012(c)(2)(E) specifies that if DWR's funding awards for levee improvement projects vary from the DLIS priorities, the annual report must identify how the funding is inconsistent with the priorities; describe why variation from the priorities is necessary; and explain how the funding nevertheless protects lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities. This section is necessary to enable DWR to vary its funding decisions from the DLIS priorities under certain circumstances; circumstances may include, no eligible projects being submitted from the Very-High category for the reporting cycle, or legislative restrictions on how or where funding may be spent. However, DWR must report each such variation, and the reporting requirement requires that DWR justify its funding decisions in light of the established DLIS priorities. This reporting requirement allows for variations from the DLIS priorities under limited circumstances. This provision implements Water Code section 85210(h), which grants the Council the power, in part, to request reports from state governmental agencies on issues related to the implementation of the Delta Plan.

Proposed Section 5012(d) renumbers existing 5012 subdivision (b) to subdivision (d). This is necessary because the proposed regulation would expand the existing regulation to include the amended prioritization and the reporting requirements.

Water Code sections 85210(h) and 85306 are identified in the authorities and references for the proposed amendments to Section 5012. Water Code section 85210(h) gives the Council the authority to request reports from state, federal and local agencies, which is needed for the proposed regulation in section 5012(c). Water Code section 85306 gives the Council the authority to revise the priorities proposed in Sections 5012(a) and 5012(b).

Economic Impact Assessment

When a State agency proposes to amend a regulation that is not a major regulation, Government Code section 11346.3(b) requires the agency to prepare an economic impact assessment to assess whether and to what extent it will affect the following: 1) the creation or elimination of jobs within the State; 2) the creation of new businesses or the elimination of existing businesses within the State; 3) the expansion of businesses currently doing business within the State; and 4) the benefits of the regulation to the health and welfare of the State's residents, worker safety, and environment. **The Council has prepared an *Economic and Fiscal Impact Analysis of Proposed Amendments to Prioritization of State Investments in Delta Levees and Risk Reduction (EFIA)* pursuant to Government Code section 11346.3(b)(1)(A)-(D), which is included as Attachment 1 to this ISOR.**

Based on the analysis contained in the EFIA, the Council makes the following initial determinations:

1. Creation or elimination of jobs within the State: The proposed amendment would have negligible impacts on the creation or elimination of jobs within the State. The total quantifiable cost of the proposed amendments equals an indirect cost of \$212,700 per year, or approximately \$3,900,000 in net present value. This represents the prospective reduction in total land value calculated as the cost of increased EAD on islands and tracts in the Delta. The proposed amendments could reallocate some Delta levee investments to higher priority islands or tracts, but the total expenditure on Delta levee investments would not change. As a result, the proposed regulations are unlikely to create jobs within the state. The change in land value does not directly affect jobs and does not cause any quantifiable indirect or induced economic effects that would significantly affect regional employment. Land is typically an asset and not a separate value-added economic activity that would affect regional employment. A decrease in land values could cause small economic impacts if landowners change spending habits as a result of this change in asset value, and through changes in commission for real estate transactions through lower commission from land sales. This change is modeled as a reduction in NAICS 530210, real estate industries. The employment multiplier of 8.9 implies a reduction of 2.1 jobs over the analysis period. These effects are likely to be small and therefore the resulting impact on jobs is likely to be negligible. The direct economic

cost of the proposed amendments to businesses, jobs, and individuals is negligible because while the amendments could change the timing of State investment in Delta levees, they would not change the overall level of investment. The largest anticipated economic impact would be associated with potential changes in land value of islands and tracts. (see Sections V.2. and V.3. of the EFIA for further discussion).

2. Creation of new businesses or elimination of existing businesses within the State: The proposed amendment would have negligible impacts on the creation of new businesses or elimination of existing businesses within the State. The proposed amendments would not change the overall level of State investment in Delta levee improvements and would unlikely have any significant effect on individuals or businesses in the State. The proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to be negligible (less than \$232,000 over the analysis period). However, these indirect costs would not serve to create new business in the state since the proposed amendments would not change the total State investment in Delta levee improvements, and they are unlikely to have any effect on local fees, assessments, or rates for individuals or businesses. Therefore, the proposed regulations would not create new businesses or eliminate existing businesses (see Sections V.4 and V.5 of the EFIA for further discussion).
3. Expansion of businesses currently doing business within the State: The proposed amendment would not have a significant statewide adverse economic impact directly affecting business, including ability to compete. The proposed amendment would have negligible impacts on the expansion of businesses currently doing business within the State, would not require business reports to be made; and would not affect small businesses (using the consolidated definition of small business set forth in Cal. Gov. Code Section 11346.3(b)(4)(B)). While land is typically an asset and not a separate value-added economic activity, the proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to be negligible (less than \$232,000 over the analysis period). However, these indirect costs would not encourage or restrict expansion of businesses currently doing business within the state and geographic extent of regulations (the Sacramento San-Joaquin Delta and Suisun Marsh) since the proposed amendments would not change the total State investment in Delta levee improvements, and they are unlikely to have any effect on local fees, assessments, or rates for individuals or businesses. Therefore, the proposed regulations would not expand businesses currently doing business with the State (see Section V.6., V.7., and VIII.1. of the EFIA for further discussion).
4. Benefits of the regulation to the health and welfare of the State's residents, worker safety, and environment include (see Section III.A. and Section VIII.3. of the EFIA for discussion):
 - Reduced risk of damage to people, property and infrastructure, including reduced cost to repair failed levees (19 Very-High Priority or High Priority islands or tracts

with expected annual damages (EAD) greater than \$900,000 million per year (at least 80 percent of Delta-wide EAD));

- Reduced annual risk of fatalities from a levee failure (17 Very-High Priority or High Priority islands or tracts with an expected annual fatality rate (EAF) greater than 0.02 lives per year (at least 90 percent of Delta-wide EAF));
- The proposed amendments would prioritize islands and tracts that currently have less than 200-year flood protection and provide a water supply function, increasing State water supply reliability benefits (23 Very-High or High Priority islands or tracts with a probability of flooding greater than 0.5 percent per year (1-in-200-year probability));
- Cultural, recreational, and natural resource, and agricultural qualities that distinguish the “Delta as a Place”; and
- Improving transparency and public awareness of State levee funding decisions via an annual report from DWR on their levee investments.

Performance Standard Regulations

The proposed DLIS regulations are performance standard regulations. The proposed regulations describe the objective of prioritizing Delta levee funding and sets forth a criteria for achieving that goal, but do not specify the sole means of compliance with achieving that goal. DWR retains the discretion to vary investments from the criteria set forth in DLIS for levee improvement funding prioritization. The proposed amendments would not mandate the use of specific technologies or equipment.

Economic and Fiscal Impact Statement (STD. 399)

In addition to the EFIA, the Council has prepared an Economic and Fiscal Impact Statement (Form STD. 399), which is a part of this rulemaking package.

Benefits of the Proposed Regulatory Amendment

As discussed in the EFIA (Sections II.B., III.A. III.B. and Section VIII.3.) and set forth in Form STD. 399 (Section C of the Economic Impact Statement), the proposed amendment would provide economic benefits by prioritizing levee improvement expenditures to islands or tracts that would realize the greatest benefit to State interests, as identified in the DLIS. The anticipated benefits, including any nonmonetary benefit to the protection of public health and safety of the State’s residents, worker safety, and environment, from this proposed regulatory action are:

- Reduced risk of damage to property and infrastructure, including reduced cost to repair failed levees (19 Very-High Priority or High Priority islands or tracts with expected annual damages (EAD) greater than \$900,000 million per year (at least 80 percent of Delta-wide EAD));
- Reduced annual risk of fatalities from a levee failure (17 Very-High Priority or High Priority islands or tracts with an expected annual fatality rate (EAF) greater than 0.02 lives per year (at least 90 percent of Delta-wide EAF));

- State water supply reliability benefits (23 Very-High or High Priority islands or tracts with a probability of flooding greater than 0.5 percent per year (1-in-200-year probability));
- “Delta as a Place” benefits to Delta Legacy communities from cultural, recreational, and natural resource, and agricultural qualities that distinguish the Delta; and
- Improving transparency and public awareness of State levee funding decisions.

Of these five benefit categories, the DLIS quantified and monetized only reduced risk of damage to property and infrastructure as a change in expected annual damages from prioritization of levee investments. Benefits for the other four categories were characterized in qualitative, descriptive terms. The proposed amendment could potentially increase benefits across all of the above-listed categories by prioritizing levee investments to islands or tracts that address each benefit category identified in the DLIS.

Costs of the Proposed Regulatory Amendment

As discussed in the EFIA (Sections II.A., IV and Section VIII.2.) and set forth in Form STD. 399 (Section B of the Economic Impact Statement), the proposed amendment would not alter the total amount of funding for Delta levee improvements. Rather, the proposed amendment would change the prioritization for how levee investment is distributed within the Delta and could potentially result in a reallocation of expenditures between Delta islands or tracts, which may cause quantifiable economic costs and non-quantifiable (i.e., non-monetized) benefits as described above.

The proposed amendment results in a negligible economic impact because the proposed amendment could affect the timing of levee investment but does not change the overall level of funding. As discussed in the EFIA, the proposed amendment would not result in direct costs to employees, individuals, or businesses, including small businesses. The amendment could create prospective indirect economic costs by redistributing the timing of funding for Delta levee improvements to different islands or tracts. The EFIA estimates that these prospective indirect economic costs from changes in risk of damage to properties and infrastructure to Delta islands or tracts could be \$212,700 per year or \$900,000 in capitalized value.

Fiscal Impact to State and Local Agencies

As discussed in the EFIA (Sections VI.A., VI.B., VI.C. and VI.D) and set forth in Form STD 399 (Section A, Section B, and Section C of the Fiscal Impact Statement), the proposed amendment would result in fiscal costs to State agencies, but would not result in any direct cost to local agencies. DWR would be required to prepare and submit an annual report to the Council describing Delta levee investments, and if necessary, justifying why funding decisions deviated from the priorities in the proposed amendment. The Council would be required to review the annual report prepared by DWR. The additional cost of preparing an annual report is generally moderate and can be completed by existing staff that are familiar with Delta levee investments and the

Delta Plan; thus it is likely these additional costs would be absorbed within existing DWR and Council budgets.

- It is estimated that the proposed amendment would result in fiscal impacts to State agencies of approximately \$405,000 per year, and no impact to local agencies or school districts. These costs would be absorbed within existing budgets.
- The proposed amendment would not impose a mandate on local agencies or school districts that would require reimbursements.

Major Regulation Requirements

The proposed regulatory action is not a major regulation as defined in Government Code section 11342.548 and California Code of Regulations, title 1, section 2000 (g) because the proposed regulation does not have an estimated economic impact on California business enterprises and individuals in an amount exceeding \$50 million.

Reasonable Alternatives to the Proposed Policy Actions

California Government Code section 11346.2(b)(4)(A) requires the Council to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons for rejecting those alternatives. This section discusses alternatives evaluated and provides reasons why these alternatives were not included in the proposal. The Council must determine that no reasonable alternative considered or that has otherwise been identified and brought to its attention would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law. Council staff did not find any of the alternatives considered to be more effective in carrying out the purpose for which the proposed regulatory action is proposed, or any alternative that is less burdensome and equally effective, or more cost effective and equally effective in effectuating the purpose of the proposed amendments to sections 5001 and 5012.

Council staff considered and evaluated five alternatives to the proposed amendments. These alternatives are described below along with the rationale for rejecting them:

- Alternative 1 – Retain existing Section 5012 and Section 5001 regulation (No Action)
- Alternative 2 – Repeal existing Section 5012 regulation, do not amend Section 5001
- Alternative 3 – Prioritize Levee Investments in High Risk to Life or Property Areas
- Alternative 4 – Prioritize Levee Investments in Delta Wetland Restoration and High Risk to Life and Property Areas
- Alternative 5 – Prioritize Levee Investments in Through-Delta Conveyance and High Risk to Life and Property Areas

Alternative 1 – Retain Existing Section 5012 and Section 5001 Regulation (No Action)

Under Alternative 1, the Council would not take any action to amend Sections 5001 or 5012. The definitions would not be amended in Section 5001 and the “interim” priorities currently set forth in Section 5012 for State investment in Delta flood risk management would remain in place and continue to guide discretionary State investments in Delta flood risk management. Alternative 1 would have no additional or reduced economic impact or benefits relative to the current regulation as analyzed and adopted in 2013.

Alternative 1 was eliminated from consideration because the interim regulation established in the 2013 Delta Plan was adopted with the intent of a future update to incorporate a more detailed risk analysis. The new regulations utilize a refined risk analysis to direct levee improvement funds to islands and tracts that represent the largest risk to State interests such as protecting life, property, and water supply reliability. The existing regulation states that prior to the completion and adoption of the updated priorities developed pursuant to Water Code section 85306, the interim priorities included in the regulation shall guide discretionary State investments in Delta flood risk management. Please also see Section III.

Alternative 2 – Repeal Existing Section 5012 Regulation, Do Not Amend Section 5001

Under Alternative 2, the Council would act to repeal Section 5012. The “interim” priorities set forth in Section 5012 for State investment in Delta flood risk management would be repealed and there would be no regulation to identify long-term priorities for State investments in Delta levee operation, maintenance, and improvements. Rather, the DLIS priorities would be implemented as a non-regulatory part of the Delta Plan. Alternative 2 would eliminate any economic impacts of Section 5012 of the current regulation as analyzed and adopted in 2013. Alternative 2 would reduce costs to State agencies since staff resources would not be required to produce or review a report, however the public would lose the transparency that a report would provide.

Alternative 2 was eliminated from consideration because Water Code section 85306 requires the Delta Plan to recommend priorities for State investments in Delta levees, including project and non-project levees.

Alternative 3 – Prioritize Levee Investments in High Risk to Life or Property Areas

Alternative 3 would focus investment priorities on levee improvements at islands or tracts identified as having a high risk to life or property, including urban and urbanizing areas of Sacramento, West Sacramento, and Stockton. Levee improvements that support other State interests (such as improving Delta ecosystem conditions or maintaining water supply corridors) would still occur but would be prioritized lower than investments in areas with high risk to life or property. Continued funding would be provided for maintenance of levees throughout the Delta where authorized by Water Code section 12980 et seq. and consistent with the recommendations of the Central Valley Flood Protection Board (CVFPB).

The DLIS Final Report states that it followed “the Council’s directive to rank risk to loss of life in the Delta as most important,” and the islands and tracts having the highest risk to life are included as Very-High Priority. However, the DLIS did not provide a priority ranking and corresponding monetized assessment of an alternative that emphasized loss to life and property more than the recommended strategy. Therefore, there is insufficient information upon which a quantitative economic assessment could be based. However, the economic and fiscal impacts described above for the proposed amendments are representative of the general magnitude and timing of impacts that could be expected under Alternative 3. Alternative 3 would provide somewhat greater benefits in the categories of reduced risk to life and property and a somewhat lower level of benefits to water supply, ecosystem, and Delta as a place. There is no evidence that Alternative 3 would be more effective than the proposed amendments in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses or be more cost effective to affected individuals or businesses. As with the proposed amendments, economic impacts to private businesses or individuals would be negligible.

Alternative 3 was eliminated from consideration because although it would achieve, or partially achieve, many of the objectives of the proposed amendments, it would not prioritize levee investments that protect ecosystem enhancements that provide high benefits over other types of levee investments. Further, this alternative would not be consistent with the comprehensive methodology applied by the Council using sound scientific and engineering principles, and appropriate economic and hydrologic data, nor consistent with an independent peer review and an extensive public engagement process.

Alternative 4 – Prioritize Levee Investments in Delta Wetland Restoration and High Risk to Life and Property Areas

Alternative 4 would focus investment priorities on levee improvements at islands or tracts identified as having benefits to Delta ecosystems and high risk to life or property. Levee improvements that support other State interests (such as maintaining water supply corridors) would still occur but would be prioritized lower than investments in Delta wetland restoration and high risk to life and property areas. Continued funding would be provided for maintenance of levees throughout the Delta where authorized by Water Code section 12980 et seq. and consistent with the recommendations of the CVFPB.

The DLIS did not provide a priority ranking and corresponding monetized assessment of an alternative that emphasized Delta wetland restoration more than the recommended strategy. Therefore, there is insufficient information upon which a quantitative economic assessment could be based. However, the economic and fiscal impacts described above for the proposed amendments are representative of the general magnitude and timing of impacts that could be expected under Alternative 4. Alternative 4 would provide somewhat greater benefits (relative to the proposed amendments) for Delta ecosystem and habitat and a somewhat lower level of benefits to loss of life and property, water supply, and Delta as a place.

There is no evidence that Alternative 4 would be more effective in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses, or more cost effective to affected individuals or businesses. As with the proposed amendment, economic impacts to private businesses or individuals are negligible.

Alternative 4 was eliminated from consideration because although it would achieve, or partially achieve, many of the objectives of the proposed amendments, it would not prioritize investments that contribute to protecting water conveyance and diversion infrastructure over other types of levee investments. Further, this alternative would not be consistent with the comprehensive methodology applied by the Council using sound scientific and engineering principles, and appropriate economic and hydrologic data, nor consistent with an independent peer review and an extensive public engagement process.

Alternative 5 – Prioritize Levee Investments in Through-Delta Conveyance and High Risk to Life and Property Areas

Alternative 5 would focus investment priorities on levee improvements at islands or tracts identified as having high risk to water supply, life, and property. Levee improvements that support other State interests (such as improving Delta ecosystem conditions) would still occur but would be prioritized lower than investments in high risk to water supply, life and property areas. Continued funding would be provided for maintenance of levees throughout the Delta where authorized by Water Code section 12980 et seq. and consistent with the recommendations of the CVFPB.

The DLIS did not provide a priority ranking and corresponding monetized assessment of an alternative that emphasized water supply reliability and conveyance more than the recommended strategy. Therefore, there is insufficient information upon which a quantitative economic assessment could be based. However, the economic and fiscal impacts described above for the proposed amendments are representative of the general magnitude and timing of impacts that could be expected under Alternative 5. Alternative 5 would provide somewhat greater benefits (relative to the proposed amendments) for water supply reliability and conveyance and a somewhat lower level of benefits to loss of life and property, ecosystem, and Delta as a place.

There is no evidence that Alternative 5 would be more effective in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses, or more cost effective to affected individuals or businesses. As with the proposed amendments, economic impacts to private businesses or individuals would be negligible.

Alternative 5 was eliminated from consideration because although it would achieve, or partially achieve, many of the objectives of the proposed amendments, it would not prioritize levee investments that protect ecosystem enhancements that provide high benefits over other types of levee investments. Further, this alternative would not be consistent with the comprehensive methodology applied by the Council using sound

scientific and engineering principles, and appropriate economic and hydrologic data, nor consistent with an independent peer review and an extensive public engagement process.

As demonstrated above, the Council considered alternatives to the proposed amendments and determined that: 1) no alternative would be more effective in carrying out the purpose for which the action is proposed; 2) no alternative would be as effective and less burdensome, while at the same time protecting human health, safety, and the environment; and 3) no alternative would be more cost-effective and equally as effective in implementing the statutory policy or other provisions of law. Further, the Council has determined that the effect on business is negligible, as explained previously. Therefore, it follows that there are no reasonable alternatives to the proposed amendments that would lessen any adverse impact on business, including small businesses, because no significant adverse impact will result from the proposed amendments.

Economic Impact of Alternatives to the Proposed Policy Actions

The following summarizes the conclusions of the analysis in Attachment 1, Economic and Fiscal Impact Assessment:

- Alternative 1 would retain the existing section 5001 and 5012, so would have no additional or reduced economic impact relative to the current regulation as analyzed (Council 2012) and adopted in 2013.
- Alternative 2 would eliminate any economic impacts of section 5012 of the current regulation as analyzed (Council 2012) and adopted in 2013.
- Alternative 3 would provide somewhat greater benefits in the categories of reduced risk to life and property and a somewhat lower level of benefits for water supply, ecosystem, and Delta as a place.
- Alternative 4 would provide somewhat greater benefits (relative to the proposed amendment) for Delta ecosystem and habitat and a somewhat lower level of benefits in the other categories (loss to life and property, water supply, and Delta as a place).
- Alternative 5 would provide somewhat greater benefits (relative to the proposed amendment) for water supply reliability and conveyance and a somewhat lower level of benefits in the other categories (loss to life and property, ecosystem, and Delta as a place).

Reasonable Alternatives to the Proposed Regulatory Policies that Would Lessen Adverse Impact on Small Business

California Government Code section 11346.2(b)(4)(B) requires state agencies to consider reasonable alternatives that would lessen any adverse impact on small businesses. Since the effect on general businesses is negligible, it follows that small businesses would not be disproportionately affected or overly burdened by the proposed amendment. As described in the EFIA, there is no evidence that any of the alternatives considered by the Council would be more effective in implementing the

proposed regulatory amendment, be as effective and less burdensome to affected individuals or businesses or be more cost effective to affected individuals or businesses.

Determination that the Action Will Not Have a Significant Adverse Economic Impact on Business

California Government Code section 11346.2(b)(5)(A) requires state agencies to include facts, evidence, documents, testimony, or other evidence relied upon to support an initial determination that the action will not have a significant adverse economic impact on business. The Council has determined that the proposed regulations will not have a significant adverse impact on businesses, nor will the proposed regulations affect the ability of California businesses to compete with businesses in other states (see Sections V.1., V.5, and V.7. of the EFIA for discussion).

While land is typically an asset and not a separate value-added economic activity, the proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to be negligible (less than \$232,000 over the analysis period). However, these indirect costs would not eliminate, create, encourage, or restrict expansion of businesses currently doing business within the state and geographic extent of regulations (the Sacramento San-Joaquin Delta and Suisun Marsh). Furthermore, since the proposed amendments would have a negligible effect on businesses, they would not have a significant statewide adverse effect on the ability of those businesses to compete within the State or with businesses in other states.

Duplication or Conflicts with Federal Regulations

The proposed regulations do not unnecessarily duplicate or conflict with federal regulations. A review of the Code of Federal Regulations did not indicate the existence of duplicative or conflicting law.

Public Process for Development of Proposed Amendment

In addition to the independent peer review, the Council deployed an extensive public engagement process in developing the DLIS methodology. Council staff hosted over 70 workshops and public meetings with Delta residents, reclamation district engineers, water supply and ecosystem interests, and other Delta stakeholders. Development of the DLIS was discussed at over 47 Council meetings.

Technical and Empirical Studies, Reports, or Documents

The Council relied upon the following studies, reports, and documents:

- Addendum to Delta Plan Amendments Program Environmental Impact Report: Delta Levees Investment Strategy Update. Council, 2021.
- Comparison of PL 84-99 Analyses Delta Levees Investment Strategy (DLIS) Technical memorandum. Delta Stewardship Council (Council), 2017.

- Cost Analysis for Proposed Delta Plan Regulations in Support of Economic and Fiscal Impact Statement. Council. 2012.
- Economic Sustainability Plan for the Sacramento-San Joaquin Delta. Delta Protection Commission, 2012.
- Delta As Place: Agriculture White Paper. Council. 2010.
- Delta Flood Management Investment Strategy Principles. Council, Approved as Interim Guidance on July 24, and August 27, 2015.
- Delta Flood Risk Management Assessment District Feasibility Study and Delta Levee Financing Options Report. Delta Protection Commission. 2018.
- Delta Levees Investment Strategy Issue Paper. Council, 2015.
- Delta Levees Investment Strategy Final Report. Council, 2017.
- Delta Levees Investment Strategy Risk Analysis Methodology Report. Council. 2017.
- Delta Levees Special Flood Control Projects. DWR. 2017
- Delta Memorandum of Understanding (MOU) Working Group Meeting with Delta Stewardship Council (Council) and Central Valley Flood Protection Board (CVFPB). Attendees: Laura Hollender (DWR), Chris Williams (DWR), Erin Mullin (Council), Ryan Stanbra (Council), Meghan Sullivan (CVFPB), and Erica Bishop (GEI). DWR. 2019.
- DLIS Memorandum of Understanding and Joint Implementation Plan. Council, June 22, 2017. Meeting.
- Delta Plan: Ensuring a reliable water supply for California, a healthy Delta ecosystem, and a place of enduring value. Council, 2013.
- Delta Plan Program Environmental Impact Report. Council, 2013.
- Delta Plan Amendments. Council, April 2018.
- Delta Plan Ecosystem Amendment: DRAFT APPENDIX Q1. Methods Used to Update Ecosystem Restoration Maps Using New Digital Elevation Model and Tidal Data. 2020
- Delta Plan Amendments Program Environmental Impact Report Addendum and Rulemaking Authorization for Delta Plan Policy RR P1. Council staff report, August 2021.
- Delta Plan Executive Summary, Delta Plan Policies and Recommendations. Council, 2013.DLIS Risk Analysis Methodology Report. Council, Revised June 2017.
- DLIS: Sea Level Rise Methodology. Council, 2015.
- Delta Reclamation District Financing and Budgets. Council, 2015.
- Delta Risk Management Strategy, Phase 1. Risk Report: Section 2. DWR, 2009.

- Discussion Draft of Potential Revisions to Chapter 7 Policies and Recommendations. Council, March 23, 2017. Meeting.
- Draft Report: Earthquakes and High Water as Levee Hazards in the Sacramento-San Joaquin Delta. Delta Independent Science Board (Delta ISB), 2016.
- Economic Sustainability Plan for the Sacramento-San Joaquin Delta. Delta Protection Commission, 2012.Final: Levee Related Habitat Review Issue Paper. Council, 2015.
- Impacts for Planning and Analysis Model. <http://www.implan.com/>. 2014 R3 California Counties Database (Delta Counties). MIG Inc. 2014.
- Inspection and Local Maintaining Agency Report of the Central Valley State-Federal Flood Protection System. DWR, 2013.
- 2017 Light Detection and Ranging Data. <https://data.cnra.ca.gov/dataset/delta-lidar-2017> Map of the Sacramento-San Joaquin Delta. Council, 2014.
- Map of the Sacramento-San Joaquin Delta and Suisun Marsh prepared by the Flood SAFE Environmental Stewardship and Statewide Resources Office (FESSRO). DWR, 2013.
- Personal communication with Erin Mullin. Senior Engineer. Delta Stewardship Council. January 29, 2019. Updated to 2021 dollars using GDP-IPD. Council. 2019.
- Reclamation District Ability to Pay (ATP) Analysis Technical memorandum. Council, 2017.
- Resolution 2018-1. Certification of the Delta Plan Amendments Program Environmental Impact Report, Adoption of Findings and a Statement of Overriding Considerations, Mitigation Measures, and a Mitigation Monitoring and Reporting Program, and Adoption of the Delta Plan Amendments. Council, April 26, 2018.
- Resolution 2021-02. Approval of the Delta Plan Amendments Program Environmental Impact Report Addendum and Rulemaking Authorization for Delta Plan Policy RR P1. Council, August 26, 2021.
- Review Technical Memoranda from Delta Levee Prioritization Methodology Peer Review Meeting. Council, May 19-20, 2015.
- Revisions to Current DLIS Amendment. Council, March 23, 2017 Meeting.
- Sacramento-San Joaquin Delta Atlas. DWR, 1995.
- Sacramento – San Joaquin Delta Reform Act of 2009
- Staff-Recommended DLIS Prioritization Table and Map; Staff-Recommended Modified Preliminary Draft Regulatory Language for Delta Plan Policy RR P1. Council. 2021.
- State Investments in Delta Levees. Key Issues for Updating Priorities. Council, 2014.

- State Investments in Delta Levees. Key Issues for Updating Priorities. Council, 2015.
- Suisun Marsh Properties Map. Suisun Marsh RCD, 2015.
- Text of Proposed Amendment to Existing Regulation Sections 5001 and 5012; proposed Appendix P.
- U.S. Bureau of Economic Analysis, Gross Domestic Product: Implicit Price Deflator, retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/GDPDEF>.

Appendix 1 EFIA

Economic and Fiscal Analysis

I. INTRODUCTION

The Delta Stewardship Council (Council) is proposing amendments to California Code of Regulations (CCR), Title 23, Waters, Division 6, Delta Stewardship Council, Chapter 2, Consistency with Regulatory Policies Contained in the Delta Plan, Article 1, Definitions, Section 5001, *Definitions* (Section 5001), and Delta Plan Article 3, Consistency with the Regulatory Policies Contained in the Delta Plan, Section 5012, *Prioritization of State Investments in Delta Levees and Risk Reduction* (Section 5012) (proposed amendments). Section 5001 and Section 5012, adopted in 2013, respectively specified definitions and interim guidelines for prioritization of State of California (State) investments in Delta levee improvements. The amended regulation would replace the interim guidelines set forth in the current Section 5012 and the amended language would be consistent with that approved by the Council for purposes of rulemaking on August 26, 2021, in Resolution 2021-02¹. Proposed changes to Section 5001 and Section 5012 relevant to the EFIA are summarized below.

II. SUMMARY OF PROPOSED AMENDMENTS

A. Overview

This section summarizes the key components of the proposed amendments that could result in fiscal or economic impacts quantified in the EFIA. Additional details about the proposed amendment can be found in the main body of the Initial Statement of Reasons (ISOR). The proposed amendment to Section 5012 would encourage State investments in Delta levee improvements that are consistent with the Delta Levees Investment Strategy (DLIS) priorities, while Section 5001 supports Section 5012 by providing definitions for activities identified in Section 5012, in addition to defining Very-High, High, and Other islands and tracts. The EFIA describes the purpose, data, methods, and results of the economic and fiscal impact analysis and summarizes the findings of the economic and fiscal analysis for relevant sections of the STD 399.

Water Code section 85306 requires the Delta Plan to include priorities for state investments in levee operation, maintenance, and improvements in the Delta. To implement Water Code section 85306 and guide discretionary State investments prior to the completion and adoption of the updated priorities developed pursuant to Water Code section 85306 (which are included in this amendment), the Council adopted Delta Plan Policy RR P1, *Prioritization of State Investments in Delta Levees and Risk Reduction*, included in the 2013 Delta Plan and codified in Section 5012. Currently, Section 5012 sets forth priorities for State investment in Delta flood risk management. The fiscal and economic impacts associated with the current regulation (Section 5012 and other sections related to regulatory policies included in the Delta Plan) were described in a fiscal and economic analysis report, hereafter referred to as “2012 Cost Analysis”². As described in the 2012 Cost Analysis, the current Section 5012 specifies a set of guidelines to maximize benefits from investments in Delta levee improvements pending additional analysis to quantify and prioritize those benefits (pursuant to Wat. Code § 85306). The 2012 Cost Analysis found that there were no additional fiscal or economic costs attributable to Section 5012 beyond those that were already calculated as part of broader consistency determination requirements for the Delta Plan. The DLIS quantifies and prioritizes many of the benefits from investments in Delta levee improvements. The proposed amendment to Section

5012 would replace the current Delta levee investment guidelines with the DLIS priorities, while Section 5001 would add five new definitions to support Section 5012. The proposed amendments would not affect the total amount of funds available for Delta levee improvements.

The proposed amendments would modify the existing regulations by requiring future discretionary State investments in Delta levees to be consistent with the priorities defined (Very-High Priority, High Priority, and Other Priority islands or tracts), determined by the DLIS.³ Under the proposed amendments the California Department of Water Resources (DWR) would fund levee improvement projects at Very-High Priority islands or tracts before approving levee improvement projects at High Priority or Other Priority islands or tracts. However, if there are no proposed levee improvement projects on Very-High Priority islands or tracts for a given grant cycle, then DWR can fund levee improvement projects for High Priority islands or tracts (and Other Priority islands or tracts, if there are no proposed levee improvement projects for High Priority islands or tracts). In addition, the proposed amendment would require DWR to prepare an annual report to the Council, identifying its decisions to award State funds for Delta levee operation, maintenance, repair, rehabilitation, replacement, and improvement projects and include specific information in the report. If funding awards for levee improvement projects vary from the DLIS priorities, DWR would be required to identify how the funding is inconsistent with the priorities; describe why variation from the priorities is necessary; and explain how the funding nevertheless protects lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities.

As described throughout this report, the anticipated economic impacts (costs and savings) associated with the proposed amendments is small. However, the economic analysis of impacts on businesses and individuals was conducted using a conservative methodology, outlined in Section II.B. to identify prospective costs and benefits. Applying this conservative methodology does identify a potential for negligible economic impacts. The reallocation of Delta levee improvement investments could cause some economic impacts by redistributing the timing of costs and benefits that are a result of Delta levee investment across Delta islands or tracts. However, these economic impacts would be prospective because while the proposed amendments may affect the timing (order) of future expenditures on Delta levee improvements, they would not affect the total magnitude of such investments and would allow DWR to vary levee investments from the established priorities under certain conditions. The EFIA quantifies these prospective economic impacts.

The proposed amendments would create fiscal costs to State agencies by the preparation of an annual report by DWR to submit to the Council. DWR would incur additional fiscal costs to prepare the annual reports and the Council would incur fiscal costs by reviewing annual reports and coordinating with DWR. Local agencies would not be directly affected by the DLIS prioritization and would not incur any fiscal costs beyond current requirements. The proposed amendments would not change local funding or revenue sources for Delta levee improvements. Local agencies would continue to assess fees and taxes and would still be eligible for funding for Delta levee improvements. The EFIA quantifies the fiscal costs of the proposed amendment.

The proposed amendments would result in both quantifiable and unquantifiable (i.e., non-monetized) costs and benefits. The analysis provides a qualitative discussion and quantitative estimates of the following economic and fiscal impacts:

1. Direct benefits that accrue to businesses and individuals that could realize an increase in State investments in levee improvements.
2. Direct costs that accrue to businesses and individuals that could realize a decrease in State investments in levee improvements.
3. Indirect economic impacts to businesses and individuals that are related to the direct costs or benefits.
4. Fiscal costs to DWR from annual reporting, identifying variations from the DLIS priorities, and describing how variations are consistent with the goals of the Delta Plan.
5. Fiscal costs that the Council would incur when reviewing annual reports prepared by DWR.

The proposed amendment to Section 5001 would add five new definitions. No direct or indirect economic or fiscal impacts to businesses, individuals, local agencies, or state agencies from incorporating these definitions into Section 5001 and other minor formatting edits to Section 5001 were identified. Any economic or fiscal impacts related to these definitions would be caused by proposed amendments to Section 5012, where these terms are applied, as explained herein.

B. Economic and Fiscal Impact Analysis Methodology

The economic impact analysis uses data from the DLIS, DWR Project Solicitation Package (PSP) grant programs, and other publicly available reports, identified in the “Citations” section of this document. The fundamental logic of the economic impact analysis is as follows. State investment in levee improvements is inversely related to the probability of levee failure (from combined hydraulic and seismic risks). In the near-term, the proposed amendments could decrease State expenditures on High Priority or Other Priority islands or tracts and increase State expenditures on Very-High Priority islands or tracts, but the total funding is unchanged. As levee expenditures increase the probability of levee failure decreases and expected annual damages from flooding decrease. Conversely if levee expenditures decrease, the probability of failure increases, and expected annual damages from flooding increase. The expected annual damages from flooding can be capitalized into Delta island or tract land values, which is an indirect benefit or cost of the proposed amendment (depending on if the island or tract sees an increase or decrease in levee expenditures). It follows that the quantifiable economic impact of the proposed amendment is equal to the prospective change in land values on islands or tracts that realize an increase (benefit) or decrease (cost) in State levee investment expenditures.

The approach for the economic impact analysis involves the following steps:

1. Quantify the probabilistic relationship between expenditures on Delta island or tract investments and the probability of levee failure using the DLIS data.

2. Identify recent State investments in Delta levee improvements by island or tract and classify those investments according to the DLIS priorities (Very-High Priority, High Priority, or Other Priority islands or tracts).
3. Estimate the maximum quantifiable economic impact (benefits or costs) by reallocating recent investments in Delta levee improvements identified in (2) according to the DLIS priorities and quantify the resulting change in the probability of levee failure, using the relationship calculated in (1).
4. Calculate the economic impact (costs or benefits) as the prospective capitalized land value of the change in levee failure probability under (3), multiplied by the expected annual cost of a levee failure.
5. Calculate any quantifiable indirect effects resulting from the direct changes calculated under (4), applying a standard input-output model of Delta counties.
6. Describe any unquantifiable (non-monetized) costs or benefits.

The fiscal impact analysis applies the same approach:

6. Estimate the direct fiscal cost of DWR staff time for preparing annual reports, general consultation with the Council, preparing justifications for variations from the DLIS, and reviewing any such justifications with the Council.
7. Estimate the direct fiscal cost of Council staff time for annual reviews of DWR reports, general consultations with DWR, and reviews of variations from the DLIS.

All values in this report, unless otherwise noted, are at 2021 price levels, using the Gross Domestic Product Implicit Price Deflator (GDP-IPD).⁴ The following sections summarize the estimated fiscal and economic impacts of the proposed amendment.

The analysis in this report identifies potential benefits and costs both quantitatively and qualitatively. The quantitative analysis indicates that the range of potential costs associated with the proposed regulations is so small as to be considered negligible. However, a conservative analysis was performed to illustrate what prospective costs may occur. The DLIS risk analysis of quantifiable expected annual damages was used to estimate the change in levee failure risk per dollar invested in levee improvements. Data summarized in Table 5-3 of the DLIS Final Report⁵ were used to calculate the capital cost to improve selected levees from baseline conditions to standards established under Public Law 84-99, Rehabilitation Assistance for Non-Federal Flood Control Projects (PL 84-99). The analysis conservatively used the higher construction cost range shown in the DLIS (\$1.7 million per mile). These data were merged with data from Table 5-5 of the DLIS Final Report showing flooding probability and expected annual damages under baseline conditions (no additional investment), and flooding probability and expected annual damages if levees were improved to PL 84-99 standards. A constant repair cost of \$27.6 million per levee failure was applied based on estimates described in the DLIS Risk Analysis Methodology Report.⁶

The expected change in land value per dollar investment in levee improvement, by island or tract, was analyzed using the data described above. The benefit of improving a representative levee from baseline conditions to PL 84-99 standards was calculated as the corresponding reduction of the expected annual damages and in expected annual repair cost. This amount was

then divided by the capital cost of improving the subject levee to PL 84-99 standards. The result was the change in expected annual damages and avoided repair costs (costs) per dollar of levee investment. This information was calculated for a subset of 16 islands or tracts for which data were available. Data were limited to islands or tracts with levees that would benefit from being upgraded to PL 84-99 standards. The economic analysis based on these data is representative of the type and magnitude of economic impacts that could be expected throughout the Delta.

The next step in the analysis calculated total recent historical expenditures on Delta levee improvements that would be covered by the proposed amendment. As described by the Delta Protection Commission (DPC) in the *Delta Flood Risk Management Assessment District Feasibility Study and Delta Levee Financing Options Report*,⁷ gathering comprehensive data describing Delta levee investments, by agency, by island or tract, by funding source is generally not feasible. In general, funding for Delta levee improvements comes from State, federal, and local partners from local fees, state bonds, and various cost-sharing arrangements. It was not possible to identify a complete historical inventory of expenditures on levee improvements by island or tract. Therefore, this analysis used the Delta Special Flood Control Projects Program (PSP)⁸ reported project expenditures, by island or tract, between 2008 and 2015 to illustrate the recent distribution of State expenditures on Delta levee improvements that could be affected by the proposed amendments. This is not intended to be a complete inventory of investments in Delta levee improvements; rather, it is a partial accounting based on the best available data used to demonstrate a plausible range of prospective economic costs. Total State expenditures on levee improvements included in this analysis equal \$75 million in nominal terms. After converting these past costs to current dollars using the gross domestic product Implicit Price Deflator (GDP-IPD)⁹, the total expenditures equal \$86.1 million.

State expenditures were inventoried by island or tract, and each island or tract was ranked based on its DLIS priority. Of the \$86.1 million expenditures used in this analysis, approximately \$13.3 million (15.4%) in State funding was allocated to levee improvements on Other Priority islands or tracts, \$7.1 million (8.3%) to levee improvements on High Priority islands or tracts, and \$65.7 million (76.3%) to levee improvements on Very-High Priority islands or tracts. Therefore, the proposed amendment could affect the ongoing allocation of approximately \$20.4 million in State expenditures on levee improvements on Other Priority or High Priority islands or tracts that occurred over the seven-year period from 2008 to 2015. Expenditures on Very-High Priority islands or tracts would not be affected.

For this analysis, all expenditures allocated to Other Priority or High Priority islands, or tracts were conservatively assumed to be reallocated to Very-High Priority islands or tracts. That is, this analysis illustrates the economic impact of reallocating all \$20.4 million invested in levee improvements on High Priority or Other Priority islands or tracts to Very-High Priority islands or tracts. In practice, DWR's funding decisions are subject to its consideration of the benefits, costs, engineering considerations and other factors such that DWR has discretion to fund proposed levee improvement projects for Other Priority or High Priority islands or tracts. If there are no proposed levee improvement projects on Very-High Priority islands or tracts for a given grant cycle, then DWR can fund levee improvement projects for High Priority islands or tracts (and for Other Priority islands or tracts if there are no proposed projects for High Priority islands or

tracts). Therefore, this was a conservative analysis to demonstrate potential economic impacts of the proposed amendment if all levee improvement funds were reallocated.

Using the method and data described above, each dollar invested in levee improvements on High Priority or Other Priority islands or tracts that are included in this analysis reduces expected annual damages (EAD) by approximately \$0.156 (that is, provides an expected benefit of \$0.156). Therefore, reducing levee improvement expenditures on High Priority or Other Priority islands or tracts by \$20.4 million would reduce benefits to those islands or tracts by \$3.18 million. This loss is largely offset by benefits realized on other islands or tracts. Every dollar invested in levee improvements on Very-High Priority islands or tracts included in the analysis reduces EAD by (provides a benefit of) \$0.083. Therefore, increasing expenditures by \$20.4 million on Very-High Priority islands or tracts would increase benefits to those islands or tracts by \$1.69 million. It follows that the net quantifiable economic cost equals \$1.49 million. On an average annual basis, the net quantifiable economic cost, in terms of EAD, equals \$212,700 per year. To put this number in perspective, with around 530,000 acres in agriculture in the Delta, this represents about \$0.4 per acre in agricultural production.¹⁰

Prospective changes in EAD could be capitalized into Delta island or tract land values. Using an interest rate of 5.5%, consistent with current private lending rates, an average annual increase in EAD of \$212,700 would cause a reduction of approximately \$3,900,000 in capitalized land values over the geographic area of the Delta. We refer to this as “negligible” in the context of a proportion of the total land value in the geographic area of Delta. Therefore, the quantifiable net present value economic cost of reallocating \$20.4 million from High Priority or Other Priority islands or tracts to Very-High Priority islands or tracts is approximately \$3,900,000. This analysis assumes that expenditures would be spread uniformly across all Very-High Priority islands or tracts. If expenditures are targeted to Very-High Priority islands or tracts that provide the greatest economic return (largest reduction in EAD per dollar levee investment), then the proposed amendment would provide a quantifiable net economic benefit rather than an economic cost. Note, again, that total levee improvement expenditures are unchanged. All costs are prospective and do not reflect actual outcomes.

C. Major Regulation Determination

The proposed amendments are not major regulations. The Council determined that the estimated economic impact to business enterprises and individuals located in or doing business in California of the proposed amendment is less than \$50 million in any 12-month period, which is less than the threshold for a Major Regulation (Govt. Code, Section 11342.548).

III. BENEFITS

A. Benefits to California

The proposed amendments to Sections 5001 and 5012 would provide economic benefits by prioritizing levee improvement expenditures to islands or tracts that would realize the greatest benefit to State interests, as identified in the DLIS. The DLIS priorities were developed based on an analysis of quantified and unquantified costs and benefits, and a public review process to solicit feedback and refine the final prioritization. The proposed amendments improve Delta

island or tract resiliency by effectively targeting investments to the islands or tracts that provide the greatest benefits toward achieving the coequal goals. (Wat. Code, Section 85054). This is expected to result in benefits to State and local public agencies or private individuals and businesses in the State from improvements in water supply reliability, ecosystem restoration, flood risk reduction, and land use policies. The proposed amendments would increase these benefits by ensuring that levee improvement investments provide the greatest return to the State. The DLIS does not set the amount of expenditure for levee improvement (i.e., the cost); rather, it sets priorities for how a given level of expenditure should be allocated based on benefits that generally fall into the following categories:

1. Health and welfare of California residents and individuals

The proposed amendments would reduce risk to people, property, and infrastructure, including reduced cost to repair failed levees. The proposed amendments would direct levee improvement funds to the Delta islands and tracts with greatest risk to people, property, and infrastructure, thereby reducing overall flood risk in the Delta over time. According to the DLIS analysis, 80% of the Delta's expected annual damages (EAD) from flooding are on islands or tracts included in the areas the proposed amendments would prioritize for levee investments (representing 19 out of 142 islands and tracts). The proposed amendment would also provide monetized benefits to islands or tracts that realize a reduction in EAD. Such benefits would equal \$1.69 million or approximately \$212,700 per year. However, these benefits are prospective and do not reflect actual outcomes.

Similarly, 90% of the anticipated flood fatalities in the Delta also occur on the Delta islands and tracts the proposed amendments would prioritize for levee investments based on their critical role in public safety (representing 17 out of 142 islands and tracts).

The proposed amendments would prioritize islands and tracts that currently have less than 200-year flood protection and provide a water supply function. A water supply function is defined as an island or tract that is critical to freshwater conveyance through the Delta, an island or tract that contains a regional water infrastructure facility, or an island or tract that acts as a barrier to salinity intrusion into the Delta (representing 23 out of 142 islands and tracts).

2. Worker safety

The proposed amendment would prioritize population centers and areas with damageable property. As stated in Section III.A.1, 90% of the anticipated flood fatalities in the Delta also occur on the Delta islands and tracts the proposed amendments would prioritize for levee investments based on their critical role in public safety (representing 17 out of 142 islands and tracts), and 80% of the Delta's expected annual damages (EAD) from flooding are on islands or tracts included in the areas the proposed amendments would prioritize for levee investments (representing 19 out of 142 islands and tracts). These islands and tracts combined represent the largest concentration of the in-Delta workforce. By prioritizing EAD, and expected annual fatalities (EAF), the proposed amendment also prioritizes workers safety.

3. Benefits to the State's environment

The proposed amendments seek to protect high-value non-tidal habitat (habitat protected from flooding by levees) and islands and tracts that contribute to the cultural, recreational, natural resource, and agricultural qualities that distinguish the Delta and Suisun Marsh (“Delta as a Place” benefits). High-value, non-tidal habitat includes areas of non-tidal marsh, managed marsh, riparian forest and scrub, vernal pools, and alkaline seasonal wetlands. The proposed amendments would prioritize levee improvement funding on islands and tracts that have approximately 89 acres of habitat per year at risk of flooding. Islands and tracts providing “Delta as a Place” benefits contain public roadways, prime farmland, and Delta legacy communities (representing 48 of 142 islands and tracts).

4. Improving transparency and public awareness of State levee funding decisions

The proposed amendments would create a reporting structure and forum for public discourse regarding State funding decisions in Delta levee improvements. The proposed amendments would require DWR to prepare a written report to the Council describing the prior year’s levee improvement funding decisions, and to present that report at a Council meeting. The written report would be available to the public for review and comment. The proposed amendments would allow the Council to track and monitor the State’s efforts to reduce Delta flood risk over time through targeted investments in levee improvements.

B. Benefits to California Businesses, Including Small Businesses

The proposed amendments would also provide monetized benefits to islands or tracts that realize a reduction in EAD. As described in Section II.(B.), such benefits would equal \$1.69 million or approximately \$242,000 per year. These benefits are included in the net costs described under Section IV. However, these benefits are prospective and do not reflect actual outcomes.

IV. COSTS

Any economic costs to related sectors of the economy (e.g., suppliers to farming operations) are indirect and likely to be negligible. Land is typically an asset and not a separate value-added economic activity that would affect other regional spending or businesses. A conservative approach to illustrate a potential economic cost was applied using the Impacts for Planning and Analysis (IMPLAN) model.¹¹ The decrease in capitalized land value (\$3,900,000) was modeled as a decrease in land real estate commission sales for Delta counties using a commission rate of 6% (net decrease of \$232,000). The implicit assumption here is that all land affected by the change in EAD would be sold, and that local real estate businesses would lose the commission income associated with the decrease in capitalized value. The multiplier of 1.47 implies a total change in gross output value of approximately \$341,000.¹²

The total quantifiable cost of the proposed amendments equals \$212,700 per year, or approximately \$3,900,000 in net present value (Section II.(B)). This represents the prospective reduction in total land value calculated as the cost of increased EAD on islands and tracts in the

Delta. The proposed amendment could reallocate some Delta levee investments to higher priority islands or tracts.

However, this is an unlikely outcome based on a worst-case scenario assumption. This analysis assumes that the island or tract in the Other category would be disadvantaged in such a way that the land would lose value. In reality, islands and tracts in the Other category represent a lower risk to state interests; this could mean that the levees protecting the island or tract are sufficient to protect the people, property and state interests behind them and do not require further investment at this time. The proposed regulation anticipates that as levees are improved risk will decrease. As an island or tract's risk decreases, it will move to a lower priority category. Therefore, an island or tract has the potential for its land value to increase as its levees are improved and it moves to the Other category. The overall effects are likely to be small and therefore the resulting impact on jobs is likely to be negligible.

The direct fiscal cost of the proposed amendments falls on State agencies, not on businesses. Businesses could be affected indirectly through changes in landowner expenditures or real estate sales commission, but as stated above, this effect is likely negligible. Since the effect on general businesses is indirect and negligible, it follows that small businesses (using the consolidated definition of small business set forth in Cal. Gov. Code Section 11346.3(b)(4)(B)) would not be disproportionately affected or overly burdened by the proposed amendment. Since the proposed amendment would have an indirect and negligible effect on small businesses, the proposed amendments would not have a significant statewide adverse effect on the ability of those businesses to compete. Furthermore, the proposed amendments would not affect the creation of new businesses or elimination of existing businesses within the State. In addition, the proposed amendments would not affect the expansion of businesses currently doing business within the State.

The proposed amendments could result in a net indirect economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value) and any additional indirect economic effects are likely to be negligible (less than \$232,000 over the analysis period, Section V.). The proposed amendments would not change the overall level of State investment in Delta levee improvements and would be unlikely to have any significant effect on individuals or businesses in the State. Since the proposed amendments would not change the total State investment in Delta levee improvements, they would be unlikely to have any effect on local fees, assessments, or rates for individuals or businesses.

The proposed amendments do not have any direct effect on housing costs. Changes in land values caused by the change in EAD could have a small indirect effect on housing costs by pushing down rental rates; however, given the small amount of change in land values anticipated, this effect is likely to be negligible. Therefore, there is no evidence that there would be an effect on housing costs.

V. ECONOMIC IMPACTS

1. Private individuals/ types of business entities impacted

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed amendments. The proposed amendments would not change the overall level of State investment in Delta levee improvements and are unlikely to have any significant, statewide adverse economic impacts directly affecting individuals or businesses in the State.

The economic analysis of impacts on businesses and individuals was conducted using a conservative methodology, outlined in Section II.(B.), to estimate prospective costs and benefits. Applying this conservative methodology does identify a potential for negligible economic impacts because of the proposed amendments on timing and distribution of Delta levee investments. The reallocation of Delta levee improvement investments could cause some economic impacts by redistributing the timing of costs and benefits that are a result of Delta levee investment across Delta islands or tracts. However, these economic impacts would be prospective because while the proposed amendments may affect the timing (order) of future expenditures on Delta levee improvements, they would not affect the total magnitude of such investments and would allow DWR to vary levee investments from the priorities under certain conditions.

The proposed amendment could result in an indirect net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to also be less than \$232,000 over the analysis period, as explained below in this Section. Since the proposed amendments would not change the total State investment in Delta levee improvements, they would be unlikely to have any effect on local fees, assessments, or rates for individuals or businesses.

Any economic costs to related sectors of the economy (e.g., suppliers to farming operations) are likely to be small. Land is typically an asset and not a separate value-added economic activity that would affect other regional spending or businesses. A decrease in land values could cause small economic impacts if landowners change spending habits as a result of this change in asset value, or through changes in commission for real estate transactions through lower commission from land sales. A conservative approach to illustrate a potential economic cost was applied using the Impacts for Planning and Analysis (IMPLAN) model.¹³ The decrease in capitalized land value (\$3,900,000) was modeled as a decrease in land real estate commission sales for Delta counties using a commission rate of 6% (net decrease of \$232,000 over the total land value for the geographic area, therefore the term “negligible” is used). The multiplier of 1.47 implies a total change in gross output value of approximately \$341,000.¹⁴

For the reasons described above, since the proposed amendments would have a negligible effect on small businesses, the proposed amendments would not have a significant statewide adverse effect on the ability of those businesses to compete. Furthermore, the proposed amendments would not affect the creation of new businesses or elimination of existing businesses within the State. In addition, the proposed amendments would not affect the expansion of businesses currently doing business within the State. Any economic costs to related sectors of the economy (e.g., suppliers to farming operations) are likely to be negligible and would not be direct costs.

In summary, the direct economic cost of the proposed amendments to businesses, jobs, and individuals is negligible because it could change the timing of State investment in Delta levees but would not change the overall level of investment. The direct economic cost would be a result of a change in the distribution of prospective benefits from levee improvement expenditures. The proposed amendments could cause indirect economic costs of up to \$212,700 per year in EAD by affecting the timing and location of State investment in Delta levees. Because of the small magnitude of this prospective change, there would be no effect on housing costs. Expressing these annual costs in terms of the change in net present land value and including potential multiplier effects, the capitalized cost equals \$4,200,000.

The proposed amendments would not require additional business reports or the use of specific technologies or equipment.

2. Creation of jobs within the state

The total quantifiable cost of the proposed amendments equals an indirect cost of \$212,700 per year, or approximately \$3,900,000 in net present value. This represents the prospective reduction in total land value calculated as the cost of increased EAD on islands and tracts in the Delta. The proposed amendments could reallocate some Delta levee investments to higher priority islands or tracts, but the total expenditure on Delta levee investments would not change. As a result, the proposed regulations are unlikely to create jobs within the state.

The change in land value does not directly affect jobs and does not cause any quantifiable indirect or induced economic effects that would significantly affect regional employment. Land is typically an asset and not a separate value-added economic activity that would affect regional employment. A decrease in land values could cause small economic impacts if landowners change spending habits as a result of this change in asset value, and through changes in commission for real estate transactions through lower commission from land sales. These effects are likely to be small and therefore the proposed regulations are unlikely to create jobs within the state.

In summary, the direct economic cost of the proposed amendments to businesses, jobs, and individuals is negligible because while the amendments could change the timing of State investment in Delta levees, they would not change the overall level of investment. The largest anticipated economic impact would be associated with potential changes in land value of islands and tracts. Therefore, the proposed regulations are unlikely to create jobs within the state.

3. Elimination of jobs within the state

The total quantifiable cost of the proposed amendments equals an indirect cost of \$212,700 per year, or approximately \$3,900,000 in net present value. This represents the prospective reduction in total land value calculated as the cost of increased EAD on islands and tracts in the Delta. While the proposed amendments could reallocate some Delta levee investments to higher priority islands or tracts, the total expenditure on Delta levee investments would not change.

The change in land value does not directly affect jobs and does not cause any quantifiable indirect or induced economic effects that would significantly affect regional employment. Land is typically an asset and not a separate value-added economic activity that would affect regional employment. A decrease in land values could cause small economic impacts if landowners change spending habits as a result of this change in asset value, and through changes in commission for real estate transactions through lower commission from land sales. This change is modeled as a reduction in NAICS 530210, real estate industries. The employment multiplier of 8.9 implies a reduction of 2.1 jobs over the analysis period. These effects are likely to be small and therefore the resulting impact on jobs is likely to be negligible.

A conservative approach to illustrate potential economic impacts was developed using the IMPLAN model. The decrease in capitalized land value (\$3,900,000) was modeled as a decrease in land real estate commission sales for Delta counties using a commission rate of 6% (net decrease of \$232,000 in real estate business income). The implicit assumption is that all land affected by the change in EAD would be sold, and that local real estate businesses would lose the commission income. This change is modeled as a reduction in North American Industry Classification System (NAICS) Impacts for Planning and Analysis (IMPLAN) model. The decrease in capitalized land value (\$3,900,000) was modeled as a decrease in land real estate commission sales for Delta counties using a commission rate of 6% (net decrease of \$232,000). The multiplier of 1.47 implies a total change in gross output value of approximately \$341,000. Under this conservative assumption, the total net present value cost would be \$4,200,000.

In summary, as explained above, the proposed regulations may result in a reduction of 2.1 jobs over the analysis period, due to a reduction in real estate commissions. However, the direct economic cost of the proposed amendments to businesses, jobs, and individuals is negligible because while they could change the timing of State investment in Delta levees, they would not change the overall level of investment.

4. Creation of new businesses within the state

The proposed amendments would not change the overall level of State investment in Delta levee improvements and would unlikely have any significant effect on individuals or businesses in the State. Therefore, the proposed regulations would not create new businesses within the state.

The proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to be negligible (less than \$232,000). However, these indirect costs would not serve to create new business in the state since the proposed amendments would not change the total State investment in Delta levee improvements, and they are unlikely to have any effect on local fees, assessments, or rates for individuals or businesses.

Since the proposed amendments would have a negligible effect on small businesses (as explained above in Section IV.), they would not have a significant statewide adverse effect on

the ability of those businesses to compete. (*See also*, Section V.(9).) Therefore, the proposed amendments would not affect the creation of new businesses within the State.

5. Elimination of existing businesses within the state

The proposed amendments would not change the overall level of State investment in Delta levee improvements and would unlikely have any significant effect on individuals or businesses in the State.

The proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to be negligible (less than \$232,000 over the analysis period). Since the proposed amendments would not change the total State investment in Delta levee improvements, they are unlikely to have any effect on local fees, assessments, or rates for individuals or businesses. Therefore, the proposed regulations would not eliminate existing businesses within the state.

6. Expansion of businesses currently doing business within the state and geographic extent of regulations

While land is typically an asset and not a separate value-added economic activity, the proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value). Any additional indirect economic effects are likely to be negligible (less than \$232,000 over the analysis period). However, these indirect costs would not encourage or restrict expansion of businesses currently doing business within the state and geographic extent of regulations (the Sacramento San-Joaquin Delta and Suisun Marsh) since the proposed amendments would not change the total State investment in Delta levee improvements, and they are unlikely to have any effect on local fees, assessments, or rates for individuals or businesses.

7. Effects on small businesses

The direct fiscal cost of the proposed amendments falls on State agencies, not on businesses. As described under employment effects (Section V.(2.)(3.)), businesses could be affected indirectly through changes in landowner expenditures or real estate sales commission, but this effect is negligible. Since the effect on general businesses is negligible, it follows that small businesses (using the consolidated definition of small business set forth in Cal. Gov. Code Section 11346.3(b)(4)(B)) would not be disproportionately affected or overly burdened by the proposed amendments.

8. Geographic impacts

The proposed amendments would require future discretionary State investments in Delta levees to be consistent with the priorities (Very-High Priority, High Priority, and Other Priority islands or tracts) determined by the DLIS. The DLIS prioritization considers a range of island-specific factors related to levee improvement including public and private property, potential

impacts to life, recreation, and ecosystems. The DLIS prioritization also considers the importance of Delta levees as a system to State water supply reliability. The proposed amendments would not establish a rigid priority system that would defund levee investments directed toward specific islands or tracts. Rather, they would prioritize investments based on the DLIS in a way that directs levee improvement funds to the islands and tracts with the greatest risk, while taking into account program and funding authorities.

State expenditures were inventoried by island or tract, and each island or tract was ranked based on its DLIS priority. Of the \$86.1 million expenditures used in this analysis, approximately \$13.3 million (15.4%) in State funding was allocated to levee improvements on Other Priority islands or tracts, \$7.1 million (8.3%) to levee improvements on High Priority islands or tracts, and \$65.7 million (76.3%) to levee improvements on Very-High Priority islands or tracts. Therefore, the proposed amendments could affect the ongoing allocation of approximately \$20.4 million in State expenditures on levee improvements on Other Priority or High Priority islands or tracts that occurred over the seven-year period from 2008 to 2015. Expenditures on Very-High Priority islands or tracts would not be affected.

Using the method and data described above, each dollar invested in levee improvements on High Priority or Other Priority islands or tracts that are included in this analysis reduces expected annual damages (EAD) by approximately \$0.156 (that is, provides an expected benefit of \$0.156). Therefore, reducing levee improvement expenditures on High Priority or Other Priority islands or tracts by \$20.4 million would reduce benefits to those islands or tracts by \$3.18 million. This loss is largely offset by benefits realized on other islands or tracts. Every dollar invested in levee improvements on Very-High Priority islands or tracts included in the analysis reduces EAD by (provides a benefit of) \$0.083. Therefore, increasing expenditures by \$20.4 million on Very-High Priority islands or tracts would increase benefits to those islands or tracts by \$1.69 million. It follows that the net quantifiable economic cost equals \$1.49 million. On an average annual basis, the net quantifiable economic cost, in terms of EAD, equals \$212,700 per year.

9. Competition factors

As previously explained, the proposed amendments to Sections 5001 and 5012 would not change the overall level of State investment in Delta levee improvements and are unlikely to have any significant effect on individuals or businesses in the State. The agency is not aware of any cost impacts that a representative business would necessarily incur in reasonable compliance with the proposed amendments.

The proposed amendments would not require additional business reports or the use of specific technologies or equipment.

The proposed amendments could result in a net economic cost (higher EAD as a result of reallocation of prospective levee investments) of \$212,700 per year (\$3,900,000 in net present value) and any additional indirect economic effects are likely to be negligible (less than \$232,000). Since the proposed amendments would not change the total State investment in Delta

levee improvements, they are unlikely to have any effect on local fees, assessments, or rates for businesses.

Since the proposed amendments would have a negligible effect on businesses, the proposed amendments would not have a significant statewide adverse effect on the ability of those businesses to compete with each other or with businesses in other states. The direct fiscal cost of the proposed amendments falls on State agencies, not on businesses. As described under employment effects, businesses could be affected indirectly through changes in landowner expenditures or real estate sales commission, but this effect is negligible.

Since the proposed amendments would have a negligible effect on small businesses, the proposed amendment would not have a significant statewide adverse effect on the ability of those businesses to compete within the State or with businesses in other states. Furthermore, as explained previously, since the proposed amendments would have a negligible effect on business, proposed amendment would not affect the creation of new businesses or elimination of existing businesses within the State. Nor would the proposed amendments affect the expansion of businesses currently doing business within the State.

10. Reporting requirements

While the proposed amendments would establish a new reporting requirement for a State agency (DWR), they would not establish a reporting requirement that applies to businesses or the private sector. The proposed amendments would require DWR to prepare an annual report to the Council identifying its decisions to award State funds for Delta levee operation, maintenance, repair, rehabilitation, replacement, and improvement projects and include specific information in the report. If funding awards for levee improvement projects vary from the DLIS priorities, DWR would be required to identify how the funding is inconsistent with the priorities; describe why variation from the priorities is necessary; and explain how the funding nevertheless protects lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities.

VI. FISCAL IMPACT

A. Local governments and schools

There are no non-discretionary costs or savings imposed upon local agencies or schools. The proposed regulations would not require local governments or schools to do anything different or new, and nothing would change with respect to any local subvention programs. Therefore, local agencies would not be directly affected by the DLIS prioritization and would not incur any additional fiscal costs beyond current requirements. This is because the proposed amendments do not place any additional requirements on local agencies. Instead, the proposed regulations impose a reporting requirement on DWR to ensure transparency. Local agencies do not have to report to the Council or justify to the Council why they received levee improvement funding. The proposed regulations do not impose a mandate on local agencies that would cause them to incur additional costs, nor does it create potential for savings.

As discussed previously, the proposed amendments would not increase or decrease the amount of State funds available for Delta levee improvements. Rather, the proposed amendments would potentially redistribute the available levee improvement funds to provide greater levels of funding to improve levees protecting Very-High Priority and High Priority islands and tracts, and lower levels of funding to improve levees protecting Other Priority islands and tracts. As also discussed previously, indirect effects of these shifts in funding are realized as changes in land value, which could potentially change revenues available to local public agencies and school districts. It follows that these shifts in funding, land values, and potential revenue could increase or decrease the funding available to individual local Reclamation Districts that manage Delta levees, depending on the priority assigned to the island(s) or tract(s) that each District manages. However, because the amount of State funds available for Delta levee improvements would remain constant, while some agencies and districts may realize increased or decreased revenues, there is no indirect net effect on revenues for local agencies and school districts on the whole. Furthermore, any net effect would apply to discretionary levee improvements, rather than to ongoing operations and maintenance activities. Thus, there would be no costs or savings to schools or local agencies.

B. State agencies

Under the proposed amendments DWR would be required to prepare and submit a written annual report describing expenditures on Delta levee operation, maintenance, repair, rehabilitation, replacement and improvement projects. No other State agencies, with the exception of DWR and the Council, will incur fiscal costs or savings as a result of the proposed amendments.

The proposed amendments would create fiscal costs to State agencies, (DWR and the Council) by requiring DWR to prepare an annual report and submit that report to the Council. DWR would incur additional fiscal costs to prepare the annual reports (see Section II.(A.) for a more detailed discussion). The Council would incur fiscal costs by reviewing the annual reports and coordinating with DWR.

DWR fiscal costs were estimated based on a review of the regulatory requirements by DWR and Council staff familiar with the proposed regulation. For budgeting purposes, the annual DWR staff cost, including all salary and fringe benefits, was estimated to equal \$301,000.¹⁵ This includes all direct staff time and fringe benefits for staff including review, and project leads to calculate estimated reductions in risk, prepare annual reports and coordinate with the Council.

The cost to DWR includes time to consult with Council staff and prepare the annual report indicating whether levee improvement expenditures are consistent with DLIS priorities, and describe how expenditures vary from the DLIS priorities, if necessary. The additional cost of preparing an annual report is generally moderate and can be completed by existing staff that are familiar with Delta levee investments and the Delta Plan.

The estimated fiscal cost of the proposed amendment to the Council is the additional resources required to review Delta levee investments reports prepared by DWR. This involves

staff time to receive, review, comment, and coordinate on each annual report. There is no fiscal cost attributable to the change in Delta levee investments (e.g., capital investments in levee improvements) because the proposed amendment does not change the total level of funding available for Delta levee improvements. There is no known change in revenue associated with the proposed regulations.

The Council fiscal costs were approximated based on the fiscal cost estimate from the 2012 Cost Analysis. Council staff effort to review annual State reports is expected to include a mix of legal and senior technical staff. For budgeting purposes, the annual staff cost, including all salary and fringe benefits, was estimated to equal \$104,000. This is consistent with the estimated Council fiscal cost used in the 2012 Cost Analysis, which equals approximately \$99,000 when indexed to current dollars using the GDP Implicit Price Deflator.

No State agencies would see a fiscal savings under the proposed regulation for the reasons explained above.

C. Reimbursement

Because the regulations do not impose a cost on local governments or schools, there is no fiscal impact on any local government or school. The proposed regulations do not require local governments or schools to do anything different or new, and nothing changes with respect to any local subvention programs. As a result, the proposed regulations do not impose a reimbursable mandate on local governments or schools that requires reimbursement.

D. Federal funding to the State

No additional federal funding is required. There are no costs associated with the proposed amendments because there is no reduction in any funding. No direct or indirect fiscal impacts are anticipated to federally funded State agencies or programs as a result of the proposed amendments because the proposed amendments could affect the timing of levee investment but do not change the overall level of funding. Because there is no change to the overall level of funding, there are no savings in federal funding to the State.

VII. ALTERNATIVES

Alternatives to the proposed amendment are described in the main body of the ISOR in the Reasonable Alternatives to the Proposed Policy Actions section. California Government Code section 11346.2(b)(4)(A) requires the Council to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons for rejecting those alternatives. Five alternatives were identified:

- a. Alternative 1 – Retain Existing Section 5012 and Section 5001 Regulation (No Action)
- b. Alternative 2 - Repeal Existing Section 5012 Regulation, Do Not Amend Section 5001

- c. Alternative 3 - Prioritize Levee Investments in High Risk to Life or Property Areas
- d. Alternative 4 – Prioritize Levee Investments in Delta Wetland Restoration Areas and High Risk to Life and Property Areas
- e. Alternative 5 – Prioritize Levee Investments in Through-Delta Conveyance Areas and High Risk to Life and Property Areas

A. Alternative 1 – Retain Existing Regulations (No Action)

Under Alternative 1, the Council would not take any action to amend Sections 5001 or 5012. The definitions would not be amended in Section 5001 and the “interim” priorities currently set forth in Section 5012 for State investment in Delta flood risk management would remain in place and continue to guide discretionary State investments in Delta flood risk management. Alternative 1 would have no additional or reduced economic impact or benefits relative to the current regulation as analyzed and adopted in 2013.

Alternative 1 was eliminated from consideration because the interim regulation established in the 2013 Delta Plan was adopted with the intent of a future update to incorporate a more detailed risk analysis. The new regulations utilize a refined risk analysis to direct levee improvement funds to islands and tracts that represent the largest risk to State interests such as protecting life, property, and water supply reliability. The existing regulation states that prior to the completion and adoption of the updated priorities developed pursuant to Water Code section 85306, the interim priorities included in the regulation shall guide discretionary State investments in Delta flood risk management. Please also see Section III.

B. Alternative 2 – Repeal Existing Section 5012 Regulation, Do Not Amend Section 5001

Under Alternative 2, the Council would act to repeal Section 5012. The “interim” priorities set forth in Section 5012 for State investment in Delta flood risk management would be repealed and there would be no regulation to identify long-term priorities for State investments in Delta levee operation, maintenance, and improvements. Rather, the DLIS priorities would be implemented as a non-regulatory part of the Delta Plan. Alternative 2 would eliminate any economic impacts of Section 5012 of the current regulation as analyzed and adopted in 2013. Alternative 2 would reduce costs to State agencies since staff resources would not be required to produce or review a report, however the public would lose the transparency that a report would provide.

Alternative 2 was eliminated from consideration because Water Code section 85306 requires the Delta Plan to recommend priorities for State investments in Delta levees, including project and non-project levees.

C. Alternative 3 – Prioritize Levee Investments in High Risk to Life or Property Areas

Alternative 3 would focus investment priorities on levee improvements at islands or tracts identified as having a high risk to life or property, including urban and urbanizing areas of Sacramento, West Sacramento, and Stockton. Levee improvements that support other State interests (such as improving Delta ecosystem conditions or maintaining water supply corridors) would still occur but would be prioritized lower than investments in areas with higher risk to life or property. Continued funding would be provided for maintenance of levees throughout the Delta where authorized by Water Code section 12980 et seq. and consistent with the recommendations of the Central Valley Flood Protection Board (CVFPB).

The DLIS Final Report states that it followed “the Council’s directive to rank risk to loss of life in the Delta as most important,” and the islands and tracts having the highest risk to life are included as Very-High Priority. However, the DLIS did not provide a priority ranking and corresponding monetized assessment of an alternative that emphasized loss to life and property more than the recommended strategy. Therefore, there is insufficient information upon which a quantitative economic assessment could be based. However, the economic and fiscal impacts described above for the proposed amendments are representative of the general magnitude and timing of impacts that could be expected under Alternative 3. Alternative 3 would provide somewhat greater benefits in the categories of reduced risk to life and property and a somewhat lower level of benefits to water supply, ecosystem, and Delta as a place.

There is no evidence that Alternative 3 would be more effective than the proposed amendments in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses or be more cost effective to affected individuals or businesses. As with the proposed amendments, economic impacts to private businesses or individuals would be negligible. Alternative 3 was eliminated from consideration because although it would achieve, or partially achieve, many of the objectives of the proposed amendments, it would not prioritize levee investments that protect ecosystem enhancements that provide high benefits over other types of levee investments.

D. Alternative 4 – Prioritize Levee Investments in Delta Wetland Restoration Areas and High Risk to Life and Property Areas

Alternative 4 focuses on prioritizing investments in levee improvements at islands or tracts identified as having benefits to Delta ecosystems and high risk to life or property. Levee improvements that support other State interests (such as maintaining water supply corridors) would still occur but would be prioritized lower than investments in Delta wetland restoration and high risk to life and property areas. Continued funding would be provided for maintenance of levees throughout the Delta where authorized by Water Code section 12980 et seq. and consistent with the recommendations of the CVFPB.

The DLIS did not provide a priority ranking and corresponding monetized assessment of an alternative that emphasized Delta wetland restoration more than the recommended strategy. Therefore, there is insufficient information upon which a quantitative economic assessment could be based. However, the economic and fiscal impacts described above for the proposed amendments are representative of the general magnitude and timing of impacts that could be expected under Alternative 4. Alternative 4 would provide somewhat greater benefits (relative to

the proposed amendments) for Delta ecosystem and habitat and a somewhat lower level of benefits to loss of life and property, water supply, and Delta as a place.

There is no evidence that Alternative 4 would be more effective in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses, or more cost effective to affected individuals or businesses. As with the proposed amendment, economic impacts to private businesses or individuals are negligible. Alternative 4 was eliminated from consideration because although it would achieve, or partially achieve, many of the objectives of the proposed amendments, it would not prioritize investments that contribute to protecting water conveyance and diversion infrastructure over other types of levee investments.

E. Alternative 5 – Prioritize Levee Investments in Through-Delta Conveyance Areas and High Risk to Life and Property Areas

Alternative 5 focuses on prioritizing investments in levee improvements at islands or tracts identified as having high risk to water supply, life, and property. Levee improvements that support other State interests (such as improving Delta ecosystem conditions) would still occur but would be prioritized lower than investments in high risk to water supply, life, and property areas. Continued funding would be provided for maintenance of levees throughout the Delta where authorized by Water Code section 12980 et seq. and consistent with the recommendations of the CVFPB.

The DLIS did not provide a priority ranking and corresponding monetized assessment of an alternative that emphasized water supply reliability and conveyance more than the recommended strategy. Therefore, there is insufficient information upon which a quantitative economic assessment could be based. However, the economic and fiscal impacts described above for the proposed amendments are representative of the general magnitude and timing of impacts that could be expected under Alternative 5. Alternative 5 would provide somewhat greater benefits (relative to the proposed amendments) for water supply reliability and conveyance and a somewhat lower level of benefits to loss of life and property, ecosystem, and Delta as a place.

There is no evidence that Alternative 5 would be more effective in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses, or more cost effective to affected individuals or businesses. As with the proposed amendments, economic impacts to private businesses or individuals would be negligible. Alternative 5 was eliminated from consideration because although it would achieve, or partially achieve, many of the objectives of the proposed amendments, it would not prioritize levee investments that protect ecosystem enhancements that provide high benefits over other types of levee investments.

As demonstrated above, the Council considered alternatives to the proposed amendments and determined that: 1) no alternative would be more effective in carrying out the purpose for which the action is proposed; 2) no alternative would be as effective and less burdensome, while at the same time protecting human health, safety, and the environment; and 3) no alternative would be more cost-effective and equally as effective in implementing the statutory policy or other provisions of law. Further, the Council has determined that the effect on business is negligible, as explained previously. Therefore, it follows that there are no reasonable alternatives

to the proposed amendments that would lessen any adverse impact on business, including small businesses, because no significant adverse impact will result from the proposed amendments.

VIII. SUMMARY OF ECONOMIC IMPACTS AND FISCAL COSTS IN FORM STD 399

The proposed amendments to Sections 5001 and 5012 would encourage State investments in Delta levee improvements that are consistent with DLIS priorities. The EFIA described the purpose, data, methods, and results of the economic and fiscal impact analysis. This section summarizes the findings of the economic and fiscal analysis corresponding to relevant sections of the STD 399 and identifies those findings within the relevant portions of the EFIA.

ECONOMIC IMPACT STATEMENT:

1. Section A: Estimated Private Sector Cost Impacts

Section A.1

The proposed amendments result in a negligible economic impact because the proposed amendments could affect the timing of levee investment but would not change the overall level of funding (see Section II.(A.) for overview and Section II.(B.) for methodology). The EFIA demonstrates that the proposed amendment would result in:

- Negligible direct costs to businesses, employees, or individuals (see Section V.)
- Negligible direct effect on jobs or occupations (see Sections V.(2.) and V.(3.))
- Negligible direct costs to small businesses (see Section V.(7.))

Please refer to Section IV. for a discussion concerning the negligible costs and prospective nature of the economic analysis. The proposed amendment could cause economic costs totaling approximately \$212,700 per year.

The proposed amendments do not impose reporting requirements on the private sector (see Section V.(10.)).

Since the proposed amendments would have a negligible effect on businesses, the proposed amendments would not have a significant statewide adverse effect on the ability of those businesses to compete with each other or with businesses in other states, therefore there is no impact on California competitiveness (Section V.(9.)).

The proposed amendments are performance based, not prescriptive. The proposed amendments do not mandate the use of specific technologies or equipment or prescribe specific actions or procedures. The proposed amendments would require DWR to prepare an annual report to the Council identifying its decisions to award State funds for Delta levee operation, maintenance, repair, rehabilitation, replacement, and improvement projects and include specific information in the report. If funding awards for levee improvement projects vary from the DLIS

priorities, DWR would identify in a report how the funding is inconsistent with the priorities; describe why variation from the priorities is necessary; and explain how the funding nevertheless protects lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities. The proposed DLIS regulations are performance standard regulations. They describe the objective of prioritizing Delta levee funding and set forth criteria for achieving that goal, but do not specify the sole means of compliance with achieving that goal. DWR retains discretion to deviate from the criteria set forth in DLIS when funding levee improvements.

Section A.2

The Council determined that the total impact (including economic and fiscal costs) of the proposed regulation is less than \$10 million (see Sections IV., V., and VI.).

Section A.3

Please see Section V.(1). above for analysis regarding total number/types of businesses entities potentially impacted.

Section A.4

Please see Section V.(1) above for analysis regarding the number of businesses that will be created or eliminated.

Section A.5

Please see Section V.(8.) above for information pertaining to the geographic extent of statewide and local/regional impacts.

Section A.6

Please see Sections V.(2.) and V.(3.) above for analysis regarding jobs created and eliminated.

Section A.7

Please see Sections V.(9.) above for analysis regarding the ability of businesses to compete with other states.

2. Section B - Estimated Costs

Section B.1.

The total statewide cost of the proposed amendments to businesses and individuals is negligible because the proposed amendment could affect the timing of levee investment but would not change the overall level of funding (Section IV.)

Section B.2.

Any indirect costs to businesses, small businesses, or individuals are negligible (see Section IV.).

Section B.3.

While the proposed amendments would establish a new reporting requirement for a State agency (DWR), they would not establish a reporting requirement that applies to businesses or the private sector.

Section B.4.

The proposed amendment has no direct effect on housing costs (see Section IV.). Other potential indirect economic costs to businesses and individuals may include the maximum indirect cost of a change in Estimated Annual Damages (EAD) on Delta island or tract land values, which is conservatively estimated to equal \$212,700 per year (see Section IV.).

Section B.5.

The purpose of the proposed amendments is to implement and make specific Water Code section 85306 to provide guidance for State investments to maintain, improve or rehabilitate Delta levees while advancing the coequal goals. There is no comparable federal regulation because the Delta is unique to California (*See* Wat. Code sections 85000, et. seq.)

3. Section C - Estimated Benefits

Section C.1.

Please see Section VIII. above and the summary below. The proposed amendments would create monetizable and nonmonetizable benefits. Prioritizing investment in Delta levees would generate the following types of benefits:

- Reduced risk of damage to property and infrastructure, including reduced cost to repair failed levees
- Reduced annual risk of fatalities from a levee failure
- State water supply reliability benefits
- Ecosystem/habitat benefits
- “Delta as a Place” benefits from special qualities that distinguish the Delta

Most of these benefits are nonmonetized except for local reduced risk of damage to property and infrastructure, including the reduced cost to repair failed levees. The monetized benefit from reduced damage to property and infrastructure (EAD) equals \$242,000 per year (see Section III.(B.)).

Section C.2.

The benefits of the proposed amendments are the result of specific statutory requirements and specific goals developed by the Council based on statutory authority. As summarized in the Delta Reform Act (Wat. Code § 85054), implementation of Delta Plan policies would provide the best means to achieve the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem, all in a manner that protects and enhances the unique cultural, recreational, natural resources, and agricultural values of the Delta as an evolving place.

Section C.3.

The proposed amendments improve resiliency of Delta islands and tracts by targeting investments to the islands or tracts that provide the greatest benefits. This in turn would be expected to result in benefits to State and local public agencies or private individuals and businesses in the State resulting from changes in water supply reliability, ecosystem restoration, flood risk, or land use policies. The proposed amendments would increase these benefits by ensuring that levee improvement investments provide the greatest return to the State.

Section C.4.

No expansion of businesses identified.

4. Section D - Alternatives to the Regulations

Section D.1.

Section VII. describes five (5) alternatives to the proposed amendments and the approach to quantifying the costs and benefits of each proposed alternative, including quantification issues.

Section D.2.

Total statewide costs under the proposed amendments and all alternatives would be similar (< \$213,000/yr., see Sections III and IV.), but most costs are not monetized.

Section D.3.

Economic impacts to private businesses or individuals under the proposed amendments and all alternatives would be negligible. There is no evidence that any of the alternatives would be more effective in prioritizing Delta levee investments, be as effective and less burdensome to affected individuals or businesses, or more cost effective to affected individuals or businesses.

Section D.4.

The proposed amendments and all alternatives would not mandate the use of specific technologies or equipment or prescribe specific actions or procedures, as explained above (Section VII.).

5. Section E - Major Regulations

As explained in Section II.(C.) above, the Council determined that the estimated economic impact of the proposed amendment to business enterprises and individuals located in or doing business in California is less than \$50 million in any 12-month period, which is less than the threshold for a Major Regulation. See Sections IV. and V. for a discussion of economic costs, and Section VI. for a discussion of fiscal costs.

The proposed amendments would create monetizable and nonmonetizable benefits by prioritizing Delta levee investments consistent with the DLIS. Section III. summarizes all monetized and nonmonetized benefits of the proposed amendments identified by the Council including, where applicable, benefits to health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life.

FISCAL IMPACT STATEMENT:

1. Section A - Fiscal Effect on Local Government and Schools

Please see Section VI.(A.). No fiscal impact to local government exists. This regulation does not affect any local entity or program. There would be no direct costs or savings to local public agencies or schools. Local agencies would continue to assess fees and taxes and would still be eligible for the same level of funding for Delta levee improvements. Local public agencies may incur indirect administrative costs to monitor Council activities, attend meetings, and review documents and findings related to DLIS prioritization, but these costs would not be required in order to comply with the proposed amendments.

Further, since there is no fiscal impact to either local governments or schools, there are no savings created by the proposed amendments.

Please see also "Reimbursement" in Section VI.(C.).

There are no other impacts such as revenue changes in the amount of operating income received by local governments.

2. Section B - Fiscal Effect on State Government

As described in Section VI.(B.) above, the estimated fiscal effects of the proposed amendments on State agencies would occur in several forms. First, DWR would be required to prepare an annual report describing investments in Delta levees. Second, Council staff would be required to review that report and coordinate as necessary with DWR staff. Section VI.(C.) summarizes State fiscal costs. The total cost is estimated to equal \$405,000 and would be absorbed within existing State (Council and DWR) budgets. The additional expenditures in the current State Fiscal Year are likely to be less than \$405,000 and could be as low as zero.

There are no other impacts such as revenue changes in the amount of operating income received by state governments. No State agencies would see a fiscal savings under the proposed regulation.

3. Section C - Fiscal Effect of Federal Funding of State Programs

No additional federal funding is required and there is no reduction in federal funding. No direct or indirect fiscal impacts are anticipated to federally funded State agencies or programs as a result of the proposed amendments because the proposed amendments could affect the timing of levee investment but do not change the overall level of funding. (See Section VI.(D.) above).

IX. CITATIONS

California Department of Water Resources (DWR). 2017. Delta Levees Special Flood Control Projects. Project List 3/2/2017.

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Delta Protection Commission (DPC). 2012. Economic Sustainability Plan for the Sacramento-San Joaquin Delta. pp. 61-62.

Delta Protection Commission (DPC). 2018. Delta Flood Risk Management Assessment District Feasibility Study and Delta Levee Financing Options Report.

Delta Stewardship Council (Council). 2010. Delta As Place: Agriculture White Paper.

Delta Stewardship Council (Council). 2012. Cost Analysis. Cost Analysis for Proposed Delta Plan Regulations in Support of Economic and Fiscal Impact Statement.

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MIG Inc. 2014. Impacts for Planning and Analysis Model. <http://www.implan.com/>. 2014 R3 California Counties Database (Delta Counties).

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