MEETING SUMMARY

CALIFORNIA WATER PLAN UPDATE 2009
ADVISORY COMMITTEE MEETING

MARCH 20, 9:30 - 4:30 P.M. | MARCH 21, 9:00 A.M. – 4:00 P.M.
DOUBLE TREE HOTEL
2001 POINT WEST WAY
SACRAMENTO, CA

Next AC Meeting:

July 9, 2008
Double Tree Hotel
2001 Point West Way
Sacramento, CA 95815

Table of Contents:

DAY 1
Welcome and Opening Remarks 2
Forest Management – The Next Frontier....3
Companion Plans 5
California Transportation Plan 2035, the Statewide Housing Plan 5
General Plan Guidelines 5
Climate Change....5
Coordinating Water Plan & Climate Action Team activities 6
Special Presentation on AB 32 Climate Change Initiative 6
Mitigation Strategies....7
Shared Vision Planning: Bridging Technical and Policy Conversations....10
Reconnect for the Day 10
Initial Drafts of Regional Report and Resource Management Strategies – Available for Review 11
Using Shared Vision Planning for Update 2009....12
Developing Future Scenarios....12
Evaluation Criteria / Performance Indicators 13
Governor's Initiatives for a Comprehensive Delta Solution....15
Reducing Urban Water Use 20% Statewide by 2020 15
Delta Vision & Strategic Plan....19
Public Comments....20
Closing Thoughts....21
Attendance (93):....21

DAY 1

Welcome and Opening Remarks

Opening Remarks:

Mark Cowin, Deputy Director, California Department of Water Resources (DWR)

Deputy Director Mark Cowin welcomed everyone to the third meeting of the Advisory Committee (AC) for the *California Water Plan Update 2009* (*Update 2009*). In speaking about the Governor's goal to reduce per capita water use 20% by 2020, he noted that the Administration's commitment supports the first Foundational Action of Water Plan Update 2005 – to "Use Water Efficiently." While DWR is interpreting the Governor's goal as addressing urban water use, conservation from other sectors will also be looked at.

As a statewide objective, targets will have to account for the differences across water users and water agencies, as well as across regions. The initial approach will develop regional target. A multi-agency team is heading this effort to create a true "State of California" plan for meeting the Governor's objective. Currently, the lead agencies include DWR, the State Water Board, CALFED, and the California Energy Commission and Public Utilities Commission, with participation from other agencies. The team hopes to have recommendations to the Governor by October 2008

Discussion

A question was posed whether the State will voluntarily include socioeconomic analysis in a CEQA Programmatic Plan – noting that although CEQA does not require socioeconomic analysis, much of what the Water Plan approach focuses on trying to make best use of the State's fiscal resources through integrated resources planning. Mr. Cowin responded that the level of CEQA analysis has not yet been determined, and that it will be need to take a balanced approach.

A comment was made that the approach for measuring the 20% reduction is critical to the environmental community. Unless tied fewer diversions, conservation will mean more growth to the disadvantage of environmental conditions. The effort was encouraged to consider assigning targets as fewer diversions from natural ecosystems. Mr. Cowin remarked that this was a good point. While conservation in Southern California doesn't directly result in fewer exports, simulations suggest that they are related – and that conservation measures are part of a larger strategy.

A question asked whether the 20% reduction target was aggressive enough, since the actual reduction by 2020 – given population growth – might only be 3.5% of current water use. It was explained that seemed like a reasonable target with available technology and existing regulatory authorities. This includes implementation of Best Management Practices (BMPs) and grand funding to provide incentives. The per capita water use reduction applies to urban use, including residential, commercial, and industrial sectors. Water recycling will continue to be advanced as a source of water supply, not as a conservation measure.

The effort was encouraged to add Department of Public Health as lead agency. Mr. Cowin acknowledged the importance of their involvement, especially with their experience in sophisticated measurements. The State Water Board will be bringing in their expertise relating to water quality. Another suggestion was to include groundwater measurements in the overall program, to assure that water use reduction does not lead to increased pumping of groundwater.

As part of the public process, advice will be sough on the geographic scope of targets – either at statewide or regional levels. Interim targets will also need to be part of the package. Public workshops will be conducted on this issue. Other public processes could also be leveraged to obtain feedback.

Agenda Review

Lisa Beutler, Executive Facilitator from the Center for Collaborative Policy (CCP), reviewed the meeting agenda. The agenda and all other meeting materials are available on the website: http://www.waterplan.water.ca.gov/materials

Forest Management – The Next Frontier

Forest Management is proposed as a potential new resource management strategy for California Water Plan Update 2009. There were two presentations to introduce the topic of Forest Management.

Barry Hill, USDA Forest Service Region 5, gave a PowerPoint presentation titled “Meadow Restoration on National Forests in California: A Headwaters Approach to Water Resources Protection during Climatic Change.” This presentation introduced the concept of how meadows affect hydrologic processes and how meadow erosion can have adverse impacts. Meadow restoration does not produce new water, but it helps redistribute water over time. It helps to retain water in during the winter and spring peak flow seasons and increases water that is available during the dry months when water is scarce. The Forest Service has a program for meadow restoration in national forests. It costs roughly $100 to $250 per acre-foot over 10 years based on recent projects, with minimal long-term maintenance costs and limited risk of failure.

Michael Jackson, Plumas County Flood and Water Conservation District, and member of the Water Plan AC, gave a PowerPoint presentation called "Upper Feather IRWM Program: Collaborating with the U.S. Forest Service." In 2005, the Plumas National Forest joined the County of Plumas and other local agencies in adopted an IRWM plan for the 2.3 million-acre Upper Feather River watershed. The U.S. Forest Service is an essential partner for water supply, quarter quality, and flood control, since the Feather River Watershed contains nearly all of the 1.1 million acres of the Plumas National Forest.

Group Discussion:

The AC met in table groups to discuss issues that should considered in developing a new resource management strategy on meadow restoration / forest management. There was interest in the nexus between upstream and downstream landscapes and in sediment quantification. A major issue is how to capture and model the economic value of upstream forest management activities, including ecosystem services for fish and wildlife, sustained production of timber and other commodities, and downstream opportunities for hydro-power generation. There was interest in a cost-benefit analysis and a determination of cumulative impacts.

There was discussion on whether Forest Management should be a standalone resource management strategy or a component of the existing Watershed Management resource management strategy. In general, AC members supported Forest Management as a separate resource management strategy. Regardless of whether forest management represents a separate strategy, there was agreement that the concepts of Forest Management, Watershed Management, and fuel management should be thought through in a comprehensive, integrated way. It was suggested that IRWMPs might be an appropriate scale for quantifying and analyzing the efficacy of forest management and meadow restoration activities.

AC members expressed concern regarding impacts of meadow restoration on imports. There was a question if there should be flow targets downstream of recreation areas. Knowledge must be integrated from a variety of sources: including traditional knowledge of meadow functions and

ecosystem conditions; energy aspects of urban forests (carbon sequestration); and multi-benefit practices from other agencies. It was mentioned that the State Water Resources Control Board should be engaged to manage water rights issues that may arise in forest management/meadow restoration. It was also suggested that the U.S. Army Corp of Engineers be encouraged to work cooperatively with state agencies to promote watershed objectives and integrated water management in its flood management strategies.

Companion Plans

DWR is working with other State agencies from the Water Plan's State Agency Steering Committee to help make the California Water Plan Update 2009 benefit from the work of other related companion State plans.

California Transportation Plan 2035, the Statewide Housing Plan

Del Deletetsky, Caltrans, gave a PowerPoint presentation titled "Companion Plans; Linking Planning Efforts." He described the linkages between the California Transportation Plan 2035, the Statewide Housing Plan, and the California Water Plan Update 2009. Linkages are especially strong in scenarios. Demand influences are closely related between housing, transportation, and water. Caltans is identifying watersheds that are impacted by the Sate's transportation corridors and housing development.

General Plan Guidelines

Seth Litchney, Governor's Office of Planning and Research (OPR), gave a PowerPoint presentation titled, "OPR General Plan Guidelines for Local Government." He gave background on the General Plan Guidelines, which is the premier guidance document on how local government should create and implement a general plan. In particular, Mr. Litchney described the optional Water Element which OPR recommends local government incorporate in general plans. According to an OPR survey, 41 cities and counties self-reported adopting water elements. The Water Plan can provide information for water elements, including regional water supply, resource management strategies, floodplains, and climate change. OPR is currently updating the 2003 General Plan Guidelines. Mr. Litchney also spoke about environmental justice and tribal consultation guidance to local governments. SB 18 requires that cities and counties contact and consult with California Native American Tribes (whether federally recognized or not) before adopting or amending a general plan or designating land as open space.

Climate Change

The California Water Plan Update 2009 is closely related to the State's efforted related to greenhouse gas emission reduction targets from AB 32. In September 2006, the California State Legislature passed AB 32, the Global Warming Solutions Act of 2006 with the goal of reducing man-made California greenhouse gas back to 1990 emission levels by 2020.

Coordinating Water Plan & Climate Action Team Activities

Mark Cowin, DWR, and Fran Spivey-Weber, State Water Resources Control Board (State Water Board) member, are co-chairs for the Water-Energy subgroup for the Governor's Climate Action Team (WETCAT). Mark Cowin gave an introduction in terms of the Water Plan connection to WETCAT activities. Fran Spivey-Weber noted that the WETCAT is developing an initial list of four strategies for dealing with carbon emissions from the water and energy sectors of the economy. She also said that the SWRCB was producing a new strategic plan that incorporates elements form the Water Plan and climate change.

Special Presentation on AB 32 Climate Change Initiative

Charles Shulock, California Air Resources Board (ARB), gave a presentation on "AB 32: The California Global Warming Solutions Act of 2006." The presentation described the background of AB 32 and the process timeline. A Scoping Plan will be released in late 2008, after which the ARB will update it every five years. The AB 32 Scoping Plan has an extensive public process with stakeholder outreach workshops held through the state and several subgroup and workgroup meetings.

The ARB has some statutory deadlines for setting AB 32 targets. In meeting those deadlines, the Energy Commission is working with ARB to define appropriate strategies – which often have tremendous crossover to Update 2005 Resource Management Strategies (RMS). The effort would like receive feedback on the initial concepts, to develop refinements for reasonable and realistic mitigation measures.

The initial concepts represent the first cut, in providing core measures that create framework measures for the plan. There are not enough "no-regrets" measures to provide for all the reductions needed. Additional options deserve further attention and need to be analyzed in terms of trade-offs, cost effectiveness, overall quantify of reductions in greenhouse gases, and cap and trade considerations.

Part of the process involves tracking – and providing credit for – early actions. Protocols for accounting of reductions are currently being explored. Those with projects are encouraged to talk with ARB. The California Climate Action Registry will serve as the repository in accounting for the level of reductions achieved.

Questions of Clarification

A comment was made, noting that definitions will be an important part of the conversation. For example, when discussing communities that rely on imported water, at what point does use of imported water supplies (as a percent of total water supply) indicate reliance on imported supply? Rely is a relative term. Also, how is imported water

defined? What comes to mind is that "imported" water involved using non-natural infrastructure to move water from one hydrologic region to another

In referencing that Integrated Regional Water Management is looking at calculations of carbon footprints, a question asked if a process has been established to make this type of calculation. The response is that some approaches have been developed, but will need additional dialog through public process – perhaps looking at potential aspects of new guidelines.

An inquiry was made about how costs considerations are being dealt with. Mr. Shulock described that a cost-effectiveness approach would be used, to look at costs, societal benefits, avoided damages – using available information. There are contracts for energy sector and ecosystem modeling, which will feed into these analyses. Some interactions are well-understood, while others are just emerging.

Mitigation Strategies

Following the AB 32 presentation, the Advisory Committee broke into groups to discuss draft mitigation strategies developed by the Climate Action Team's Water-Energy sub-team WET CAT). Based on their project involvement, key staff from multiple agencies provided content expertise at each station. The group reports for each station follow.

Proposed WETCAT Strategies and Measures:

Strategy 1: Water Recycling
Draft Measure 1: Require Water Recycling Plans at Wastewater Treatment Plants
Agency: State Water Resources Control Board

Strategy 2: Urban Water Reuse
Draft Measure 1: Urban Water Reuse
Agency: State Water Resources Control Board

The group reported on the need to address stormwater and on-site reuse separately. Potential wastewater streams that might yield opportunities for reuse or recycling include car washes, industrial or commercial processes, and power plant cooling technology. Potential barriers to stormwater reuse include water quality concerns associated with first flush flows. Treatment plants require large amounts of energy for treating wastes and contaminants such as food waste, water softeners, and emerging contaminants – it would be better to try and eliminate them from entering wastewater streams to begin with.

Public perception is a barrier associated with recycled water. Additional education and awareness is needed for recycled water use – including stormwater and on-site reuse. Options to increase energy efficiency should be also be researched for water treatment.

Strategy 3: End-Use Water Conservation and Efficiency
Draft Strategy: Reduction of Greenhouse Gas Emissions through Water Use Efficiency
Agencies: Department of Water Resources, State Water Resources Control Board, California Energy Commission

The discussion on conservation strategies emphasized the complexity and diversity of needs and conditions throughout the State. For example, the same water conservation measure will yield different benefits in San Diego v. Marin County. Similarly, water conservation measures can sometimes increase energy consumption – as with sprinkler systems that use less water but require more energy to pressurize. Analytical tools will be extremely important to make these types of comparisons.

There needs to be discussion and modeling on water pricing. Again, there may be unintended consequences, and additional safeguards are needed – such a life line rates, and economic vitality of industry and business. Scale is another consideration, since what works for a large water agency may not work for a small agency.

There is high potential for conserving water through landscaping practices. Grants programs can be used to creative incentives for particular conservation practices. Better incentives need to be implemented for conservation and drought tolerant landscaping, such as:

- Model landscape ordinance(s) put in place to help guide do tolerant landscaping in communities
- Greater use of drought-resistant, native species and training materials for landscapers
- Better state and local agency oversight on public landscapers (parks and recreation, Caltrans, etc.)

The State can be a leader in this area, building on the work of CalTrans.

Disincentives must also be considered, through regulatory authorities assigned to the State Water Board or PUC – such as “reasonable” beneficial use of water requirements in relicensing.

Challenges include how to deal with un-accounted water – balancing the scope of data collection scope with collection costs and value of data. Water use would perhaps be measured in per application use. Conservation efforts need to provide some kind of credit for existing water use efficiency improvements (both urban and agricultural).

Other challenges include overlaps between different uses and systems, and how to improve water supply and demand forecasting that allow more efficient water project operations (peaking, maximizing efficient parts/equipment, etc.)

Strategy 4: Energy Intensity of Water Systems
Draft Measure 1: Implement cost effective energy efficiency measures in water system infrastructure projects
Agencies: Department of Water Resources, State Water Resources Control Board, California Energy Commission, and California Public Utilities Commission

The group report out included a suggestion for setting a target for energy efficiency improvement in system. The State is encouraged to set standards for its own systems, to lead by example. Federal facilities and wastewater plants need to upgrade system facilities as well. Water uses make up 19% of electrical use for the State. Of that amount, 72% is for end uses (including offset for hydrogen). Much of the remainder is for conveyance. Additional information is needed at the wholesale level to better refine where energy costs are (e.g. energy requirements per acre foot). Data acquisition requires measurement tools and protocols. Sonoma County Water Agency is conduction a pilot study, for reporting energy use. This type of information could be incorporated into Urban Water Management Plans, in lieu of new reporting requirements. It is essential to find a metric that works. Energy per capita may not be the best measure for evaluation, perhaps a "unit energy per water using application" would work better.

A comprehensive approach is needed to promote energy efficiency in design of new distribution systems, and to increase efficiency of existing facilities through maintenance upgrades. Financial incentives are needed, including additional criteria for rate cases associated with capital improvement projects for investor-owned utilities. Information must be available regarding equipment efficiencies, as well as long-term costs and benefits. Energy and water benefits can translate into locally 'compounded' benefits – such as energy generation or re-capture from small hydro on water distribution system. Mechanisms must be in place to allow energy to get on back onto the grid. General plan guidelines should be applied, as this is a since local land-use decision.

Strategy 5: Increase Renewable Energy Production
Draft Measure: Develop renewable projects that can be co-located with existing water system infrastructure
Agencies: Energy Commission and Public Utilities Commission

Conversation centered on different options for renewable energy production: hydro, wind, and solar. For example, small low-head hydro can be retrofit on existing facilities. Renewable energy can be combined with recharge and with pollution discharge reduction (see Turlock, Modesto, Madera, Chowchilla).

Tribes are investigating renewable energy options, by developing wind investments and other renewable energy production (see www.indiancountry.com). Biomass represents another option for Tribal and rural communities.

Mechanisms are needed to assure buy-back of alternative energy sources back into the grid. Although utilities are required to buy-back output from renewable facilities up to 1.5 MW- they do not have to issue a permit for the connection until they are ready to take the energy supply. Standard tariffs are issued investor-owned utilities. The standard rate is tied to market rates for energy, and to gas prices. The market price for energy is currently around 10 cents per kilowatt, tied to gas prices, so that's an opportunity that is available.

Shared Vision Planning: Bridging Technical and Policy Conversations

Hal Cardwell, U.S. Army Corps of Engineers, gave a PowerPoint presentation on Shared Visions Planning. Shared Vision Planning is the Collaborative Modeling Tool used by the U.S. Army Corps of Engineers that DWR intends to use to enhance work of the Water Plan's Statewide Water Analysis Network (SWAN).

AC members made several requests to DWR:

- Try to estimate statewide cost of water per acre-foot for each strategy by scenario
- Have to a more robust economic analysis, including costs of maintenance
- Consider subsidence when looking a t change of storage
- Do an assessment in terms of land use densities

DAY 2

Reconnect for the Day

Lisa Beutler, Executive Facilitator, welcomed the AC to the 2nd day of the meeting. She reviewed the previous morning's discussion on the AC's process concerns:

- **Relevance**: AC members were concerned about the relevance of the AC's role on the Water Plan program, especially when there are many other priorities for AC member time
- **Workshops:** AC members wanted to take content discussion to single-issue workshops with conference call capacity
- **Caucuses**: AC members indicated that they wanted a more formal caucus structure and help in setting up initial caucus meetings
- **AC Meeting Frequency**: AC members generally expressed preference to have 1-day meetings, perhaps more often, than 2-day meetings.

- **Regional Workshops**: The Water Plan's regional outreach efforts are well-intentioned, but they are not as effective as they could be.
- **Mini-Assessment**: The AC requested a mini-assessment of the process. The Center for Collaborative Policy facilitation team would follow-up with the AC to schedule caucus interviews and report back findings to DWR.

The AC spent a few minutes in table groups to discuss feedback for the process.

Group Report-Outs:

AC members gave the following feedback:

- There was general agreement of the summary of AC member concerns.
- There was support for a peer review process of Regional Reports
- For Regional Reports, there was interest in inter-regional water demand and how it affects the environment

Kamyar Guivetchi, DWR, let the AC know that each Regional Report chapter has a section called "Relationship with other Regions" that describes inter-regional water issues. He also confirmed that initial are reviewers doing a peer review process of the Regional Report drafts.

Initial Drafts of Regional Report and Resource Management Strategies – Available for Review

Kamyar Guivetchi announced that most of the Initial Drafts of the Regional Report and Resource Management Strategy narratives had been posted to the Water Plan website:

Regional Reports: http://www.waterplan.water.ca.gov/regions/
Resource Management Strategies: http://www.waterplan.water.ca.gov/strategies/

DWR requested a deadline of April 18th for public comment on the Initial Drafts. The next draft of content, called the "Working Draft," would be available in late May.

DWR intends to release a total of 5 drafts of Water Plan content for review and comment before the final is published in December 31, 2009, based on the following schedule

1. Early March 2008: Initial Draft (Resource Management Strategies & Regional Reports)
2. Late May 2008: Working Draft
3. Early September 2008: Pre-Administrative Draft
4. December 31, 2008: Public Review Draft
5. Early September 2008: Preview of Final Update 2009
6. December 31, 2008: Final Update 2009

Using Shared Vision Planning for Update 2009

Kamyar Guivetchi, DWR, gave a PowerPoint presentation titled "Using Shared Vision Planning for Update 2009." Shared Vision Planning (SVP) is a collaborative approach used to help bridge policy-level conversations with technical information exchange. For Update 2009, the AC serves as the body for statewide policy deliberation, while the Statewide Water Analysis Network (SWAN) serves as the technical body. Under the Water Plan's SVP approach, the AC gives guidance to the SWAN technical community by framing the "big picture" items and strategically asking questions to be answered via technical analysis. Using the AC's input, DWR is asking the SWAN to test analytical tools such as WEAP in pilot studies. DWR announced that SWAN and the California Water and Environmental Modeling Forum (CWEMF) will hold a joint workshop on Shared Vision Planning in Sacramento on April 22.

Kamyar also announced that the Draft Assumptions and Estimates (A&E) Report was released in January 2008. DWR is seeking comments by June 30, 2008 on

- Additional information sources
- How to improve utility of the A&E Report
- How to improve data and information for Update 2009

The Final A&E Report will be released in December 2008 along with the Public review Draft of Water Plan Update 2009.

Developing Future Scenarios

Rich Juricich, DWR, presented the scenario approach for Update 2009. The overview included a recap of the key factors, associated factor categories, scenario factor packages, and narrative storyline. Meeting participants broke into small groups to review and discuss the proposed scenario approach. The groups then reconvened to report out their considerations.

In looking at the three scenarios, there is some concern that the packaging of the factor "conditions" is not plausible. For example, in Scenario 3, the State's population would be higher than what DOF projected, yet businesses have moved out of State. Also, better consistency between scenarios should help track trends, such as water guzzling, across all three scenarios. Lastly, more specific storylines and language would be helpful in painting a more meaningful set of future conditions. In this regard, it would be good to clarify timeframes (e.g. retrospective v. forward looking).

Several specific comments address particular factors. There were suggestions to include flood factors, such as: flood protection, urban development of natural areas, and the nexus to changes in natural hydrology. There were also suggestions to include financial considerations for various factors, such as: economic considerations for reuse and alternative water supplies; metering technology becoming less expensive, water pricing (e.g. large areas of state are receiving water below CSR), and economic realities

regarding infrastructure maintenance. Changes and enforcement trends regarding endangered species laws also affect water management.

Other sectors that could be developed and represented in the narrative tables include community and industrial factors. Similarly, existing sectors could be expanded to address additional factors, such as collapse of Bay-Delta levees and enforcement of water management laws (as an institutional factor; for example, flexibility provides cushion during drought). The modelers were encouraged to expand cultural practices beyond an urban perspective and include rural California phenomenon.

Participants also considered how scenarios could help examine management responses. Beneficial modeling outputs might include:

- cost-effectiveness
- drivers for reservoir operations
- constraints and benefits
- links between flood control and land use
- links between flood flows and environmental flows
- relationship of reoperation as a pre-condition for some scenario factors
- impacts to areas of interest
- regional connections and inter-regional implications
- optimized timing for strategy implementation

Evaluation Criteria / Performance Indicators

In Update 2005, scenarios were used to help determine potential ranges of water demand. Update 2009 will expand the use of scenarios to help evaluate the performance of Resource Management Strategies and responses. Rich Juricich provided an overview of the framework to quantify future demand and response packages, based on conditions associated with the three scenarios. Meeting participants were asked to assist in identifying evaluation criteria (or indicators), metrics and measures. While the models are better suited to demand-side strategies, the modeling team sought feedback on evaluation criteria for all types of strategies. The group report-outs are summarized below.

On the question of how ***climate change*** might affect future water management, it will be important to look at: habitat (in terms of acres or miles), evapotranspiration use, cover (crops or native vegetation), rainfall quantities and intensity, temperature, and hydrographs. Current water management planning models will likely not work well -or at all – under various climate change scenarios. New conditions will require new tools and measures of variability to address conditions outside of historic patterns. The expanding use of desal might be an indicator of how climate change is affecting water management.

In terms of how RMSs and policy affect ***agriculture***, one group raised the connection between water efficiency and water rights, noting that water use efficiency does not equate to additional outflows or benefits. Criteria for evaluating RMS outcomes could involve: animal populations, crop acreage, areal extent of plants or habitats, indicators species, and physical and chemical parameters of soils. An additional indicator, for policy decisions, might use of some type of biomarkers, such as tagging of fish so they can be sonically or aerially tracked to follow movement.

In looking at impact of RMSs on ***environmental resources***, it was suggested that clear definitions be developed for evaluation criteria relating to species recovery. Draw on indicators from CalEPA and the EPIC program. Some general criteria that can assist recovery include:

- Degree to which all species recovered under scenario
- For habit, make include aquatic and prior riparian habitat
- Degree to which habitat conditions achieve sustainability

In order to assess ***flood management*** strategies, indicators might include: miles of levees, percent of levees with certification by the Corps, the level or type of protection provided, and number people located behind levees. Other indicators could point to: level of development in the floodplain, or connectivity of the floodplain to rivers.

Expand the ***groundwater*** definition to include a broad range of items including water storage and subsidence. Also, add effective sea level rise as it relates to saltwater intrusion. It would also be helpful to understand the extent of groundwater contamination, throughout the state. Estimate where plumes are going to go and show the total amount of potential supply - at certain cost levels. It's important to get our arms around the amount of groundwater supply lost to contamination.

In the area of ***water rights***, it was suggested that a better understanding would benefit from quantification of existing conditions. Specifically is would be helpful to have numbers regarding what we think available water rights are, existing and future water rights, claims, and special area of origin rights for watersheds. This is valuable information. Quantifying those items on a watershed basis would allow us to start to address questions, such as:

- How do existing and future claims contradict or enable RMS?
- How do they support area of origin claims, or address climate change?
- Where does it make sense for expenditures in water supply options?
- Where are we most vulnerable during droughts?

Water quality should have its own category. It will be important to look at the information contained in basin plans and identify data gaps.

Governor's Initiatives for a Comprehensive Delta Solution

Mark Cowin provided an overview of the Governor's letter to the Legislature, which lays out a comprehensive approach to addressing critical needs and ecosystem decline in the Delta. The identifies seven key activities: floodplain protection, emergency response, conveyance improvements, broader water quality programs, expanded water storage capacity, interim habitat measures, and water conservation.

Many of these topics have been part of the Water Plan discussions in Update 2005 and Update 2009.

The Governor's objectives are consistent with the key initiatives of the State Water Plan: to improve statewide water systems and implement IRWMP. The first foundational action, to use water efficiently, is essential. The Governor's goal to reduce per capita water use by 20%, by 2020, strongly supports Statewide water planning efforts. The next speaker will make a presentation on the State's effort for interpreting that goal and developing a plan to achieve the target.

Reducing Urban Water Use 20% Statewide by 2020

Rick Soehren spoke about specific actions already underway, as well as actions being considering to meet the target, and is asking the AC for input and suggestions on the current framework. The 20% reduction goal is being interpreted as per capita urban water use. Other efforts will continue to work with agriculture and other sectors to develop appropriate conservation goals, targets, and actions.

Per capita urban water use numbers will be subject to refinement as discussion move forward on defining and measuring the baseline and 20% reduction targets. Another point is how to interpret and measure a statewide reduction. This doesn't monitoring every user, or even every agency. There is no cookie cutter approach to setting reduction targets. Some areas have wider opportunities for conservation and may contribute more than other areas. As the plan is developed, more specific targets will be identified on a regional basis.

Four agencies are working together in developing the initial approach: DWR, State Water Resources Control Board, California Energy Commission, and California Public Utilities Commission. These agencies are all part of the Water Plan Steering Committee. The intent is to develop a true State plan for meeting the conservation target. The agencies will collectively consider their respective responsibilities in developing a conservation package. Additional regulations will be considered as required. Public involvement, and the perspectives of the AC, will be essential to developing the plan.

Rick noted that the Water Plan has been helpful in supporting water conservation, through IRWM incentives. Other tools that support water conservation include:

- AB 1420 was passed and requires implementation of water demand management measures. Beginning January 1, 2009, urban water suppliers applying for grants or loans need to show implementation of water conservation measures (Section 10631 of the Water Code) as a condition for receiving grant funding.
- Water efficiency standards are being phased in to address water use for plumbing, appliances, and irrigation controllers.
- A model ordinance for Landscape Water Efficiency is being developed.
- CIMIS, the California Irrigation Management Information System, was first developed in the 1980s. Information from this network of automated weather stations is increasingly being used to inform urban operations.
- Collaboration in working with the California Urban Water Conservation Council in developing Best Management Practices for conservation.

These tools alone are not expected to meet the reduction targets. The effort is requesting input on: how to develop a more aggressive plan, which tools use, what new tools put in toolbox, and measurement metrics.

Questions of Clarification

A question was raised as to whether there will be a CEQA document for a broader programmatic plan that will include a socioeconomic analysis to help guide actions. Mark Cowin acknowledged this as a good point that hasn't been given much consideration yet. The concern is to balance the level and scope of analysis that is conducted.

In response to a question, Rick Soehren noted that the 20% reduction effort will be working with the Delta Vision and climate change initiatives.

A comment was made that conservation targets need to include measures of reduced diversions in order to benefit the environment. Otherwise, what we get out of conservation is more growth without benefits for the existing environmental conditions is California. Targets need to include less diversion from natural ecosystems in the state. A 20% reduction in diversions and pumping would generate a lot of support from environmental interests and would make a major difference. Mark Cowin noted this was a very valid point. While conservation in Southern CA clearly doesn't result directly in less export, there has been some simulation in past that has been suggested that these things have been related. In order to reduce exports, action is needed… conservation one action measure within a larger strategy,

It was noted that with population growth, by 2020, a 20% per capita reduction could actually result in a net increase of overall water use. Future legislation could result in increased reductions for the future, which go beyond the current initiative.

The effort was encouraged to look at the Bay Delta Conservation Plan.

An inquiry was made as to the thinking that went into setting 20% as the reduction target. The response was that 20% seemed to be a reasonable target, after factoring in available technology, existing authorities, grant funding levels, and current BMPs and other measures.

A comment was made that the technology for getting to a 20% reduction is the easy part; changing individual behavior is more challenging.

It was clarified that urban use includes use by people throughout the State, not just use in urban centers. Small towns, residential, municipal, commercial, and industrial uses are all within the scope of the reduction target.

In response to a question as to whether water recycling measures will count towards conservation targets, Mark Cowin noted that the initial take on water recycling is as water supply. In no way should the definition of conservation impede the advancement of water recycling.

A suggestion was made that Department of Public Health be included as a coordinating agency on. Mark Cowin agreed that the agency should be included in developing policies. Also, if there are regulatory considerations, their experience in developing sophisticated measurements will be invaluable.

A question asked if targets will be set on a statewide or regional basis. It was noted that determining the scope of targets is part of the overall process and will be part of a series of public workshops.

A comment was made to include a monitoring system that assures that reductions in surface water diversions are not being offset by groundwater pumping.

Another comment supported developing interim milestones to assure implementation.

There was a suggestion that it would be helpful to understand what is needed in terms of water quality and flows to protect Delta water quality. What standards would be useful to help us get our arms around this? Liz Haven from the State Water Board noted that this was a complex system that the Division of Water Rights might be able to assist with.

Group Work

Lisa Beutler summarized that the effort is seeking input on definitions, issues, strategies, actions, and partners that need to be brought into the discussion. Meeting participants were asked to discuss the overall approach in a small group format.

Discussion

The group reports are summarized here:

- There needs to be strong direction and leadership for this effort, in light of the number of other existing State plans and efforts. Stakeholders, those who are actually going to implement conservation efforts, need to be involved. Stakeholders need to be at the table to help determine fair, equitable, and achievable targets. The conversation will have to look at linkage with IRWMPs, and 2175, as well as what defines local cost efficiency.

- There was concern that conservation efforts analyze and recognize the different circumstances for water use efficiency throughout the state. As with carbon trading, this is a new system with "low-hanging fruit" and opportunities for process improvement. Key questions will be how to measure baselines, urban water management responses, and implications. Consider how water reuse, water recycling and water use efficiency technologies relate to the concept of conservation. This relates to Delta Vision Action #6.

- Urban growth is where water use has been increasing, and policies have potential to address this. AB 2175 (Laird and Feuer) would promote increased water use efficiency by establishing numeric water savings targets for urban and agricultural water use. AB 2153 (Krekorian) the Water Efficiency and Security Act (WESA), would require new development to be water demand neutral. AB 2153 is also structured to direct water efficiency upgrades to disadvantaged communities that may not otherwise be able to afford these improvements. It is co-sponsored by the Planning and Conservation League and the Environmental Justice Coalition for Water.

- Ensure that water conservation implementation funds are equitably distributed across all regions and user communities. In the past, loans and grants went mostly to developed portions of the State.

- There was concern that there be a public process that includes all stakeholders. Talked mostly about the process need to include all stakeholders. Perhaps begin with a scoping workshop. The issue of measurement protocol could be very complex.

- The Water Plan should be coordinated with the Delta Vision program and make sure that the Water Plan should not get too far ahead of the Delta Vision's Implementation Plan.

Delta Vision & Strategic Plan

Leo Winternitz, Deputy Director, CALFED Bay-Delta Program, provided an overview of the Delta Vision and Blue Ribbon Task Force. The Delta Vision process was created by Executive Order, recognizing the importance of the Delta to the entire state. The Administration created a seven-member Blue Ribbon Task Force, whose membership brings extensive policy and management expertise. Two key products from the Task Force effort are the Delta Vision Report, released in November 2007, and a Strategic Plan. The Executive Order also created a Stakeholder Coordination Group, which developed its own Recommendations Report and is now assisting the task Force in developing the Strategic Plan.

The Delta Vision Report provides twelve integrated and linked actions to improve the sustainability of the Delta. The solutions for the Delta can not rely on engineering fixes. The problems in the Delta are symptomatic of challenges to Delta streams and tributaries, resulting from inefficient water management and institutional policies that have not adapted well to changing conditions. A comprehensive, integrated, and linked approach is needed to improve the Delta.

The Delta Vision identifies two primary co-equal goals: supporting the Delta ecosystem and providing a reliable water supply. Each goal is indispensable to the State, and each must be advanced in any decision. The twelve actions represent recommendations to advance those goals.

In looking at water supplies, the Task Force looked at water rights, diversions, and pending applications. To ease pressure on imported water supplies, increased regional self-sufficiency will depend on greater water conservation, conjunctive use, integrated resource management, and use of renewable technologies. Water conveyance and storage capacity also need to be improved. Sustainable use must drive the State's water policies. The Governor's initiative to reduce water use by 20% by 2020 is an example of encouraging sustainability.

Another recommendation is constructing new conveyance and storage facilities, and improving system operation to better manage California water systems – for both the estuarine environment and water exports. Delta operations must promote ecological functions, such as freshwater flows and temperature levels, which support native fisheries and species. Channelization has impacted many ecosystem functions. Addressing water diversion levels and timing is critical to supporting ecosystem capacity.
The Task Force recommends a stronger governance structure in the Delta, with authority for land use. Inappropriate urbanization must be discouraged and floodplains must be protected from development. There are no simple fixes. Policies cannot be rigid and must be flexible enough to accommodate emerging issues and conditions.

Questions of Clarification

A question asked if it is possible to maintain the Delta islands over the long-term. In response, Mr. Winternitz noted that there are different types of islands. Some will become inundated. Others support important infrastructure that needs to be protected. The challenge is to determine where funding and investments are most appropriate.

A question was raised as to whether the recommendation on governance structure (#10) would eliminate the State Water Board. The reply is that no part of the Delta Vision report recommends the replacement of any agency. Management of water rights does not necessarily require changes to water rights. Other concerns were raised regarding this recommendation – specifically, how can the expertise currently provided by different agencies be coordinated within one agency? These are the very types of issues that are being looked at and further defined in the Strategic Plan.

Another concern was raised regarding having a single entity with authority over diversions, improvements, and exports. It seems that the diversions are focused only on supporting the Delta – diversions have impacts on the Trinity River and Mendota systems as well. The concepts of upstream flows and area of origin rights need to be included here. Also, fees and financing will be part of this – which has surfaced before. Finally, returns back into the Delta (such as tail water) do not offset diversions, since they are qualitatively different. Continued attention to water quality is essential

A follow-up comment supported a structure that would help unify policy in the Delta. Currently there are approximately 200 governing agencies with responsibilities in the Delta. There is no central agency to oversee restoration efforts. A farmer called, wishing to convert 3,000 acres to tidal wetland. Who do they contact?

The Blue Ribbon Task Force is looking for suggestions and recommendations on how a streamlined governance structure might work. The thinking that went into the action on governance is described on pages 51-53 of the Delta Vision report.

In response to a question, it was clarified that 8 MAF is diverted above the pumps, on an annual average. Much of that does get returned, although the Hetch Hetchy diversion bypasses the watershed entirely.

Public Comments

Donna Begay, Tubatulabals of Kern Valley, said that the Water Plan's Tribal Communication Committee has been working with tribes. She posed a question to the Advisory Committee asking what impact Tribal participation has had to the Water Plan process.

Lisa Beutler said that this topic would be discussed during the Advisory Committee mini-assessment in the next month.

Kamyar Guivetchi also provided a summary of tribal outreach and involvement to the AC members. Key aspects included a briefing to the Steering Committee on federal agency responsibilities pertaining to Tribal water. This involved a panel of representatives of the Bureau of Indian Affairs, US EPA, and the Bureau of Land management. The Steering Committee is slated to have another panel with federal agencies that are land trustees: BLM, Forest Service, and Park Service. This will tie into forest management and meadow restoration, as well as show how federal lands relate to tribes.

The effect of the Water Plan Tribal Communication Committee (TCC)'s outreach is already showing outcomes. In the first round of regional workshops, in 2007, there were very few tribal members who participated. In the second round of workshops in 2008, Table Mountain Rancheria hosted on one of the workshops, and Tribal pre-workshop sessions are now included for workshops.

A key product of the TCC effort will be the Tribal Communication Plan. After finishing the plan, work will begin on its implementation. The committee has met six times, so far. Another element is hosting a Tribal Water Summit and the TCC has started discussing what the process would be to get high-level State representatives and Tribal representatives to participate. The proceedings of the summit would be included in Update 2009.

Closing Thoughts

Deputy Director Mark Cowin, DWR, closed the meeting with a word of thanks to everyone in attendance.

Next AC Meeting: **July 9, 2008**

Attendance (93):

Advisory Committee Members and Alternates (26):

1. **Ted Allured**, California County Planning Commissioners Association
2. **David Bolland**, Association of California Water Agencies
3. **Diane Brooks,** Division of Ratepayer Advocates, California Public Utilities Commission
4. **Chris Brown**, California Urban Water Conservation Council
5. **Merita Callaway**, California State Association of Counties
6. **Grace Chambers**, Planning and Conservation League
7. **Lenora Clark**, Recreational Boaters of California
8. **Lloyd Fryer**, State Water Contractors

9. **Mark Franco**, Intertribal Council of California, Water Commission
10. **Jack Hawks**, California Water Association
11. **Paul Hegedus**, Floodplain Management Association
12. **Al Herson,** California Chapter of the American Planning Association
13. **John Hopkins,**
14. **Mike Jackson**, California Sportfishing Protection Alliance
15. **Mary Lee Knecht**, California Watershed Network
16. **Jim Metropulos**, Sierra Club
17. **Jonas Minton**, Planning & Conservation League
18. **Gary Mulcahy**, Environmental Justice Coalition for Water
19. **Valerie Nera**, California Chamber of Commerce
20. **Betsy Reifsneider**, Friends of the River
21. **Larry Rohfles**, California Landscape Contractors Association
22. **Katie Shulte-Joung,** California Urban Water Conservation Council
23. **Jack Sullivan**, League of Women Voters
24. **Susan Tatayon**, The Nature Conservancy
25. **Iovanka Todt**, Floodplain Management Association
26. **Randy Yonemura**, Intertribal Council of California, Water Commission

Others (68):

1. **Jamie Anderson**, DWR
2. **Donna Begay**, Tubatulabals of Kern Valley
3. **Katie Benouar**, CA Business Transportation and Housing Agency
4. **Lisa Beutler**, CCP
5. **Jerrold Bruns**, Central Valley Regional Water Quality Control Board
6. **Hal Cardwell**, U.S. Army Corps of Engineers
7. **Mike Chapel**, U.S. Forest Service
8. **Jim Chatigny,** Mountain Counties Water Resources Association
9. **Charlotte Chorneau**, Center for Collaborative Policy
10. **Mark Cowin**, DWR
11. **Paul Dabbs**, DWR
12. **Baryohay Davidoff**, DWR
13. **Robert DuVall,** California Air Resources Board
14. **Tom Filler**, DWR
15. **Ted Frink,** DWR
16. **Connie Gallippi**, Conservation Strategy Group
17. **Gretchen Goettl**, DWR
18. **Loretta Greycloud**, Inter-Tribal Council of CA
19. **David Groves**, RAND Corp.
20. **Kamyar Guivetchi**, DWR
21. **Kathleen Haley**, inside Cal/EPA Newsletter
22. **Liz Haven**, SWRCB
23. **Barbara Hennigan**, Butte-Sutter Basin Area Groundwater Users
24. **Barry Hill,** U.S. Forest Service
25. **Ed Horton**, Placer County Water Agency

26. **Rich Juricich**, DWR
27. **Chris Keithley**, CALFIRE
28. **Chris Knopp**, U.S. Forest Service
29. **Jennifer Kofoid**, DWR
30. **Brian Leahy**, CA Department of Conservation
31. **Seth Litchney**, Governor's Office of Planning and Research
32. **Carl Longley,** Central Valley Regional Water Quality Control Board
33. **John Lowrie**, CA Department of Conservation
34. **Liz Mansfield**, El Dorado Irrigation District
35. **Sarah Martin,** CA Watershed Network
36. **Lorraine Marsh**, DWR
37. **Clara Martinson**, California State Association of Counties
38. **Felix Mendoza**, PacStat
39. **John Mills**, Offices of John S. Mills
40. **Lew Moeller**, DWR
41. **Gary Mulcahy**, Environmental Justice Coalition for Water
42. **Michael Perrone**, DWR
43. **Roy Peterson**, DWR
44. **Charlie Pike**, Charlie Pike & Associates
45. **Cheryl Rubin**, The Forest Foundation
46. **Virginia Sajac**, DWR
47. **Chuck Shulock,** California Air Resources Board
48. **Matthew Silver**, California Energy Commission
49. **Richard Snyder**, UC Davis
50. **Rick Soehren**, DWR
51. **Fran Spivy-Weber**, State Water Resources Control Board
52. **Pierre Stephens**, DWR
53. **Atta P. Stevenson**, Intertribal Council of California
54. **Marilee Talley**, DWR
55. **Susan Tatayon,** The Nature Conservancy
56. **Jim Tischer**, CA Water Institute
57. **Iovanka Todt**, Floodplain Management Association
58. **Michelle Trotter,** DWR
59. **Kristopher Tsernell**, Conservation Strategy Group
60. **Matt Van Sluis,** Planning and Conservation League
61. **Brian White**, CA Forestry Association
62. **Lorraine White,** California Energy Commission
63. **Jim Wieking**, DWR
64. **Leo Winternitz**, CALFED Bay Delta Program
65. **Emilia Wisniewski**, East Bay Municipal Utility District
66. **Kathy Wood**, CA Water Institute
67. **Ally Wu**, DWR
68. **Steve Zikman**

Facilitation Team: Lisa Beutler, David Sumi, Judie Talbot – Center for Collaborative Policy, CSUS