DELTA PROTECTION COMMISSION

DELTA FLOOD RISK MANAGEMENT ASSESSMENT DISTRICT FEASIBILITY STUDY

Workshop Schedule and Work Products

May, 2016

The Delta Protection Commission, working with a team of consultants led by M.Cubed, has initiated a study to identify feasible financing mechanisms to pay for levee improvements and other methods of reducing flood risk in the Delta. The Study will use several constructed case studies to evaluate the potential of a range of financing mechanisms to fund capital investment and maintenance of Delta levees. The Study will recommend alternative ways to implement the suite of financial mechanisms.

Study Objective

This Study will help support the Delta Stewardship Council's Delta Plan recommendation that "the Legislature should create a flood risk management assessment district … to provide adequate flood control protection and emergency *response for the regional benefit of all beneficiaries, including landowners, infrastructure owners, and other entities that benefit from the maintenance and improvement of Delta levees, such as water users who rely on the levees to protect water quality*." (Delta Plan Chapter 7, Recommendation RR R2, emphasis added). In addition, the Department of Water Resources, which funded the Study, has had a long interest in a beneficiary pays system for Delta levee improvement and maintenance.

The Study will:

- Consider the legal, institutional, financial, and political feasibility of each mechanism;
- Identify the classes of relevant beneficiaries and their tangible and intangible assets (e.g., farms, pipelines, roads, through-Delta conveyance, etc.);
- Characterize their level of benefit and ability to contribute financially (although these estimates will be of orders of magnitude); and
- Describe institutional and legal constraints that could influence their ability to make a fair and equitable payment.

Because this is a feasibility study, the project will not produce sufficiently precise and comprehensive information to implement a financing program. Instead, the project will produce illustrative examples that reflect the Delta's complexity, and which are sufficient to draw broad conclusions about the feasibility of a range of financial mechanisms. To move the results of the feasibility study forward to implementation, the State will need to obtain more precise and comprehensive information, and the Legislature will need to consider the various policy options that the feasibility study generates.

Study Approach

The feasibility study consists of four concurrent tasks, as well as ongoing facilitated and targeted stakeholder input. The four tasks are as follows:

1. Gather information on existing financing mechanisms, institutional settings (e.g., reclamation districts, counties, state, federal, private), and current physical, demographic and economic parameters. This task includes constructing a set of five "archetypes" that cover a range of situations in the Delta that can influence the functioning and attractiveness of financing mechanisms.
2. Identify broad classes of beneficiaries and activities that affect Delta levees, and evaluate each class' relative economic activity, flood damage risk, costs to provide flood protection, and ability and motivation to contribute a fair, proportionate share to a beneficiary pays-based system of financing Delta levee improvements or other means of reducing flood risk.
3. Test the more promising mechanisms on the five archetypes—a small enough set to be manageable, yet complex enough to represent the most important challenges in the Delta.
4. Develop a refined list of the more promising financing mechanisms based on criteria developed in concert with stakeholders. While one of the mechanisms anticipated to be included is an assessment district, the study will identify a suite of mechanisms to match the characteristics of the key beneficiaries.

The M.Cubed team is recruiting a sounding board of one to two dozen key interest group representatives to serve as the project's stakeholder group. Individual phone interviews took place in December and January to obtain stakeholder input into this process and identify the sounding board members. The sounding board members will be invited to attend three workshops to review work products, provide input, and help further refine the feasibility analysis. A fourth workshop will be open to the public, at which the project team will present the results of the analysis and obtain suggestions for implementation steps.

Tentative Schedule for Stakeholder Workshops

The following list describes the topics and tentative schedule for the four stakeholder sounding board workshops.

- **Workshop #1 – Building Blocks**– ***early March 2016***: This workshop will review the team's understanding of the context and data before moving into the feasibility assessments. The agenda of the workshop will include a review of the "current status" memos (levee funding and legal issues), and presentation of the archetype representations.
- **Workshop #2 – Economic Aspects** – ***late May 2016***: This workshop will introduce the team's approach to estimating the economic factors that enter into assessing the

feasibility of different financing mechanisms. Memos will be presented on estimation of existing economic benefits by activity, linkage of beneficiaries to hazards and risks, flood protection cost estimates for each of the five archetypes, and descriptions of the available and applicable cost allocation methods.

- **Workshop #3 – Financing Mechanisms**– ***June 2016***: This workshop will present the preliminary assessment of feasible financing mechanisms based on the building blocks and economic aspects described in the first two workshops. This will include a review of how the list of viable financing mechanisms was developed and culled, and a review of financing mechanisms' feasibility offered within the context of each archetype.
- **Workshop #4 – Public Presentation–early July 2016**: This workshop will present the results of the analysis developed in concert with the sounding board in the previous three workshops. The team will summarize the process and findings, and request broader public input on implementing the approaches developed in the planning process.

Work Products for the First Three Workshops

The work products will be sent to the stakeholder group shortly before each workshop.

Workshop #1 - Building Blocks

This workshop will include information on: (a) existing financing mechanisms in use in relationship to current institutional settings (e.g., reclamation districts, counties, state and federal agencies, etc.); and (b) current physical, demographic, and economic parameters. This task will rely primarily on existing information, including the Delta Stewardship Council's "Delta Levee Investment Strategy" (DLIS) reports and data.

It will also review the construction of the "Archetypes," or case studies, which broadly describe the conditions and challenges presented by the different mixes of assets and beneficiaries, and which financing mechanisms would be most appropriate to each. These archetypes will be constructed to cover the range of conditions in the Delta's sub-regions (e.g., western Delta islands, urbanized eastern fringes), general levels and types of risk, depth, and duration of inundation, and differing mixes of beneficiary classes.

Work products presented will include:

1. Context Memos on:
    - Historic and current Delta levee construction and maintenance funding mechanisms and sources; and
    - Historic and current legal guidance and constraints on flood protection finance.
2. A memorandum characterizing the five archetypes, with GIS representations:
    - Agriculture-dominated West Delta Island;

- Cross-delta and in-delta infrastructure;
- Through-Delta water conveyance;
- Small urban and scattered commercial and residential development in the North Central Delta; and
- Large urban.

Workshop #2 - Economic Aspects

This workshop will identify classes of beneficiaries and activities that affect Delta levees, and evaluate each class' relative economic activity, risks from levee failure, costs for flood protection, and ability and motivation to contribute a fair, proportionate share to a beneficiary pays-based system of financing Delta levee improvements.

Work products presented will include:

1. List of potential beneficiaries and associated activities affecting Delta levees.
2. Memo with a catalog and valuation of economic activities and benefits tied to the Delta, including:
    - Rough estimates for linkages to hazards and resulting risks; and
    - Representation of value and risks in each archetype.
3. Memo on the range of flood protection action costs for each archetype.
4. Memo on available and applicable cost-allocation methods including consideration of ability to pay.

Workshop #3 - Initial Screen of Financing Mechanisms

The objective of this workshop is to refine the most promising mechanisms based on criteria developed with advice from stakeholders. Mechanisms will include an assessment levied by a reclamation district as well as other mechanisms intended to match the characteristics of the key beneficiaries. The workshop will cover the applicability and potential performance of the financing mechanisms across financial, administrative, economic and legal dimensions, and solicit input from stakeholders regarding metrics for feasibility.

Work products presented will include:

1. Memo with a catalog of viable financing mechanisms with an assessment matrix for several dimensions affecting feasibility.
2. Memo assessing each viable financing mechanism within each archetype.
3. Memo describing the allocation of costs to the various beneficiaries, including a list of available financing mechanisms applicable to each type of beneficiary, and a preliminary assessment of ability to pay applied to each archetype.