

DWR - SWAN Workshop
 Quantification of Scenarios for the Ca Water Plan Update 2009
 Monday, December 10, 2007, 12:30 – 3:30 p.m.

Introduction

Short-term work includes activities for Update 2009
 Long-term is for Update 2013

Meeting Facilitator – Ken Kirby, Kirby Consulting Group

<i>Presentation</i>	Strategic Thinking about Water Plan analysis and stakeholder interaction	Hal Cardwell
<i>Handout</i>	Shared Vision Planning	
<i>Presentation</i>	Technically Informing Planning and Decisions: The Long Road	Jay Lund
<i>Handout</i>	Modeling Principles – CWEMF	See www.cwemf.org
<i>Discussion Questions</i>	(Setting a strategic direction for the long-term) <ul style="list-style-type: none"> • What do you think? • Did we miss anything? • What would you like to see next? 	

Discussion:

Comment - Agree with Jay, regions are collecting data and implementing projects. Regions are struggling with Integrated Regional Water Management (IRWMP) process and prioritizing projects. How can we make sure the work the regions are doing is reflected in the Water Plan? How can we use our IRWMP product to fit into what the state is doing? Long-term technical products are important.

Response - We heard this during Update 2005. We have worked with a subset of SWAN to develop a scope of work looking at integration of urban water management plans, regional plans, and the Water Plan.

Comment - IRWMP's are focusing on water supply and reliability and others (e.g. resource management strategies). We need to agree on metrics.

Comment –There is an issue with technical sustainability caused by lack of uniformity among plans. One way to bring these together is through shared vision planning. Also need to reflect regional nuances and local perspective.

Comment - Information flow must go both ways including from top down. You would like consistency. Right now only MWD does top down collaboration effectively. How do you look at consistency in population data and climate change data? We know it is

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uncertain. It is useful to take 2 or 3 scenarios as ‘what ifs’. Maybe have a scenario involving farming. Statewide assessment needs to reflect the local behavior.

Comment – I get how Shared Vision Planning would work to develop scenarios, but not sure if how it’s currently outlined could work with the Water Plan. Technical foundations are hard to understand. (e.g. WEAP model is hard to understand) I can understand how Shared Vision Planning can be useful for the scenarios.

Response - Update 2005 laid out an approach, but there is still disagreement about quantitative analysis. Shared Vision Planning can help with this.

<i>Handout & Presentation</i>	Synthesis of Existing Technical Studies	(Jay Lund)
<i>Discussion Questions</i>	(Setting a strategic direction for the long-term) <ul style="list-style-type: none"> • What do you think? • Did we miss anything? • What would you like to see next? • Do you think surveying the existing studies would be useful for Update 2009? • How would you like to interact with us on this? 	

Discussion:

Comment - There is a natural tie to what is already going on with regional planning. How commonly are these reports filed? Is it difficult to collect data?

Comment – U.C. Berkeley has a collection of regional water planning information at the Archives Center.

Comment - We should do this, and put on web.

Comment - I am all for it, it is a piece of the puzzle that has been lacking for years. Put it in the context of what is being produced out in the regions. At some point we need to reconcile the regions. Assemble IRWMP data and reconcile. We need to know what the regions are doing and thinking of doing. There are potential conflicts between regions.

Comment - There is a large number of studies out there. What is best? What is most recent? Annotation process has to address that.

Comment - Besides CVP SWP, water supply is very fragmented. Need a plan to help local water supplies. Need a greater degree of coordination. Need honest Statewide Water Plan.

Anisa Devine (IID Representative) - IID is in process of implementing Quantitative Settlement Agreement for Colorado River supply and it is changing all the time. You

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should have a cut-off date for when data goes into Update 2009.

Facilitator - Recognizing that the Water Plan is a snapshot in time.

<i>Presentation</i>	A Proposal for Near-term Quantitative Support of Integrated Scenario Analysis for the California Water Plan Update 2009	(Purkey, Groves and Yates)
<i>Handout</i>	A Proposal for Near-term Quantitative Support of Integrated Scenario Analysis for the California Water Plan Update 2009	(Purkey, Groves and Yates)
<i>Discussion Questions</i>	<ul style="list-style-type: none"> • Helpful vs. Unhelpful? • Is this proposal clear? • Would you like to see additional information about the proposal? • Do you think this would be useful for Update 2009? • Is there anything that needs to be added to the proposal? • How would you like to interact with us on this? • Would you feel comfortable recommending this approach to the Steering Committee and Advisory Committee? 	

Comment – We need to know in words how to move (Scenario Matrix - from top chart to bottom chart). Update 2005 scenario framework (diagram from handout) to robust management strategies for IEUA (diagram from Scenario Matrix).

Discussion:

Comment - Need to be careful about creating expectations that you can't meet. Shared Vision Planning suggests that all stakeholders can participate. Water crisis is seriously escalated. Any stakeholder that wants to be engaged can be. Integrating regional pieces and all the new stuff and stakeholder stuff will be difficult.

Comment - Do we have independent ideas here? How does Shared Vision Planning fit into the WEAP Proposal?

Facilitator – DWR does not expect to have the time to use Shared Vision Planning to extensively improve the WEAP Proposal.

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Comment – I can see how we can apply WEAP to Sacramento Valley, but not how to apply it to everything else because we have all these missing holes.

David Purkey – We are not going to open up this application process to quantify everything; we are trying to demonstrate how it could be useful for different scenarios. We are trying to integrate a regional analysis in WEAP with a system wide analysis with CALSIM or CALSIM Lite. Andy Draper will be heavily involved in this step. This will be an additional model to those already out there. We don't want to disintegrate into different development directions. WEAP has built-in hydrology model. CALSIM model is purely allocation model, operations meeting fixed demands. How would we fit in the responses? Looking at climate change progressing out to 2050 is a very different approach. How do we take this approach and meld it with the approaches DWR is using today. It is challenging but worthwhile.

Comment - Proposal looks at 2 regions, but it is important to keep a consistent approach for statewide analysis.

Comment – For 2014, there could be a WEAP version for the whole state. It will do what CALSIM does, either by itself or ...it takes time to extend this analysis. This is an intermediate step because there is limited time. It is going in the right direction for the future.

Facilitator - Are you clear what are being proposed with regards to 2009 and beyond?

Comment – To what extent will the Sacramento Hydrologic Region and South Coast be linked under the proposal?

David Purkey – Right now they will be kept independent within WEAP. Could do more to link these two regions if there is interest. Would use CALSIM or CALSIM Lite to look at cross Delta interaction.

Comment - Hard to understand how WEAP works, is there a Web site?

Response - www.weap21.org

Comment –Water Allocation Models (WAM) from Texas are different. Regulatory framework is built into models with historical hydrology and climate.

Comment – There is a useful article from February, 2006. I will send it to DWR for use in scenario development.

Facilitator – We are trying to refine quantitative approach and how we will use Shared Vision Planning? We can't use Shared Vision Planning for everything. We are also working on refining response packages.

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Comment - How much on the feedback from economic considerations? (In terms of transfers?) Can WEAP optimize like CALVIN?

David Purkey – Looking at a more simulation based approach, not optimization. We looked at cost in terms of response packages. We can do that in the context of these two regional studies.

Facilitator - Do you like this idea? Is this useful?

Jim Crowley, SCWD – I am familiar with WEAP and am supportive of this concept. Let me know how I can help.

Dan Cayan – Climate Change Center scenario effort would be happy to provide information from Global Circulation Models and some downscaling that is being developed. I am intrigued by the proposal. It is a step along the way and we would be pleased to be involved.

Comment – I am supportive of the proposal. This is what I thought the Water Plan process needed last time.

Comment – Can see how this applies to Update 2014 but more difficult with time constraints for 2009, but support moving forward.

Comment – Is this the only proposal? Are there other alternatives?

Facilitator – We looked at many different options and modeling platforms. This is the most detailed response to date. There is an issue with time available and resources available. If the group wants to look at other options we can do that.

Rich Juricich – We already have a contracting mechanism in place for this proposal. For Update 2009 we won't be able to look at additional approaches due to time and resource constraints. We are interested in hearing what others things SWAN would you like to see incorporated into the proposal.

Comment – Quite a bit of work done already in Sacramento River valley. Look at risk or failure of reservoirs. Understand this is a high level type approach. Need to look at 'what if' more and different runoff scenarios through the system. We would like to understand some of these assumptions.

Comment – Monthly time step is too coarse for climate change studies. California Energy Commission is sponsoring climate studies. Need to cross validate the WEAP results with these studies.

Facilitator – Would you like us to move forward with this idea?

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Comment - Think we should look forward, but need more detail on WEAP.

Comment – Move forward, with caveat, Water Plan Advisory Committee needs to be put in the loop and so do the regions at the regional workshops.

Conclusion - No additional SWAN meeting before the Dec. 19th AC meeting. Send in comments if you like, to Rich Juricich (juricich@water.ca.gov).

Attendees in Room	Organization
Ken Kirby	Kirby Consulting Group (Facilitator)
Hal Cardwell	U.S. Army Corps of Engineers (Presenter)
Jay Lund	U.C. Davis (Presenter)
David Purkey	Stockholm Environment Institute (Presenter)
David Groves	Rand Corp. (Presenter)
David Yates	National Center for Atmospheric Research (Presenter)
Rich Juricich	DWR (SWAN Coordinator)
Jennifer Kofoid	DWR
Lewis Moeller	DWR
Steve Phillips	U.S. Geological Survey
Michael Perrone	DWR
Steve Culberson	CALFED Bay-Delta Program
Michael Hanemann	U.C. Berkeley
Bob Languell	State Water Resources Control Board
Philip Duffy	Lawrence Livermore National Laboratory
Brian Van Lienden	CH2M Hill
Steve Hatchett	Consultant
Kamyar Guivetchi	DWR
Paul Hutton	Metropolitan Water District of Southern California
Andy Draper	MWH
Robin Newmark	Lawrence Livermore National Laboratory
Arthur Hinojosa	DWR
Greg Young	Tully and Young
Terry Erlewine	State Water Contractors
Ken Trott	Ca Dept. of Food and Agriculture
Robert Morrow	
Kathy Jacobs	Arizona Water Institute
Robert Hodam	State Water Resources Control Board
Barney Austin	Texas Water Development Board
Ray Hoagland	DWR

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Attendees via Web-Ex	Organization
Matthew Heberger	Pacific Institute
Mark Horne	PBS&J
Kosta Georgakakos	Hydrologic Research Center
Jim Crowley	Santa Clara Valley Water District
Lloyd Fryer	Kern County Water Agency
Ed Maurer	Santa Clara University
Richard A. Denton	Consultant
Dan Cayan	Scripps Institution of Oceanography
Priyanka Jain	East Bay Municipal Utility District
Gail Cismowski	Central Valley Regional Water Quality Control Board
Lorraine White	California Energy Commission
K T Shum	East Bay Municipal Utility District
Jim Martin	Central Valley Regional Water Quality Control Board
Anisa divine	Imperial Irrigation District
Allan Oto	DWR
Benjamin Bray	East Bay Municipal Utility District
Cris Tulloch	Santa Clara Valley Water District