Regional Advisory Committee (RAC) Meeting #54

February 4, 2015
9:00 am – 11:30 am
San Diego County Water Authority Board Room
4677 Overland Avenue, San Diego, CA 92123

NOTES

Attendance

RAC Members

Toby Roy, San Diego County Water Authority (chair)
Ann Van Leer, Escondido Creek Conservancy (and Alternate Betsy Keithley)
Bill Hunter, Santa Fe Irrigation District
Bob Kennedy, Otay Water District
Brian Olney, Helix Water District
Chris Helmer, City of Imperial Beach
Gloria Silva, U.S. Forest Service (and Alternate Emily Fudge)
Goldy Herbon for Marsi Steirer, City of San Diego
Greg Thomas, Rincon del Diablo MWD (and Alternate Julia Escamilla)
Jack Simes, United States Bureau of Reclamation
Jay Klopfenstein for Ron Wootton, Buena Vista Lagoon Foundation
Jennifer Hazard, Alter Terra
Jennifer Sabine, Sweetwater Authority
Joey Randall for Kimberly Thorner, Olivenhain Municipal Water District
John Flores, San Pasqual Band of Mission Indians
Joni Johnson, Rural Community Assistance Corporation
Katie Levy, SANDAG
Kimberly O'Connell, University of California – San Diego Clean Water
Leigh Johnson, University of California Cooperative Extension (and Alternate Loretta Bates)
Ligeia Heagy for Crystal Najera, City of Encinitas
Mark Seits, Floodplain Management Association (and Alternate Brinton Swift)
Marilyn Thoms, County of Orange, Tri-County FACC (and Alternate Jenna Voss)
Michael McSweeney, Building Industry Association (and Alternate S. Wayne Rosenbaum)
Mike Thornton, San Elijo Joint Powers Authority (and Alternate Chris Trees)
Phil Pryde, San Diego River Park Foundation
Vanessa Nevers for Robyn Badger, San Diego Zoological Society
Travis Pritchard, San Diego Coastkeeper

RWMG Staff and Consultants

Loisa Burton, San Diego County Water Authority
Mark Stadler, San Diego County Water Authority
Mark Stephens, City of San Diego
Nancy Stalnaker, County of San Diego
Vicki Kalkirtz, City of San Diego
Chris Griggs, RMC Water and Environment
Crystal Benham, RMC Water and Environment
Enrique Lopezcalva, RMC Water and Environment
Rosalyn Prickett, RMC Water and Environment
Sally Johnson, RMC Water and Environment

Interested Parties to the RAC

Alida Cantor, Clark University
Ann Bamford, Industrial Environmental Association
Catherine Rom, City of San Diego
Dave Gibson, Regional Water Quality Control Board
David Renfrew, Alta Environmental
Deanna Spehn, Assembly Member Toni Atkins
Eylon Shamir, Hydrologic Research Center
Ian Achimore, Santa Ana Watershed Project Authority
Lauma Jurkevics, California Department of Water Resources
Laura Carpenter, Brown and Caldwell
Lewis Moeller, California Department of Water Resources
Lorraine Frigolet, Water Conservation Garden
Mehdi Khalil, City of San Diego
Nathan White, Agess, Inc.
Terrell Breaux, City of San Diego
Roshan Christoph, AMEC Foster Wheeler

Welcome and Introductions

Ms. Toby Roy, San Diego County Water Authority (SDCWA), welcomed everyone to the meeting. Mr. Ken Weinberg, SDCWA, was thanked for his wonderful service to the RAC and with SDCWA, as this was his final RAC meeting. Introductions were made around the room. Ms. Roy introduced the new RAC members, who are starting their 4-year terms.

Imported Water Supply Reliability

Ms. Roy provided a brief overview of the San Diego region's reliance on imported supplies and where these supplies come from. Over 3 million people in the region are supplied water by SDCWA and its member agencies. In 1991, 95% of the region's water was imported, but because of the drought, allocations were limited. This led to a need to diversify supplies, and increased supply diversification has been a priority of SDCWA and its member agencies. The Region has made progress towards supply diversification, and projects to increase diversification continue to be implemented, including desalination, reuse, and other diversification strategies.

Imported water comes from the Bay-Delta through the State Water Project (SWP), or the Colorado River via the Metropolitan Water District, which supplies imported water to southern California. Both the SWP and Colorado River supplies are stressed, although SDCWA's water transfer agreement with Imperial Irrigation District (IID) is its most reliable imported supply due to IID's high priority for receiving Colorado River supplies.

Questions/Comments:

- How did the Region increase its surface water supply between 1991 and 2013?
    - The figures show how much water is in storage, not the reservoir capacity. The amount of surface water stored depends on rainfall. 1991 was a bad year for rainfall because of the drought.

Colorado River Basin Water Supply and Demand Study

Ms. Roy introduced the first guest speaker, Ms. Carly Jerla, U.S. Bureau of Reclamation (USBR), to discuss the Colorado River Basin (Basin) Water Supply and Demand Study (Study). Ms. Jerla spoke to the group via teleconference. The Study showed that use of Basin supplies has steadily increased over time, while actual supplies have a large annual variation due to precipitation. The purpose of the Study was to assess the future water supply and demand imbalances on Basin supplies through 2060, as well as to identify potential opportunities for resolving these imbalances. Ms. Jerla noted that this was a planning study that provides the technical foundation for future activities to build on, and that it does not implement any actions.

The Colorado River Basin is divided into two sections, the Upper Basin, and the Lower Basin. The Lower Basin faces greater outside demands than the Upper Basin. Ms. Jerla reminded the group that the metrics presented in the slides reflects the scale of the data, which was by the Upper Basin and Lower Basin. Future projections showed an anticipated increase in supply and demand imbalances. A number of solutions were evaluated and a series of portfolios developed to address these projected imbalances. Portfolio A was the most inclusive, while Portfolio D was the least inclusive. Portfolio B took a water supply approach, while Portfolio C focused on lowest impacts. Compared to the baseline, each of the four portfolios improved water supply reliability to similar degrees. Ms. Jerla emphasized that there are tradeoffs for each portfolio, so looking just at the supply benefits alone does not provide a complete evaluation of which portfolio to pursue. Further, Ms. Jerla noted that implementation of any of the portfolios (including the most inclusive one, Portfolio A) does not reduce potential vulnerabilities (water supply shortages) to 0%; in other words, despite implementation of future actions, it is anticipated that in some years there will be supply shortages. However, the baseline scenarios show substantial vulnerabilities, indicating that without future action there will be supply vulnerabilities, and these vulnerabilities can be reduced. Further, all scenarios show that conservation, water transfers, and reuse are cost-effective ways to reduce supply vulnerabilities.

Questions/Comments:

- Why does the projected water demand spike in 2015 (see graph on Slide 5)?
    - The historical data (left of the dashed line) is based on water use, while the future shows projected water demand (i.e., if the water were available, how much would be used). Historically, demand is higher than use – demands may be met by other means or activities are not undertaken; however, accurate historical demand data are not

available. When looking to the future, demand was not limited by allocations so that the risk of future supply vulnerabilities could be calculated.

- There are efforts to increase water reuse in San Diego, so even though overall water demand may increase, the actual demand for Colorado River water may decrease. Do the portfolios of solutions account for the potential for additional supplies? There is a concern that if this analysis does not consider other supply options, it will over-state the potential for supply vulnerabilities.
    - When considering solutions, the analysis tried to separate active conservation from passive conservation. Passive conservation was accounted for in the demand projections, while active conservation was accounted for by the solutions portfolios. Active conservation that is already on the books was accounted for. USBR is working to improve how conservation efforts are being accounted for in their projections.
    - The Colorado River study is a large scale study; local studies, such as Urban Water Management Plans (UWMPs) also take local efforts into consideration when calculating projections.
- If Portfolio A is essentially implementation of all solutions, and Portfolio D implementation of just a few solutions, why are the results in terms of water supply reliability so similar?
    - By the time you project far enough out, essentially all of the same solutions are being implemented. You start with the easiest solutions first. If you look at costs and resource-specific measures, you start to see the differences between the portfolios. Each of the portfolios has different levels of risks, certainty, environmental impacts, etc.
- Which costs more to implement, Portfolio A or Portfolio D?
    - Portfolio A is more costly because it implements more projects.

California Water Plan Update

Ms. Roy introduced the second guest speaker, Mr. Lewis Moeller, California Department of Water Resources (DWR), to discuss the California Water Plan Update 2013. San Diego is part of the South Coast Hydrologic Region, which has a regional report as part of the Water Plan. Mr. Moeller pointed out the strong nexus between the California Water Plan and the Governor's Water Action Plan, and brought a handout for the group that showed a cross-walk between the two plans. The California Water Plan is a tool for guiding investment priorities and legislative actions, but has no mandates or appropriations itself. It can be used to influence decisions but does not have any funding to provide in the form of grants or loans for projects. The 2013 Update provides guidance on implementation of the Governor's Water Action Plan. It also focused on five core messages targeting people who do not regularly work with water, to try to get everyone on the same page regarding why water matters and why it is important. These core messages are:

- Water is the essence of life for California
- California's complex water system is in crisis
- A diverse portfolio approach is required
- Solutions require integration, alignment, and investment
- We all have a role to play in securing our future

The themes of the 2013 Update are integrated management, strengthening government and agency alignment, and investing in innovation and infrastructure. The 2013 Update calls for integration, noting that water systems are really interconnected systems that require integrated solutions, and notes that agency alignment is critical to expediting and reducing the costs of implementation. Sustained investments are required for resiliency, and to-date, the vast majority of the investments have been local expenditures. Focusing on who should pay for these investments is not the right discussion. Instead, we need to find a shared vision and values regarding how the state should invest. To this end, a financing framework was developed, and eventually the goal is to develop a financing plan.

Mr. Moeller showed a butterfly chart that showed applied water use on one side, and dedicated and developed water supply on the other. This chart shows that for every use, there must be an equal or greater amount of supply, and that the types of water supplies utilized vary depending on the year (e.g., wet years use different amounts of groundwater than dry years).

Mr. Moeller noted that all of the documents for the 2013 California Water Plan Update are available on the website (http://www.waterplan.water.ca.gov/), under Update 2013, with the exception of Volume 4 with the reference materials. Mr. Moeller encouraged interested parties to subscribe to the Water Plan eNews weekly electronic newsletter, by visiting the website (http://www.waterplan.water.ca.gov/enews/).

Questions/Comments:

- Even though state spending is low compared to local spending, IRWM funds from the state help to fund projects that take people out of their silos, which helps to change how people think and what they are doing. It is important to continue having state funding available for these kinds of projects to help continue this progress. Further, IRWM funds that bring multiple parties together also help to reduce costs and maximize benefits and are therefore more efficient than individual agency-by-agency spending.
- Has there been consideration of funding structures that include public-private partnerships?
    - Public-private partnerships have been talked about, but there is a challenge on how to build those partnerships successfully.
- Those kinds of partnerships have proven successful for airports and roads, and could also be successful for water projects.
    - If there is an income stream that results from the projects, or such projects would help serve a private need, they seem like they would be appealing to private entities.
- Has there been much consideration of energy impacts related to moving water?
    - This is part of the climate change team's discussions and has been thoroughly analyzed by DWR in other planning documents.

Basin Plan Triennial Review Workshop

Ms. Nancy Stalnaker, County of San Diego, led a panel on the Regional Water Quality Control Board's (RWQCB's) Triennial Review for the Basin Plan. The Basin Plan is being amended by the RWQCB, and written comments are due February 6. The Basin Plan is a regulatory document; therefore, changes to this document are time intensive as they must be supported by adequate science and also generally require compliance with environmental regulations such as the California Environmental Quality Act. The RWQCB staff has four recommendations for amending the Basin Plan:

1. Biological Objectives
2. Chollas Creek Metals Water Effect Ratio
3. Contact Water Recreation Water Quality Objectives
4. Editorial Revisions, Clarifications, Corrections

Mr. Dave Gibson, Executive Officer of the San Diego RWQCB, discussed the biological objectives change. The Clean Water Act calls for chemical, physical, and biological integrity of water, but the Basin Plan currently lacks biological criteria. This amendment would add measures to assess the attainment of these criteria, and it is a RWQCB priority to add biological integrity to its water quality toolbox. The approach in the San Diego Basin Plan would likely be similar to that in Region 8 (Santa Ana), and is based on environmental outcomes. Biological objectives helps to integrate water quality over space and time, and is important for moving forward with water quality regulations, especially as regards non-point source pollution.

Ms. Vicki Kalkirtz, City of San Diego, spoke on the Chollas Creek Metals change. Chollas Creek is listed for dissolved metals, and the associated TMDL currently uses the default calculation to set limits for metal loadings. Local data, however, shows that the hardness of the water in Chollas Creek makes these metals less available to organisms. The RWQCB staff is recommending that the Basin Plan be updated with information about a more accurate calculation of the water effect ratio for Chollas Creek based on research conducted by the City of San Diego.

Ms. Stalnaker spoke to the third recommendation, and explained that there is a bacteria TMDL that covers many of the beaches and creeks in the Region, including beaches in six of the Region's watersheds. The goal is to protect human health, but testing for pathogens directly has been difficult and expensive, so indicator bacteria are currently being used. This approach is flawed because some of these bacteria can be from natural sources and do not directly cause people to get sick; therefore, water quality standards for bacteria may be more stringent than necessary to protect human health. Because of this, there is a desire to change the TMDL to include information about natural background levels for bacteria and also take into consideration what kind of bacteria are present in the water. To support a change to the TMDL that would remain protective of human health while addressing the flaws of the current approach, three studies are being conducted – one is a bacterial reference study to determine natural background bacteria levels, one is a wet weather epidemiology study that looks at the health effects of people entering the ocean after storm events, and one is a dry weather source study that looks at different potential sources of fecal indicator bacteria (human vs. animal, etc.)

Mr. Gibson noted that these were the top three issues for the RWQCB due to their reasonableness, protectiveness, and the fact that they utilize progress that has been made to-date. There is room for a fourth project, but it would need broad support, and must be ready to move forward. It should address a longstanding need, and bring in partnerships to help implement.

Ms. Roy discussed an additional project that SDCWA and some of its member agencies will recommend for inclusion in the Basin Plan. This additional project would be to amend the implementation portion of the Basin Plan that is related to drinking water reservoirs. The Basin Plan does not currently recognize storage of imported water or natural limnology that can affect water quality, or downstream water treatment facilities that would address water quality prior to actual use of the water. Even though the water in these reservoirs may be above secondary water quality standards for things like manganese, they do impact beneficial uses pertaining to municipal supplies, because water treatment facilities treat water to the applicable standards. The lack of recognition for these circumstances can lead to the reservoirs being listed on the 303(d) list, which in turn triggers a TMDL and restricts or can impact reservoir operation and management. SDCWA is requesting flexibility in standards for reservoirs that recognize downstream treatment plants. Such flexibility could also help prepare for potable reuse in the future, and would protect against water quality impacts of runoff. SDCWA will be submitting a letter to RWQCB this week.

Questions/Comments:

- Regarding the bacteriastudies, how would agencies or cities deal with urban wildlife contributions to water quality impacts?
    - Addressing urban wildlife contributions to water quality violations is challenging. Part of the study is to determine if all of the bacteria from wildlife are harmful to humans and also determine if the bacteria is coming from wildlife or humans. One way to address bacteria from wildlife could be to add screens to stormwater systems that would keep animals out, but this could lead to other issues, such as overflows if the screens are blocked by trash, so any urban wildlife solution would need to be considered carefully.
    - The natural sources exclusion rule helps regions deal with this because RWQCB knows that you cannot "diaper raccoons" to prevent animal waste from entering storm drains. As such, if the research shows that most of the bacteria are coming from animal sources, that would be taken into consideration by the RWQCB when setting bacteria limits.
- Are there estimates of the number of people who get sick from bacteria after swimming in the ocean?
    - Although no numbers on hand, preliminary results from the wet weather epidemiology study show that there is a potential health risk (albeit not statistically significant due to the sample size) associated with swimming in the ocean after a wet weather event.
- For the Chollas Creek metals, assume the amendment would result in an increased loading standard, leading to more copper being allowed in the creek. Is this just looking at Chollas Creek or was there consideration of downstream effects on water bodies such as the San Diego Bay?

  - The study was on Chollas Creek itself. The Basin Plan amendment would potentially change the load allocation but not load reduction. Will need to consider the San Diego Bay eventually.
  - RWQCB is drafting a Bay Strategy that would consider copper levels on a holistic level.
- How would the biological integrity measures link violations back to strict liability? How can you tie a violation back to a source?
  - The SWRCB expects copermittees to achieve water quality standards over time through implementation of BMPs. RWQCB has the Watershed Water Quality Improvement Plans, which allows copermittees to choose priorities to address first. There are ongoing problems with habitat and chemical issues that contribute to biological issues in all watersheds.
  - Focus is on pursuing the outcome we want, instead of pursuing the problems.
  - Eventually will add receiving water limitation compliance language to permits.
- Basin Plan regulates bacteria in ocean water up to three miles offshore. Will the Basin Plan differentiate between the near shore areas of this zone where people swim versus the portion of this three-mile zone that is further offshore?
  - The three-mile regulation area comes from the Ocean Plan, which is set by the SWRCB, to meet the expectations of the U.S. Environmental Protection Agency. The Basin Plan amendment for the bacteria TMDL will not be able to modify the area over which bacteria is considered due to the Ocean Plan restrictions.

Ms. Roy opened up the room for a discussion of whether the IRWM Program should submit a comment letter. The consensus of those who commented opposed submittal of an IRWM comment letter – individual RAC members did not feel comfortable committing their respective organizations to signing off on all of the recommendations without reading them in more detail. Individual organizations would be submitting comments letters independently.

IRWM Grant Program

Grant Administration

Ms. Loisa Burton, SDCWA, updated the group on grant administration activities for the San Diego Integrated Regional Water Management (IRWM) Program. In total, 44 projects have been funded, for a total of $59 million in grant funds.

Proposition 50

Ms. Burton updated the group on the status of the audit that DWR conducted on the Proposition 50 projects. DWR issued its final decision on December 19, 2014. One Local Project Sponsor (LPS) remitted additional matching fund costs and reduced its retention invoice to cover ineligible costs that had already been reimbursed. All of the materials requested by DWR have been compiled and submitted. Throughout the process, SDCWA and the LPS learned lessons that will be applied to other projects moving forward.

Proposition 84 Implementation, Round 1

Projects are proceeding as planned. Of the $7.9 million awarded, $3.5 million has been billed, with $557,000 in reimbursements outstanding. The Chollas Creek Integration Project Phase 1 has an anticipated groundbreaking in early April 2015, and a site visit with DWR in mid-February. Two projects have not billed anything yet, but are making progress.

Proposition 84 Implementation, Round 2

Most projects funded under Round 2 have commenced work, and the first round of billing has been submitted to DWR.

Proposition 84, Drought Solicitation Implementation

Ms. Burton updated the group on the status of the grant contracting with DWR. On December 11, 2014 SDCWA submitted all of the grant agreement materials. In late January, 2105, SDCWA received a contract template, and is currently reviewing it. An executed contract is anticipated in June 2015. Ms. Burton thanked the project sponsors for submitting all of their materials on time.

Summary and Next Steps

Ms. Roy reminded the group of the 2015 RAC meeting schedule.

Next RAC Meeting:

- April 1, 2015 – 9-11:30am

2015 Meeting Schedule:

- June 3, 2015
- August 5, 2015
- October 7, 2015
- December 2, 2015

Questions/Comments:

- Ms. Lauma Jurkevics, DWR, informed the group of the NOAA Flood Safe Program and the California Landscape Conservation Cooperative. She also mentioned that the California Water Plan discusses climate change mitigation and adaptation and the water-energy nexus in multiple locations.
- Ms. Goldy Herbon, City of San Diego, told the group that the city was looking to put together a public study team for a basin study and water supply analysis. Interested parties should email Ms. Herbon.
- Mr. Jack Simes, USBR, directed people to the newsroom page on their website for information on basin studies, reuse, and feasibility studies. Grant dollars are available.