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Delta Levee Investment Strategy: Cost Allocation Methodology and General Updates

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Summary: This is a progress report on the Delta Stewardship Council's (Council) activities to update the Delta Plan priorities for State investment in Delta levees. Staff will provide general updates on progress related to public outreach and communication along with the status of the methodology review by an independent peer review panel. This report also provides information about the cost allocation element of the proposed methodology along with a discussion of next steps.

Background

In March, the Council approved a list of State interests for further consideration during development of the Delta Levees Investment Strategy (DLIS) and other Delta Plan provisions related to levee investments and risk reduction measures. The Council also directed staff to continue to evaluate these interests as they develop the DLIS and report back to the Council with the results of these evaluations.

Also at the March meeting, staff provided an update to four alternative approaches for addressing goals and objectives for State investment in Delta levees. Several Council members suggested these alternatives could be revised and better developed and possibly be used as a framework for the levee investment strategy. No vote was taken on these alternative approaches. Instead, staff was directed to work with the Council and stakeholders to further define and develop these elements.

For this April meeting, staff will provide information on two key elements: a presentation on the cost allocation methodology and the status of the independent peer review process The cost allocation methodology presentation is the third and final in a series of presentations on ARCADIS' proposed DLIS methodology.

Cost Allocation

The DLIS, in accordance with the Delta Plan's recommendation (RR P1: Prioritization of State Investments in Delta Levees and Risk Reduction), will recommend not only priorities for State investments in Delta levees, but will also recommend allocation of levee improvement and maintenance costs among other levee beneficiaries. The cost allocation approach proposed by ARCADIS is guided by existing cost allocation principles, including existing law.

There are two types of levees in the Delta: project levees comprise approximately one-third and non-project levees comprise the remaining two-thirds. Project levees are included in the State Plan of Flood Control, which may qualify them for financial assistance from the federal government. Costs for building or improving project levees historically have been shared by the federal government, the State, and local agencies in varying proportions. Historically, the federal government has paid between 50 percent and 75 percent of the total costs while the non-federal costs have been shared, typically 70 percent by the State and 30 percent by local agencies. Costs for maintaining most project levees have been paid by local agencies. A few project levees, such as the west side of the Yolo Bypass, are maintained at State expense.

For State-funded project levee improvements without a federal cost share and for other urban levees, the Department of Water Resources (DWR) recently published *Cost Share Guidelines for State-Local Cost Shared Flood Programs and Projects* which establishes cost sharing formulas for project levees. The State base-level cost share for levee improvements is 50 percent, which may be increased if improvement projects satisfy the objectives described in the guidelines. Satisfying all objectives can increase the State share to a maximum of 90 percent.

For improvements to non-project levees in the Delta, DWR published *Delta Levees, Special Flood Control Projects, 2014 Guidelines for Providing Funding to Local Agencies*. In general, the State share is limited to $10 million per project, which may be modified by DWR in project solicitation packages. The State may pay up to 20 percent of pre-construction costs and in no case will the State pay more than 100 percent of the cost of a project. For projects in the Delta's Primary Zone that comply with the guidelines, the State's base cost share is 75 percent. For projects in the Delta's Secondary Zone, the State's share is 50 percent, which may be increased up to a maximum of 75 percent based on the results of an ability-to-pay study (or, LABA, Local Agency Benefits Assessment).

The State will increase its share for improvements to non-project levees that contribute to 1) restoring habitat (up to 40 percent with a maximum of 100 percent); 2) specific public purposes (up to 20 percent with a maximum of 95 percent); 3) subsidence control (up to 10 percent); and 4) statewide interests including water supply reliability and ecosystem enhancement or beneficial reuse (up to 10 percent for each). In addition, the State may provide a 50 percent match for third party contributions.

For maintenance of levees through the Delta Levees Maintenance Subventions Program, Section 12986 of the Water Code states the Legislature's intent is to reimburse an eligible local agency for costs incurred for the maintenance of non-project levees. The details of cost-sharing for maintenance of non-project levees are described in Delta Levees Subventions Program materials. Subject to availability of State funds, the program will reimburse local agencies for up to 75 percent of remaining eligible maintenance costs for non-project levees after local agencies have expended at least $1,000 per mile using local funds. The Water Code requires that a local agency provide information regarding the agency's ability to pay for the cost of levee maintenance or improvement.

These formulas for sharing costs for levee improvements between the State and local agencies are well established by DWR guidelines. The Delta Levees Investment Strategy project will examine cost allocation within the local share in compliance with the Delta Plan's principle that those who benefit from projects – in the case of levees, the beneficiaries of flood risk reductions -- should share in the cost of improving those facilities. Benefits of levee investments accrue to numerous individuals, property owners, commercial businesses, utilities, and public infrastructure within and outside of the Delta. In addition, the State of California as a whole also benefits from levee investments as reflected in the State's cost sharing guidelines.

The DLIS project will examine the local share using the Separable Costs Remaining Benefits (SCRB) process, which is the preferred method for cost allocation identified in the Department of Water Resources' *Economic Analysis Guidebook* for repayment purposes for the State Water Project (SWP). This process identifies the costs for each purpose that a proposed project will support (for example, reducing flood risk to property, improving water supply reliability, or ecosystem enhancement). The SCRB process also identifies the costs for project features that support all proposed project purposes, termed residual costs, which cannot be readily allocated to specific beneficiaries.

The SCRB process, guided by fairness and manageability, can be used to allocate cost within the local share by examining the residual cost as well as the cost for each purpose of the project. The SCRB also enables allocating costs by assigning benefits to specific beneficiaries. To date, the DLIS project has identified general procedures and data requirements for local share cost allocation using SCRB. Detailed procedures for final cost allocation among beneficiaries and beneficiary groups will be identified as the DLIS project is developed.

Independent Peer Review of Project Methodology

A key next step in development in the DLIS is review by a science panel of the methodology ARCADIS proposes to use in evaluating alternative levee investments and allocating costs. The names of panel members for this independent review are listed in Attachment 1 along with their area of expertise and relevant experience. The panel's review will ensure the approach taken is transparent, robust and sufficiently sensitive to quantify and prioritize the assets and risks to State interests associated with leveed islands and tracts in the Delta.

Earlier this month, ARCADIS' memorandum describing the methodology and scientific basis to be used in developing the Delta levee investment strategy, backed five technical memoranda, was provided to the independent review panel. The documents also have been made available for public review on the Council's website on the DLIS webpage. Topics in the memoranda include:

- The geographic scope of the DLIS, including a list of islands and tracts covered by the DLIS

- The methodology for creating an inventory of assets affected by the Delta's levees
- The methodology for identifying hazards that threaten these levees
- A tolerable risk methodology to assess risk from flooding
- Metrics to assess baseline conditions and estimate the effects of future levee investments on items such as
  - expected annual fatalities,
  - expected annual property damage,
  - water supply disruption,
  - habitat impacts, and
  - impacts to farm land.

The panel will review the documentation over a 30-day period then convene on May 19-20 for a public meeting where they will receive a presentation from Council staff and the consulting team on the technical materials and the methodology's development. During the meeting, the panel will provide some initial feedback from its review to date, ask questions of the staff and also hear from stakeholders and the public during the public testimony portion of the meeting. Thirty days after the public session, the review panel will submit its final report to the Delta Science Program Lead Scientist. Suggestions from the final report may be incorporated to improve the methodology used in the development of the Delta levees investment strategy.

Stakeholder Coordination

Staff continues to meet with key stakeholders and technical experts to provide an overview of the project and to solicit input on the information being assembled.

Two public meetings will occur in April. The first will be on April 27 in Stockton at the Robert J. Cabral Ag Center and the second will be on April 29 in Walnut Grove at the Jean Harvey Center. The primary focus of these meetings will be to update the public on the project's status including presenting and discussing the technical materials that will be evaluated as part of the independent peer review process.

Other Next Steps

During the next few months, as the independent peer review is proceeding, staff will:

- Distribute a Notice of Preparation to solicit agency and stakeholder input on the scope and content of the Programmatic EIR for the Delta Plan amendment that may result from the DLIS
- in late spring/early summer
- Work with ARCADIS to continue developing the decision-support tool that will be used in the DLIS analysis following the completion of the peer review process
- Work with the Council and stakeholders on further developing and evaluating a series of alternatives to guiding State investments in Delta levees

List of Attachments

Attachment 1: Information on the Independent Peer Review Panel

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