

***DRAFT 3/12/15 SUBJECT TO CHANGE***  
***For Review and Adoption by the DSC at the April 23, 2015 Meeting***

**DELTA STEWARDSHIP COUNCIL**  
**Delta Levees Investment Strategy: Technical / Policy Public Workshop**  
**March 11, 2015**  
**Park Tower Plaza**  
**980 9<sup>th</sup> Street, 2<sup>nd</sup> Floor Conference Room**  
**Sacramento, CA 95814**

**MEETING SUMMARY**

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**1. Welcome and Introductions**

The workshop was called to order at 10:03 a.m., March 11, 2015, by Chair Randy Fiorini.

Roll call was taken and a quorum established at 10:05 a.m. The following members were present: Patrick Johnston, Randy Fiorini, Phil Isenberg, Susan Tatayon, Frank Damrell, and Mary Piepho. The following member was absent: Aja Brown.

**2. Panelist Introductions**

Lead Scientist Peter Goodwin introduced himself as facilitator and introduced the panel members:

- Dr. Lewis E. Link, Research Professor, Dept. of Civil and Environmental Engineering, University of Maryland
- Dr. Dennis Mileti, Professor Emeritus of Sociology, University of Colorado Natural Hazards Center
- Dr. G. Paul Kemp, Associate Research Professor, Center for Coastal Energy and Environmental Resources, Louisiana State University
- Larry A. Larson, P.E. CFM, Director Emeritus, Senior Policy Advisor, Association of State Floodplain Managers
- Dr. Jeff Mount, Senior Fellow, Public Policy Institute of California
- Alicia Kirchner, representative from the U.S. Army Corps of Engineers, Sacramento District

**3. Opening Remarks**

Cindy Messer gave an overview of the Delta Levee Investment Strategy (DLIS) and stressed that the strategy would be based on information and resources already available.

**4. Panel Discussion**

Dr. Goodwin began by asking the panelists what lessons they had learned from their work elsewhere—the take-home lessons of what's worked really well—and the pitfalls. He then led

the Council and panel through discussions focused on three questions: Is the Council adequately considering all alternatives; what are the best approaches to consider when assessing tolerable risks or recommending levels of protection; and how can we best consider ecosystem functions?

Dr. Link said that it's essential to have a technically sound big picture strategy of assets, issues, and stakeholders involved as a basis for decisions. Dr. Link stated risk is an extremely powerful tool; it allows you to weigh the chance of hazard and the type and severity of consequences. Dr. Link added that it's critical to set strategic goals, but not to try to solve a problem in one bite and cited the strategy the Dutch are using now for climate change adaption; implementing it incrementally. "It's a marathon, not a sprint and the Dutch are doing it very well."

The pitfalls Dr. Link sees include: 1) Dilution is not a solution; 2) Trying to serve everyone's desires is going to lead to no one being satisfied; "Don't hide behind science if you don't want to make a decision; and 3) Don't rest on the laurels of current standards."

Dr. Kemp said flood protection is not a right; it's a negotiation. "You have certain shared values between people who are personally at risk and those who aren't, but are called upon to pay for improvements. It's important to describe those other benefits out there."

Dr. Mileti listed three things that he had seen work: 1) The need for a multi-dimensional approach as relying on one approach to managing risk is destined to fail; 2) Consequence reduction needs to be thought of in a multitude of ways, not only the population being affected, but also the systemic population; consequences also include economic, society, institutional, and environmental; 3) Human life is the number one priority, issue people at risk warnings prior to them being impacted by floodwaters and motivating the public how to engage in safety is critically important.

Mr. Larson said to keep in mind the 3 E's: Economy, Environment, and Equity—who wins and who loses. Mr. Larson stated it is important to get buy-in at the stakeholder level and to keep the system transparent. "You're not going to get the buy-in unless they see something that's important to them. When you start to implement, no one has the perfect plan. Start and adapt as you go along. It's a social issue, not an engineering issue."

Alicia Kirchner said transparency is key, and judging and planning for it early is the challenge every single time and understanding the impediments that the partner entities bring to the table; i.e., laws that don't exist or laws that are restraining in some ways. Ms. Kirchner said a risk is when people think they can influence those policies to a greater degree than they can. Ms. Kirchner felt it is important to understand those impediments and be able to strategize around them.

Ms. Kirchner stated the pitfalls she sees: 1) Don't do things in a vacuum—Collaboration is key; 2) Explaining policy matters—once a year isn't enough, it's an ongoing dialogue; and 3) The visioning discussion can leave a lot of expectations that can be hard to deliver on, "We're going to do great things, things that have never been seen before. When you try to do it, you hit impediments." Need to be responsible in messaging—expectation setting is key.

Dr. Mount said the levees plan can devolve from the Delta Plan. “To do this Plan well, you are going to have to give people bad news. The earlier you can give them that bad news, the longer they have to adjust to it. You can make the bigger policy decisions with the information that you have.” He added that standards are the clearest definition of policy the government can give on levees, but standards are viewed as fixed. The PL 84-99 standard is already out of date. Standards should be viewed as something that can be constantly adjusted.

Federal funds are unlikely to be available, except for disaster response and recovery, Dr. Mount added. For risk, he said to beware of the sum cost effect; we’ve made an investment in the past, so that’s a compelling reason to continue that in the future.

Several panelists recommended the full range of tools, not solely levee improvements should be used to reduce risks. California’s earthquake risk reductions programs provide some useful models. Panelists also said the strategy may be big, but implement it in fundable increments to allow adjustment based on experience and opportunity. Too many implementing agencies dilutes responsibility and hinders execution, so consider New Orleans’ response of consolidating levee agencies, suggested Dr. Kemp. The Delta levee subventions program can allow low cost, bottom-up implementation within a larger strategy’s framework.

Alicia Kirchner said the protection of the economy through Delta levees’ contributions to water supply reliability is important as is protection of other infrastructure, and protection of other economic sectors.

Dr. Mount noted that not all islands will be priorities; some are important to water quality or ecosystem protection, for example, but others are not. Dr. Mount said you’re seeking a “bright line” between all the alternatives, but he doesn’t see it. The choice of this should devolve directly out of the Delta Plan.

Alicia Kirchner said it comes down to the difficult challenge of identifying the true interest of the State. The Delta is complex and it is multi-faceted. It’s going to be difficult to whittle down.

Throughout the workshop, the panelists heard Council members’ comments, answered questions and provided clarification. Chair Fiorini asked if there were any members of the public who wished to comment.

## **5. Questions and Public Comment**

Erik Ringelberg, Local Agencies of the North Delta, said his group, which represents reclamation and water districts in the North Delta, had looked at the prioritization table and came up with a slightly revised table that they believe is more reflective of the law and could provide a road map for how we might consider investments at large. He also liked Dr. Mileti’s social scientist comments which offered an important and refreshing perspective.

Rogene Reynolds, a South Delta resident spoke on behalf both of Restore the Delta which is in full support of the third option—the Delta Protection Commission’s take on Delta levees—and as a Delta resident. Ms. Reynolds stated she fully recognizes the risks where she lives and was pleased to hear Dr. Mount endorse the subventions program because it works and their levees are in better shape now than they’ve ever been historically. She was dismayed that during the panelists’ field trip to the Delta they didn’t come out to Lower Jones Tract to

look at their fat levees. “You could have 3-bike lanes and still drive cars and trucks back and forth on that levee. We don’t say that every levee, every island is equal. We’re not looking for a handout. We’re California citizens with an interest in the economic success of our state, which includes water movement through our Delta, not around it.”

Gilbert Cosio, of MBK Engineers, said he’s been involved in the levees for 30 years and, in the Delta, the whole is greater than the sum of its parts. Mr. Cosio stated the levee around Franks Tract gets a tremendous hit from wave action and a lot of the budget for those levees goes to protecting them from wave action. There are little pockets of levees that may not be as important on their own but to their neighbors and to the state as a whole, there’s a lot of importance. He added that they’ve got a State-approved project where seven urban water agencies are going to pick up the local share. They also see the benefit of setting back a levee, or planting habitat on a levee that may not be strong enough to maintain that habitat, but they haven’t seen a program that has the incentive to allow the farmers to give up farm ground or beef up their levees so it’s super fatty. How do they incentivize that?

John Lopez, Tremaine & Associates, said he works for an environmental company that has worked in the Delta for eight years. His company has developed a technology that’s able to show how the levee was constructed and what some of the faults might be. Mr. Lopez said there are technologies, not always with the largest companies, that give them the ability to manage these resources and this technology can provide information to help prioritize and better plan and manage budgets.

Bill Betchert, consulting water resources engineer, said the Council members’ comments were helpful and gave him hope that they’ll go in what he called the right direction. He said that the subventions program is extremely effective and is essential for the state to help maintain levees and avoid a much larger cost down the road. He also said there are big perception problems in the Delta; people can’t imagine what it would be like to have an earthquake and have months without the ability to export fresh water. There’s also a perception problem that in a disaster the federal government doesn’t come and provide disaster assistance to reconstruct levees.

## **6. Closing Remarks**

Chair Fiorini asked the panelists if they had anything to add to or adjust to opening comments based on what was heard during the meeting.

Dr. Mount said everything was explored well, except for the issue of liability. He mentioned a landmark verdict against the State of California for a levee break in 1986 that cost half a billion dollars known as the Paterno decision. Dr. Mount used the analogy, ‘you touch it, you break it, you own it’ and said that is something the Council needs to deal with. He also asked who’s in charge and said it often seems like everyone’s in charge because decisions are so fragmented with overlapping agencies. He said that would be valuable for the Council to deal with that issue.

Alicia Kirchner suggested changing the tone of the discussion of rights to focus more on realities. She said she was encouraged to hear the discussion from locals about understanding risk and added that it’s good to make sure that’s widespread since they learn more about risk all the time and communicating that risk while difficult to do on a daily basis,

is something that has to be done, as well as communicating that things that have been done before may not work anymore in spite of people wanting things to continue as they were.

Larry Larson said he thinks the Council has a good understanding of how difficult the task is and how difficult the path ahead will be. Mr. Larson felt the number one challenge is how to get the stakeholder buy-in.

Dr. Mileti said he came to the workshop pessimistic that this complex problem could be solved, but he was leaving an optimist. Dr. Mileti said if there are solutions that can be found, this group will find them.

Dr. Kemp said there's a strong need for leadership even though it's all collaborative and consensus building; this is not going to be done by consensus. Within the Delta there has to be a lot of congruity; people can't be fighting in the Delta and expect folks outside of the Delta to really take them seriously.

Dr. Link said he's been involved in decision tools for 48 years and they can't be looked at as a turnkey system that's ready to operate. Dr. Link stated it is better to look at the tools as ways to provide consistency in how you look at data and integrate data and it is a way to facilitate collaboration. The tool should be modified as you learn what it can and cannot do and should evolve, along with your perceptions of what is important.

Chair Fiorini asked Dr. Goodwin for final comments. Dr. Goodwin thanked the panel and asked if they find additional examples where people were grappling with these similar kinds of issues, they provide them to the Council.

**The workshop adjourned at 2:30 p.m.**