

MINUTES
MEETING OF THE CENTRAL VALLEY FLOOD PROTECTION BOARD
March 22-23, 2012

NOTE: THE BOARD WILL CONSIDER TIMED ITEMS AS CLOSE AS POSSIBLE TO THE LISTED TIME, BUT NOT BEFORE THE TIME SPECIFIED. UNTIMED ITEMS MAY BE HEARD IN ANY ORDER. MINUTES ARE PRESENTED IN AGENDA ORDER, THOUGH ITEMS WERE NOT NECESSARILY HEARD IN THAT ORDER.

A regular meeting (Open Session) of the Central Valley Flood Protection Board was held on March 22-23 beginning at 1:00 p.m. in the Auditorium of the Employment Development Department Building, 722 Capitol Mall, Sacramento, California. The March 23 location was the Resources Building Auditorium, First Floor, 1416 Ninth Street, Sacramento, California.

THURSDAY, MARCH 22

The following members of the Board were present:

Mr. Bill Edgar, President
Ms. Teri Rie, Vice-President
Ms. Jane Dolan, Secretary
Mr. Ben Carter
Mr. Tim Ramirez
Ms. Emma Suarez
Mr. Mike Villines

The following members of the Board staff were present:

Mr. Jay Punia, Executive Officer
Mr. Len Marino, Chief Engineer
Mr. Eric Butler, Supervising Engineer
Ms. Nancy Moricz, Staff Engineer
Ms. Amber Woertink, Staff Assistant

Department of Water Resources staff present:

Mr. Joe Bartlett, Senior Engineer
Mr. Marc Hoshovsky, Environmental Program Manager
Mr. Paul Marshall, Assistant Chief, Division of Flood Management
Mr. Rod Mayer, Assistant Deputy Director, FloodSAFE
Mr. Keith Swanson, Chief, Division of Flood Management

Also present:

Mr. Eric S. Clyde, MWH
Dr. Ibrahim Khadam, MWH

1. ROLL CALL

Board Member Carter announced that Governor Brown had made an appointment for the position of President of the Board: Mr. William Edgar. Board Member Carter congratulated Mr. Edgar and formally passed the gavel to him.

President Edgar thanked and expressed appreciation to Board Member Carter, who had been an inspiration to the staff and to the Board during his tenure as President.

Executive Officer Punia reported that all Board Members were present except Vice President Rie and Board Member Villines, who arrived shortly.

2. APPROVAL OF AGENDA

Staff reported no proposed changes to the agenda.

Upon motion by Board Member Carter, seconded by Secretary Dolan, the Board unanimously approved the agenda as published.

3. PUBLIC COMMENT

Keith Swanson, Chief of the Division of Flood Management with the Department of Water Resources (DWA), welcomed the new President and said that he looked forward to working with him in the coming years. Mr. Swanson also acknowledged the work that Board Member Carter had done as President. There had been tremendous growth in the Board and the Board staff, and Mr. Swanson attributed that to the former President's leadership.

4. INFORMATIONAL BRIEFING

Department of Water Resources Technical Briefing on 2012 Public Draft of the Central Valley Flood Protection Plan (DWR Staff)

President Edgar gave introductory remarks stating that the briefing was scheduled partly in response to requests from the Board and the public and that DWR will walk through the technical documents to provide an understanding of how they fit together and support the plan's recommendations and conclusions.

The 29 attachments to the document describe the data, analysis, findings, and technical studies that were developed to support the plan and its conclusions and recommendations. All are available on the Board's website.

President Edgar noted that there was an additional section in the internal agenda that was not on the public agenda: the Approach Comparison and Summary. It would be included as well.

He requested the Board to think about what will happen after the April hearings. He outlined the review and adoption schedule to take place in April, May, and June, as follows:

1. First two weeks in April: public hearings.
2. Second two weeks in April: collect and organize public comments. Meet with DWR for a workshop to develop responses to comments. Possibly consider the comments at the April 27 Board meeting.
3. First two weeks of May: another round of public hearings.
4. Second two weeks in May: Collect and organize comments. Meet again with DWR. Post the officially considered responses at the May 24 meeting.
5. First two weeks in June: Collect and organize comments to meet the final posting deadline of June 15.
6. End of June: final adoption.

President Edgar also commented that plans and construction would not commence next year. Two major components of the plan development process had been eliminated due to time constraints: the regional approach of eliciting comments, and the review of possible projects that could be implemented in the plan.

Real projects will not emanate from the plan for a long time. Early Implementation Projects (EIP) will proceed, as will subvention programs. However, the major projects such as the proposals of a ne Cherokee Canal and the Sutter Bypass expansion won't happen for a long time. They will need to be much public input, engineering analysis, feasibility studies, economic analysis, and so forth. President Edgar requested the public to continue giving their input as the plan moves forward.

The Presentation

Below is a summary of the presentation given by DWR staff to the Board.

Paul Marshall, DWR Flood Management Division Assistant Chief, referred the Board to their packets and explained the contents. Then he introduced the DWR panel:

Rod Mayer, FloodSAFE Assistant Deputy Director Mayer

Dr. Ibrahim Khadam, MWH (consultant to DWR)

Joe Bartlett, DWR Senior Engineer

Eric Clyde, MWH (consultant to DWR)

Marc Hoshovsky, Environmental Program Manager, DWR Floodway Ecosystem Sustainability Branch

A. Plan Scope and Development

Plan Overview

The 2012 Central Valley Flood Protection Plan (CVFPP) describes an integrated system approach to flood management. It is focused on improving integrated flood management and flood protection for areas protected by the State Plan of Flood Control (SPFC) facilities. It recognizes the following:

- The connection of flood management actions to water resources.

- Water resource management, land-use planning environmental stewardship.
- Long-term economic, environmental, and social sustainability.
- The State interests of public safety, environmental stewardship, and economic stability.

Mr. Bartlett explained that the CVFPP is a suite of documents comprised of the following:

- The State Plan of Flood Control: a description of what the State Plan of Flood Control facilities are, where they are located, the authorization, the operations and their Operations and Maintenance (O&M) manuals, and so on.
- The Flood Control System Status Report (FCSSR) is a report card of sorts, showing how the system is currently operating and its condition.
- The Urban Level of Flood Protection Criteria, the ULDC Design Criteria, and other documents address some of the legislative requirements of SB 5 that are outside of the CVFPP.
- The Program Environmental Impact Report (PEIR) is associated with the main body of the report.
- The 2012 CVFPP attachments include Volumes II, III, IV, and V, which are the technical portion describing the analysis to date.
- The Reader's Guide referencing the Volumes of Attachments is posted online, and gives brief descriptions of each attachment.

Mr. Bartlett gave an overview of the geographic scope of the plan.

Need for the improved flood management system

Mr. Bartlett explained that currently California's level of protection is the lowest in the nation. There are a million people in the floodplains that are protected by the SPFC facilities, and over \$60 billion in assets. In major flood events just since the mid-eighties, we've experienced over \$3 billion in damages.

The ecosystem has declined over the past several years. We need to continue to seek opportunities to integrate environmental enhancements with flood protection.

Over half the urban levees are not meeting current engineering criteria. About three-fifths of the SPFC non-urban levees have a high potential for failure, and over half of the channels do not have the capacity to pass design flows.

Formulation of systemwide approaches

The plan formulation process was developed in multiple phases:

- Phase 1 evaluated problems and opportunities, and resulted in the development of the CVFPP goals, the primary goal being improved flood risk management.

- Phase 2 identified the individual management actions to meet the CVFPP goals.
- Phase 3 was the preliminary approach comparison.
- Phase 4 formulated the State Systemwide Investment Approach (SSIA).

The comparison of the approaches informed the development of the SSIA: the most promising elements of each approach were carried forward.

The approaches were evaluated using both quantitative and qualitative performance criteria:

- Flood risk reduction benefits were primarily based on quantitative analysis.
- Integration and sustainability were primarily evaluated through qualitative analysis.
- Cost used a mix of both.

The ability to meet the objectives of SB 5 The flood management system was analyzed at a high level. Reconnaissance level detail was suitable for screening and identifying trade-offs.

The two groups of analysis fell into the hydrology and hydraulics (H&H) valuation. Actual tools used were:

- Synthetic hydrology, developed for the comp study.
- HEC-5 to model reservoir operations.
- UNET (another GEC product) to take storm flows into the actual riverine channel system.
- HEC-RAS for some gaps in the comp study analysis.
- RMA2, the Delta RMA model, to understand the Delta water events and their impacts.

For the economic analysis, the primary tool used was FDA – a probabilistic model that considers uncertainty and risk. Its primary use is to evaluate long-term expected annual damages. FDA was also used for life safety analysis.

SB 5 required DWR to consider climate change. They did this in two phases:

- Phase 1 was a climate change scope definition workgroup.
- Phase 2 used technical experts who helped DWR develop a unique threshold analysis approach.

Questions

Vice-President Rie asked about the Delta hydraulic model. Mr. Marshall explained that RMA is commercially used by the corporation that developed it. It is a finite difference model that has been done throughout the Delta, and it's an industry standard. It is used to

help calibrate other Delta models, and is approved by the Army Corps of Engineers (the Corps).

Vice-President Rie asked about the geographic area included in the Delta model and its level of detail. Mr. Marshall explained that the CVFPP does not address the flooding of the Delta, as much of the Delta is not protected by the SPFC. Here, DWR was trying to examine the areas that the CVFPP would be most apt to affect; that would be everything downstream of the Yolo Bypass all the way out through Rio Vista, as well as the South Delta, through the Grant Line Canal and Old River areas.

Board Member Suarez asked about the scope of technical evaluation. Mr. Marshall stated that long ago during the design of the Central Valley flood control system, the various cities and farming communities would try to protect their own areas. They made their levees basically stronger than their neighbors', so the neighbors' levees would fail rather than their own. The CVFPP is trying to get away from local systems and on to greater systemwide approaches that could be more economical. Mr. Marshall felt that this approach was consistent with SB 5.

Board Member Suarez then asked whether the models used in the H&H evaluation were industry standards. Mr. Bartlett responded that they were, although the UNET is a dated model.

Board Member Carter asked about the economic analysis coverage done by the flood damage analysis. How did DWR subdivide, for example, the Sacramento into 61 different areas to do the economic analysis, when we don't have great visibility into the local impacts? Mr. Clyde responded that the impact areas don't necessarily represent a given political jurisdiction, town, or city. They represent areas that have the same flooding risk or an aggravated flooding risk.

Board Member Carter then asked how DWR arrived at its level of detail for local flood risks. Eric Clyde, MWH consultant, replied that the majority of the descriptions were breaking those up into damage areas as part of the comprehensive study. Mr. Bartlett added that each of the impact areas essentially represents an area that's protected by a system of levees, or that common flooding source. Those impact areas were developed by the Corps, and they more or less follow the system map.

Mr. Ramirez asked for more insight about the analysis itself. Dr. Ibrahim Khadam, MWH consultant, explained that they came up with an approach called the Threshold Analysis Approach, in which they analyzed vulnerability in the system and assessed the stressors that will close the vulnerability leaks in the system. They looked at the concept of an atmospheric river, and asked the question, what if the storm became more intense? They analyzed the stress on the system.

Dr. Khadam went on to say that this pilot study was proof of the concept that they'd like to expand in the future: analyzing the system as a whole to find the critical key vulnerable elements and stressors.

Board Member Ramirez asked about the vulnerability of the San Joaquin side given that the downstream areas are so confined. Mr. Marshall replied that DWR is developing a new Central Valley Flood Model, which is a model of the Sacramento and San Joaquin

Rivers. It's a HEC-RAS down the spine of the river, and DWR is using FLO-2D for the overflow areas, so that they can get a good sense of how a particular event might flood a neighborhood or a parcel.

Mr. Marshall continued that the new Central Valley Hydrology Study is coming out of the Corps. It has the ability to scale up events from the past and to scale a single river system. It would be a perfect tool to employ for climate change thinking in the future.

B. Preliminary Approach to Achieve State Plan of Flood Control Design Capacity

Mr. Bartlett stated that the rationale behind this approach was to address specifically some of the language in SB 5. DWR had been directed to examine what it would take to get the system to pass its design flows. This required correctly identifying hazards and reconstructing, but not enhancing, the facilities – to stay within the footprint.

Evaluation

DWR referred to the FCSSR to find facilities that did not meet their geometry, stability, or seepage design criteria, or a capacity to convey design flows. DWR meant to reconstruct the levee, raise the levee, or rehab bypasses and weirs to ensure that they could pass their design flows. (There would be no change to reservoir and operations.)

This involved almost 1,600 miles of repairs to the SPFC and some of the pertinent non-SPFC facilities. The scale of this approach and the actual amount of work needed was quite extensive.

Results from technical analysis

Flood damage reduction was about 43% from the no-project condition.

Improvement of the levees gives the whole system the capability to convey more flows, so as you move water down through the system, you start to see higher and higher stages. There is the potential for downstream impacts because of the upstream reliability improvement.

DWR used specific index points throughout the presentation of the four approaches. For the Sacramento River at I Street, there was an increase in water stage of approximately 1'. On the San Joaquin at Vernalis, the increase was approximately 2'.

Mr. Bartlett referred to maps that showed the peak stage inflow at key locations. He then showed a map with Delta flows and stage. As more water makes its way downstream, the Delta shows some increases in peak flows. The maximum increase was about 2.5'.

As flood improvements are fairly costly, the cost was fairly high: \$19 to \$23 billion. Economic damage was reduced by 34%. Life-risk improvement was about 6%.

Levels of flood protection improved, but did not reach the 200-year urban level of protection directed in SB 5.

SB 5 objectives

For improvement of ecosystem functions and incorporation of multi-benefit projects, there were not many opportunities with this approach; those improvements are in place.

In the near term there would be some reduction in O&M costs, but over time, the same erosive forces would continue their effect.

The approach did not change the system resiliency.

Questions

Board Member Suarez inquired about peer review. Mr. Bartlett replied that the MWH technical team had been primarily responsible for most of the modeling. DWR did send out all of its technical models to other consulting firms for a peer review. DWR also conducted several internal reviews.

Secretary Dolan asked how DWR reconciled making the finding of the 43% damage reduction with the finding that improving the system capacity might cause more downstream impact. Mr. Clyde stated that while the stages may be higher, they had fixed the levees. The reduction in economic damages resulted from the levees not breaking in the places where they otherwise might have. Dr. Khadam added that the numbers did not cover most of the Delta outside the SPFC levees.

President Edgar noted that we need to find out which urban areas do not meet the 200-year stated goal. Mr. Mayer speculated that probably few, if any, of the areas would meet the defined criteria for 200-year protection.

Board Member Carter asked for clarification on whether the downstream levees would not meet the 200-year level of protection. Mr. Mayer said that was true. The levee design criteria looks at a 200-year stage. It assumes that levees don't fail upstream. For urban areas, we're not going to rely on our neighbor's levees to breach – we're not going to depend on that to protect urban areas.

Mr. Mayer went on to say that the Federal Emergency Management Agency (FEMA) would be looking at the 100-year level of protection. They also have rules about what one would assume – that other levees perform and don't break – and they leave the loading on each individual levee for certification.

Vice-President Rie asked about a figure showing the Delta stage with the area around Rio Vista increasing two to three feet. Mr. Marshall explained that this approach improves the levees upstream, so that they actually carry water better all the way down to the Delta. With the Delta at the downstream end of everything, it's going to see the highest increases in peak flood stage.

Vice-President Rie then asked about mitigation for the islands and communities downstream when there's an increase in stage. Mr. Marshall explained that as this was not the approach that DWR was recommending, they had not looked at mitigation.

C. Preliminary Approach to Protect High Risk Communities

Mr. Bartlett explained that this approach focused on populations at risk – on the threats that flooding poses to life safety.

The investments were prioritized to address identified hazards from the FCSSR in the urban and small communities. The 200-year level of protection was the target for the urban areas with populations of greater than 10,000. Small communities with

populations of less than 10,000 had a target of the 100-year level of protection, which is consistent with FEMA.

Communities that had flood threats of high, moderate high, or low moderate were those that moved forward and were considered for physical improvements for flood protection.

Results from technical analysis

The approach reduced flood damages by approximately 63%. There were greater reductions in damage compared to the previous approach, due to the focus on populated areas where the majority of structural assets are found.

For the index points, the Sacramento River at I Street had an approximate difference of 0.2' from the no-project. The San Joaquin at Vernalis had a reduction of 0.1'.

The flood stage map showed a limited stage change compared with existing conditions. For Delta stages, the greatest increase in peak stage compared to no-project was about 0.6'.

Cost was much lower than the previous approach, due to the focus on a smaller area of repairs.

Urban areas would get 200-year flood protection while small communities would get 100-year flood protection.

Because this approach focused only on the population at risk, it did not change the footprint of the system; that limited the opportunities to improve the ecosystem. There were no opportunities for multi-benefit projects. There were no changes to O&M of the system; chronic erosion repairs and costly O&M continue as they are today.

Questions

President Edgar asked about the amount of protection for rural areas. Mr. Bartlett replied that the approach does not focus on rural areas as much as it does small communities. Dr. Khadam noted that the number of small communities protected to a 100-year level is 27 – approximately half of the 50+ that are along the rivers.

D. Preliminary Approach to Enhanced Flood System Capacity

Mr. Bartlett stated that this approach, the “Cadillac” approach, achieved multiple benefits and addressed all the objectives and needs defined in SB 5. It incorporated elements from both the prior approaches, as well as additional system elements such as increasing storage in both reservoirs and the floodplains; expanding the conveyance through improvements to both channels, bypasses, and their control structures; and integrating environmental restoration throughout.

For this approach DWR assessed three components: the capacity enhancement needs for each river reach; the effectiveness of various storage and conveyance improvements in reducing peak flood stage systemwide; and the ability to meet multiple objectives and contribute to all of the CVFPP supporting goals.

Mr. Bartlett gave key findings of the reservoir and storage operations. He explained the findings for managed floodplain storage, bypass expansion, weir modification, and floodway expansion (setback levees). He noted that as the approach would change the

footprint of the system significantly, there were likely to be opportunities for conservation elements.

Results from technical analysis

This approach would reduce flood damages by 80%, the highest reduction in flood damages of all the approaches. There would be a reduction throughout the riverine flood stages due to expansion of storage in both reservoirs and floodplains, as well as the bypasses.

For the key index points, on the Sacramento River at I Street the decrease was about 1.6', which is fairly significant. On the San Joaquin at Vernalis the flood stage would decrease by about 4', reflective of the effects of storage and the added conveyance capacity within the system.

The bypass in the upper San Joaquin region shows increased flood stage because of levee reliability and ability to contain flood waters. Due to the effects of increased storage and bypass expansions, which tend to shift flood peak timing, peak flood stages in the Delta were reduced.

The cost of this approach was high: \$32 to 40 billion. Along with the 80% reduction in flood damages was the improvement in life risk to about 60%. Urban areas received a 200-year level of protection. Many of the small communities received a 100-year level. The effects of lowered peak stages throughout the system provided the potential for benefits throughout all of the system, including rural agricultural areas.

In addition to the opportunity to improve ecosystem functions was the ability to integrate other benefits such as water supply and recreation. There would be a reduction in chronic erosion sites and in O&M challenges.

Questions

In response to a question from Board Member Ramirez, Mr. Bartlett explained that particularly for reservoir operations, the impact analysis was so speculative at this level that DWR couldn't, in good faith, take it forward.

Board Member Ramirez asked about the managed floodplains such as the upper San Joaquin Bypass. Mr. Marshall stated that the managed floodplains are typically private property within the two-year floodplain area, close to the river. To get this kind of acreage, they would be buying a fair amount of farmland in the Sacramento and San Joaquin Valleys. DWR felt that this kind of an impact on the agricultural community would not be well-supported at all.

In answer to a question from President Edgar, Mr. Marshall stated that many of the small communities would meet the 100-year level of flood protection, similar to the Protect High Risk Communities Approach.

E. The Selected State Systemwide Investment Approach

Mr. Bartlett stated that the State Systemwide Investment Approach (SSIA) was the culmination of the best elements from the prior approaches. It emphasizes State interests, systemwide benefits, and systemwide sustainability. The SSIA provides a level of protection commensurate with the level of risk. It also promotes actions that increase

flexibility and adaptability – addressing potential climate change, and wherever possible, integrating ecosystem restoration opportunities.

Mr. Bartlett introduced a map showing all of the conceptual elements of the SSIA, divided into four different categories:

- Regional improvements, including 200-year urban protection and 100-year protection for small communities. Site-specific improvements are for addressing unknown deficiencies and known deficiencies in rural agricultural areas.
- System improvements, including bypass expansions, forecast coordinated operations, and improvements to various flood structures and system erosion relocation and sediment removal.
- Conservation elements, including fish passages, ecosystem restoration enhancement, and on a case-by-case basis, river meandering and other ecosystem restoration activities.
- Residual risk management elements, including enhanced flood emergency response, enhanced operations and maintenance, and floodplain management.

The SSIA reduces flood damages by 66%.

The SSIA gives a slight decrease in flood stage, as result of the expansion of bypasses that were carried forward from the last approach.

The sample index point at I Street shows a 1½ foot decrease. For the San Joaquin, there is about a 1/10th foot decrease.

The bypass expansions tend to attenuate and shape the flood peaks. There are some improvements, but not that much.

The cost is \$14 to \$17 billion.

Economic damages are reduced by 66% and life risk is reduced by 50%.

The 100- and 200-year levels of flood protection are carried forward from the last approach.

Additional Analysis

For the SSIA, DWR looked further at some of the regional economic effects. They came up with the following results:

- Construction activities for implementation of this plan would result in the equivalent of approximately 6,500 jobs.
- The construction stimulus effect would add about \$1 billion.
- As we are significantly increasing the footprint of the system, we have many opportunities to integrate other benefits: to deal with climate change in the future, and to address chronic O&M challenges.

- Incorporating some fish passages will bring the opportunity to preserve some of the shaded riparian aquatic habitat that remains, and improve some connectivity.
- The bypass expansions may bring the opportunity for wetland-type restoration.
- Including conservation elements would reduce the cost of mitigation.

Questions

Board Member Ramirez asked if the easements referenced under reservoir storage operations, river meandering, and floodplain management are mutually exclusive. Mr. Marshall explained that some of them can be. Some of the things included in floodplain management are actually managing structures within the floodplain. FEMA has programs for elevating structures, to reduce the amount of flood damage that can happen to them; so DWR wanted to increase participation in that type of program, and help to make the floodplain safer for the people who remain.

Mr. Marshall went on to say that in other cases, DWR is looking at managing the floodplain differently, e.g., moving some people out.

Allowing the river to meander a bit more is sometimes being done with setback levees to reduce O&M costs. One of the benefits is being able to give back some of that property to habitat.

Board Member Carter asked about criteria used in the case-by-case assessment of ecosystem restoration activities and non-structural or structural improvements. Mr. Bartlett explained that in this approach, because of the overall effect of the system improvements, some were determined to be no longer required because flood stages have been reduced significantly, and the targeted communities no longer fall into the category where they were under a high threat. Mr. Bartlett stated that for the 50-odd small communities, certain feasibility issues (for example, benefit cost ratios) caused them to be dropped out and not considered for improvements. For some of the communities, bypass expansion causes a lower stage overall, which removes them from danger.

Regarding river meandering and other ecosystem restoration activities, Mr. Bartlett said that DWR had identified some chronic erosion sites that would be beneficial to repair. They would want to incorporate ecosystem restoration in those cases. As the project moves forward into regional planning and basinwide feasibility study, DWR would be able to identify places where repair and restoration would make sense.

Summary

Mr. Bartlett stated that the Enhanced Flood System Capacity approach had many benefits, but the cost was very high. SSIA brings a very good benefit for a significantly smaller investment. About a quarter of the investment is going to be spent between the rural agricultural and small community improvements, and the residual risk management. The rest is fairly equally divided between urban improvements.

Looking at each approach from a flood damage reduction and life safety perspective, the best performer is the Enhanced Flood System Capacity approach, but again the cost is very high. The SSIA brings much of the improvements for significantly less money.

In comparing all of the stages at the index points, we remember that to achieve SPFC improves the system throughout and allows it to carry more flows than it currently does. As we move downstream we see increases in stage.

Protecting high risk communities involves doing very localized improvements. There may be localized stage increases.

The Enhanced Flood System Capacity approach, due to the effects of attenuation and all of the extra storage in both the floodplain and the reservoirs, shows significant decreases throughout. The SSIA combines the best elements of each and shows moderate decreases in stage throughout the system.

For a performance comparison: in addition to DWR's quantitative analysis, they also did a qualitative assessment of approaches to inform the development of the SSIA. On the last chart Mr. Bartlett showed the contribution to the primary goal of improving flood risk management on the horizontal axis, and contribution to the supporting goals on the vertical axis.

Mr. Bartlett stated that this was a reconnaissance level effort. It addressed some of the big ideas by using all the existing tools and data available for the analysis, explained below.

- DWR looked at areas where they had the greatest benefit for the cost. They moved those elements forward into the SSIA.
- DWR focused on the people and assets that were at risk in all of the different communities – not just the high risk communities, but some of the small communities and the rural areas. DWR used elements that would benefit all of them.
- For the future, DWR put some system resiliency as well as some multiple benefit elements into the projects.
- DWR included residual risk management.
- DWR divided up the Central Valley into nine different regions, to be able to work with local levee districts and flood control districts to start identifying the flood projects for each region.
- From there, DWR would start to screen out those projects that have a State or federal interest in them, to move them forward into more of a basinwide feasibility study.
- The basinwide feasibility study will be used to examine how individual elements from the regions work together, keeping in mind the need to look at the systemwide impact analysis.
- DWR is continuing with floodplain management programs, Emergency Response programs, and so on.

Questions

Board Member Carter asked where to find the information used to arrive at the SSIA figures of 66% flood reduction and 50% life risk reduction. Dr. Khadam directed him to various sections of the Reader's Guide.

President Edgar asked how DWR chose to go to the SSIA and away from just protecting the high risk communities – did they look at needed improvements for small communities and rural communities? Mr. Marshall responded that some but not all of the small communities are protected, which will provide benefits to some of the rural agricultural areas.

Mr. Marshall pointed out that the SSIA also included habitat restoration, which is the multi-benefit process – one of the things that the Legislature had asked DWR to look for. DWR was also trying to establish some system resiliency through system elements like storage and the bypass expansion.

President Edgar asked for a vision and overall objective of what the CVFPP does. For example, as DWR saw a need to improve flood protection, were they looking at inherent ecosystem restoration opportunities, or were those a separate, stand-alone analysis? Mr. Marshall responded that DWR's goal would be trying to look for those coinciding projects more than meeting the mitigation needs.

Board Member Suarez asked how the legal mandates of SB 5 informed DWR's technical analysis. Mr. Marshall replied that the three methods called out in SB 5 were:

1. Achieve SPFC design criteria.
2. Enhance the flood system.
3. Protect high risk communities.

DWR looked at synergy between the three methods to move forward into a flood plan.

Secretary Dolan commented that the Board had received lots of questions on the footprint of the floodplain system, and she asked about its size. Mr. Marshall replied that the plan specifies that there may be an increase in floodplain acreage by about 40,000 acres which would include 10,000 acre increase in habitat. This expansion was divided up among all of the different floodway expansion projects throughout the system.

Secretary Dolan noted that it might be beneficial to the Board and the public if there were some specificity of how that process might move forward. Mr. Marshall responded that for the nine different regions in the plan, DWR was currently developing the regional planning approach.

5. PUBLIC PROCESS UPDATES

Board Member Suarez updated the Board on the upcoming public hearings. There were four hearings where the Board would ask for public comments: in Sacramento, Stockton, Marysville, and Woodland, all to occur the first two weeks in April.

These will also be hearings relating to the environmental document, and DWR was going to brief the Board on March 23 on the PEIR.

More public hearings may be held in May in the four communities, with a format yet to be decided.

Board Member Suarez emphasized that anything the Board does together as a Board is a public process. Discussions with DWR on the possibility of amendments and changes to the plan will occur in a forum where the public can participate in terms of watching the deliberations.

President Edgar asked the staff to take the outline of the May and June schedule to have ready for discussion at an upcoming Board meeting.

President Edgar noted that Board Members Villines and Suarez have compiled the information focus areas and included it on the agenda for the April hearings. The Board discussed how to conduct those hearings. Board Member Suarez pointed out that the Board needs help from members of the public in identifying the issues, and even more important, in identifying how to make changes and solutions.

President Edgar noted the crowded meeting schedule of the next three months. He acknowledged that Board members couldn't be expected to attend each meeting; but they would try to have as much representation as possible.

6. ADJOURN

President Edgar adjourned the meeting at 4:19 p.m.

FRIDAY, MARCH 23

The following members of the Board were present:

Mr. Bill Edgar, President
Ms. Teri Rie, Vice-President
Ms. Jane Dolan, Secretary
Mr. Ben Carter
Mr. Tim Ramirez
Ms. Emma Suarez
Mr. Mike Villines

The following members of the Board staff were present:

Mr. Jay Punia, Executive Officer
Mr. Len Marino, Chief Engineer
Mr. Eric Butler, Supervising Engineer
Ms. Mitra Emami, Senior Engineer
Mr. Michael Wright, Senior Engineer
Ms. Amber Woertink, Staff Assistant
Ms. Deborah Smith, Legal Counsel

Department of Water Resources staff present:

Ms. Tasmin Eusuff, Senior Engineer
Ms. Nancy Finch, Senior Staff Counsel
Mr. Noel Lerner, Chief, Flood Maintenance Office
Mr. Patrick Luzuriaga, Senior Engineer
Mr. Paul Marshall, Assistant Chief, Division of Flood Management
Ms. Michelle Ng, Environmental Scientist
Mr. David Pesavento, Chief, Flood Project Inspection Branch
Mr. Keith Swanson, Chief, Division of Flood Management

Also present:

Ms. Paige Caldwell, United States Army Corps of Engineers
Mr. Pete Ghelfi, Sacramento Area Flood Control Agency
Ms. Meegan Nagy, United States Army Corps of Engineers
Mr. Randy Olsen, United States Army Corps of Engineers

1. ROLL CALL

President Edgar welcomed everyone and requested Mr. Punia to call the roll.

Mr. Punia reported that all Board Members were present except Ms. Rie and Mr. Villines. They arrived shortly thereafter.

2. APPROVAL OF MINUTES – January 26, 2012 (Postponed)

3. APPROVAL OF AGENDA

Executive Officer Punia gave the staff recommendation to postpone Items 7B and 7J.

He informed the Board that staff had received all the Corps recommendation letters except Item 7F. It would be a conditional item; for the rest, staff had received the needed endorsements.

Board Member Suarez received assurance from Senior Engineer Emami that staff did not expect any conditions with the letter for Item 7F.

Upon motion by Board Member Carter, seconded by Secretary Dolan, the Board unanimously approved the staff recommendation given above.

4. PUBLIC COMMENT

There was no public comment.

5. REPORT OF ACTIVITIES OF THE DEPARTMENT OF WATER RESOURCES

Keith Swanson, Chief of the DWR Division of Flood Management, gave the report. Below are highlights.

- Precipitation to date in the northern Sierras was at 72% of average. The San Joaquin was at 56% of average.
- Snowpack in the northern Sierras had increased in March: the snow water equivalent was up to 53% of average, lagging down to 37% of average in the southern Sierras.
- DWR participated in a Senate budget hearing. The Senate approved the Governor's budget items related to a request from the Division of Flood Management for 49 limited term positions, extending those for two years, and providing funding for DWR staff over the course of the next year.
- Last month Vice-President Rie had asked about federal crediting. Mr. Swanson reported that the Corps had stopped using 104 as a means to credit projects. Initially DWR and the Corps were talking about using completion of feasibility as the start date for eligibility for federal crediting. The Corps had backed that off to draft feasibility as the trigger for when federal credits could start being accrued.
- There's a lot of work on the legislative front to try to reinstate 104 crediting as a means of obtaining credits. Congressman Mike Thompson is spearheading and effort by the California delegation to reinstate the 104 crediting procedures. Secretary John Laird had sent a letter in support.
- DWR was working on official comments on the Corps' Policy Guidance Letter (PGL) on levee vegetation. DWR worked with Board staff and provided comments on a Board letter.

- Problems continue with the PGL System-Wide Improvement Framework (SWIF) process. SWIF preserves PS 84-99 funding only. It still leaves problems with implementation of Corps projects in terms of the vegetation issue.
- DWR has continued to make presentations in support of the CVFPP. During the past month DWR has participated in meetings with the Pocket residents, the Solano County Water Agency, the Central Valley Flood Control Association annual meeting, the California Farm Bureau, and the Delta Stewardship Council.
- On March 6, DWR released the Draft PEIR.
- In April, DWR will provide a Board presentation on regional planning. DWR's goals are to develop a prioritized description of projects at the regional level, the cost to construct those projects, and the regional benefits that those projects would provide; and then to have discussions on financing projects at the local level.
- DWR has been working with Board staff regarding the Delta mercury Total Maximum Daily Load (TMDL) issues that both are facing. Draft letters are circulating to respond to the Regional Water Quality Control Board's basin plan, and compliance obligations.
- The U.S. Environmental Protection Agency is looking at classifying the Cache Creek settling basin as a Superfund site. CalEPA has started evaluation and has concluded that of 10 potential sources of mercury contamination, nine are former mine sites and the other is the Cache Creek Settling Basin.

The preliminary assessment on the basin will take into consideration the studies that DWR is conducting. There is a tremendous amount of potential work and responsibility for both DWR and the Board on this issue.

Questions

Board Member Suarez asked for an update on the non-urban levee evaluation. Mr. Marshall responded that almost all drilling has been completed and samples have been sent to the labs for geotechnical information. From there, URS and Kleinfelder are going through the lab analysis to write individual geotechnical reports for stretches of levee. DWR intends to group together the worst cases first, and start writing them up.

Mr. Marshall continued that the Flood Control System Status Report gave DWR an idea of where the worst problems are by reviewing the history and doing a walkthrough. The geotechnical borings are really just confirming a lot of that information.

Mr. Swanson added that DWR was tasking the non-urban levee evaluation group to develop specific areas of concern and document them in DWR's regional atlases. DWR will use that information during the regional discussions. As they talk about regional projects for the future, DWR wants to take advantage of the geotechnical information that is available.

Board Member Suarez clarified that the Board does not have a solid deadline on when they would stop receiving comments. They encouraged people to submit their comments by April 20, which is the deadline for comments to the DPEIR; and for comments on the

plan: the sooner the better. But the Board will consider comments on the Draft Plan until the day they adopt the plan.

Board Member Carter followed up with the comment that the Draft PEIR and the CVFPP hearings are happening on the same day in the same location. The Board is going to be hearing public comments on both during the day. Deborah Smith, Staff Legal Counsel, added that it will be important to be very clear about which comments pertain to the PEIR, because those are comments that DWR, as lead agency, has a legal obligation to respond to.

The 2011 Inspection Report

David Pesavento, Chief of the DWR Flood Project Inspection Section, reported on the 2011 Inspection Report, as summarized below.

- In 2010, DWR was not able to complete all of their inspections due to restrictions they encountered with their resources. In 2011 they were able to complete all of them: 56 structures, 26 channels, and approximately 1,600 miles of levees.
- DWR continued to inspect the encroachment permits that they approve, closing a total of 14 in 2011.
- DWR was able to gather data in the southern San Joaquin area.
- DWR has an obligation to inspect other portions of the system such as designated floodways, borrow sites, and rock sites. However, they are currently trying to focus efforts on the most high priority issues, which they view as the larger physical structures such as levees, pump plants, and bypasses.
- Results from the channel inspections showed that maintenance was similar from 2010 to 2011.
- Maintenance on the structures was found to be similar to that of previous years, possibly a little better – although the line between minimally acceptable and unacceptable is somewhat fine.
- Pump plants are being maintained fairly well, although one was rated unacceptable.
- For the actual levees, the number of unacceptable districts went down while the minimally acceptable districts went up. That resulted in the number of overall acceptable districts going down.
- DWR began using the current criteria for levee inspection in 2007. The total level of deficient mileage was 83%. The length of deficiencies decreased by approximately half from 2007 to 2008, and again approximately half from 2008 to 2009. The number leveled out from 2009 to 2011.
- The length of deficiencies increased from 2010 to 2011. The year 2011 was very wet; it was difficult for the Local Maintaining Agencies (LMAs) to mow five times as intended. Vegetation was an issue, which also affected rodent control.
- DWR inspectors continue to work with the local maintaining agencies.

- The Corps recently sent a letter requesting that DWR further align its inspection criteria with their flowchart, so DWR has started doing inspections with some modified inspection criteria. However, there are still some significant differences in the areas of vegetation and encroachments. DWR is still rating vegetation based on accessibility and visibility. They are working with the LMAs, the CVFPB staff, and the Corps to determine priorities and align programs.

President Edgar commented that the 2011 Inspection Report contains an inventory of the LMAs' work, but not an analysis or criteria about how they are doing. Mr. Pesavento referred to the Local Maintaining Agency Reporting document.

Mr. Pesavento stated that there are four inspections required annually per the CVFPB's agreement with the Corps and the O&M manuals. DWR conducts two of those inspections in the spring and fall. The LMAs conduct the other two, and that information is fed into DWR through the DWR Flood Project Integrity and Inspection Branch. They are separate data collecting efforts. The two groups are trying to work better together to give a high-level picture, and to include documents that contain both sets of information.

The Local Maintaining Agencies Annual Report for Levees of the State Plan of Flood Control

Tasmin Eusuff, Senior Engineer with the DWR Flood Project Integrity and Inspection Branch, told about some highlights, program implementations, and outreach efforts of the LMA Annual Report, as summarized below.

- In 2008, two sections – 9140 and 9141 – were added to the California Water Code. Section 9140 required all LMAs to submit information on their maintenance from their perspective to DWR. Section 9141 required DWR to summarize that information for the CVFPB to approve and adopt.
- The Legislature required five parts in the report:
 1. The condition, general aspect, and performance of the levees from the LMAs' perspective.
 2. Critical information that might compromise the level of flood protection.
 3. A summary of maintenance performed by the LMAs in the previous year.
 4. The LMA statements of their work and their estimated costs for the current fiscal year.
 5. Any readily available information the LMAs would like to share.
- In 2011, DWR had done the following outreach and communication for the LMAs:
 - Two sessions of an annual workshop.
 - Letters reminding the LMAs of their requirements.
 - A final reminder letter in September, and after that, phone calls to LMAs not responding.
- The branch redesigned the report, reducing its 600-page size without compromising its quality. This complied with DWR's sustainability policy.

- An electronic web application is now available for the LMAs to report remotely.
- Cost-share criteria is available for non-routine maintenance such as levee repair programs. If the LMAs do a good job in reporting, DWR can provide a higher cost share for their levee repair projects.
- The branch shares critical information with the Flood Operations Centers.
- AB 156 requires collection of information such as emergency action plans, and security and safety plans.
- In 2011, 90% of the LMAs reported – the highest response rate so far. 50% used the electronic method and 40% used the hardcopy method.
- Of the 45 LMAs who received an Acceptable rating, one didn't report. Of the 24 LMAs who received a Minimally Acceptable rating, two didn't report. All six of the LMAs who received an Unacceptable rating didn't report.

Questions

Board Member Ramirez asked whether DWR would be able to inspect the designated floodways in the future. Mr. Pesavento replied that ten years ago, DWR did inspect them. At present, DWR feels that the channels, levees, and structure are of higher importance given the limited resources.

Mr. Pesavento added that DWR is going to start updating levee logs, which can serve as an inventory of the system and feed into a lot of different efforts. DWR will also be working with Board staff on prioritizing the encroachments.

Executive Officer Punia gave the staff perspective of the three types of levee inspection efforts:

1. Corps inspections. They used to do spot inspections, but recently received substantial funding under the Periodic Inspection Program.
2. DWR inspections under Mr. Pesavento's program, the Flood Project Inspection Section. They inspect levees on behalf of the Board, because the Board has given assurance to the Corps. DWR is also obligated to inspect the levees based on the Water Code.
3. The Annual Report is a new requirement under AB 156, enacted in 2008, in which the LMAs are supposed to report to DWR.

Executive Officer Punia commented that the various inspections can be confusing for the general public and for the Board. Staff is working with DWR to align inspection criteria to the Corps' criteria, to provide one type of rating.

President Edgar stated the same concern. We need to focus on trying to get an inspection reporting and enforcement system that is clear and efficient, and aligns DWR's and the Corps' criteria. The LMAs need to understand what they're going to be held accountable for.

Mr. Swanson agreed, commenting that the locals inspect twice and DWR inspects twice. They should be prioritizing, tracking, and reporting on the same things. We want to

make it as easy as possible for the locals to provide the information. We need to tie the results from the inspections and the maintenance to some of our cost share programs, to reward people for doing proper maintenance. We have programs in place to deal with things that are beyond maintenance – legacy design and construction issues – that are due to obsolescence.

Board Member Villines noted the importance of including the LMAs in the conversation. He also noted that we need to be prepared to answer both to the Legislature and to citizens.

Mr. Swanson remarked that this is key to what we're trying to outline in the CVFPP: clear roles and responsibilities; establishing the threshold and then holding people accountable; and being honest and fair about what we expect at the various levels.

In answer to a question from Board Member Carter, Mr. Swanson stated that the LMAs and DWR are developing similar criteria.

Board Member Carter asked if the spreadsheet format was available; Mr. Pesavento assured him that it was.

Board Member Carter asked for comment on the differences in the criteria between what the State, the LMAs, and the Corps are using, and where the gaps are. Mr. Swanson noted that DWR is working with the Corps on integrating. Meegan Nagy of the Corps commented that the primary differences in the inspections relate to vegetation, encroachments, and the way they roll up the system ratings (DWR uses a percentage while the Corps can give an Unacceptable rating for one terrible item).

Ms. Nagy went on to say that when the Corps inspects, it tends to do a maximum of 30% of the system in a year. They walk every stretch of the levee with three people, one on each side, one on the crown; the result is that they find more problems.

Ms. Nagy stated that the Corps has developed a conversion tool for DWR's inspection reports, which shows how the Corps would have rated the items. It will be available to the LMAs so they can be better prepared when the Corps comes out for an inspection.

Board Member Villines asked if it would be possible literally to combine the reports and include a section showing the differences between the two. Ms. Nagy was receptive to the idea. Ms. Eusuff stated that her branch had been thinking about that idea as well.

Vice-President Rie asked what would happen with the vegetation inspection in the fall after the Board has approved the CVPFC. Would the Levee Roundtable framework document inspection criteria still apply for the vegetation, or would there be a different expectation from the Corps?

Ms. Nagy replied that when the Corps inspects now, even under the framework, it uses the strict vegetation criteria in the inspection checklist. From an inspection results standpoint, it will remain unchanged. An unacceptable vegetation item does not impact PL 84-99 eligibility.

Board Member Suarez requested for last year's briefing comparing both inspection programs to be shown to the new Board Members.

President Edgar summarized that the Board's overarching idea is to get the programs together for DWR and the Corps to provide a criteria to the LMAs that's understandable and clear, and then a short line reporting system. The duplication, multiple reports, and different criteria need to be streamlined.

6. REPORT OF ACTIVITIES OF THE EXECUTIVE OFFICER

Executive Officer Punia reported on the CVFPB staff activities, as summarized below.

- Executive Officer Punia welcomed the new Board President, Bill Edgar.
- Staff was reviewing the technical detail and attachments in the CVFPP. Executive Officer Punia expressed the hope that the Board wouldn't need to go into the details of the hydraulics and geotechnical findings, but would rely on the staff's technical analysis.
- DWR had released the Draft EIR associated with the plan, and would be briefing the Board that afternoon.
- Staff was receiving public comments and posting all of them on the website. Staff was updating the comments each Wednesday.
- Staff has completed the second Title 23 update. This includes the update based upon Assembly Bill 1165 and the 2007 flood legislation.
- The new regulations allow the Board to delegate the staff to approve simple projects, making the process much more efficient.
- Staff is working closely with Caltrans on their various bridge applications.
- DWR is updating the Small Erosion and Repair Program documents for the final Board and staff legal review.
- Staff met with the Budget Office. Some money was reserved from previous budgets, and there are some restrictions as to whether that money can be used for Board litigation and settlements. The Budget Office is showing some positive signs for that use of the funds.

Board Member Villines encouraged Executive Officer Punia to call on the Board in this matter if they could be of assistance.

- Staff has received the same letter as DWR from the California Regional Water Quality Control Board. It asked staff to provide information about how the methylmercury can be controlled to reduce the load in the Yolo Bypass and the Delta. Staff is working with other agencies, and will be seeking a nine-month extension to gather the information.
- The Corps has issued a Policy Guidance Letter for requesting a vegetation variance. Staff has prepared comments and will discuss them this afternoon.

Michael Wright, Chief of the Enforcement Section, gave a synopsis of staff enforcement efforts.

- Staff has begun to meet with Sutter Butte Flood Control Agency to discuss the 400+ encroachments associated with the Feather River West Levee Improvement Project. Staff met with the residents to look at the levee and hear their concerns.
Staff has engaged an independent licensed land surveyor to perform a peer review of the survey work that has been done by the Three Rivers Levee Improvement Authority (TRLIA).
- Enforcement Action 2011-298 has been closed, having reached compliance. This was the aging boat dock at Raley's Landing in West Sacramento. It has been removed as well as the access ramp.
- Staff has been participating with Mr. Pesavento's group of DWR and with the Corps in their inspection program working group. Staff has also been participating in the DWR/LMA coordination meeting.
- Staff continues to work with the Corps and their periodic inspection program, re-inspecting RD 17 and RD 2064.
- Possible upcoming hearings are a hay barn and elevated berm in the Yolo Bypass; AT&T buried cable on the Cherokee Canal levee; and orchard planted within the floodplain of Putah Creek in Yolo County; and leaking pipes in Lake County.

Board Member Suarez asked about the schedule of the TRLIA enforcement hearings. Len Marino, Staff Chief Engineer, responded that staff has scheduled a meeting with TRLIA in mid-April to go over the determination of the toe line and come up with an alignment of the O&M road that is more congruent with what staff is finding in the drawings. Executive Officer Punia stated that TRLIA was comfortable with the enforcement hearing not being closed by the end of April, and extending it into June.

Mitra Emami, Senior Engineer, gave a review of the permit applications.

- For the month of March, staff has issued seven permits, received five Corps letters, and is reviewing seven new applications.
- Staff has planned 59 applications for the future months, and 15 are the backlogs.
- Staff is working with applicants to get more complete applications, via pre-application meetings and education.

Board Member Villines asked about the oldest applications that are still outstanding – are there any that are just not able to get to resolution? Ms. Emami responded that of the 15, eight are already built and not in compliance. Of the others, some are built and are outside agencies; staff is working with applicants to change the design.

Ms. Emami pointed out that last year at this time, they had 87 in this category, and now they are down to 15.

Mr. Butler told Board Member Villines that the oldest application is from perhaps 2007.

President Edgar asked about the performance metric: when staff receives a completed application, what is the timeline goal? Ms. Emami responded that three to four months is

the goal to schedule it and bring it to the Board to issue a permit. It depends on how complex the project is and whether it is within the Corps' jurisdiction.

Mr. Butler pointed out that the delegation of permitting authority to staff should streamline the process and speed things up for many of the routine permits.

President Edgar asked about the definition of a minor project. Mr. Butler responded that those definitions are currently in the new regulations in Sections 5 and 6.

7. CONSENT CALENDAR

A. Permit No. 18313-2-1, West Sacramento Area Flood Control Agency (WSAFCA) (continued from December 2, 2011)

Consider approval of a Mitigation and Monitoring Plan for mitigation plantings required by WSAFCA's "The Rivers" and "The Riverwalk" projects. The plantings were conditionally approved by the Board at the December 2, 2011 Board Meeting.

B. Permit No. 18560, Slavic Missionary Church (Postponed)

Consider approval of Permit No. 18560 to authorize an existing dwelling, a 0.87-acre pond, an in-ground swimming pool, two entry gates, 730 feet of wrought iron fence, 350 feet of chain link fence, two garden sheds, a house pump, an agricultural well, a septic tank, and 319 trees; to remove and replace two garden sheds and a metal storage shed; to construct a metal foot bridge, a gazebo, a small waterfall, a pump house, five light poles, 420 feet of chain link fence, and 975 feet barbed wire fence within Area C of the Yuba River Designated Floodway. (Yuba County)

C. Permit No. 18573, Chevron North America

Consider approval of Permit No. 18573 to drill and construct one oil well and two steam injection wells within the designated floodway of the left (south) bank of the Kern River. (Kern County)

D. Permit No. 18574, Chevron North American

Consider approval of Permit No. 18574 to drill and construct one oil well and three steam injection wells waterward of the left (south) bank of the Kern River designated floodway. (Kern County)

E. Permit No. 18581-REV, Butte County Association of Governments

Consider approval of Permit No. 18581-REV to plant replacement vegetation to mitigate the effects of the construction of the State Route 99 widening over Big Chico Creek. (Butte County)

F. Permit No. 18700, Lodi Unified School District

Consider approval of Permit No. 18700 to construct a stormwater pump station outfall system consisting of 1) three 24-inch and one 12-inch steel discharge pipes, 2) approximately .037 acres of non-grouted, facing class

rock slope protection; and 3) a float sensor to stop the pumps when Bear Creek exceeds its design capacity. (San Joaquin County)

G. Permit No. 18704, Stevinson Water District

Consider approval of Permit No. 18704 to authorize the replacement of a manually operated gate on the Bear Creek Inlet Structure with an automated gate. (Merced County) Central Valley Flood Protection Board Meeting – March 23, 2012 Page 3 • Items on the Consent Calendar may be removed at the request of any Board member or person.

H. Permit No. 18705, Stevinson Water District

Consider approval of Permit No. 18705 to authorize the construction of a 1.5-foot-high broad-crested weir and a metal bridge over the weir on the East Side Canal (Merced County)

I. Permit No. 18706, California Department of Boating and Waterways

Consider approval of Permit No. 18706 to remove and replace the existing boat ramp in Bidwell-Sacramento River State Park. (Butte County)

J. Permit No. 18707, California Department of Water Resources (Postponed)

Consider approval of Permit No. 18707 to install nine flow monitoring stations throughout the southern Delta in Middle River, Old River, Grantline Canal, the San Joaquin River, and the intake channel for Clifton Court Forebay. (San Joaquin and Contra Costa Counties)

K. Permit No. 18711, Colusa Shooting Club

Consider approval of Permit No. 18711 to remove an existing floating 3,000-square-foot clubhouse which floats on Butte Creek, and replace with a new 5,445-square-foot elevated steel clubhouse. (Colusa County)

L. Permit No. 18712, Jeffrey E. & Patricia L. Crowder

Consider approval of Permit No. 18712 to construct a three-story, 2,800 square-foot concrete block and wood frame house on the landside along Garden Highway. (Sutter County)

M. Permit No. 18713, Pacific Gas & Electric Company (PG&E)

Consider approval of Permit No. 18713 to authorize the removal, relocation and replacement of several PG&E power poles and related structures. (Sutter County)

N. Permit No. 18714, California Department of Transportation

Consider approval of Permit No. 18714 to replace an existing State Route 99 bridge crossing the San Joaquin River. The replacement bridge will be a full lane wider in each direction and construction will occur in two stages in order to maintain 2 lanes of traffic in each direction. (Fresno and Madera Counties)

O. Interagency Agreement with the State Lands Commission

Consider approval of Resolution No. 2012-11 to renew an Interagency Agreement with the State Lands Commission for technical and consulting services on oil and gas leases for an additional 5 years, and authorize the Executive Officer to execute the Agreement.

Secretary Dolan recused herself from Item 7E.

Board Member Villines recused himself from Item 7M.

Upon motion by Board Member Suarez, seconded by Board Member Carter, the Board voted unanimously to approve the items on the Consent Calendar.

(2.) APPROVAL OF MINUTES – January 26, 2012

Secretary Dolan noted that the Minutes being approved were for January 26 and 27, 2012.

Upon motion by Board Member Suarez, seconded by Secretary Dolan, the Board voted unanimously to approve the Meeting Minutes for January 26 and 27, 2012.

8. REQUESTED ACTIONS

A. Consider approval of a Board comment letter to the United States Army Corps of Engineers Headquarters concerning its Policy Guidance Letter for obtaining variances to allow vegetation on levees.

Len Marino, Staff Chief Engineer, presented the item as summarized below.

- The Board comment letter was the latest draft that staff had developed in coordination with Board Committee members Ramirez and Rie.
- Mr. Marino gave a background of the Corps Policy Guidance Letter and the two prior comment letters.
- He gave a tentative schedule for finalizing and sending the current comment letter.
- He summarized the eight bullet points in the letter.
- The letter had been vetted thoroughly with DWR, particularly with George Qualley.

Questions and Discussion

Vice-President Rie stated that the Corps had offered the SWIF as a pathway to get into compliance with the ETL. The Board Committee felt the need to have further discussions with DWR to see if that pathway was an option for the State at this point, and requested delegation to continue to work with staff and DWR to finalize the letter.

Ms. Smith raised a legal concern that if comments were going to be made to the subcommittee by the Board Members, it had to be done in public to comply with Bagley-Keene.

Board Member Ramirez suggested mentioning towards the end of the letter that this issue must be resolved for the broader mandate of the CVFPP to work. He also mentioned that obviously follow-up action needs to be taken after submittal of the letter.

Board Member Suarez mentioned that references to the first person in the letter should be replaced with “the Board.” She also suggested reminding the Corps that an existing variance was granted in the past, and suggested other editing changes as well.

In response to a question from Board Member Carter, Mr. Marino said that the Corps had not addressed the Board’s comments on the original PGL. Board Member Carter added that the Corps had done the first and second PGLs without collaboration from the public.

Upon motion by Board Member Suarez, seconded by Secretary Dolan, the Board voted unanimously to delegate the Committee to finalize and submit the comment letter to the Corps on or before deadline of April 17.

9. BOARD SPONSORED PROJECTS AND STUDY AGREEMENTS

A. American River Watershed Natomas Features Project

Consider approval of Resolution No. 2012-01 to:

1. Approve Amendment #1 to Local Project Cooperation Agreement 4600007686, recognizing the increase in State share obligation to the Sacramento Area Flood Control Agency (SAFCA) on the American River Watershed Natomas Features Project, and increase the agreement’s maximum amount in order to allow the State to reimburse SAFCA for that obligation on the project.

2. Delegate to the Board Executive Officer the authority to execute the amendment insubstantially the form attached hereto.

Patrick Luzuriaga, DWR Project Manager for the American River Watershed Natomas Features project, gave a presentation on the item. Below are highlights.

- The project is about 20 years old. It has been completed, and some financial transfers need to take place.
- The three key players are the Corps, the Board, and the Sacramento Flood Control Agency (SAFCA).
- The project increased flood protection on four different creeks. Improvements included raised levees, extended levees and a new pumping plant.
- The request was for an addition of \$3.7117 million to the Local Project Cooperative Agreement (LPCA) ceiling amount to be able to pay back SAFCA the outstanding debt of \$4.207 million.
- The California Water Code was modified in 2000 to include this project for the portion of reimbursement that was defined under the original Natomas federal plan. In 2007 it was further amended to allow the State to reimburse for costs as defined under the expanded Natomas federal plan.

Questions

Board Member Carter ascertained with Mr. Luzuriaga that the second LPCA was originally written for \$496,000, but needs to be written for \$4.2 million.

Board Member Suarez asked where the money was coming from; Mr. Luzuriaga replied that in 2007, money was set aside in the General Fund for this purpose. There were some technicalities with the funding and its availability, but essentially the money will come from the General Fund.

Board Member Villines asked if the money was still there in the General Fund since it was appropriated in '07. Mr. Luzuriaga responded that he had double-checked with the Budget Office. They had looked into the State Controller's Office rolls, and determined that the balance on the budget was indeed still available to expend.

Board Member Villines asked if the reappropriation request was going to the Legislature for a vote. Mr. Luzuriaga responded that it was currently in front of the Legislature. The Budget Office had informed him that they were more than 80% confident that the reappropriation request would be approved.

President Edgar asked when the Corps decided that they wanted to increase the cost of the project and SAFCA agreed to advance money to get the project done, and we knew the State's share was going to go up past the local cost sharing agreement, why it wasn't brought to the Board at that time. Peter Ghelfi, SAFCA Director of Engineering, responded that with Auburn Dam, the big push was that the Corps was \$16 million. SAFCA spent its efforts on making sure they got that money back, and then turned attention to getting the money back out of the State.

Secretary Dolan said that it appeared that the money had been obligated, but was still in play to be removed. Until it's spent, it's liquid money that the Legislature can sweep from. The Board discussed with Mr. Luzuriaga the question of whether this was real money.

President Edgar suggested going ahead with the resolution, understanding that it is a ceiling. He requested an informational report for the Board in the near future.

Upon motion by Vice-President Rie, seconded by Board Member Suarez, the Board voted unanimously to approve Resolution 2012-01 and delegate to Board Executive Officer Punia to execute the agreement, with a report back to the Board on the funding situation.

(12.) CLOSED SESSION

To discuss litigation (Giudice v. State of California et. al; San Joaquin County Superior Court Case No. 39-2011-00256176-CU-OR-STK) pursuant to Govt. Code section 11126(e)(1).

Pursuant to the authority of Government Code section 11126, subdivisions (e)(1), (e)(2)(B)(i), and (e)(2)(C)(i), the Board will meet in Closed Session to consider potential litigation involving the Board.

Personnel matters pursuant to Government Code sec. 11126(a).

The Board recessed into Closed Session at 11:22 a.m., reconvening at 1:11 p.m.

10. CENTRAL VALLEY FLOOD PROTECTION PLAN

A. Draft Program Environmental Impact Report

Executive Officer Punia stated that CVFPB had invited DWR to give a summary of the Draft PEIR related to the CVFPP, to explain how comments will be received, and to present a process for finalizing the EIR.

Mr. Marshall began the presentation. He noted that DWR had received a fair amount of legal help to make sure that everything was phrased properly and so forth. He pointed out that everything in the presentation was actually part of the Executive Summary.

Michelle Ng, DWR Environmental Scientist, presented the Draft PEIR as summarized below.

- The PEIR will allow DWR and the Board to consider broad policy alternatives, potential program level environmental impacts, and mitigation measures from implementation of some or all of the plan's components.
- The study area included lands currently protected by the State Plan of Flood Control, and lands with non-State Plan of Flood Control facilities including federal and local reservoirs that have allocated flood storage.
- The CVFPP reflects a new way of looking at flood management from a systemwide perspective. It addresses the system as a whole. The PEIR evaluates impacts from near-term and long-term management actions.
- The environmental stewardship goal is to leverage flood system improvements to create and connect habitat throughout the Central Valley flood protection system, with the intent of moving beyond traditional project-by-project compensatory mitigation.
- The PEIR considers the three preliminary alternative approaches, the proposed program (the SSIA), and four more alternatives.
- The SSIA includes numerous actions that are related geographically, and would have similar environmental effects, but are not yet sufficiently well-defined with respect to specific locations, project level details, or implementation strategies to allow preparation of a project level EIR.
- Twenty resource categories were evaluated. Within each category, potential impacts were identified and evaluated. The impacts fell into one of three degrees of significance after mitigation.
- Ms. Ng summarized the resources, impacts, and beneficial effects of the SSIA.
- Comments from the public may be submitted at public hearings, in writing, and by email. In accordance with the CEQA process, DWR will formally respond to comments that raise issues or concerns specific to the environmental analysis presented in the Draft PEIR.

Questions

Board Member Suarez asked if the Board were to adopt the modified SSIA, would that mean a lesser impact on ag and forestry, which actually might be mitigated or not an issue. Mr. Marshall replied that there would be lesser impacts on ag and forestry, but there would also be less benefit to rural communities.

Board Member Suarez asked for a description of the modified SSIA. Ms. Ng explained that it is similar to the SSIA in that it is based on the urban protection provided by the Protect High Risk Communities alternative, and it adds some small community protection, but it has more limited construction activities than the other alternatives.

The modified SSIA also includes expanding the Yolo Bypass and widening the Fremont Weir, but does not include any of the other bypass expansions, and addresses only the most critical stressors on public safety, O&M, and ecosystem function, while minimizing potential adverse environmental effects.

Ms. Ng stated that the communities that would be targeted for work could not be identified. Communities in any region – Sacramento or San Joaquin – were treated the same for analysis purposes.

Board Member Suarez asked what DWR considers certification and issuance of the Notice of Determination in terms of schedule and deadlines to be ready for the Board to use for adoption by July 1. Mr. Marshall stated that DWR must have certification from the Director for the document in writing, stating that DWR approves of the EIR. DWR then would need to submit a Notice of Determination to the State Clearinghouse to be able to comply with CEQA.

Mr. Marshall also noted that it might be wise for the Board to put out a Notice of Determination, because they're depending on this EIR.

Mr. Marshall stated that DWR could have the EIR certified and a Notice of Determination mailed on June 28, so that the CVFPB could adopt it based on the lead agency (DWR) already having certified it. The Board could adopt it on June 29.

Board Member Ramirez suggested for the Board to be aware of the distinction between the mitigation costs and the ecosystem restoration project costs. Mr. Marshall reminded everyone that the plan is still at a program level, and specific project costs are not known.

Board Member Ramirez added that within each of the approaches, there are different ways to treat the improvements that are being made; there are costs that are not mitigation costs.

President Edgar went on to ask about the cost estimates – whether the flood improvement costs and related ecosystem restoration costs are separated from the mitigation costs. Mr. Marshall replied that if the costs are separated, it's at a very high level (cost per mile, approximate number of miles, and so on).

President Edgar pointed out that during the hearings the public will be asking where the numbers came from, such as 40,000 acres for expanded floodways and, of that, 10,000 acres of mitigation lands. Mr. Marshall responded that he would have that information ready, especially in the regional settings for the workshops.

The Board discussed the No Project Alternative Continued Operations scenario with Ms. Ng. She explained that it assumed that funds were forthcoming for projects that are currently being planned, and stated that DWR was not recommending that alternative.

Board Member Suarez and President Edgar stressed that we need to define the baseline for the public, so that we aren't taking impacts or benefits from projects that are going to happen anyway or have already happened. Impacts will be quantified from that baseline.

Board Member Carter asked about a scenario where the Board decides to adopt an option other than the SSIA. What would be the implications for that decision, and for the EIR, process, and timing? Mr. Marshall responded that the Board would need to talk to its own attorneys. Also, if the Board adopts something with lesser impacts, often the EIR can still be utilized. If the Board changes the plan significantly to have a different set of impacts, those would need to be recirculated through the public with a new public comment period.

At the request of Vice-President Rie, Mr. Marshall outlined the agenda for the public hearings in early April.

Board Member Suarez referred to the scenario in which the Board chooses to adopt the modified SSIA as the platform. Could the current CEQA document support that decision? Mr. Marshall responded that it could, from a program level.

President Edgar wanted to ensure that the Program EIR was comprehensive enough for the Board to be able to make necessary modifications. Mr. Marshall stated that DWR tried to include as much flexibility as they could in the EIR, but there was no way to be able to plan for everything.

President Edgar responded that the process should be iterative: the April hearings would result in some input and feedback that may require some actions and changes. Also, the lawyers have to be involved early in this process.

Secretary Dolan remarked that it may be confusing to the public to deal with the different public comment schedules. Board Member Suarez stressed that the schedule for the CEQA hearings was more a formality than anything. Every comment will be heard, captured, and identified.

B. Public Process for the Adoption of the Central Valley Flood Protection Plan

Executive Officer Punia and Nancy Moricz, Staff Engineer, reviewed the dates, times, and locations of the April and May public hearings, the three sets of Board/DWR public workshops, and the Board meetings.

Executive Officer Punia noted that it's a very aggressive schedule. President Edgar stated that the adoption date goal had to be set, and everyone would do their best to meet it. Mr. Marshall commented that DWR staff had been working on this plan for a year and longer, and they were committed to the process.

President Edgar noted that for the previous comp study and Governor Davis' Floodplain Management Task Force, much work and effort had been done, but then both had been essentially put on the shelf. President Edgar did not want that to happen with the CVFPP.

The CVFPP had to be general enough to allow the regional stakeholders to have an effect, as feasibility studies and engineering studies, etc. are done; but the plan had to

have enough legs to be a true framework for the future – a template for everyone to work with, modify, fix, and make more specific going forward.

Board Member Ramirez noted that a calendar was in place for the next three months. However, it might help both the public and the Board to have it extend further into the future. President Edgar agreed, and requested the staff to compile a sort of generic calendar showing what happens after the plan is adopted.

Board Member Carter referred to the importance of the vision: it is worth some investment in time in terms of articulating something concrete for the public to take and charge forward with.

President Edgar talked about the agenda for the public hearings. He emphasized that if a speaker does not like something that's proposed, the speaker should offer an idea for a solution. Executive Director Punia and Board Member Suarez would be working on opening comments for the hearings.

Board Member Suarez clarified that the terminology "workshop" signified that the Board would be seated around a table with DWR for a dialogue, and the public would be welcome to come and listen. The May hearings would be for the Board to go back to the public to inform them of progress made so far, based on the public input received; the public then had the opportunity to comment a second time.

11. INFORMATIONAL BRIEFINGS

A. Briefing from the U.S. Army Corps of Engineers regarding the status of completing the PL 84-99 2005-2006 Levee Rehabilitation effort.

Randy Olsen, Chief of Operations and Readiness Branch with Sacramento District Corps of Engineers, gave a presentation on the remaining portion of the 2005-06 rehabilitation effort, specifically the mitigation portion. Below are highlights.

- Over 30,000 linear feet of riverbank will be planted with willow poles. Approximately 14,000' of those willow poles required a vegetation variance, which was approved by the Corps in October 2011.
- The Corps is working with DWR on the necessary real estate rights.
- Mr. Olsen described the installation, and the non-variance and variance planting patterns.
- Following the installation, the Corps is going to prepare a supplement to the O&M manuals to be transferred to the CVFPP.
- For the maintenance requirements, the non-variance sites need a variance. The intention is for the LMAs to maintain them in accordance with the standard O&M manual.
- The caveat per the Resource Agencies is that survival of the willows cannot be purposely endangered.
- The variance sites have two conditions:

1. When the trunks reach 2-4" in diameter, the willows must be cut 12" from the ground.
 2. The willows cannot impair the visibility of the toe, so they must be trimmed into a hedge cut.
- All other vegetation in the variance sites must be managed in accordance with the approved O&M manual for those sites.
 - Less than 20% of the plantings will be within 7' of the toe. For the majority of the areas, a long period of time will pass before they grow out to the point where levee toe visibility will be an issue.
 - The Corps has started coordinating with Fish and Wildlife Service, and will begin coordinating with the National Marine Fisheries Service (NMFS) in April.
 - The near term real estate concerns are that they require the lands, easements, and right-of-ways in accordance with the signed Project Cooperation Agreement. DWR has indicated that the State Lands Commission is the land overflow for over 90% of the sites.
 - There is still some level of uncertainty with the State Lands Commission as far as the ownership. If the State Lands Commission is not the owner, DWR's Real Estate branch will need to obtain rights from the individual landowners for 83 sites.
 - The long-term real estate concerns are that the CVFPB lacks adequate land rights for placement and maintenance of vegetation. On some of the project lands, the CVFPB lacks any rights.
 - The Corps intends to try to accomplish the Public Law 84-99 rehab under one contract. This could create a situation where the LMAs and the Board have to acquire all adequate land-use or easement rights for the Corps before the Corps solicits for the construction project. That is one potential way of getting the LMAs to step up, as they are the local landowners.
 - Conclusions are as follows:
 - The Sacramento District Corps will plant over 30,000 linear feet of riverbank with the willows. In accordance with the 2007 agreement, the CVFPB has agreed to operate and maintain the completed rehabilitation at no cost to the federal government.
 - The maintenance requirements for the LMAs are reasonable and appropriate.
 - The real estate certifications are needed from DWR.
 - These actions are needed by all agencies involved to develop a long-term solution to ensure that we are not impacted for the next flood event.
 - The Corps has offered to Board staff to schedule and participate in meetings with the LMAs to discuss the mitigation and maintenance requirements.

Questions

Board Member Carter felt that the State and the locals were being set up for failure, because of the lack of definition in the maintenance requirements, location of the plantings and funding at the State and local levels.

He also expressed concern regarding the very vigorous growth habit of these willows along the rivers – a very favorable environment for the willows. Mr. Olsen responded that the species was specifically chosen because of its growth and size limitations in this area. He added that the RDs are already doing annual maintenance of vegetation on the levees.

Board Member Carter replied that the interim vegetation standards leave waterside vegetation intact, because it is valuable from a shaded riverine habitat perspective and from a resource perspective. Further, lopping off the vegetation in the prescribed manner would diminish the value of that habitat from a resource perspective. Mr. Olsen replied that the willows will be lopped as they go up the levee toward the toe.

Ms. Nagy stated that when the rehabilitation effort began in 1997, and the Corps put soil back on the levees to mitigate significant erosion, the LMAs conveyed that there was significant erosion shortly thereafter and they lost what the Corps had put in. The Corps then added rock instead of soil.

Over the long term, the maintenance associated with the vegetation is going to be less than the maintenance that would have been required with continual erosion. Ms. Nagy posed the question, was it worth putting the rock in with the added mitigation, extra maintenance costs, and vegetation, but less maintenance costs associated with erosion?

Executive Officer Punia stated that staff agreed with Board Member Carter's comments, and that they are concerned about the mitigation requirements. Staff has had various discussions with DWR, and they're extremely concerned about the additional maintenance requirements that the State will impose upon the LMAs.

In response to a question from Board Member Ramirez, Mr. Olsen said that the Corps had held a formal consultation with Fish and Wildlife Service. They had also held a consultation with NMFS. This planting was the agreed-upon path going forward as far as mitigation so satisfy the Resource Agencies.

Paige Caldwell of the Corps stated that they were required to comply with NMFS and Fish and Wildlife requirements, but the requirement to comply with the Department of Fish and Game largely falls upon the State's responsibility. Board Member Ramirez commented that there should be only one table to have the discussion; there can be only one solution if the issue is going to work for everyone.

Noel Lerner, DWR Flood Maintenance Office Chief, gave a presentation summarized below.

- Regarding the 41 sites being contemplated for plantings, 35 are within the purview of the State Lands Commission. DWR hoped to get to those sites by the fall of 2012. For the six sites under private ownership, the time for acquisition can be anywhere from 18 to 36 months.

- Regarding the various ownership rights of properties in the Sacramento-San Joaquin Drainage District as a whole, Mr. Lerner appreciated Mr. Olsen's comments about starting to work now for a plan – should there be another high water event where there are similar erosion sites, they are ready to deal with it as to the real estate.
- The harder issue is the vegetation variance request. This is one of the first instances in California where we have tried to have a variance, and it could set a precedent.
- DWR had some concerns with the variance request because it's so prescriptive. Some of the areas allow only two types of willows and more flexibility is needed.
- Mr. Lerner addressed several issues:
 - He showed photos of the lateral growth of lopped willows. For managing visibility, the willows raise an issue; DWR would like to see a broader planting palette.
 - Another issue arises when cutting the tree and measuring for width at the same location. The growth pattern will require frequent cutting.
 - Another issue concerns the line demarking the toe and the hedge trimming that's required. DWR may have GPS units, but the LMAs will have to go out and find the location of the line.
 - For promoting visibility, the idea of trimming up like a hedge will work against us. DWR is seeking the flexibility to manage the system so they can really see erosion.
 - Regarding the mandated requirement to do soundings from the river: as these sites proliferate, it is a major addition to the limited resources LMAs have.
- Mr. Lerner hoped that in the spirit of the framework – which states that the Corps, the Resource Agencies, and DWR will get together and work out vegetation management practices that are practical – the main goal of looking for erosion and having access for flood fighting could be reached.

Questions

Mr. Lerner agreed with Board Member Carter that the soundings were redundant. DWR felt that large erosion scours are present, and the only way to capture them is through bathymetric means.

President Edgar asked would DWR would suggest. Mr. Lerner responded that DWR had prepared a draft letter for the Board to look at, and summarized its recommendations.

Board Member Suarez asked if Mr. Olsen could talk to the people at the Corps about this very restrictive vegetation policy, as the Corps was seeing the difficulty of working with it. Mr. Olsen replied that there's a programmatic problem with PL 84-99, and on a day-to-day basis the implementation for PL 84-99. In doing the rehabilitation project prior to the next flood season, it is not efficient for the Corps to acquire a variance every time they need to fix a levee.

Mr. Olsen added that they were coordinating with Headquarters to try to put together a programmatic-type document on what they can and can't do related to rehabilitation projects. The Corps will include the Board in this effort.

Executive Officer Punia stated that staff is working with DWR and had prepared the letter to highlight the issues, so that Mr. Olsen could get some flexibility from Corps Headquarters for the O&M requirements. Staff agreed with Mr. Olsen that we have to fulfill the mitigation commitment. However, they want to find a maintenance program that is acceptable and not a burden on the LMAs.

Everyone discussed how to move forward. Mr. Olsen stated that the PCA was signed, and he felt that there is sufficient latitude in it for the Corps to sit down with the LMAs and Resource Agencies to make the project work.

Mr. Olsen stated that the downside of sending the DWR/CVFPB letter to the Corps was that there is already a PCA that requires mitigation compensation. Right now, the Corps is just following through with that existing contract.

President Edgar requested to form a Board committee consisting of Board Members Carter and Ramirez to provide guidance to the staff. All the parties should meet to try to resolve the issue. If that can't be accomplished, then the parties are at an impasse and the letter will have to be sent to the Corps.

Mr. Olsen assured that Board that the Corps Sacramento District was committed to making this work. This was a case of the Corps doing mitigation, and now based on how they write the ETL, they need a variance for it to do the mitigation that they have always had to do in California.

13. BOARD COMMENTS AND TASK LEADER REPORTS

President Edgar noted that the list of Board committees that Board Member Carter has compiled will soon be ready.

14. FUTURE AGENDA

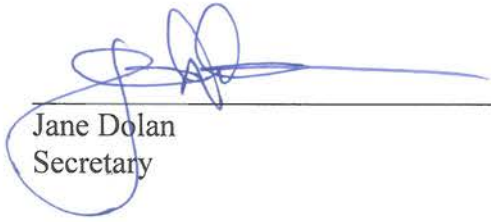
Board Member Suarez noted that DWR might be ready to talk to the Board about the regional planning process – they had developed an outline. Executive Officer Punia agreed to schedule it with Mr. Marshall.

15. ADJOURN

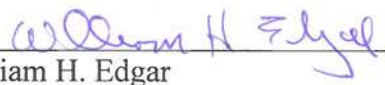
President Edgar adjourned the meeting at 4:05 p.m.

Dated: May 25, 2012

The foregoing Minutes were approved:



Jane Dolan
Secretary



William H. Edgar
President