Joint IRWM Plan Update Workshop #5 &
Regional Advisory Committee (RAC) Meeting #74

June 6, 2018
9:00 am – 11:30 pm
San Diego County Water Authority Board Room
4677 Overland Avenue, San Diego, CA 92123

NOTES

Attendance

RAC Members

Ramin Abidi, County of San Diego (chair)
Al Lau and alternate Seval Sen, Padre Dam Municipal Water District
Chris Helmer, City of Imperial Beach
Chris Trees for Mike Thorton, San Elijo Joint Powers Authority
Greg Thomas, Rincon del Diablo Municipal Water District
Jennifer Hazard, Rural Community Assistance Corporation
John Flores, San Pasqual Band of Mission Indians, and alternate Rob Roy, La Jolla Band of Luiseño Indians
Joseph Randall for Kimberly Thorner, Olivenhain Municipal Water District
Justin Gamble, City of Oceanside
Kelly Craig for Robyn Badger, San Diego Zoo Global
Kimberly O'Connell, University of California – San Diego Clean Water Utility
Lan Wiborg, City of San Diego
Mark Seits, Floodplain Management Association
Mark Stadler for Bob Yamada, San Diego County Water Authority
Michael McSweeney, Building Industry Association
Michelle Berens for Brian Olney, Helix Water District
Phil Pryde, San Diego River Park Foundation
Ron Mosher, Sweetwater Authority
Sarah Pierce, San Diego Association of Governments

RWMG Staff and Consultants

Andrew Funk, City of San Diego
Jen Sajor, Woodard & Curran
Loisa Burton, San Diego County Water Authority
Mark Stephens, City of San Diego
Rosalyn Prickett, Woodard & Curran
Ruth de la Rosa, County of San Diego
Sally Johnson, Woodard & Curran
Sarah Brower, City of San Diego

Stephanie Gaines, County of San Diego

Interested Parties to the RAC
Catherine Rom, City of San Diego
Chris Gehrki, City of San Diego
J.B. Hinds, University of California, San Diego
Joel Kramer, San Diego State University
Kevin Perozo, BDP Envirotech
Laura Walsh, Climate Collaborative
Marissa Perez, City of San Diego
Martin Schmidt, Environs/ASLA
Rich Williamson, Yuima Municipal Water District

Welcome and Introductions

Mr. Ramin Abidi, County of San Diego, welcomed everyone to the meeting. Introductions were made around the room.

San Diego RWQCB Update

None.

Stormwater Capture & Use Feasibility Study Update

Ms. Stephanie Gaines, County of San Diego, provided an update on the fourth Technical Advisory Committee (TAC) for the Stormwater Capture and Use Feasibility Study (SWCFS), which took place on May 4, 2018. The TAC reviewed the cost and implementation (prioritization) approach taken for the SWCFS. Ms. Gaines updated the group on the status of the SWCFS, and provided an overview of completed work and upcoming tasks. The project team is currently working on Step 6 of the process, which includes applying project costs per volume of stormwater captured, or unit costs, to the refined potential parcel list. The calculated unit costs were based on modeled parcels taken from the Stormwater Resource Plan (SWRP) and Integrated Regional Water Management (IRWM) Plan project lists. The unit costs of the alternatives in the SWCFS were compared to the unit costs of imported water and desalinated water. Ms. Gaines indicated that they will use the feedback received from the TAC to refine the study's cost assumptions and calculations.

The SWCFS narrowed the stormwater use alternatives list to eight through a prioritization exercise that considered 1) potential volume of captured stormwater, 2) unit cost, 3) additional benefits, and 4) constraints and opportunities. This process helped to create a draft feasibility timeline for the eight alternative uses based on technical feasibility, political feasibility, and cost. The timeline sets a schedule of implementation based on near-term and long-term feasibility.

Ms. Gaines welcomed any additional feedback on any of the technical memoranda by this Friday, June 8, 2018. The Draft SWCFS is expected to be completed at the end of August 2018. The fifth and final TAC meeting will be scheduled for mid-September 2018, and a presentation of the Final SWCFS is expected for late October 2018.

San Diego IRWM Program Update

Mr. Mark Stadler, San Diego County Water Authority (SDCWA), presented updates on the statewide IRWM Program and the Proposition (Prop) 1 Grant Program timeline. The Concept Proposal Solicitation Package (PSP) has been released. The Draft PSP for the Round 1 Implementation Grant is anticipated in June 2018 with the Final PSP anticipated to be released in Fall 2018. Consultations between the California Department of Water Resources (DWR) and the IRWM Funding Areas are expected from January through June 2018. The San Diego Funding Area workshop is planned for March 2019 with the final application due six to eight weeks after the workshop. Mr. Stadler noted that though the workshops will be held jointly with all the regions in the Funding Area, final applications will be completed by individual Regions. Round 1 grant awards are expected for mid-2019 or end of year 2019. The Prop 1 - Round 2 Implementation Grant is anticipated in 2020. There is $33 million available for the San Diego IRWM Region over two rounds, with $5 million minimum allocated for disadvantaged community (DAC) projects. Though there are grant dollars available for DAC project in both rounds, DAC projects are more likely to be awarded in Round 2.

Mr. Stadler presented a list of ten Prop 1 statewide priorities. There is no emphasis on one priority over another. Priorities include providing safe water for all communities, increasing flood protection, and achieving co-equal goals for the Delta. However, the San Diego IRWM Region will also use its IRWM Plan goals and objectives to guide the project selection process.

Mr. Stadler presented an overview of the Concept PSP. Mr. Stadler emphasized that the San Diego Region is happy with DWR's efforts to reach out to the regions prior to application submittal. All projects must meet a "critical need" as defined by the IRWM Plan goals and objectives. In addition, the California Environmental Quality Act (CEQA) and permits processes must be completed prior to grant agreement execution. The San Diego Funding Area is working on a comment letter to send to DWR this week. The comment letter strongly states that this CEQA and permitting requirement will exclude projects that need IRWM the most. The San Diego Region will need to be careful about following this requirement when selecting projects. DWR has made an exception for DAC projects with the caveat that 100 percent of the project benefits go to the DAC.

San Diego IRWM Plan Update

Ms. Sarah Brower, City of San Diego, presented the work being done on the 2019 San Diego IRWM Plan Update (Plan Update). She reminded the group that the Plan Update is being completed in two phases, with the first phase being finalized and adopted in December 2018. This will allow the San Diego IRWM Region to continue to be eligible for funding. Today's RAC meeting will be used to gather RAC input on the climate change framework and implementation actions.

Ms. Brower prefaced the climate change panel by reminding the RAC about the addition of the climate change framework for the IRWM Plan update. Addressing climate change impacts within the San Diego IRWM Region was elevated to an IRWM Goal, signifying that all IRWM Objectives should intrinsically address climate change impacts as well. The Climate Change Framework was two-pronged and focused on increasing both the adaptive capacity to address climate change vulnerabilities and increasing mitigation efforts. The Climate Science Alliance (CSA) and Scripps Institution of Oceanography were engaged in the Plan Update process to help the San Diego IRWM Region

understand current climate science as it relates to the San Diego region and how it can be incorporated into the IRWM Plan. The CSA is currently working on California's Fourth Climate Assessment.

Climate Change in the San Diego Region Panel

Ms. Megan Jennings, San Diego State University, Mr. David Pierce, Scripps Institution of Oceanography, and Ms. Laura Engeman, Scripps Center for Climate Change Impacts and Adaptation, held a panel to discuss climate change impacts on the San Diego region.

Mr. Pierce introduced the context of three major climate projection models, RCP 8.5, RCP 4.5, and RCP 3-PD (based on reductions to carbon dioxide emissions per the Paris Accord), which project high, medium, and low global carbon dioxide emission scenarios, respectively. The current trend, based on measured data, shows levels of global carbon dioxide emissions are trending between the high and medium emission scenarios. Mr. Pierce walked the RAC through projected changes in average precipitation and temperature patterns, based on the medium and high emissions scenarios, within the Colorado River Basin and in Northern California, the two major sources of the San Diego region's imported water supply. While average precipitation is expected to increase by 2050, which would increase water supplies, average temperatures are expected to increase more significantly. This pattern will lead to an overall decrease of Colorado River flows. Changes in seasonal average precipitation and temperatures in Northern California are expected to lead to wetter winters and drier springs. Mr. Pierce indicated the pattern would mean more precipitation is expected to fall over fewer storms. In addition, warmer temperatures will lead to more precipitation falling as rain rather than snow. This will effectively reduce the Sierra Nevada snowpack, decreasing the state's natural water storage capacity. The projections also show a rise in the frequency of dry years by 50 percent under the medium emissions scenario. These patterns indicate more year-to-year variability that could produce more extreme droughts *and* storms. This could lead to more years of reduced water supplies and years of extreme flooding.

Ms. Jennings presented the structural changes in regional ecosystems as a result of more extreme and extensive droughts. Vegetation in an ecosystem plays a key role in reducing erosion, which helps manage sediment flows and improve water quality. "Drought tolerators," plants species less competitive in drier environments, saw a 93% mortality in the 2014 drought, according to one study. This change in vegetation can have impacts on erosion patterns. Vernal pools, which are naturally resilient to highly variable precipitation, can reduce vulnerability to changes in precipitation patterns due to climate change. In addition, spring drying in riparian environments can affect breeding patterns for riparian species. Increased temperatures will also increase stratification in water bodies, in which colder, more nutrient-rich water will not reach the surface. This can increase to amount of cyanobacteria, which like warmer water, and lead to harmful algal blooms. The key to gathering a greater understanding of these natural mechanisms and climate change impacts is monitoring efforts.

The panel ended with the announcement that CSA will be releasing two reports in late Summer/early Fall 2018, as part of California's Fourth Climate Assessment.

Questions/Comments:

- Can you clarify what you mean when you [Ms. Jennings] talked about the 93% mortality of drought tolerant species in the 2014 drought?

    - The 93% mortality was based on a specific study. I used this to explain that there can be up to a 93% mortality due to drought.
- What do you mean by "mortality"? Plants can bounce back in wet years and are not technically dead.
    - It depends on the species. Some species drop their leaves to cope with stress, but in other species there is a growth mechanism in the plant that dries out. We are seeing dieback of species regionally that we did not expect to see.
- Is there a list of publicly available list of plants that are being monitored? In my 40 years of experience I have not seen this.
    - It is not all plants, just some.
- As water managers, we have seen an alignment of some regulations and policies with effects of changing precipitation regimes. Do you intend to float scientific advice to support surface or subsurface storage? Are you ready for that kind of advocacy or do we still need more research to be done?
    - In my personal opinion, proper policy steps depend on the constituency.
- The goal for us as an integrated group is to be able to cite research to support the urgency of responding to climate change. With this Fourth Climate Assessment, are we there yet? Have you been able to substantiate past research and projections?
    - Are we seeing impacts on the ground now? Yes. And things are changing fast.
- We need to consider more storage. In the SWCFS, the challenge is not political. Our issue is where to store captured water. If we have larger, flashier storms, it makes sense to capture it for use to mitigate dry years.
- In the case of water supply versus flood control, it comes down to managing risk by choosing one project over another. The current flood control infrastructure is maxed out. How do we do an integrated solution that addresses multiple risks?
    - Balancing the two will be difficult, but it will also be our reality. For example, these flashier floods from riparian ecosystems will impact coastal areas and estuaries downstream. Combine this with projected bigger ocean storms and sea level rise that push water inland. We will need to think about how we are going to get rid of the flood waters coming from both sides.

Ms. Brower encouraged the RAC to think how these climate change impacts apply to IRWM. A draft climate change vulnerabilities-resource management strategies (RMS) crosswalk table was distributed to the RAC. The crosswalk table shows how each RMS identified in the *California Water Plan Update 2013* directly or indirectly reduces the climate change vulnerabilities developed during the 2013 San Diego IRWM Plan update. The crosswalk table was developed to help local project sponsors identify how various projects address the Region's climate change vulnerabilities. The table can be used to develop project benefits. The RAC will have two weeks to review and comment on the crosswalk table. Ms. Brower also asked the RAC for suggestions on additional implementation actions as they relate to climate change. All comments should be sent to Rosalyn Prickett (rprickett@woodardcurran.com) by June 22, 2018.

Questions/Comments:

- Did we get the vulnerabilities ranking right? We may want to elevate "Sea Level Rise: Damage to ecosystems/habitat." It is currently ranked as low.
- Storage or a lack of storage has been a point of resistance. Currently groundwater storage is ranked as low. I suggest moving "Water Supply: Lack of groundwater storage to buffer drought" to a high.
    - I would also include surface water storage in this.
- Can you confirm that we do not have groundwater storage capacity?
    - The City of San Diego has a current policy of seven months and 10 days of storage, but I think this should be increased. This should be a priority.
- The San Vicente Dam raise did not do anything?
    - It did, but imported water remains a vulnerability.
- Is the six-month policy at the City still valid? Is six months adequate time to repair dams/infrastructure?
    - The emergency storage strategy has a six-month and a two-month scenario.
- I would like to add an asterisk on storage. We technically have enough storage capacity, but a lot of it is not currently linked to the regional system.
    - So we did half the project [i.e. the emergency storage], but we still need to connect the reservoirs to the system.
    - Yes, the goal was to pump the water uphill. It really should be emergency storage and conveyance.
- I think you should clarify "Water Quality: Increase in treatment cost." Is this a water supply issue?
- We should consider elevating "Water Quality: Increased eutrophication" because the probability of this happening in the future is increasing.
- I would like to point out that "Ecosystem/habitat: Decrease in environmental flows," which is currently ranked as very low, is linked to two vulnerabilities ranked in the high category ("Ecosystem/habitat: Decrease in available necessary habitat" and "Ecosystem/habitat: Decrease in ecosystem services"). A lot of these vulnerabilities are tied together.
- There is a lot going on in the table. You need to think about how to parse it out more. Maybe think about doing a near-term and long-term ranking in addition to the high-low ranking. Maybe think about the degree of uncertainty of each vulnerability.

Water Needs Assessment Update

Ms. Gaines presented an update on the Water Needs Assessment. The group was informed that the RWMG and its NGO partners are working on scheduling Speakers Bureau presentations to targeted communities. Attendees representing DACs, economically disadvantaged areas (EDAs), underrepresented communities (URCs), and environmental justice (EJ) communities who were interested in having the RWMG come speak to them were encouraged to contact the RWMG.

Questions/Comments:

- Do URCs include tribes?
    - Yes.

Grant Administration

Ms. Loisa Burton, SDCWA, presented updates on grant administration. Of the eight IRWM grants that have been awarded to the San Diego IRWM Region, two (Proposition 50 and Proposition 84 Plan Update) have been completed. The Region has six open grant programs for 48 projects. Of the open grant programs, we have billed $55.6 million. Ms. Burton highlighted projects under each implementation grant, including the Sustainable Landscape Programs (Prop. 84 Round 1), Sustaining Healthy Tributaries to the Upper San Diego River (Prop. 84 Round 2), the Regional Demand Management Program Expansion (Prop. 84 Round 3), the San Diego Water Use Reduction Program (Prop. 84 Round 3), the San Diego Water Conservation Program (Prop. 84 Round 4), and the Ms. Smarty-Plants Grows Water-Wise Communities project (Prop. 84 Round 4). Ms. Burton also presented significant milestones and upcoming activities for the Prop. 1 Plan Update grant and the Prop. 1 DAC Involvement grant. Milestones included incorporation of DAC definitions into draft IRWM Plan, conducting kick-off meetings with NGO partners in support of the Water Needs Assessment, approving outstanding local project sponsor (LPS) agreements, and submittal of the advance payment requests.

Public Comments

None.

Summary and Next Steps

Ms. Rosalyn Prickett, Woodard & Curran, presented current and upcoming funding opportunities in the Region. There are six funding opportunities open now. Please visit each respective grant program's website (listed below) for the most current information. The USBR Title XVI/WIIN grant program opened last Friday. Apply for Title XVI funding if your project was included in the earmarked funding allocation before 2014. The State Water Resources Control Board (SWRCB)'s grant program has the same timeline as IRWM. All projects applying should be uploaded to the SWRP database. The IRWM Program will remind everyone of this as the timing comes closer.

Questions/Comments:

- What kind of project is USBR looking for in their WaterSMART grant?
  - Capital projects, automated metering infrastructure, etc
  - Recycled water?
    - Yes, however look at the eligibility requirements to see if you can apply.
- What kind of projects are included in the water bond [Prop 68]?
  - There is no money for IRWM. There is money allocated for recycled water and flood control.

Project Types	Deadline	Website
SWRCB Groundwater Sustainability		
Category 1: Groundwater sustainability for Severe DACs Category 2: GSP planning and development	Round 2 concept solicitation opens April 2018	https://www.waterboards.ca.gov/water_issues/programs/grants_loans/proposition1/groundwater_sustainability.shtml

Project Types	Deadline	Website
USBR Title XVI / Water Infrastructure for Improvements to the Nation (WIIN) Grant		
Water reuse/reclamation projects with an USBR-approved Title XVI Feasibility Study	Spring/Summer 2018 (anticipated)	https://www.usbr.gov/watersmart/title/
USBR WaterSMART Grants		
Small-Scale Water Efficiency Projects	July 31, 2018	https://www.grants.gov/web/grants/view-opportunity.html?oppId=301905
Water Marketing Strategy Grants	July 17, 2018	https://www.grants.gov/web/grants/view-opportunity.html?oppId=301914
State Coastal Conservancy Climate Ready Grants		
Multi-benefit climate adaptation projects using natural systems	July 2, 2018	http://scc.ca.gov/climate-change/climate-ready-program/
CDFW Prop 1 Watershed Restoration Program		
Water quality, river, and watershed protection and restoration projects outside the Delta	June 13, 2018	https://wildlife.ca.gov/Conservation/Watersheds/Restoration-Grants
SWRCB Prop 1 Storm Water Grant Program		
Stormwater Grant Program	December 2018 (anticipated)	https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/prop1/

Next RAC Meeting:

- August 1, 2018 – 9:00-11:30 am