SBx7-7 Public Listening Session
2009 Water Conservation Act
Meeting Summary
Sacramento, CA
March 8, 2010

Welcome and Greetings

Manucher Alemi, DWR Water Use and Efficiency Branch Chief, welcomed participants to the Senate Bill x7-7 Listening Session. He explained that the California Department of Water Resources (DWR) and the California Urban Water Conservation Council (CUWCC) are starting the process to establish technical methodologies and a water use target method to comply with Senate Bill x 7-7. The Listening Session is for the public to provide input on possible approaches, and assistance in identifying the most feasible technical methodologies (including identifying possible data sources for water use target methods). Session participants were encouraged to provide input to DWR staff.

Facilitator Dave Ceppos, Managing Senior Mediator with the CSU Sacramento, Center for Collaborative Policy (CCP) introduced himself and Charlotte Chorneau, CCP, who will capture the comments through detailed note taking as well as Gwenn Huff, DWR, who will be charting flip chart notes as back up.

Presentation # 1: Overview of SBx7-7

Mr. Alemi presented an outline of the requirements of SBx7-7, the timeline of the many subsequent processes and projects and the plan for implementation and public participation. Presentation slides are available at: http://www.water.ca.gov/calendar

Urban Stakeholder Committee

John Woodling, Sacramento Regional Water Authority, asked who the potential Urban Stakeholder Committee (USC) members are.

- Manucher Alemi, DWR, explained he has only prepared a partial list. He is working with the California Urban Water Conservation Council (CUWCC) to finalize the list. Mr. Alemi mentioned that those interested in participating in the USC should contact DWR staff.

Sonia Diermayer, Sierra Club, asked if environmental groups will be on the stakeholder committee for this project.

- Mr. Alemi responded that yes, tentatively the Sierra Club and the Pacific Institute are to be invited to be on the committee.

Pauline Calvillo, U.S. Bureau of Reclamation, asked if the USC will ensure regional representation.

- Mr. Alemi explained that DWR has developed a set of criteria including both large and small agencies and a mixture of suppliers, retailers, cities, academics, policy and

technical level stakeholder. DWR will consider regional variation as well. The criteria will eventually be included in the committee charter.

Ellen Carlson, Elk Grove Water Service (EGWS), asked why DWR partnered with the CUWCC and not other agencies.

- Mr. Alemi explained that DWR is required in two parts of the law to work with the CUWCC and the state agencies to implement the requirements. The Council is not required to work on all parts of implementation, and DWR hopes to bring in more agency participation through the formation of an agency team.

Attorney Jan Goldsmith, Placer County Water Agency (PCWA),, cautioned that it is essential it to post USC member selection criteria on the DWR Web site, along with the invitation to join. The USC meetings should be open to the public, and the Department should develop a listserve for all those interested.

- Mr. Alemi explained that DWR must meet the legislated timeline, but will provide the opportunity for input and that this will be a public process.

CII Task Force

Chris Brown, CWUCC, asked how specific the commercial, industrial, and institutional (CII) regulations will be since the CII Task Force will not finish their work until 2012.

- Mr. Alemi agreed and explained that in order to meet the deadline set by the legislation, DWR must adopt the regulations during this calendar year (2010. Under the law it is an emergency rule making process. DWR does not have to go through a public hearing process to adopt the regulation, however in order to make it permanent there will be a rule making process in 2011.

Clean Up Legislation

Jeff Stephenson, SDCWA [*via email*], asked what the status is of the legislative amendment to grant wholesaler water agencies a 6-month extension on the due date for submitting Urban Water Management Plans (UWMP).

- Rick Soehren, Assistant Deputy Director with Water Use Efficiency, DWR, responded that one of the minor flaws of the November 2009 bill was that the provision which allowed an extension until 2011 for the submission of UWMPs applied only to retail water suppliers and not to wholesale suppliers. There has been clean up legislation introduced. It was not the intention of the legislature to exclude the wholesalers from the deadline extension.

Presentation #2: SB x7-7 Water Use Targets and Compliance Steps

Tom Hawkins, DWR, presented on the legislatively outlined steps to document water use reduction. Presentation slides are available at: http://www.water.ca.gov/calendar

Mr. Brown asked why DWR staff is using the term "ET" instead of "ETo."

- Mr. Hawkins explained that 'ET" is from the legislation.
- Mr. Brown mentioned that this term usage might be one of those clean up issues, as he believed it should be "ETo."

Presentation #3: Technical Methodologies and Compliance Year Adjustments

Peter Brostrom, DWR, presented on the six technical methodologies for calculating baseline and the three compliance year adjustments.
Presentation slides are available at: http://www.water.ca.gov/calendar

Fiona Sanchez, Irvine Ranch Water District, explained that the intent of the CII Task Force is to revise the target because per capita is not a metric for CII. The revised metric will be incorporated into Method 2.

Greg Young, Tully and Young, pointed out that Section 10608.20 (4) (E) of the legislation suggested that submitting "compliance daily water use for 2010" is a misstatement as there will be nothing to report until the interim target year which is 2015.

- DWR agreed it appeared to be a misstatement.

Thomas Neiser, Alameda County Water District, mentioned that in terms of calculating GPCD compliance year adjustments based on economic development increase, there is at least a three year lag in local revenue data and he uses water consumption as the next best indicator of economic development for his area.

Population Calculation

Rose Koch, Indian Wells Valley Water District [*via email*], asked how service area population is determined? Indian Wells is in two counties that extend outside of the city limits.

- Mr. Hawkins responded that DWR is looking for input on the calculation.

Matt Colwell, South Feather Water and Power, mentioned that it would be helpful to have Census 2010 population data and per capita per household data to determine population. He asked when the Census 2010 data becomes available.

Fiona Sanchez mentioned that population can be calculated with Department of Finance (DOF) data or equivalent which gets down to the census track level.

Other considerations mentioned were:

- large transfer population (i.e. student population)
- non-permanent residents (resort communities)
- food processors fluctuating usages

Andy Walker, City of Fairfield, asked how agencies will set their baseline adequately if they do not have 10 years of data. The census data will not be available for two years. It will be good for

making adjustments, it will not be useful in the establishment of baseline. The City of Fairfield has 10 year baseline data, however neighboring agencies may not have it.

Vicki Sacks, San Joaquin Water District, mentioned that local council of governments takes the DOF data and uses a multiplier with number of connections to determine population projections.

Mr. Colwell mentioned for population estimations that span across counties, cities and unincorporated areas, DOF data does not break down to census tracks. For calculating or estimating population in interim census years, his agency took Census 2000 data at the track level and then determined population based on connection data to come up with baseline to get indirect estimate.

Mr. Neiser explained that Alameda County Water District uses DOF estimations between census years. He also stated that the technical methodologies should account for the fact that water reductions have occurred in CII consumption due to the current economic slump. A further point was that there will be a margin of error and the methodologies should account for that in the calculation of targets. There should be some method for incorporating a reasonable margin of error for population and economic activity for compliance, ACWD's DOF numbers will reflect a 1% change.

Ms. Sacks mentioned that estimating population will be the most difficult aspect of these calculations. She asked if agencies can simply take the definition of gross water use and use 20% less.

- Jeff Szytel, Water Systems Consulting, responded that would not account for population growth. A flat reduction of 20% will not work for an area that is growing.

Gross Water Use

Robert Dolezal, California Association of Nursery and Garden Centers, asked why there is no mention of reductions for water loses.

- Bruce Gwynne, Department of Conservation, responded that leaks and operational loses in agriculture were not included as a reduction in order to create an incentive to fix the inadequate system.

Mr. Young asked if "treating contaminated groundwater" will count as recycled water. Sources like these can be used for landscape purposes and the water should be subtracted from gross water use.

- Ms. Sanchez responded that treated tertiary water counts.

Cathy Pieroni, San Diego Public Utilities Department [*via email*], pointed out that the law under 10608.12 (g) also recognizes that indirect potable reuse, or recycled water that a retailer places in long term storage, can be subtracted from gross water use.

- Mr. Hawkins mentioned that there are two definitions and gross water use under 10608.12 (m) which defines recycled water and talks about indirect and potable reuse.

- Ms. Sanchez mentioned that there is a subtraction for recycled water already captured which must be tertiary. Potable reuse would have already been captured in the recycled water subtraction.

Bill Greg, California League of Food Processors, mentioned that process water is exempt, there is a unique situation for food and agriculture processors for sanitation purposes

- Mr. Hawkins mentioned that the slide represents the legislation definition of gross water use and that that water suppliers have the option to subtract process water.

Liz Mansfield, El Dorado Irrigation, mentioned the definition of gross water is treated and untreated water entering the system. Her agency does not have the ability to conserve untreated water because there is raw water in the system that customers are taking for use.

John Martin, Tehachapi –Cummings County Water District [*via email*], suggested that "storage" include water spread for groundwater recharge in the gross water use calculation.

Landscape Calculation

Dave Iribarne, City of Petaluma [*via email*], remarked that the landscape area water use is stated as "landscape irrigated through dedicated or residential meters or connections." Are agencies expected to gather water use for all landscapes or only those with dedicated irrigation meters?

- Mr. Brostrom clarified that it is both dedicated and residential measures. Landscape area is only used in Method 2, so if agencies do not have this data they should choose another method.

Mr. Dolezal suggested that the density of CIMIS stations needs to be increased, especially for urban areas. The CIMIS agriculture model ordinance may not be appropriate for urban areas. CIMIS works for single crops planted over a large area, but in not accurate in an urban setting. He recommended postponing the requirement to use CIMIS data until this is addressed.

- Mr. Brostrom asked if the suggestion was to not to use the ET method for calculating landscape water use?
- Mr. Dolezal responded that the science has not been established for urban landscape and the broad categorizations have not been done and are not accurate. For example, all turf grasses have been classified as high water use when buffalo grass uses 60% less water. There is legislation in the current session on the science, but currently landscape ET calculations are not based on the best science available.

Ed Patterson, Contra Costa Water District, mentioned that landscape water use area within residential areas can be determined by subtracting hardscape and non-planted areas from the parcel area.

Mr. Dolezal asked if retail and wholesale nurseries (both landscape and agriculture materials) in urban areas which rely on municipal water supply are going to be considered residential, agricultural or CII. His recommendation is that they are separate from residential – they use water in the same fashion as agriculture, and they will have issues in terms of measurement

which is going to distort residential figures. San Diego County classifies its largest nurseries as commercial they are not agriculture. This is a situation of being in conflict with local ordinance.

- Ms. Sanchez mentioned that 10608.24 (f) addresses urban nurseries; it says that urban water suppliers can choose to count nurseries as agriculture or CII. If they count as agriculture use they would be used at 100% of ETo for that crop. If they have separate metering they can be calculated into gross urban water use. She mentioned this was negotiated by San Diego County, which is the reason why it is flexible so that water agencies can decide for themselves.

Indoor Water Use

Einar Maisch, Pacer County Water Agency, asked what methods DWR will use to calculate indoor water use in Northern California. He proposed using the minimum use month in the winter time as the indoor estimate.

Agency Compliance Issues

John Martin, Tehachapi –Cummings County Water District [*via email*], asked if smaller water agencies that are not required to file UWMPs (those with less that 3,000 connections or 3,000 acre feet per year) will be required to achieve a 20% reduction.

- Mr. Alemi explained that by law they are not required although it might be good to plan in case they expand and then have to be in compliance with the legislation.

Andy Florendo, Solano County Water Agency, asked how wholesalers serving only raw water (no treated water at all) that have contracts which call for 100% delivery of what is demanded by their retail suppliers are going to comply with a 20% reduction. Such wholesale agencies have to get approval from its retailers in order to do this because their agency does not have the decision making authority due to contracts.

Suggestion that there be a committee that takes a look at the legislation and the methodology and considers how smaller agencies or those that do not fit into the box can comply.

Ms. Diermayer asked how previously made investments and aggressive conservation efforts by utilities will be accounted for.

- Ms. Sanchez explained that the 20% reduction is statewide and not every agency will conserve that much. Various methodologies such as Method 2 are based on performance and efficiency standards and Method 3 factors in current practices. Even if the agency is already efficient there is still a requirement of 5% conservation.
- Mr. Soehren, co-chair of the 20x2020 Plan, explained that in 2008 the Governor set a goal of 20% reduction by 2020 in urban per capita water use. He charged state agencies to come up with a plan to meet this goal. The group of state agencies included the State Water Resource Control Broad, Department of Public Health, California Public Utilities Commission, California Energy Commission, Air Resources Board, as well as CUWCC and US Bureau of Reclamation to develop a draft plan to get to that goal. The 20x2020 effort was a planning approach to develop targets of each region. The draft plan is posted

on the State Water Resource Control Board Web site and the final plan will be posted there as well (the numbers are the same in the final plan).

Mr. Brostrom asked for more input on the ET and rainfall adjustment.

- Mr. Brown explained that the CUWCC is in the initial stages of the research to develop a baseline methodology for ET. They have completed a literature review and it is worth noting that there appears to be higher regression values in using temperature as opposed to ET.
- Mr. Dolezal mentioned that wind is another good ET indicator to examine.

Mr. Brostrom asked if the model ordinance standard of 25% effective precipitation is a good number to use.

- Mr. Young pointed out that it depends on the time of year it needs to be considered on a monthly basis.
- Ms. Sanchez suggested looking at the research done within the model ordinance process to determine if that is a reasonable standard.

Presentation #4: Water Use Target Method 4

Mr. Brostrom presented on the Urban Water Use Method 4 which must be developed by DWR and consider the following:

- Climate differences
- Population density differences
- Provide flexibility
- Differing levels of per capita water use based on plant water needs
- Differing levels of CII
  Avoid placing an undue hardship on communities that have implemented conservation measures

Presentation slides are available at: http://www.water.ca.gov/calendar

Darleen Phares, Suburban Water Systems [*via email*], asked if the different methods are going to be voted on by DWR, and if water agencies will have options to comply.

- Mr. Alemi explained that Methods #1, 2 and 3 are in the legislation and can be used by any agency. DWR is going to go through this stakeholder process to determine Method 4. An agency can always decide to use one of the first three methods.

Ms. Diermayer asked if Method 4 will need to result in a 20% reduction statewide.

- Mr. Hawkins responded that yes, the legislation requires that if implemented by everyone it would be a 20% reduction. Therefore Method 4 must be modeled statewide to show that it would result in a 20% reduction considering not everyone is going to adopt it.
- Mr. Soehren explained that the legislation gives agencies a lot of flexibility with three existing methods and a fourth method that DWR will develop. The legislature understood that having multiple methods might mean that cumulatively the state may not reach the 20% reduction. DWR has been tasked with looking at the 2015 UWMPs to see if the state

is on track to meet the goal and if not DWR will recommend additional actions that need to be taken to get there.

Anona Dutton, Bay Area Water Supply and Conservation Agency [*via email*], asked while there will be many factors that could be relevant to include in the Method 4 calculation, the real question is going to be if the various agencies would actually have the data needed to make the calculation. How will this balancing act be addressed?

- Mr. Alemi responded that Method 4 must be workable and it has to achieve a 20% cumulatively reduction. There needs to be reliable and useful data to make the calculation.

ACWA Proposal

David Bolland, Association of CA Water Agencies (ACWA), presented as a member of the public on the ACWA White Paper Method 4 Conceptual Draft. Mr. Bolland distributed a draft version of this proposal to help jump-start DWR's stakeholder process with substantive input. (the draft White Paper is available online at: http://www.water.ca.gov/calendar) Please note: DWR posted the materials on their Web site as a vehicle to share the information and not as an endorsement of the draft proposal.

Mr. Bolland pointed out several elements of this proposal:

- It has been drafted by a geographically diverse workgroup
- The draft is based on, and tied to, the provisions of SBX7 7
- It is intended to assure that those urban retail water agencies that select Option 4 contribute their "fair share" towards the 20% statewide per capita goal
- It is based on identification of a "Reference Area" that is an aggregate of attributes of those agencies that implement Option #3 and that represents a strong level of conservation widely recognized. Option #4 agencies would then adjust for their individual ETo and density differences, include 10% CII reduction from Option#2 to establish their target GPCD.
- The proposal provides the flexibility for local water agencies to meet the goal prescribed in the legislation
- It encourages regional cooperation in the implementation of the conservation programs
- It provides a list of suggested proven implementation tools that those opting to select Option 4 may consider

Discussion on the White Paper

Ms. Sanchez asked that Mr. Bolland explain the "reference area?"

- Mr. Bolland responded that DWR would set the standard and then individual agencies would make adjustments for difference between parameters such as density and climate. This weighted average would take into consideration conservation and that has been already been achieved. ACWA felt some of the targets from the 20x2020 Plan, i.e. Coachella Valley, are unobtainable and this proposed method would level the playing field.

Mr. Bolland invited Mr. Maisch of the Placer County Water Agency and ACWA workgroup member up to explain the reference area further. Mr. Maisch explained that PCWA is emblematic of the problem, their service area is fully metered they have implemented the (best management practices) BMPs from the Sacramento Water Forum. Their service area is low density and the climate is hot and dry inland.

- The agency would separate out CII and indoor.
- The agency determines local landscape area and local ETo rate.
- DWR sets the reference place or "exemplary community standard" as the starting point for other agencies to compare to in order to calculate GPCD for landscape.

Ms. Sanchez asked how the reference standard would be distinguished from reference ETo. She mentioned this has already been adjusted for climate.

- Mr. Maisch explained that in the proposal, the reference area is not the same as the reference standard. The reference area is the place all others would compare their outdoor water use to. Adjustments are made based on local ETo.

Mr. Dolezal suggested providing more flexibility in the calculations through considering the canopy area of the plants instead of square footage of landscape.

Mr. Colwell asked if ACWA worked on Method 4 because Methods 1, 2 and 3 do not fit every agency.

- Mr. Maisch explained that the 20x2020 targets have not taken into consideration population and density or the conservation already achieved.
- Mr. Colwell responded that reference ET requires a cover crop. In his service area there currently is not a CIMIS station to compute this value. He pointed out that agencies have made substantial investments in water conservation and that capital investments are not accounted for.

Mike Reese, Apple Valley Ranchos Water Company [*via email*], asked if an agency decides to go with any of the three methodologies in the legislation, is there a chance that the Method 4 would affect the three? Agencies want to make sure that we are ok to move forward before the fourth option is established.

- Mr. Alemi responded that he Method 4 should not affect any of the other methods. It might use similar data, but method 4 calculations will not affect how the other 3 methods are calculated..

John Mills, Offices of John S. Mills [*via email*], asked how the ACWA White Paper incorporates the raw water component of total water use. This issue was raised earlier in the day by Liz Mansfield of EDI. Mr. Mills shares her interest in this aspect of calculation of total water use by the individual agency.

- Mr. Bolland responded that the conceptual draft does not address this. Most people want to focus on the treated water, potable water and residential or CII uses of that potable water and the raw water would be dealt with in agriculture or in some other way.

Ms. Sanchez asked how the proposal relates plant water use as there is no direct correlation and ET. DWR has spatial ET on their Web site, so agencies are not limited to the use of CIMIS

stations. She encouraged ACWA to consider ET adjustments as they do consider climate differences.

- Mr. Woodling explained the reference area is an aggregate of areas based on agencies that meet the GPCD targets under method 3. Plant water calculations are based on ETo and landscape area. This is the piece that ACWA is specifically addressing.

Mr. Brown pointed out that the ACWA paper mixes a number of different concepts from the other Methods in the legislation. Method 2 does account for landscape area, and Method 3 is a different approach for statewide average reduction targets. This already has a weighted factor in it.

- Mr. Maisch suggested that Method 2 only works for new construction; the ACWA proposal will provide an equitable formula for existing construction
- Mr. Brown cautioned that the BMPs affect on conservation must be factored in.
- Matt Colwell mentioned that the implementation of the BMPs take funding and BMPs should only be implemented when they are cost effective.
- Ms. Sanchez pointed out that AB 1465 requires the implementation of BMPs.

Charlie Pike, Charlie Pike and Associates, suggested that the estimate of landscape size should subtract hardscape percentage variation from old to new construction.

General Method 4 Discussion

Mr. Woodling suggested there are some issues that are not addressed in the law such as losses in conveyance systems which may be a way to save water when measuring from the treatment system out. Recycled water, for example the tertiary recycled water in the Sacramento area, take secondary treated water which offsets groundwater recharge from the Delta that is being use in Elk Grove. This was a missed opportunity in the legislation.

Mr. Neiser proposed thinking "outside of the purple pipe" for Method 4 and be open to re-uses of water treatment of contaminated groundwater. He recommended considering any project that provides new sources of municipal supply by putting to beneficial use sources that have historically been discharged as waste water under NPDES permit. Recycling/NPDES permit reduction – evaluate BMPs without requirement to implement, this may not be economically feasible.

Mr. Brostrom asked in terms of calculating landscape area, how do people see the calculation separating irrigated and non irrigated areas?

- Mr. Maisch responded that this requires a regional analysis.
- Mr. Maisch explained that DWR would only need to calculate the exemplary community standard.

Ms. Sanchez suggested tools for calculating landscape size. Irvine Ranch has done a lot of sampling of lands and calculated what it should be for residential; they have used GIS and have gotten measurements. For new accounts they require that customers provide measurements as a condition of service model ordinance will make this more readily available.

Mr. Szytel mentioned that Method 1 implicitly includes those items considered "gross water use". He also stated that if DWR is apportioning gross water use, , that will be reflected on a per capita basis and on communities that have already been employing conservation methods.

Terminology to be specified and further defined:

- "substantial change"
- "long-term storage"

City of Santa Rosa representative raised the issued of agencies that will have an increase in their service area to include unincorporated areas that have historically relied on groundwater. This will be a challenge as currently there is no incentive for the unincorporated areas to conserve because they are using groundwater and there is no data to determine GPCD. There will need to be flexibility in determining GPCD and this needs to be provided in the compliance year adjustments.

Mr. Walker asked how new projects will be approved that are not included in the UWMPs.

Attendance (In person)

Georgette	Aronow	Ecologic
Rachel	Ballanti	DWR
Dave	Beauchamp	PBS&J
Elizabeth	Betancourt	EID
Polly	Boissevain	West Yost Associates
David	Bolland	Association of CA Water Agencies
Peter	Brostrom	DWR
Chris	Brown	CUWCC
Lisa	Brown	City of Roseville
Jennifer	Burke	City of Santa Rosa
Dawn	Calciano	City of Woodland
Ellen	Carlson	EGWS
Dave	Ceppos	CCP
Dong	Chen	DWR
Charlotte	Chorneau	CCP
Joanne	Chu	DWR
Matt	Colwell	South Feather Water and Power
Ed	Crouse	RMCSD
Jim	Crowley	Jug
Edwin	Deleon	GSWC
Sonia	Diermaryer	Sierra Club
Darrell	Eck	SCWA
Kyle	Ericson	Folsom
Jodi	Evans	DWR
Kris	Fernell	Conservation Strategy Group
Andy	Florendo	Solano County Water Agency
Kent	Frame	DWR
Julie	Friedman	City of Sacramento
Bill	Grigg	
Bruce	Gwynne	DOC/DLRP

Catherine	Hansford	Ecologic
Steve	Hatchet	CH2MHill
Gwen	Huff	DWR
Tami	Ipson	Hidden Valley Lake CSD
David	Isaacson	Water Wise Consulting
Luana	Kiger	NRCS
Ed	Kriz	City of Roseville
Barbara	Leatham	San Juan Water
Jim	Lin	DWR
George	Lincoln	SCWA
Dana	Maasz	Kennedy/Jenks
Einar	Maisch	PCWA
Katie	Moore	SCWA
Thom	Neiser	ACWD
Tom	Nelson	FRCD
Tom	Noonan	Ewing Irrigation
Doug	Obegi	NRDC
Loren	Oki	UC Davis
Ed	Patterson	CCWD
Charlie	Pike	Charlie Pike and Associates
Robert	Polezal	CAUGE
Carrie	Pollaro	SCWA
Melissa	Price	City of Stockton
Mark	Roberson	Water Forum
VL	Sacksteder	SJWD
Walt	Sadler	City of Folsom
Fiona	Sanchez	Irvine Ranch Water District
Al	Schiff	CPUC
Paul	Selsky	B&C
Dong	Smith	City of Folsom
Rick	Soehren	DWR
Anna	Sutton	USBR
Jeffrey	Szytel	Water Systems Consulting, Inc
Joe	Tam	EBMUD
Dave	Todd	DWR
Michelle	Trotter	DWR
John	Turner	GSWC
Dave	Underwood	Sac County
Andy	Walker	City of Fairfield
Jennifer	West	Geyer Associates
John	Woodling	Regional Water Authority
Marcus	Yagutake	City of Folsom
Greg	Young	Tully&Young