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California Natural Resources Agency

Department of Water Resources

Regional Water Management Sessions

2017 and 2018 California Water Plan Plenaries

California Water Plan

Update 2018

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Panel Session Interpretive Transcript

Regulatory Alignment Needs to Support Better Regional Outcomes

California Water Plan Update 2018

Second Day Plenary Meeting

September 27, 2017

McClellan Conference Center, Sacramento

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Regulatory Alignment Needs to Support Better Regional Outcomes[1]

California Water Plan Update 2018

Second Plenary Meeting
September 27, 2017
McClellan Conference Center, Sacramento

Description: This session is intended to be a positive, forward-looking, and solution-oriented discussion of strategies and actions to better integrate and align water-related regulatory practices at the regional scale. The panel, consisting of key members of the regulatory and integrated regional water management (IRWM) communities, were asked to share their insights and ideas about how regulators and the regulated community can work together better, and in an integrated manner, to improve regional water management outcomes effectively and efficiently. Information from this session will help the California Department of Water Resources (DWR) and other State agencies determine how to best implement alignment actions identified in *Stakeholder Perspectives — Recommendations for Sustaining and Strengthening Integrated Regional Water Management*[2].

Moderator: Lynn Rodriguez, Watersheds Coalition of Ventura County and IRWM Roundtable of Regions.

Panelists[3] (speaking order)**:**

Steven Moore — State Water Resources Control Board.
Junko Hoshi — California Department of Fish and Wildlife.
Martha Davis — Inland Empire Utilities Agency.
Carl Morrison — Bay Area Flood Protection Agencies Association
(please see the editor's note for Carl Morrison in the biographical summaries[3]).
Vincent Gin — Santa Clara Valley Water District
(In place of Norma Camacho — Santa Clara Valley Water District).
Karen Buhr — California Association of Resource Conservation Districts.

[1] This "interpretive transcript" of the subject panel session is not a verbatim record. Changes were made between the panel session recording and this written record for the sake of readability and understanding. Careful consideration was given to preserving the original content and meaning of each speaker's contribution. The panel session recording is available at: https://www.youtube.com/watch?v=WF7h852PlkA.
[2] This report can be accessed at: https://www.water.ca.gov/LegacyFiles/irwm/docs/IRWM_Recommendations.pdf.
[3] Biographical summaries are presented on Pages 18 through 21.

Lynn Rodriguez — Introduction

I want to begin by thanking DWR for including the IRWM Roundtable of Regions, which I co-chair with Tracy Hemmeter, in the planning of today's three regional water management-focused panel discussions. These panel discussions are related to conversations we are having at the Roundtable of Regions level. I'm hoping that today's audience also includes folks that are not part of the roundtable so that we can bring others into this dialog.

Before we start to hear from these six great panelists about regulatory alignment needs to support better regional outcomes, I want to pose some basic questions to help start the panel discussion:

- Why do we need regional regulatory alignment?
- Why do we need to work together?
- What are some of the positive outcomes that can be achieved?

My thoughts about answers to these questions are:

- A lot of this is about avoiding unnecessary costs.
- More efficiency is needed at the local level to get beneficial projects going.
- Expediting processes.
- Spending less time on regulatory matters and more time on projects.
- Improving trust with the regulatory community — something huge that you'll likely hear about from the panel.
- Increasing predictability by getting things settled upfront.

All of this is ultimately about achieving better regional management of our water resources.

So, to start things off, I would like to ask each of the panel members, who represent a vast amount of experience across the various facets of water management, including water delivery, resource conservation, and regulatory roles, to briefly share examples of misalignments with IRWM projects and the consequences of those misalignments.

Steven Moore

Integrated regional water management is an opportunity for better coordination between the water boards and the local water leadership. IRWM provides a fertile ground for creating and improving relationships between the regional water boards/State Water Resources Control Board and local leaders. The various regional boards across the state have had varying involvement and experiences with IRWM and they are happy to engage and discuss/share goals. IRWM also has helped create and improve relationships between and within local water agencies, including, for example, individual agencies that manage both drinking water and wastewater.

As far as misalignments, I can't give a lot of examples except that it can sometimes take a lot more time to work through regulatory processes with multiple agencies and the permitting that may be required to ensure water quality issues are integrated. The main theme of misalignment relates to when IRWM projects are dominated by water supply interests where water quality concerns can sometimes end up being an afterthought. There have been some successes too, like the salinity management work in the Ventura area which illustrates a good case of where IRWM project funding was linked up with regional board permitting processes.

Aligning IRWM with water quality standards represents a huge opportunity. When you link IRWM projects to the achievement of standards, like for dissolved oxygen, safe fish passage, safe drinking water, etcetera, then, with those things aligned, there's a lot of power within the regulatory process to ensure things are funded and implemented.

I want to remind everyone that the regional boards are organized according to the major watersheds/hydrologic areas of the state. That creates a great template for the State's role in working together with everyone.

IRWM is an important stepping stone that we need to maintain. I encourage IRWM regions to do more up-front coordination with the regional water boards.

Junko Hoshi

The opportunity for water management alignment at the regional scale is wide open right now. I am saying this because, even though DWR and CDFW (California Department of Fish and Wildlife) have not yet have a chance to strategically align our operations, there is a strong interest among the departments and the public to do so. It is a perfect time to have a discussion on this topic.

Actually, at the framework level, the Water Plan and the California State Wildlife Action Plan (SWAP) [https://www.wildlife.ca.gov/SWAP/Final] are already well-aligned, or pre-aligned. This is because the SWAP has multiple goals that include the integration of public interests as much as possible in the context of conservation, much like the Water Plan does.

Some might have experienced different positions or attitudes from staff in our headquarters office and our regional offices; those would definitely hinder alignment among departments. We are working very hard on this and there should be improved consistency among all our offices with time, especially since CDFW has adapted the SWAP as the blueprint for our actions.

The State Wildlife Action Plan has a two-tiered structure providing statewide strategies based on regional assessments and needs. The regional assessments are conducted on two types of regional units — terrestrial and watershed units — and for each unit, a robust set of strategies have been developed. The hydro units include Russian River and Santa Ana watersheds where IRWM pilot projects are ongoing. Strategies for the two watersheds are ready to share, so we could start a dialogue right now to prepare aligned management in the watersheds. I am looking forward to the collaboration from regional perspectives as our next step.

Martha Davis

I was really glad that Steven Moore started out talking about some of the value of the integrated water management approach. In the Santa Ana watershed, we are one of the older IRWM efforts in the state. We had a lot of legacy problems related to salt and nutrient buildup in the Chino Basin, and with issues related to how we share available water in the basin and become more efficient with it.

We began water management integration by looking at the management of salt and nutrients on a watershed basis. This enabled us to develop all sorts of water supply projects in the context of protecting and improving water quality and it proved to be of great value in the end.

Through our regional water management plan, we were able to develop and get approval for a "maximum benefit solution." This enabled us to go back to our regional board and the State board to modify water quality standards in consideration of our IRWM project implementation efforts.

If I were to pick out some of the places where integration is really hard, it's at the individual project level where there are genuine tradeoffs. So, as we talk to one-another about how we do better planning, we must deal honestly with the things that are in competition with one-another and then work things out. That's where I see a lot of the misalignment and sometimes misunderstanding occurring. There are solutions to this that can be worked out together.

Our IRWM plan has been in place long enough such that there has been turnover in participating agency staff. New staff are not always cognizant of all that has gone into the planning effort. They also are not always familiar with all the documentation that's behind the integrated regional plan. This can be problematic when the lack of background and knowledge causes people to question longstanding, hard-won agreements. It boils down to being a communication issue and it's a serious matter. As we go down the path of water management integration, there has to be some way of building continuity and strength within the decisions that have been made. It's tough when we keep getting new people, including new regulatory staff.

Carl Morrison

Interestingly enough, the Bay Area Flood Protection Agencies Association was created after all the flood agencies in the bay area had to get together and write their portion of the first Bay Area IRWM Plan. We decided that we liked each other and that there were other things that we could do together, so that's one of the benefits that resulted from the Bay Area IRWM plan.

Regarding the challenges related to alignment with IRWM, including permitting, you have enough challenges getting a permit for a single-purpose project, but when you have a multi-purpose project developed through IRWM, you can exacerbate the permitting challenges. We haven't experienced that in the Bay Area, because the Bay Area IRWM Region (which we were asked to form) consists of all or parts of nine Bay Area counties. So, for example, what happens in Santa Rosa in Sonoma County probably has little, if any, impact on what happens in Santa Clara County. In my opinion, we have only had one project in the Bay Area that is really a regional project. That project (regional radar and advanced rainfall forecast system) is fairly new and will require very little permitting.

Most of our projects have been a compilation of individual agency projects. For example, our Bay Area Regional Conservation Program is a compendium of individual agency conservation programs with each having their own conservation standards, rebates, etcetera.

The Bay Area Region (primarily with the flood agencies as lead) has been working to try and bring the permitting agencies together so that we have consistent permitting requirements. In some cases, what is considered a mitigation action by one regulatory agency is a no-no for another. I think we've all encountered that. I remember a California Biodiversity Council meeting where John Laird (representing California) along with someone from the Bureau of Land Management, talked about the need for alignment and working together. From our perspective at the regional level, no improvements made it down to us where permits are issued. There was a pilot effort planned for the high-speed rail project, but I don't think we are anywhere near doing that yet.

Some of the other things we are doing in the Bay Area IRWM Region include having quarterly meetings with the regional board. We are now also doing that with the Department of Fish and Wildlife. We may even have a meeting where we bring both together. I will share more about alignment solutions later in this session.

Vincent Gin

As we deal with a lot of societal challenges with water, the environment, and flood protection, most people think that the main challenge is money. I used to think that, but I've concluded that we are addressing the money issue (of course there's never enough) through State bonds and local tax measures. I think the greatest impediment to fulfilling our obligation to the public is the regulatory process. Not to just lay blame here, but it's the regulatory process that hasn't kept pace with other advancements like improved funding, better communication and coordination to support multiple benefits, and regional approaches. The regulatory process needs to adapt as well.

I have two ideas for helping remedy this situation. From the public agency standpoint, regulatory agencies and local water management agencies all serve the public and can have common goals. As subdivisions of the State, local agencies are essentially sister agencies to State agencies and should not necessarily be treated as an adversary by the State, or by the federal government. Regulatory statutes and rules should reflect that. We need to be better aligned and work better together for the public good.

The second idea relates to regulatory agency staffing. Regulatory agencies often have complex processes and procedures that they must follow, and they typically don't have enough staff to deal with the large number of permit applicants. My agency, the Santa Clara Valley Water District, has funded a total of five regulatory agency positions through the Association of Bay Area Governments to help with this issue. Two of those positions are with the U.S. Army Corps of Engineers, one with the U.S. Fish and Wildlife Service, one with the State Department of Fish and Wildlife, and one with the Regional Water Quality Control Board. Funding these positions has helped address some of the acute needs of my agency, but this concept is not for everyone, perhaps not even for most folks out there. The key point here is that there is a "supply" or capacity issue for regulatory agencies that needs to be addressed.

Karen Buhr

The ninety-eight resource conservation districts throughout the state work at the intersection of community, agriculture, and conservation. These districts often implement small-scale environmental restoration/improvement projects in their communities, and typically much larger projects in agricultural areas. Project are wide-ranging and include things like irrigation efficiency, carbon farming, fish passage, and many others.

Resource conservation districts encounter a lot of regulatory and government alignment issues, but I think one of the biggest examples are projects that involve fish passage. Even though a fish passage project is entirely consistent with the State Department of Fish and Wildlife's role for protecting fish and wildlife, such projects are often subject to an excruciating review process. This can be especially problematic for small districts with limited staff and funding. Just getting permits can be a huge impediment to completing a project.

So, thinking about this from a resource conservation district's side of things, imagine the effort it takes to identify a land owner with something like a culvert or bridge that impedes fish passage who is open to

fixing the problem and is willing to spend their own money to do most of the work. Then, imagine a district having to find the staff time and resources to get the project permitted. Permitting, in the best possible circumstances, can take a year and tens of thousands of dollars to complete. In worse circumstances, we are talking more like three to five years of delay, and something in the range hundreds of thousands of dollars to obtain permits. For resource conservation districts, this can stop a fish passage improvement project because of the relatively huge burden it places on districts, and/or because of land owner frustration and the loss of interest that occurs due to project delays. The time and expense required to obtain permits is the single biggest thing impeding watershed restoration projects by resource conservation districts.

Another challenge that resource conservation districts (which are mostly soft-funded) face relates to State grants. State agencies, such as the Department of Fish and Wildlife, do not issue grants to cover project planning, and if they do, it's a completely separate step. If you haven't obtained all your permits during the unfunded project permit phase before you receive a project grant, you may end up not having that grant funding when the project is ready to go because the grant agreement has expired.

In summary, there's misalignment between what the resource conservation districts are trying to accomplish and how they are treated by the regulatory agencies, and there is misalignment between State grants and the regulatory process, including timelines. The impact of these misalignments is that there are a huge number of environmentally-beneficial projects that can't be implemented, even though we have cooperative landowners willing to help fund those projects.

Lynn Rodriguez

Thank you for all those great examples of regulatory misalignment. I think this session will generate a lot of good discussions beyond the ones we are having today.

One thing I want to quickly point out is that we would like to link today's discussion with the IRWM stakeholder perspectives document (https://www.water.ca.gov/LegacyFiles/irwm/docs/IRWM_Recommendations.pdf), released by DWR in April of this year (2017). This report is the outcome of several years of strategic planning efforts for the future of IRWM in California and is full of the great ideas and suggestions from stakeholders provided at numerous workshops across the state. The report provides a wealth of information confirming what we know in the IRWM regions and it outlines how local and regional entities can work together with the State. One of the key strategies identified in the document, in fact the very first one, is "Improve Alignment."

As we proceed with this panel discussion I want to be sure that members of the audience today are aware of this document, in case you haven't seen it yet. Copies are available in the room. I encourage everyone to read the report, including the part about improving alignment.

We are just in the beginning stages of using this document to help drive what happens next. What we would like today is to help come up with ideas for what's next, including how to move forward with all this.

I now would like each panel member to share specific ideas for improving alignment. Do you have solutions in mind? If possible, I would like each panel member to describe how their solutions fit in with those identified in the stakeholder perspectives document, or if your solution is something new.

Steven Moore

At the State Water Resources Control Board, we believe we are making a lot of progress in the area of alignment. This includes recognizing the resource value of wastewater and stormwater and instituting that recognition at the State Board and the regional boards. We are reconfiguring the way we regulate wastewater and stormwater to incentivize their use. I encourage you to take a look at our stormwater strategy. We've already begun to contemplate alternative forms of compliance. Regarding stormwater, there's the engineering reality of infrastructure renewal and the development of green infrastructure over the coming decades. We established alternative compliance pathways through a precedential order that we adopted in 2015, which we are very serious about. That order sets the stage for alternative ways of complying with stormwater management requirements by recognizing stormwater as a resource. I know there are many in the room today that are working cooperatively with the regional boards to help make this adjustment happen.

For wastewater recycling, there's over a billion dollars of low-interest loans that have been appropriated. Proposition 1 funds for wastewater recycling are already spoken for. Next month, we will be looking at a debt-management strategy to fully leverage the State revolving fund from $1.2 billion to $2.2 billion. That strategy includes looking at ways of not saddling all of our infrastructure costs on our grandchildren. We either pay now, or we incur bond debt that the next generation must pay off.

Open data and decision-making transparency are key to working with the public and ratepayers, and for dealing with ratepayer backlash. The State needs to partner with local agencies to share information about what we need to pay for to keep water flowing from the tap, our farms supplied, and protect the environment.

When it comes to regulatory alignment needs, it's not just with each other, it's also within our own agencies. The State Board and the regional boards all have to work together to get our priorities and our planning and permitting efforts aligned. It all comes down to a commitment to collaboration.

Earlier in this session, the problem of regulatory agency resource limitations was discussed as an impediment to alignment and the timely permitting of projects. For my organization, getting more staff would require fees to go up. As you may know, the Water Boards are fee-supported and we just increased fees for some of our programs last week. It's never an easy issue to address. We always need to look at ways to do more with less.

Strategic collaboration toward water management solutions is critical and we are striving to fully recognize and reward that, not only through our funding programs, but through our regulatory programs as well.

A key point I want to leave you with today is please think of regulatory processes as your allies. If you work with the regulatory agencies to devise a path to compliance that empowers you to invest local funds, and partner with the State to implement projects that achieve multiple benefits, then you've helped make it easier to get things done at the local level.

I worked at the local level as a civil engineer and I heard city managers repeatedly ask, "is it required?" If the answer is "no," then the project won't happen. If a city manager asks the same question but the answer is, "yes, it's required, but we can get away with not doing it," then the project still won't happen. But, if a project is required and there is no way to get out of doing it, that's when the project will get funded.

You can use regulatory processes (especially multi-agency processes) through pre- application forums to help you get your permits. I was able to obtain streambed alteration agreements and 401 Certifications within thirty days when I worked for sewer agencies. It takes local leadership to put these forums together.

As mentioned earlier, the Water Boards have limited resources, but we are interested in helping and want the system to work for locals. We are not in business to hold things up. Our goals and our mission are often similar to those of the permittee, but getting things done means hard work, rolling up sleeves, and setting up processes. Collaborating with regulatory agencies up front can help things go much more smoothly. Of course, this is easier said than done, but it's important for all of us to commit to doing things this way.

Junko Hoshi

Very good. When you think of regulations and permitting processes, it can be a headache, but it's important to remember there's a reason for these requirements — we're trying to hold on to or protect a value of some kind. That value could be water rights, biological diversity, water availability, etc.

Regulatory agencies are coming from good intentions but, individually, our focus is very narrow, and regulations are developed around a particular focus — each regulatory agency becomes a monster on its own. Those monsters come together and start talking, an interesting talk, or maybe we cannot talk. But step back a little bit and reflect on the full body of natural resources in the context of water. Life depends on water and conversely, water depends on life; water storage depends on forest health etc., so it goes both ways. If there are ways we can assure the value of the promised intentions and come back together recognizing these diverse values and needs, and then have an alignment process, I think we will be in a better place.

Associated with that, it's important to have a good outcome indicator set; the Water plan team is working on developing a set as are we. Those indicators often reflect regulatory values so during alignment efforts, it is important to select indicators very carefully to reflect all different kind of values.

For alignment, showing relationships among the indicators is also important. For instance, if you have great quality of water, we tend to have a healthy ecosystem associated with that. If you have running active water in a riparian system, our riparian forest tends to be rich. Water quality (a perspective from chemistry) and biology (which is more of our perspective) are different, yet they are related. If we could show this kind of correlation by quantifying the mutual dependence of those values, and with the acceptance of diverse values as I mentioned earlier, we can prosper, and any small differences should become negotiable.

By the way, there is now a new regulation called Regional Conservation Investment Strategies (RCIS) under Assembly Bill 2087 (2015–16) that was enacted this year. This bill encourages you to think about conservation at regional scales asking for ecological and other analyses at regional scales, and based on that, you might further consider options to receive mitigation credits. The mitigation credits could be for State or federal regulations. We are trying to make progress to align projects at regional scales through the program. Senate Bill 103, enacted in July 2017, already amended the new regulation by removing (for the benefit of stakeholders) some of the restrictions placed on the RCIS; please check it out.

Martha Davis

A friend of mine has this great quote: “there is no silver bullet, only silver buckshot.” I think the quote fits the issue of regulatory alignment.

So, to continue with some of the themes mentioned earlier and relating them to what we’ve learned in the Santa Ana IRWM Region, I think the notion of front-end collaboration is key.

In an earlier session today, Charles Gardiner and I discussed how dealing with regulations in the old context was all about minimizing project impacts in relation to regulatory requirements (fisheries, water quality, etc.). The problem with that approach is that it’s not really about dealing with outcomes. So, when you talk about taking a new and flexible regulatory approach, it’s really about achieving a desired outcome for a region. Within that desired outcome can be the value for environmental resources and how to make multiple things harmonize together and lead to improvement.

So, going back to the Santa Ana region, one of the lessons-learned from the region’s processes is that it was the ability of the region to work with the regional board to change their basin plan which made a difference. This allowed us to do more to improve water quality in harmony with the conjunctive management of our region’s groundwater resources and in harmony with the investments we wanted to make for water supply and environmental resource issues.

None of the good things I just mentioned can occur without strategic front-end collaboration. That’s where you have the conversations that lead to mutual understanding of multiple benefits. This isn’t something you approach by simply telling State agencies that they need to do something — it instead is something that you do together with State agencies. Everyone needs to buy in on collaboration even though it isn’t easy to do and takes time and money. Ultimately, it’s about a commitment to getting the best outcome for our communities, and for the state.

Picking a few places where I would like to see action, I do think we have some challenges between SGMA (Sustainable Groundwater Management Act) compliance activities and water quality on the regulatory front, and also with riparian habitat and flood management. In those instances, I think State agencies need to come together and develop flexible approaches that honor regulatory mandates and give people understanding about where the tripping points are between different regulatory requirements and what that means on the ground.

I’ve participated on the Water Energy Team which is part of the State Climate Action Team. It’s been interesting to see State agencies come together and make recommendations regarding climate change. For regional alignment, State agencies need to double down on working together because conflicts are only going to become more difficult with time if they don’t. I think it’s very important to allow State staff to participate in regional processes because collaboration makes a big difference at that level.

Regarding DWR, there are two things I will point out. There’s now a wealth of success stories out there about where we’ve found innovative and flexible approaches to regulatory management. Those stories need to be highlighted and made a big theme, particularly as new tools and options emerge from the regulatory agencies. We need broader knowledge and understanding about how things are changing and how our regions can take advantage of those changes.

Another thing concerning DWR relates to their efforts to develop a framework for assessing multiple management/project benefits. I think we need better tools for understanding how actions can have

multiple benefits and help take that information back to communities in our regions. This will help communities understand what they will be getting back from various actions and projects.

Finally, one of the challenges we have in the IRWM regions in dealing with watersheds, groundwater basins, etc., is that regions need a coordinator. Somebody must be responsible for keeping the conversation going. It's sometimes a hard task, but it's not necessarily the most expensive thing that regions need to do — maybe something on the order of $100 to $150 thousand per year. I don't know how you do collaborative planning successfully unless you have someone that handles the coordination, including the logistics. This is a place where we need some innovative thought about funding because it's probably one of the most important first steps we can take to redouble our efforts for coordinated planning.

Carl Morrison

I want to recognize the Bay Area regional board in a positive way by mentioning the conversation I had yesterday with the regional board's regulatory branch chief. We were planning the agenda for our next quarterly coordination meeting and it was music to my ears when he said that one of the things he would like to talk to us about is the potential for having a region-wide stream management plan/permitting process. This would replace the current regulatory agency by regulatory agency process with a regional approach to make things more efficient and create less burden on already overcommitted regional board staff.

Also, concerning the same discussion, the other thing that he wanted to place on the meeting agenda relates to Bond Measure AA. We just passed this bond in the San Francisco Bay Area to support projects to deal with sea-level rise. Eligible projects include both green and grey infrastructure and flood control projects, but there must be a wetlands restoration element to them. The regional board person I mentioned said that he was very concerned about the number of permit applications that will be coming through due to Bond Measure AA, and possibly even more applications as the result of a new State bond measure. He mentioned that he really wants to have a chat with the agencies participating in the IRWM region to improve the permitting process to make sure that everyone can obtain their permits and that the regional board wouldn't become overly burdened and have a large backlog.

I don't think we would have had the conversations I just mentioned if we hadn't been meeting with regional board staff over the last couple of years and developing good relationships. We now have even have each other's home and cell phone numbers.

This issue of alignment has been going on for a very long time. There was a U.S. Environmental Protection Agency funded project called Flood Control 2.0. It had an element where we were supposed to talk about agency alignment, but I don't know if it really turned into anything. We also now have something called JARPA (Joint Aquatic Protection Permitting System), but it's not widely known/used yet. Vince's organization, the Santa Clara Valley Water District, wrote a white paper about regulatory alignment challenges and shared that paper with the Little Hoover Commission. Then there's something referred to as the "Silver Jackets," which involves DWR and the U.S. Army Corps of Engineers working together to identify great projects. We in the Bay Area submitted a project application, and the Corps tried to help us to find funding for it.

My recommendation is that if you haven't already done so, start to, and continue, working with the regulatory agencies (Corps, Fish and Wildlife, regional water quality control board, etc.) at IRWM region

level. On the State's side of things, both the administration and the Legislature need to look at the entire permitting situation, including mitigation.

All of the nine Bay Area counties touch the ocean/bay and are affected by sea-level rise. In order for us to deal with sea-level rise, the permitting process must change, otherwise, none of the projects we need for dealing with this problem will get approved. Changes will, in some cases, require legislative action to untie the hands of the regulatory agencies. The administration also needs to act and direct agencies and their personnel to work together and come up with solutions by a certain deadline. I think there really needs to be leadership at the State level from the administration and from the Legislature.

Vincent Gin

I've been involved with some regional coordination efforts and with a lot of pre-project consultation with regulators to vet concepts and alternatives in an attempt to take different approaches. In some cases, no matter how good the conversation is, it ultimately comes down to what the rules, regulations, and policies, or maybe even the long-standing culture are in determining what can happen. As an example, we had a terrific conversation in my area about the multi-use benefits of a project, the value of habitat connectivity, and establishing a wildlife corridor to connect habitat areas. There's a magnification of benefits when you connect habitat areas. But, in the end, it just came back to rules or what I refer to as "biologic accounting." Things reverted to habitat area numbers and multipliers for the same type habitat on the same site to meet mitigation requirements. This contradicted the whole philosophy of multi-use benefits but, as Carl Morrison mentioned previously, the regulators' hands are tied.

I think there needs to be an adaption/evolution of the regulatory approach, especially with climate change, because the rules haven't kept up with water management integration at the regional level. The planning process has evolved, but the issue of the handcuffs on regulators needs to be addressed. Without getting into this too much, there's also the bigger question of alignment with the federal government. There's the Corps/USEPA and mitigation rule 2008 that addresses a hierarchy/priority of mitigation banks which really doesn't match up with the State's requirements. Also, State and federal permit processes really don't line up well with each other and you are only as fast as your slowest permit.

Another thing I would like to share that's more philosophical in nature, and something I don't know how it could be codified, would be for regulators to take a risk-based approach in their permitting efforts. With regulatory agencies having to deal with an onslaught of permit requests in response to bond measures, sea-level rise, and other factors, I wonder if as much regulatory attention and energy needs to be given to low-risk projects as is given to high-risk projects. Taking a risk-based approach in applying limited regulatory agency resources to various permit requests could help stretch agency resources. Leadership would be required for such an approach to be taken so that staff would be free to exercise judgment and to make decisions. I think a risk-based approach to regulation could go a long way toward improving efficiency.

The last thing I want to touch on is something that Carl Morrison mentioned; the Little Hoover Commission. I urge you to read the commission's report that came out in June 2017 (http://www.lhc.ca.gov/report/improving-state-permitting-local-climate-change- adaptation-projects). This report is focused on permitting for climate change adaptation projects, but it applies to so much more. The report is based on some terrific research and it presents four broad recommendations for improving permitting processes. One of the recommendations is called "the big table approach" for coordination and advanced planning — bringing people together to discuss projects and permitting issues in advance. Another recommendation is for the development of a regulatory "cookbook" to help

applicants understand and navigate the regulatory process better. The commission also recommended the establishment of a dispute resolution process to deal with disagreements rather than court. The last recommendation is for more flexibility for government agencies in relation to financial surety/endowment requirements for mitigation project maintenance.

Martha Davis

I'm really glad that the previous speakers brought up the points they did. Something I would like to add is the importance of focusing on relationships and how we view one another. Looking at each other as partners is something that will help us begin moving forward together before some of the massive realignment needs can be dealt with.

Regarding all the regulatory challenges, the mission of resource conservation districts is similar to that of the regulatory agencies that we must get permits from. Just being able to recognize this fact is critical to building partnerships and recognizing their value in making projects work.

From our perspective, it's important to recognize that regulators are doing good things for the environment and keeping it safe. It's also important to recognize that we won't have voluntary conservation if there's no "stick" looming in the background. The stick needs to be there to indirectly help drive some actions.

On the regulator's side of things, it's important for them to understand the district's side of this — resource conservation districts (RCDs) know their communities and the actions that are happening in them. RCDs bring a tremendous amount of value to the table toward achieving similar missions.

One of the examples for improving things that I want to share comes from Minnesota. Their version of our regional water quality control boards came up with an alternative program for RCDs in recognition that the RCDs know the good actors in their areas. The RCDs, working together with the federal Natural Resources Conservation Service (NRCS), are developing conservation plans for farmlands and then working with farmers to help them understand the plans and the good management practices needed to protect water quality and other natural resources. If a farmer agrees to follow the conservation plan and is working with good intent to comply with the plan, then there's a certain amount of forgiveness given with respect to some of the regulatory requirements. In cases where a farmer exceeds a regulatory standard, or some other problem arises, the farmer will receive due consideration as being well-intentioned and regulators will work together with the farmer in a constructive manner to help solve the problem.

The strategy I just described allows Minnesota's version of a regional board to focus more on situations where bad things are happening and people are not acting with good intent. This strategy is a really good example of how we can look at solving the regulatory alignment problem in different ways.

Regarding the permitting process, people that have beneficial projects that are in line with a regulatory agency's mission should be treated differently. They shouldn't have follow the same process as other types of projects.

In summary, relationship and trust building to help everyone come to a middle ground in our missions is the most important piece to solving all this. Some other specific solutions that were mentioned, or that are in the stakeholder perspectives document, include:

- Access to pre-planning collaboration — being able to have conversations between project proponents and regulators in advance of permit applications.

- Grants that acknowledge and provide support for the regulatory processes for beneficial projects.
- Regulators working with each other so that applicants don't have to run their projects back and forth between each regulator to get projects approved.
- Having regulatory processes that better accommodate beneficial projects.

Finally, I want to mention the California Association of Resource Conservation Districts' annual conference from November 15 through 17, 2017. We will be taking about alignment needs and related issues during the conference.

Lynn Rodriguez

I want to thank all the panelists for their excellent thoughts and for the time they put into preparing for today. This has been a great discussion in a short amount of time. We didn't get to all the questions, but some of the things the panelists said also apply to the questions we didn't get to today. This session is a great "teaser" for more in-depth discussions moving forward.

So, as far as the question: "What should happen now?" I think there's a need to bring all of the discussions and input received so far together in one place. One of the recommendations in the stakeholder perspectives document is to create a task force to identify all of the IRWM-related regulatory alignment issues. That could be a little duplicative of other efforts, but I know this is something that the IRWM Roundtable of Regions would be committed to working on with DWR and the regulatory agencies.

There's still a lot of work to be done. We need to identify the right people to be part of the discussion to identify solutions. Even if we just wrote up all the suggestions that came out of today that could almost be the cookbook for moving forward and identifying future actions.

Just to reiterate some of the important themes I heard earlier:

- Relationships and trust are hugely important.
- Communication and coordination — that's what IRWM is about.
- We need to understand each other better, including the outcomes and values we each represent.
- Alternative paths to regulatory compliance, we heard a lot about how that is working.
- Front-end collaboration — figuring things out up front rather than fixing things later.
- Human capital to support coordination — having someone for each IRWM region to support communication and coordination. The stakeholder perspectives document includes a recommendation of IRWM baseline funding that could support this.
- Increasing regulatory agency staff so that they can keep up with the workload.
- All the things that came out of the Little Hoover Commission report.
- Risk-based approaches to regulation.

I would like to see all of these things written out so that we can take this information back to our regions and our local agency elected officials and then begin improving relationships with the regulatory agencies.

Biographical Summaries

Panel Moderator

Lynn Rodriguez has worked in the field of water resource management since 1981, focused primarily in Ventura and Santa Barbara counties. She has managed the Watersheds Coalition of Ventura County

(WCVC) IRWM Program since 2005. She authored the two IRWM plans for the region and manages the ongoing stakeholder process. She also serves as co-chair of the statewide IRWM Roundtable of Regions and the LA-Ventura Funding Area Disadvantaged Community Involvement Task Force. She has served on numerous local, statewide, and national committees addressing water management issues.

Panel Members (in speaking order)

Steven Moore was appointed to the State Water Resources Control Board by Governor Edmund G. Brown Jr. in 2012, reappointed in 2016, and elected as vice chair of the board in 2017. He previously served on the San Francisco Bay Regional Water Board from 2008 to 2012 under the Brown and Schwarzenegger administrations and held staff positions at that regional water board at various times between 1992 and 2006. Between 1989 and 2012, Steven worked more than 10 years as an engineer and consultant on a wide variety of water infrastructure projects, including sewer reconstruction, recycled water, stormwater, water supply, stream and wetland restoration, and environmental impact reports throughout California. Steven has experience in both obtaining and issuing discharge permits, wetland permits, and clean water grants and loans. He led basin planning for the regional water board from 2002 to 2006. Steven holds a Bachelor of Science degree in biological sciences and a Master of Science degree in Civil Engineering, both from Stanford University. He is a registered civil engineer and a member of the American Society of Civil Engineers.

Junko Hoshi, Ph.D., Climate Science and Renewable Energy Branch, California Department of Fish and Wildlife (CDFW). Junko's passions for nature go back to her first memory gorging on wild raspberries in a secondary forest near her home in Tokyo. Urban sprawl was approaching fast and in two years, those forests transformed into a forest of housing, except for areas protected under the city's zoning codes. This experience eventually led to her career change after being established as an ASIC design engineer/mathematician at Seagate Technology. For the past 10 years at CDFW, she has engaged on prioritizing ecosystem conservation activities at the state, national, and international levels. Her engagement includes the Bay Delta Conservation Plan, Desert Renewable Energy Conservation Plan, and asa lead and author for the California State Wildlife Action Plan 2015 Updates and the companion plans (e.g., water companion plan). She has fostered partner engagement through California Biodiversity and Strategic Growth Councils, Landscape Conservation Cooperatives, and Association of Fish and Wildlife Agencies, among others. Junko is a master gardener and certified herbalist. If not in meetings or in front of her computer, you would probably find her harvesting seeds, stems, and roots to eat and to propagate somewhere out there.

Martha Davis is the former assistant general manager/executive manager for Policy Development, now retired, at the Inland Empire Utilities Agency (IEUA), a municipal water district serving 830,000 people in the western portion of San Bernardino County. IEUA provides regional sewage treatment services, distributes imported water and recycled water supplies, and provides other utility services for the Chino Basin. Since 2000, Martha has led many of the agency's award-winning conservation planning and green programs, including initiatives promoting water conservation, renewable energy, stormwater capture, and recycled water. She also serves on multiple boards, including the California Section of the Water Reuse Association, the Mono Lake Committee, and currently as the Board President of the Sierra Institute for Community and Environment.

Carl Morrison

On April 6, 2018, Carl Morrison tragically passed away in a single-engine plane crash near the Petaluma Municipal Airport in California. Among Carl's countless attributes, he was an extremely kind and generous man.

He was also immensely well respected in California's water management community.

Carl Morrison was president of Morrison & Associates, Inc., an environmental public and government relations firm founded after Carl retired from the U.S. Marine Corps, in which he served in various assignments, including in public affairs and as a judge advocate. He also served as the administrator of the (San Francisco) Bay Area Flood Protection Agencies Association. In that role, Carl worked to improve the permitting process by coordinating with the U.S. Army Corps of Engineers and facilitating regular meetings with the San Francisco Bay Regional Water Quality Control Board and the Bay Delta Region of the California Department of Fish and Wildlife.

Vincent Gin leads the Watershed Stewardship and Planning Division for the Santa Clara Valley Water District. Vincent received his Bachelor of Science degree in Civil Engineering from the University of California, Irvine and is a registered engineer in California. He has more than 20 years of experience in flood control, environmental permitting, water quality, harbor infrastructure, and project delivery. Prior to joining the district, Vincent was the regulatory and policy division manager for Orange County Public Works. In 2010, he received the Government Engineer of Merit Award from the American Society of Civil Engineers' Orange County Branch, and the Outstanding Engineer of Merit Award from the Orange County Engineering Council. Vincent is also an active member in the National Association of Flood and Stormwater Management Agencies.

Karen Buhr has been leading the California Association of Resource Conservation Districts for seven years and has an excellent knowledge base of California, the state's resource conservation districts, and what it takes to get work done. She has facilitated countless projects throughout the state, including leading a grass roots capacity building movement that facilitated more than 100 RCD participants to create a vision and set of standards for California RCDs. She has also served on various statewide committees, panels, and targeted efforts for State agencies and partners. In the last few years, Karen has specifically worked to coordinate RCDs and public and private partners around climate change adaptation and mitigation, as well as sustainable agriculture and ranching. In addition to her experience, Karen holds a Master of Science degree in Natural Resource Science and Management from the University of Minnesota, and a Bachelor of Arts degree in Environmental Studies from Macalester College in St. Paul, Minnesota.

Panel Session Interpretive Transcript

Building the Next Update (2023) of the Water Plan from the Local/Regional Level Up

California Water Plan Update 2018

Second Plenary Meeting

September 27, 2017

McClellan Conference Center, Sacramento

Panel Session Interpretive Transcript[4]

Building the Next Update (2023) of the Water Plan from the Local/Regional Level Up

California Water Plan Update 2018

Second Plenary Meeting
September 27, 2017
McClellan Conference Center, Sacramento

Description: During this session, panelists focused on how the California Department of Water Resources (DWR) can best engage local and regional stakeholders to build the 2023 update of the California Water Plan from the "bottom up." Panel members shared ideas about how stakeholders can help DWR synthesize local and regional water management needs and goals from local/regional scales to the major hydrologic area and statewide scales. The future development of the California regional water management atlas was also discussed.

Moderator[5]: Tracy Hemmeter, Senior Project Manager, Santa Clara Valley Water District and Co-chair of the Integrated Regional Water Management (IRWM) Roundtable of Regions.

Panelists[5] (speaking order)**:**

Lewis Moeller — Project Manager, California Water Plan, DWR.
Colin Bailey — Executive Director, Environmental Justice Coalition for Water.
Dana Friehauf — Water Resources Manager, San Diego County Water Authority
(speaking in place of Mark Stadler — San Diego County Water Authority).
Lynn Rodriguez — Watersheds Coalition of Ventura County and Co-Chair of IRWM Roundtable of Regions.
Brad Sherwood — Community and Government Affairs Manager, Sonoma County Water Agency.
Sherri Norris — Executive Director, California Indian Environmental Alliance.

[4] This "interpretive transcript" of the subject panel session is not a verbatim record. Changes were made between the panel session recording and this written record for the sake of readability and understanding. Careful consideration was given to preserving the original content and meaning of each speaker's contribution. The panel session recording is available at: https://www.youtube.com/watch?v=6pEqKX1Wufg.

[5] Biographical summaries are presented on Pages 19 through 21.

Tracy Hemmeter — Introduction

I was speaking previously with one of the panel members and we both agreed that building the 2023 update of the California Water Plan from the local/regional level up is a great idea, so then the question becomes, "What is it that the panel needs to address?" I contacted all the panel members and mentioned that DWR would be giving a presentation on what is meant by building the water plan from the bottom up. We all then agreed that each panelist would speak from their own perspectives on how we make sure that everyone is represented in that plan development process. Panel members will, depending on their roles and experiences, share their perspectives from the standpoint of individual or multiple IRWM regions, tribes, hydrologic areas, statewide issues, or other concerns.

Mike Floyd (DWR) — Set Up Presentation[6]

I think that the concept of building the 2023 update of the Water Plan from the bottom up is a great one, but there will be challenges that we need to start figuring out. That's why we asked these great panelists here today.

[Slide 3] *Note: To see the slide number at the web address in footnote 6 below, please hover the curser over the bottom portion of the slides as they appear on the screen.*

The concept for the integrated regional water management atlas [which will serve as a foundation for the 2023 update] was introduced during the development of the stakeholder perspectives document [*Stakeholder Perspectives — Recommendations for Sustaining and Strengthening Integrated Regional Water Management*[7]]. The stakeholder perspectives document development effort was an extensive multi-year project where DWR engaged IRWM practitioners and other stakeholders across the state to determine how IRWM can be sustained and strengthened, now and in the future.

[Slide 4]

DWR received a lot of input related to the regional water management atlas concept during the stakeholder perspectives document development process. The atlas' purpose is to describe [under one cover] who the IRWM regions are, where they are, what they do, and what their goals, needs, and priorities are.

The idea for the atlas came from stakeholders. The atlas is identified as part of one of the 70 actions listed in the stakeholder perspectives document. The document specifically identifies the State as needing to "*Publish and maintain a web-based atlas summarizing the makeup of IRWM regions across the state, and their water management challenges and successes."*

[Slide 5]

A few years ago, we [DWR] offered up a trial concept [prototype] for the atlas. To do this, we initially focused on the American River Basin. The idea was to digest the information in the American River Basin IRWM Plan into a "bite-sized chunk," and then do the same for IRWM regions across California.

[6] The slides used for this presentation can be viewed at: http://www.water.ca.gov/waterplan/docs/cwpu2018/plenary/sep2017/presentations/02_Update2018_Plenary_Sept2017_WaterPlan_LocalRegional_Session.pdf.

[7] https://www.water.ca.gov/LegacyFiles/irwm/docs/IRWM_Recommendations.pdf.

Unfortunately, we were not able to continue with that effort because of funding issues, but we're back at it now.

[Slide 6]

We are going to relaunch the atlas effort again soon and our [updated] idea for the content of the summaries for each IRWM region includes: the characteristics of the region, what the regional water management group is and who is involved, key water management needs and challenges, and other items [shown on slide — regional alignment needs, major IRWM milestones/achievements, inter-regional management needs/actions, and project/investment needs].

[Slides 7 & 8]

Now I'm going to talk about rolling up this regional level information to a higher level. So where does this concept come from? The answer is that, during the development of the stakeholder perspectives document, we were told that DWR needs to better align its programs to support IRWM. One of those alignment issues is the California Water Plan update.

The comment from IRWM practitioners shown on the screen, "We spend a huge amount of time, energy, and resources developing and implementing IRWM plans, so why don't you [the State] use them to inform State plans policies, and investments?" paraphrases what we heard from people. So, we [DWR] say, "Amen to that," and now let us figure out a way to do it — that is why we're here today.

[Slide 9]

Our initial concept for bringing regional information together is to do it for each of the state's [ten] hydrologic areas, like the Central Coast Hydrologic Area shown on the screen. That's just one concept for bringing information together at the next level up from IRWM regions, but it could be something else [some other level/area]. That's something we want to engage stakeholders on and include in today's conversation — what's that next level up? We also need to hear how information from the regional level can be synthesized at the next level up [such as the hydrologic area] to develop common themes, needs, etc.

Once the area for that "next level up" from IRWM regions is defined, our idea for synthesizing information at the next level is to bring people together along with the information that is needed [IRWM plans/atlas content, inter-IRWM region/hydrologic area scale information, information for areas outside of IRWM regions, etc.]. From that, a synthesis report for the area would be developed. DWR would engage a team of stakeholders to help write the area report.

[Slides 10, 11, & 12]

Then, from the hydrologic area level, we go up to the state level. The next part of this concept is to take all the hydrologic area synthesis reports (or reports for some other division of the state), reports from possible overlay areas, such as the mountain counties and the Delta, and other pertinent information and then conduct a statewide summit. The purpose of the summit is to work with stakeholders to evaluate all this information, determine what rises to the top at the statewide level, and develop the statewide synthesis report. That synthesis report, combined with State policy and plans informed by the statewide synthesis, would be the California Water Plan.

In concept, this approach for developing the Water Plan seems pretty straightforward, but in practice, I can guarantee you it will be difficult, but, in my opinion, very worthwhile.

[Slide 13]

We plan on completing the design of the regional water management atlas in early 2018, and then, by sometime in late 2018 or early 2019, we will initiate the regional forums and begin the process for Water Plan Update 2023.

Tracy Hemmeter

I now would like each of the panelists to share their perspectives on how building the Water Plan from the bottom up will work.

Lewis Moeller

We just heard from someone from DWR about the atlas and the process for developing Water Plan Update 2023. I want to keep my comments a little short and underscore that the atlas is the way to go.

We, the Water Plan Team, have observed many times that implementation starts at the regional scale — that's where most efforts are taking place, and that's where most of the issues are. So, we must recognize this and reflect it in the Water Plan. Every time we have used the State-level down approach it hasn't worked as well.

I would like to point out the five themes in the current draft of the Water Plan being circulated now. They are on Page 3-3 of the draft. That's a good place to start looking at the draft plan.

[Note: The five themes, now referred to as "goals" for Water Plan Update 2018, are:

- Improve Alignment of Agencies' Initiatives and Governance.
- Improve the Regulatory Framework to Reconcile Environmental Needs and Human Activities.
- Provide Resources, Knowledge, Skills, and Tools Water Managers Need for Data-driven Decision Making.
- Provide Sufficient and Stable Funding.
- Modernize and Rehabilitate Water Resource Management Systems.]

A lot of what I heard at the earlier session applies to what the State's role should be — using dollars as incentives, alignment; taking a holistic approach for data, governance, etc.; setting limits, etc. I'm only picking the roles that the Water Plan may have a need to address. And then there's the issue of setting the proper scale for how we look at things, and for rolling information up. There's a scale that is going to work, not too detailed, yet maybe not as high as the ten hydrologic regions?

Colin Bailey

For those unfamiliar with Environmental Justice Coalition for Water, we work with low resource environmental justice communities around the state.

I have been involved with the 2013, and now the 2018 update of the Water Plan. Within that timeframe, I have witnessed a tremendous pendulum swing in terms of the plan development process. I think I can characterize the 2013 update effort as being driven by specific constituencies or caucus'. I participated as

part of the environmental justice and disadvantaged community (DAC) caucus. There were other caucuses, including a tribal caucus, and several others.

The process for the 2013 update produced a water plan that most would agree included a tremendous volume of recommendations that were almost unusable in their number, and a plan that was not as well organized as we might have liked.

I also now serve with many others at the invitation of DWR on the policy advisory committee for the Water Plan. That process is on the other end of the pendulum swing — it is a fairly small group of people bringing forward their insights who are largely at the top of their respective organizations. We have yet to have those broader, grassroots conversations. It remains to be seen what the ultimate product of those conversations will be for the 2018 update.

So, my comments on the process [described earlier] are going to draw from my organization's background as a hub organization that does community organizing and movement building. There are pillars and principles that I think might be applicable here, some of which I heard in Mike's presentation.

First, for our constituencies, you have to provide the necessary support for engagement. Engagement doesn't happen without trust and a relationship development exercise. There's a capacity-building component from which we now have a real opportunity in the disadvantaged community involvement program to leverage both relationships and trust. Capacity will be built from each of the ongoing conversations as we raise everybody's water IQ, as it were, to really understand the bigger picture.

Another principle of organizing that I think is pertinent here is that people organize around their own self-interest. To understand what that interest is, you really need to have a relationship with folks.

The third principle (that relates to the two former principles) is that it's easier to organize those who are already organized and where there are already relationships. So, you do go to leaders (as we have done with the current water plan policy advisory committee), however, you want to make sure that they, as leaders, are bringing with them the followers and people who reach out to them where there is trust. So, there are any number of groups, many of which are represented here, where you can do that. These groups can include the groundwater sustainability agencies, California Urban Water Agencies, Association of California Water Agencies, resource conservation districts, Environmental Justice Coalition for Water, tribal associations, and, of course, the IRWM regions. Hopefully, at the end of the disadvantaged communities' involvement program, the IRWM regions will be more deeply integrated with disadvantaged communities and tribes.

Another observation that I have as a newcomer to the Water Plan effort, is that it's good to have a real clear purpose and vision. I'm open to suggestions as to what the ultimate value of the State Water Plan has been in the past and what it will be in the future.

We've had some discussions, of course, on what the vision and purpose of the new iteration of the Water Plan will be, but our constituents really need to have a clear idea about all that upfront because time is precious, and choices must be made.

Regarding Mike's slides about his structure for leveraging up from smaller to larger conversations, we, in community organizing, call that a fractal or a snowflake model, which I think is a good element of what's been presented. The idea is that you have a structure for a conversation at a very small scale that then ratchets up to larger scales. In our work, we do that starting with local chapters that sometimes are at the

community-based level. We then have someone who's responsible as a facilitator/coordinator to have people come together at a regional level, usually at the hydrologic area level, or sometimes at the IRWM level. From there, the conversation ratchets up to the statewide level with the addition of cross-cutting issue workshops/workgroups.

I think it was Martha Davis who mentioned earlier the value of good facilitation and coordination support. I just cannot hammer that home enough. Good facilitation and coordination support also mean having someone who's culturally competent, and that can mean any culture. It took me a long time to figure out how to talk to engineers and I've also learned to speak "Central Valley-ian" in various ways. To Director Davis, I didn't get the chance to mention this earlier, but we do need to get Anecita Agustinez (DWR's Tribal Liaison) involved in deeper and broader ways, so let's find out how to get her more support.

Dana Friehauf

Before I get into our perspective, I want to touch on the San Diego IRWM Region and our region's governance, because it really plays into our perspective on this issue.

We have a regional water management group that consists of the City of San Diego, San Diego County, and the San Diego County Water Authority. We also formed a regional advisory committee, which is very critical to the success of our program. The committee consists of 36 individual stakeholders. It's a very diverse group and includes representatives of disadvantaged communities, tribes, nongovernmental organizations, the building industry association, and water agencies.

Regarding governance, we've been fortunate to collaborate very well within the funding area with both the Upper Santa Margarita and the South Orange County Watershed Management Area IRWM Regions. We came together and have an agreement for the allocation of IRWM grant funds for our funding area.

I think we have been fortunate to have a solid IRWM governance structure in San Diego County, which is why we've been so successful in our efforts. I think we've secured over $96 million in funding for the region.

Regarding the region itself, there's good and bad. We are not like the Santa Ana watershed--we don't just have one watershed. We have eleven watersheds, so when we talk about "big picture" planning being by watershed, that really does not make sense for San Diego County. For us, the IRWM region makes more sense and it does consider jurisdictional boundaries. So, from our perspective, while our IRWM plan includes a watershed-based approach and can show what's happening in each of those watersheds, such as water quality and environmental issues, our IRWM planning region makes sense from the big water supply perspective.

Regarding our supply portfolio, which plays into our perspective, we have diversified that portfolio tremendously since the early 90s, but we still rely on imported water for a majority of our supply. We also don't have a lot of groundwater and a large groundwater basin to manage, which is another reason we look more at the IRWM region for planning.

We fully support DWR's effort to develop the 2023 update of the Water Plan from the bottom up. I think this is the approach we need to take.

There are some questions that we've been asking ourselves about this approach. The first one is: what level [next level up from IRWM regions] should information be collected? Should it be at the hydrologic region, the funding area, or the planning area region?

I think Mr. Davis mentioned that maybe the hydrologic region isn't appropriate, and I think we would agree with that. I went back to the 2013 Water Plan update and looked at the hydrologic region report [for our part of California]. There was a lot of discussion in the report on groundwater, which makes sense considering you're looking at the whole hydrologic region, but for us, the report just didn't touch on our issues.

I think, at a minimum, we need to go down to the funding areas, if not the planning areas themselves. I could envision where, even though there's 48 planning areas, we could have a short synopsis of the issues and then have a link to the IRWM plan for more information, such as population, statistics, and issues. I think that way you'll really tap into what the true issues are within all the regions, and you can build upon that. By taking this approach, you could have an overall pick of the similarities between those planning areas, and then have a kind of synopsis of what that looks like statewide.

The second question is: how do we balance the need for consistency between IRWM plans so that we can have some consistent information, but also account for the fact that one size doesn't fit all when it comes to the IRWM regions? What we may highlight as important in our region could be very different for another region. That's something we need to talk about.

Lynn Rodriguez

I will speak briefly about my IRWM region for those of you that are not already aware of it. The Watersheds Coalition of Ventura County IRWM Region has about 860,000 people and is, I think, a microcosm of almost all IRWM regions in California. We have agriculture, mountainous areas, some high desert, different microclimates, coastal groundwater, sea water intrusion, surface water, and imported water. We have a mix of issues and projects like elsewhere in the state.

I have been involved in the Water Plan process since the end of the 2005 Water Plan update. I took the 2005 Water Plan update that had just been freshly minted, and other documents at the State level, and felt like that was a good starting point to "raise the water IQ" in my region and help us develop our IRWM plan. People do get a little insular with the issues in their own area. I thought it was good to share the work that the State had done with the folks in our county.

We have a bottom-up approach in our IRWM region. We have three major watersheds and some smaller coastal watersheds, but the three major watersheds are the planning units for our IRWM effort. As Colin Bailey pointed out so well, people are much more likely to gravitate toward what matters to them. Geographically speaking, it's easier to get people to care about what's happening in their watershed than it is to get them to care about what's happening countywide, let alone at the hydrologic region or statewide scale.

Regarding the question of scale, I think you shouldn't go too big. I would say that even the funding area is the wrong scale. We're in the Los Angeles-Ventura funding area. We're next to Los Angeles County, but we are quite different. We share some common interests and certain watershed boundaries, but our needs differ. We are struggling a little bit with the disadvantaged community involvement process. We need to make sure that we're meeting everybody's needs, but that's tough when Ventura County and Los Angeles County are so vastly different in terms of population. Los Angeles County is a very urban area while Ventura County is more rural and agricultural and contains smaller communities.

I have heard from members of the IRWM Roundtable of Regions about scale when it comes to Proposition 1. The concern is whether we can come to agreement on what the greatest needs are across funding areas. I've heard some people say that they can't get people within their own IRWM regions to

agree on needs. I think the smaller the scale, and the more people can relate to the issues being addressed, the better. I would say the watershed scale may not work everywhere because of the variation in watersheds — between the smaller ones like in San Diego County and the large ones in other areas, like Santa Ana.

I don't know that I have an answer to the "next level up" question, but I do very much support the bottom-up approach.

We now have the added challenge of addressing the Sustainable Groundwater Management Act (SGMA). Developing groundwater sustainability agencies (GSAs) and groundwater sustainability plans (GSPs), which many of us in the IRWM regions are engaged in in one way or another, can fracture stakeholders in the IRWM regions into smaller groups, pulling them away from active engagement in IRWM. In some regions, staffing resources aren't sufficient to develop a GSP at the same time you're working on IRWM implementation. The Watersheds Coalition of Ventura County IRWM Region has seven GSAs. SGMA implementation is drawing some people away, creating the need for us to keep people working together on the regional scale so that we're not at cross purposes with one-another.

Getting back to the next level up question, we must be mindful of scale, but I don't know that there is a correct one-size-fits-all answer to this question. We've been working very hard in Ventura County to try to keep these things together and keep people at the table and engaged. The smaller the scale, the easier it is to keep things together. I also want to also reiterate what everybody's been saying about the importance of trust and the relationships, and the need to maintain and build on them. Having trust and positive relationships makes things easier.

Bringing it back to the issue of, how do we use the bottom-up approach for building the [2023] Water Plan? I want to mention that the South Coast Regional Report for Water Plan Update 2013 did not end up being a useful tool for us in our IRWM region. In addition, there wasn't consistency among the different hydrologic region reports. Some regions had more information than others. There wasn't a single, consistent process or approach used to roll up the information across the hydrologic region into the regional reports.

I don't want to be too critical here because it's very hard to do regional [next level up] reports. If you want to develop a regional roll-up report, and you want people at the regional level to really use it, then it'll be a lot of work. You must keep people engaged. You must be able to show people where they will find themselves in the document and convince them that DWR, and other State entities care about what's in the plan and that they are actually going to look to the IRWM regions as the experts. I think doing that helps people feel more engaged and more empowered in the process.

Brad Sherwood

I represent the home of Grant Davis. There are several things that I think are going in the right direction in terms of engaging locals for this bottom-up approach, which we wholeheartedly support.

The Sonoma County Water Agency is involved in both the North Coast and San Francisco Bay Area IRWM regions. We are in two different regional plans and are involved with two different stakeholder groups that are really worlds apart from each other in terms of needs, assessments, and projects.

When it comes to interagency or inter-regional collaboration, that's tough. A colleague of mine who's here today helps manage the North Coast IRWM Region Plan. I help manage the San Francisco Bay Area IRWM Plan with Carl Morrison. In many ways Carl acts as our coordinator. Coordinators are needed to

help keep all the various groups in an IRWM region together to provide input and collaboration. Carl Morrison is our go-to person in the Bay Area who works with stakeholders and keeps all the various groups working together in one forward-moving path.

Now saying that, we couldn't do our job without DWR's regional program — Gary Lippner and the regional team, fantastic. It's critical that DWR support funding and staffing for that regional program. Who else is going to do that work? Boots on the ground, that's what's needed.

The 58 County initiative, which Director Davis just described, is vitally important. I am interested to hear how that's going to roll out because, at the county regional level, we're putting the "meat on the bone." The water plan is the "bone" and it's the local agencies and the local and regional plans that are the "meat." So, the question I have is, how do we ensure that meat gets on the bone and stays on the bone, and how do we all get a bite of it?

Speaking more about meat on the bone — IRWM, where is it in the California Water Code? We need to support IRWM; how do we do that? Lisa Renton, who many of you know through the water bond coalition, has these words of advice:

1. Establish baseline funding for IRWM.
2. Add language to the California Water Code recognizing IRWM as a key means of increasing regional self-reliance.
3. State agencies must align policies programs and regulations with IRWM, and that includes the water plan update.

In a nutshell, we're totally supportive of working with DACs, DWR staff, etc., realizing that we locals hold the necessary details and information to make the Water Plan successful. We can do that as long as DWR is supportive of our initiatives and our thoughts, as they have been.

We have been very lucky to have a pilot study for the Russian River, which Charles Gardner with California Forward is running for us. The study will produce metrics and schedules to illustrate how we are working in our watershed. While it might be a relatively small model, it could be replicated for a regional level funding process. It would, among other things, detail stakeholder engagement and the gap between project needs and funding, all of which could be rolled up to the program funding level for the Water Plan.

As Grant Davis pointed out earlier today, the Russian River watershed is a microcosm of the state. We are happy and proud to have been chosen for the pilot study and look forward to implementing it with our partners. We also look forward to sharing that knowledge with the rest of our community. But first and foremost, we must continue to support the DWR regional planning efforts to keep all this going.

Sherri Norris

I'm with the California Indian Environmental Alliance. We work on IRWM and we are the tribal engagement coordinator for the North Coast IRWM Region. We are beholden to thirty-four tribes in the North Coast Region. The region is very fortunate to have a governance structure that includes the tribes, but it's not just because of luck, it's because of the efforts of the tribes and others when the IRWM region was first formed. The way the governance structure is set up, I have bosses and they are the tribal representatives voted in by the thirty-four tribes. There are six of these representatives, and then there are alternates. There could be as many as twelve people from individual tribes in that governance structure at any one time.

On the day before each meeting of the North Coast Regional Water Management Group, the tribes caucus. The purpose of these tribe-only meetings, which the alliance facilitates, is for the tribal representatives to hear from the tribes in the area.

We're really excited about the disadvantaged communities program. The program will help increase the participation of all tribes in the region, to, in turn, help guide the decisions made by those tribal representatives, including directing me what to do.

So, I would say that in this process that we're discussing about including our IRWM plans in the water plan — yes, absolutely, that's a wonderful idea. There's so much work done at the local level, and there's so much trust that's been built in the North Coast IRWM Region between tribes, counties, and all the agencies; more than what I've seen in other parts of the state. When you have to sit down with everyone and roll up your sleeves to choose what projects get funded, you really get to know people. There were some relationships that started off as being uncomfortable, but I've seen some friendships be built out of that.

I am in support of IRWM continuing, helping it guide water management in the state, and using IRWM to support the development of the California Water Plan. Something that's also important to this discussion is that the goals of the North Coast IRWM Region tribes are included in the region's IRWM plan. The participation of tribes in IRWM is only as good as the ability of the regional water management group to include tribes in their governance structure, and in the development of their IRWM plan.

I'm working in four IRWM regions for the DAC participation program. In the North Coast. IRWM region we are calling the disadvantaged community program, "DAC-T" recognizing that disadvantaged communities and tribal communities are not necessarily the same, but that they sometimes have overlapping concerns (imagine a Venn diagram).

One of my hopes is that, in the mountain counties area, the Sacramento River IRWM regions, and the Bay Area IRWM Region, we're able to have space for tribes to come up with their own governance structure to then be part of the larger regional water management group structures.

Another thing to think about is that tribes are governments, so that's the other reason that DACs and tribes are separate terms. The leadership of each tribe has a responsibility to their constituency that votes them in. When it comes to tribes, you're actually involving tribal governments who are then reaching out to their communities, which is the most respectful of their sovereignty.

Timing is going to be extremely important in all this. We've struggled over the years with tribal engagement and inclusion in State policies, procedures, and activities to make sure that the tribal part occurs at the right time. If tribal engagement is too late in a process, then it becomes a struggle to get tribal considerations into something after the fact. If tribal engagement is too early, then tribes don't have an opportunity to weigh in on new decisions that come up after their engagement. So, what we've been saying with regard to consultation, which is yet another topic, is that consultation is supposed to be early and often. This means that you need to engage tribes from beginning to end because you just don't know which direction things will go during the process.

The other thing to think about as we talk about climate change, considering forward-looking plans to handle things like drought and flooding, is that the traditional ecological knowledge of tribes can help. When we think about things like the way a tsunami might hit our coast, or the way that a flood event comes down from the mountains, or why the snowpack isn't there anymore, and then wonder what are we

going to do about such things, there is knowledge the tribal community can offer. An example of this knowledge is that kelp beds and coastal wetlands can help reduce the impacts of tsunamis hitting the shore. Similarly, for Oroville, if we had upland meadows that had beavers, as existed in the past, they would create wide spaces of wetland and habitat for fish, but also make water take a lot longer to hit a reservoir.

So, for whatever planning level we are at, tribes always want to get to watershed approaches. There are often multiple tribes that really haven't had an opportunity to talk, or add, on a watershed approach just like we, as counties and other agencies, haven't had those complete headwaters-to-ocean conversations that tribes are wanting so badly, and that I can see as being very useful.

Discussion with the Audience

Audience member: I want to bring attention to the work of the California Water Foundation. They first worked in Sonoma, and then they did some work with Inland Empire Utilities Agency on assessing the sustainable management of water using a profile tool. Part of that innovative work was to first think about, and measure, the stresses that a region is facing, along with the management responses to those stresses.

I'm wondering if part of our problem in figuring out the right scale, is that we are trying to do two things that are at different scales. Thinking about two water management scale considerations, governance (who's in charge of what and where, and at what scale) and the physical environment (where is the water/where is the land), I'm wondering if there's room going forward for us to think about these two considerations of scale. The State could be powerful at saying, "Here are the physical conditions of the state related to water that the regions would be responsible for, and for responding to."

***Brad Sherwood's response*:** I think that's a good idea. Would anyone else want to weigh in?

***Sherri Norris' response*:** That reminds me of something I wanted to address earlier, and that's inter-regional support for tribes. Tribes are often in multiple IRWM regions. You have the boundaries of a tribal area, and then you have all of the other jurisdictional boundaries, along with the hydrologic boundaries. So, as we go through this, or any other process, we need to think about inter-regional support for tribes.

I know one tribe that's in four IRWM regions. The tribe's environmental director has to navigate through all that. So, for any kind of inter-regional funding or support, tribes would need to be involved in multiple hydrological region conversations, in addition to the IRWM regions within their tribal areas.

***Brad Sherwood's response*:** I concur and as you know, Sonoma County Water Agency, as a water wholesaler, has a huge multi-watershed approach extending from Lake County all the way down to the San Francisco Bay. We've done a lot with the pilot study and are supportive of that kind of method.

***Lynn Rodriguez's response*:** I like the idea and I just wanted to say that I think it's good if the Water Plan can, and maybe it has in the past, reflect those things. You can talk about different things at different scales — it can vary widely. For example, you can talk at the hydrologic scale, or the local level about things like disadvantaged community outreach, or other topics. It's important that information at large scales also be brought down and shared at the local scale. All this really makes a lot of sense because it really isn't one-size-fits-all from one thing to another.

***Sherri Norris' response*:** I'm not sure this quite gets to your issue, but I could see, for example, that at hydrologic region level there are some areas of commonality, and maybe we do capture that in the Water Plan. In the south coast area, the majority of us purchase water from the Metropolitan Water District so you know there could be some areas of commonality, but I still think we need to get down to the community and planning area levels to really dive into the issues.

***Colin Bailey's response*:** Thank you, I was going to say almost exactly that. There's a nun in Catalonia that says that democracy only works at a very small scale. The Environmental Justice Coalition for Water and UC Davis had a convening with small water systems from around the state just last week and this issue came up. Small water systems are, I think, uniquely lost in that disconnect between the scale of the problem and the scale of governance. To echo that comment, we would want to make sure that grassroots processes still scaled up to larger scales because, the more attenuated the representative nature of the discussion becomes, the more likely our constituencies will no longer be there. I think it's important for DWR staff, who often take a very neutral position in their facilitator role, to step up in the absence of particular voices and anchor the interests that might not be well represented.

***Member of the audience*:** Thank you all for that discussion. This is actually a question for DWR. If you classify all the IRWM regions into two buckets with one bucket being county-based IRWM regions and the other as multi-county regions, how have the multi-county systems operated? Have you found the multi-county regions to be as effective, less effective, and more effective than single-county regions? As institutions, we all work within the governance apparatus that that we have. I'm trying to figure out how things work out in the multi-county places.

***Art Hinojosa's (DWR) response*:** It really depends on the county. Using the North Coast IRWM Region as an example, there's a very affluent county (in terms of resources and ability) and then there are others that are not as well off, but they all work together. To be honest, Sonoma County carries a lot of the weight for others in the region, which is very altruistic of them, but they see the value in keeping that group together. In some other places it's, "to each, their own." For the Central Valley, there's still a way to go in many places in terms of getting counties to even participate. So, there really is no simple answer regarding those two buckets, as far as we've seen.

***Lynn Rodriguez's response*:** Speaking as a county-based IRWM region, the advantage to us, besides being contained within the county boundary, is that IRWM has a great connection with land-use planning. The IRWM program I work on is housed in the county chief executive officer's (CEO) office. The county planning department, and all the county agencies, are, to a degree, under the CEO's office. The CEO's office can't dictate their actions, but the CEO's office can influence them.

The planning department is working on the general plan update right now and they are adding a water element, which we will work closely with them on. So, from the standpoint of communication between land-use and water planning (which groundwater sustainability agencies must do), which is so important in urban areas, I think it would be hard if we were linked with other counties.

***Sherri Norris' response*:** In my work I'm sitting at the table with the heads of multiple IRWM regions talking about how this disadvantaged communities program is going to roll out. It will be interesting to see how this could change relationships in a funding region.

***Brad Sherwood's response*:** To add to the multi-county part of the discussion, I think that you perhaps can get more bang for the buck if you have a multi-county regional project. For example, the San Francisco Bay Area IRWM Region, which includes nine bay-area counties, received a $19 million-dollar

grant from DWR to support installing five new storm-tracking radar units. This new radar system not only supports the nine bay-area counties of the IRWM region, it also helps IRWM regions in the Sierras and eastern slope. I think that if we can really think regionally, and about the average taxpayer and how they want to stretch their dollar, you can get more for less. If you have additional multi-county efforts, you can stretch those dollars and get more benefits.

Regarding the radar project, we are leveraging $19 million from the State with many millions from local agencies in those individual counties within the Bay Area IRWM Region. It's a huge investment that's truly an integrated regional project and is the largest one in the Bay Area. I think that speaks volumes when you go to the voters and you ask them to pass another bond for this type of funding. So, I would say we all should strive, as much as we can, to have those multi-county efforts.

Tracy Hemmeter

Lew's going to do a quick wrap-up next, but I just want to say thank you very much to all the panelists and thank you to DWR staff. I wrote down a lot of things during the discussion and one thing I heard was the importance of trust and relationships. I guess it never hurts to be repeatedly reminded about how important trust and relationships are. You really can't do anything if you are not able to sit down at the table with someone and make things meaningful for whoever is participating. Just because it's meaningful to me does not mean it's meaningful to anyone else. So, a question to consider is, how do we really make these efforts meaningful so people want to participate? Then lastly, this of course is another promising of a not one-size-fits-all approach, so that will be a challenge as we move forward. So, maybe it needs to be different sizes, at different places, for different reasons.

Lewis Moeller

A lot of things were touched on today, one of those being the pilot studies that we're moving forward with. The studies are going to inform us a lot on how all this [building the 2023 Water Plan] might work. A lot of the discussion today is for the 2023 Water Plan process, but right now we are dealing with the atlas design.

Please pay attention to the recommendations in the draft Water Plan document [for Update 2018] as these recommendations can influence our path forward on all these concepts. Please give us your feedback, especially on Chapter 3, so we can incorporate it in the 2018 update.

Biographical Summaries

Panel Moderator

Tracy Hemmeter is a senior project manager for the Santa Clara Valley Water District in San Jose. She leads the district's participation in IRWM efforts in the Pajaro River Watershed in the Central Coast Funding Area and in the San Francisco Bay Area. She also co-chairs the IRWM Roundtable of Regions, an ad hoc coalition of regions from across the state. She is also responsible for the district's local and regional water supply planning efforts, including developing and updating the district's water supply and infrastructure master plan, which guides investments in securing long-term water supply reliability, and participating in the Bay Area Regional Reliability program. Tracy has experience working on a variety of groundwater management, water quality, recycled water, and water supply planning projects and programs.

Panel Members (in speaking order)

Lewis Moeller is currently chief of the Water Resources Evaluation Section, Division of Statewide Integrated Water Management at DWR. In this role, Lewis plans, organizes, coordinates, and directs a team of DWR staff for the development of the California Water Plan. Previously, Lewis worked for almost 20 years with the State Water Board in a variety of roles associated with both water rights and water quality. He also served as an adjunct instructor in the science department at American River College for more than 12 years. Lewis received his Bachelor of Science degree in Civil Engineering from California State University, Sacramento, and is a California-licensed professional civil engineer.

Colin Bailey is the Executive Director and Managing Attorney of The Environmental Justice Coalition for Water (EJCW). An accomplished social justice attorney, Colin supports EJCW's statewide policy agenda, local and regional programs, and grassroots member organizations. Building upon California's historic adoption of the Human Right to Water Policy in 2012, EJCW supports the grassroots effort to implement and enforce the mandate for safe, clean, affordable water for all, statewide. Fun factoid: Colin once got a standing ovation in Lima, Peru for his Karaoke rendition of Queen's "Bohemian Rhapsody," for which he single-handedly attempted to sing in three-part harmony.

Dana Friehauf is a Water Resources Manager at the San Diego County Water Authority. She has been with the Water Authority for close to thirty years, working in the fields of water resources and facility planning. Ms. Friehauf manages water supply planning and policy activities for the Water Authority. She is responsible for the preparation and update of the region's long-term water demand forecast and supply planning documents, including the Water Authority's Urban Water Management Plan and Integrated Regional Water Management Plan. She was also involved in creation of the Water Authority's Water Shortage and Drought Response Plan along with its implementation during the last two shortage periods. Prior to joining the Water Authority, Ms. Friehauf worked for the City of Los Angeles Department of Water and Power, and the Goleta Water District in Santa Barbara County. She has a bachelor's degree in civil engineering from San Diego State University and is a registered civil engineer.

Lynn Rodriguez has worked in the field of water resource management since 1981, focused primarily in Ventura and Santa Barbara counties. She has managed the Watersheds Coalition of Ventura County IRWM Program since 2005. She authored the two IRWM plans for the region and she manages the ongoing stakeholder process. Lynn also serves as co-chair of the statewide IRWM Roundtable of Regions and the LA-Ventura Funding Area Disadvantaged Community Involvement Task Force. She has served on numerous local, statewide, and national committees addressing water management issues.

Brad Sherwood has worked in the California water industry for 15 years with both the Association of California Water Agencies and the Sonoma County Water Agency. As the community and government affairs manager at the water agency, Brad coordinates multi-faceted and innovative federal and State legislative programs. Brad represents the water agency at legislative hearings and serves as the media spokesperson. Working directly with the water agency's board of directors and general manager, Brad coordinates high-level relationships that represent special project and innovation initiatives. Brad is actively representing the water agency throughout the Bay Area through the San Francisco Bay Area Integrated Regional Water Management Program, Bay Area Water Agencies Coalition, North Bay Watershed Association, and North Bay Water Reuse Authority.

Other regional collaborations that Brad is involved in include his upcoming position as chair of the ACWA Region One Board of Directors. Brad has a master's degree in political management from the George Washington University in Washington, D.C., and a bachelor's degree in government/journalism from California State University, Sacramento. Brad is a fifth generation Californian, born and raised in Elk Grove.

He currently residents in Santa Rosa with his wife and two small children. Brad remains active in his community by coaching soccer, baseball, and volunteering at the local school.

Sherri Norris is the executive director of the California Indian Environmental Alliance (CIEA) — a California Indian environmental health organization that provides California tribes, tribal members, and health care providers with training and decision-making tools to avoid toxins including mercury, PCBs, and more recently, cyanobacteria in fish. CIEA's Tribal Self-Advocacy Program promotes increased water quality in partnership with California tribes for the advancement of safe subsistence food security. As part of this program, Sherri is the lead tribal engagement coordinator for the North Coast; Upper Feather River; Bay Area; and Cosumnes, American, Bear, Yuba (CABY) IRWM Regions. She has served in an advisory capacity in the creation of regional fish consumption advisories, educational outreach programs, total maximum daily loads, and IRWM program development, and she has recently joined the Tribal Advisory Committee for Water Plan Update 2018. Sherri is a member of the Sierra Fund's blue-ribbon panel of mercury experts and is a recipient of the Sierra Crest Award and the Mills College Brave Hearted Women Award. Sherri will work with the PMT and subcommittee under Task 1 to develop a tribal steering committee which will be tasked with developing a tribal outreach strategy.

Set Up Presentation

Mike Floyd's 38-year career in water resources includes positions with DWR's Statewide Water Resources Planning Team, Integrated Regional Water Management Program, Suisun Marsh Program, Delta Levees Special Flood Control Projects Program, and Water Quality Evaluations Program. He also served as DWR's staff groundwater hydrology specialist and well standards specialist. Mike also held positions with the State Water Resource Control Board's Division of Water Rights and Division of Water Quality, preceded by a position with the Central Valley Regional Water Quality Control Board.

Prior to working for the State, Mike was a project manager and hydrologist at two nationally-based consulting firms, preceded by employment with the University of Arizona, Department of Hydrology and Water Resources conducting research for the development and evaluation of groundwater models. Mike worked for a geotechnical engineering firm in Santa Barbara, California as a teenager. Mike is a California Registered Professional Engineer and has served as a planning commissioner for the City of Dixon, California, and as a member of the city's Wastewater Advisory Committee. Mike enjoys time off with his family and is obsessed with motorcycles.

Session 1.3

Enhancing the Connection between IRWM and SGMA

California Water Plan Update 2018

Second Plenary Meeting

September 27, 2017

McClellan Conference Center, Sacramento

Panel Session Interpretive Transcript[8]

Enhancing the Connection between IRWM and SGMA

California Water Plan Update 2018

Second Plenary Meeting
September 27, 2017
McClellan Conference Center, Sacramento

Description: Panelists explored varying experiences and thoughts about the relationship between integrated regional water management (IRWM) and implementation of the Sustainable Groundwater Management Act (SGMA).

Moderator: David Orth, Member, California Water Commission and Principal, New Current Water and Land, LLC.

Panelists:

Lance Eckhart — Director, Basin Management and Resource Planning, Mojave Water Agency.
Courtney Howard — Division Manager, Water Resources, San Luis Obispo County.
John Ricker — Water Resources Program Coordinator, Santa Cruz County.
Eric Osterling — Manager, Water Resources, Kings River Conservation District.
John Woodling — Executive Director, Regional Water Authority.

David Orth — Opening Remarks

I [David] have extensive experience in creating and managing a successful IRWM plan in the King's River Basin. On behalf of the Association of California Water Agencies, I participated in the negotiation process with legislators and State policy staff to draft SGMA.

Background points:

> Integrated [regional] water management became part of the California legislative process through SB 1672 in 2002 (the IRWM Planning Act). Since then, we've seen a significant level of effort to integrate water management in many areas of the state.
>
> Mark Cowan, former director of the California Department of Water Resources, repeatedly stated that integrated planning is the foundation/framework of California water policy.
>
> The 2014 Sustainable Groundwater Management Act set up some requirements for the management of groundwater in prioritized groundwater basins.

[8] This "interpretive transcript" of the subject panel session is not a verbatim record. Changes were made between the panel session recording and this written record for the sake of readability and understanding. Careful consideration was given to preserving the original content and meaning of each speaker's contribution. The panel session recording is available at: https://www.youtube.com/watch?v=a-38kp5bsEs.

Under SGMA, about 80 percent of California's groundwater use is subject to a sustainable use objective by 2040 or 2042, depending on whether a groundwater basin is critically overdrafted or not.

Both the IRWM Planning Act and SGMA were founded on a fundamental State policy that the management of water is best accomplished at the local or regional level.

SGMA makes some connections with planning, but more with general land-use planning processes. It directs groundwater sustainability agencies to present their plans to land use agencies, and vice-versa. This provides some level of coordination and consistency between groundwater and land use, but it's a pretty soft connection.

SGMA is pretty quiet about IRWM, and it is up to others to decide if that was an oversight, a missed opportunity, or if it was intentional.

It was very important to the drafters of SGMA to allow local groundwater management agencies to form around whatever level of governance and governance structure that would allow them to achieve sustainable groundwater management.

As the general manager of the Kings River Conservation District participating in SGMA discussions, I thought all the way through that the Kings Basin Water Authority was going to be the groundwater sustainability agency (GSA) for the Kings Basin. We spent ten plus years building IRWM and I thought SGMA implementation will just naturally morph into IRWM. It turned out to be that just the opposite happened. GSA formation in the Kings Basin went back to kind of standard, business-as-usual water agencies going back and trying to figure out how they can manage their resources. I suggest that this occurred because we had two different drivers and two different starting points between IRWM and SGMA implementation. Integrated [regional] water management is all about a vision, and in the Kings River Basin it was all about prioritizing project needs and collectively pursuing funds. On the other hand, SGMA implementation is all about allocating and using a limited restricted resource in a way that creates competition within a groundwater basin/subbasin. It is those differences between IRWM and SGMA that create some challenges.

Mike Floyd (DWR) — Set Up Presentation[9]

The report titled *Stakeholder Perspectives — Recommendations for Sustaining and Strengthening Integrated Regional Water Management* was developed over a three-year period and is based on broad stakeholder engagement across the state. Stakeholder input included thoughts and recommendations related to groundwater.

The stakeholder perspectives document identifies four key strategies for sustaining and strengthening IRWM:

- Improve alignment.
- Strengthen practices.
- Improve services.
- Communicate values.

A total of about 70 actions are listed under these strategies. Recommendations relating to groundwater can be found in various parts of the document.

The Sustainable Groundwater Management Act was passed in 2014 while the stakeholder perspectives document development process was underway. SGMA was passed in response to the conclusion that groundwater was not being managed as well as it should have been in certain areas of the state.

Stakeholders stated that groundwater is a very important part of IRWM, but now that SGMA is here, IRWM provides an opportunity for SGMA implementation. Integrated regional water management principles and practices have all kinds of different benefits, bring a lot of people to the table, and offer many solutions.

The regional sustainability summit [sponsored by DWR and the Water Education Foundation] in April of this year [2017] brought people together across California to talk about building capacity for regional sustainability. Some key points as background for this panel discussion are that the summit discussions affirmed the importance of SGMA, reinforced the broader role of IRWM, and identified the need to enhance the connection between IRWM and SGMA.

David Orth — Guidance for the Panelists

This panel discussion is about how to enhance the connection between two similar, overlapping, and different starting point programs [IRWM and SGMA].

DWR is asking the panel to address:

> How does IRWM contribute — what are the values that IRWM brings to groundwater management?
>
> What insights and experiences do you have about how SGMA affected integrated planning (or not) in your IRWM regions?

9 Note: The slides used for this presentation can be viewed at: http://www.water.ca.gov/waterplan/docs/cwpu2018/plenary/sep2017/presentations/03_Update2018_Plenary_Sept2017_IRWM_SGMA_Session.pdf.

What are your thoughts and opinions as to opportunities and challenges for enhancing the connection between SGMA and IRWM, and how can DWR be helpful in that?

Lance Eckhart

I am speaking as a project manager for a local integrated plan that also sits primarily in an adjudicated basin.

The groundwater basin adjudication that's in my area started about 20 years ago.

The situation in my area in a way represents a fast-forward of SGMA, which is like the adjudication of groundwater basins. So, I'm speaking about how integrated planning has affected this particular adjudication over the last two decades. I'm basically summarizing the last 20 years in the next five minutes. Hopefully you'll glean a few lessons learned, at least from my area.

What you're going to learn with SGMA is you're going to have to start measuring your basin and reporting it out on an annual basis. You are going to learn that you're probably not managing your basin as well as you would hope. You may even discover that you are mismanaging parts of your basin. As you put your water budgets together, you are going to realize that a lot of your resource managers are siloed around your region. Managers will see items on the water balance portfolio that they really never thought of like:

- Where does the shower water go? If you are a groundwater person, perhaps you don't care.
- Where does our water come from? If you are a wastewater person you might not care.
- Does any water come in from the neighboring basin? You might not really be sure about that.
- What happens with all the septic tanks in non-sewered areas? You might not know.
- Is agriculture so efficient that there's no return flow, or is there return flow from crops? You might not be sure.
- You realize that you're in a small basin and it is a closed system. Are there environmental demands? You're not sure about that.

You're going to see a lot of things on your water ledger that are all water, but you are only familiar with a few of those things. Once you realize that you are actually trying to manage a system (and not just one facet of a resource) you'll realize that your water budget, whether you like it or not, or whether you understand it or not, is integrated.

We realized pretty early on in our [groundwater basin] adjudication that you cannot manage what you do not understand. However, the lack of understanding doesn't stop people from fighting. What we learned was to invest in ourselves — you either pay now or you pay later. Scientists and attorneys are expensive. If you don't want to pay for scientists now, you are going to pay for attorneys later. Then, a few years later, after you are done fighting, the judge is going to tell you to go pay for the science.

With respect to integrated planning, we got to a point where we actually started to invest in ourselves, invest in science, and actually understand how our complicated water resource system, with its many ins and outs, works. The system is not just about a groundwater agency, water import agency, or wastewater agency, etc. We also learned that integrated planning was a vehicle for us to come together and really understand all the components of the system and how they work together.

We have a water master report for our basin that we have to submit to a judge every year. There are some similarities between this and what sustainable groundwater agencies are required to do.

The integrated planning process is wholly different than putting together a sterile accounting exercise, slapping a cover on it, and sending it to a judge or regulator that's going to tell you how to manage your basin. You do need an integrated approach to deal with the many facets of operating a natural resource system. Just complying with SGMA, or waiting for, or receiving a judge's direction, really won't do that for you.

We really wanted to embrace a holistic approach that involved all the stakeholders. We first laid out all of our common understandings/objectives — just simple things like:

- Subsidence is bad.
- Don't kill the environment.
- Don't use up all the water.
- Protect water quality.

IRWM helps break us out of our individual silos.

SGMA, or at least our adjudication, isn't a great vehicle to have those conversations. The integrated planning process operates as a safe place, a think tank and as is a place to have conversations — it is very different from an accounting exercise. The conversations we have under IRWM are often candid and there's a lot of trust building. Those conversations helped us see connections that weren't obvious before. Ultimately you hope to get down to creative solutions.

A couple of examples of how the integrated water planning process worked for us:

- The Mojave River was inundated with salt cedar/tamarisk, an invasive species. Whose problem was that? Was it Fish and Wildlife's, the resource conservation districts', cities', state water contractors', water masters'? No one was quite sure. The salt cedar problem was very unfortunate in that it was choking one of the last remaining bits of southwestern riparian habitat. The tamarisk was using thousands of acre feet of water.
- Through the integrated process we banded together, found partners, and developed a business case for dealing with the issue rather than point fingers at each other based on jurisdictions. By banding together, we dealt with this invasive species problem and essentially created thousands of acre-feet of new water.
- Another example involves flood control. By bringing flood control and groundwater recharge agencies together and using a combined flood detention and groundwater recharge basin, taxpayer's money was saved.

I have many more examples of the benefits of the integrated water management process.

These types of ideas and benefits didn't come out of our adjudication and my concern is that it's going to be tough to bring them out of the SGMA process.

Courtney Howard

Our IRWM region is county-based. Depending on how you set up your IRWM region, it can have pros and cons in relation to how SGMA activities can be integrated with IRWM.

Things worked out pretty well for us. We are one of those counties that also has a flood control and a water conservation district with the same coterminous boundary, and with the same five board members for each agency. In our county, the flood control agency keeps track of conditions and implements regional projects. The County has the land use authority and looks at resource management through ordinances. We have a countywide water resources advisory committee that brings together all of the water purveyors and at-large environmental, agricultural, and development interests, so it was kind of a natural fit when IRWM came along. We basically kept going with what we were already doing and developed our IRWM plan in accordance with State standards.

In our county, we have a total of 23 groundwater basins, six of which are subject to SGMA. We see the opportunity with SGMA and the formation of groundwater sustainability agencies. We now have governance structures that can then help look at things at the groundwater basin/watershed scale and then come up with sustainability goals and solutions that can be rolled up to the county level in support of IRWM.

One of the big values that IRWM brings to groundwater management is a collaborative framework for managing water resources. As each of our six basins subject to SGMA evaluate not only demand management, but supply enhancement opportunities, they will be looking to the regional supplies that the county has available. We'll need that IRWM forum to bring everyone together to look at what the needs are in each of those six basins and how they hope to leverage what regional water supplies are available. We are going to have a kind of natural internal competition for whatever water is available, but it might provide an opportunity to think outside the box in terms of exchange opportunities. Such opportunities could include supply enhancements for the coastal basins that would free up new supplies for inland basins that don't have the same access to supply enhancements that the coastal basins do.

The institutional structure that was set up under IRWM can help bring the groundwater sustainability agencies to the table and allow what they do at the sub-regional scale to be rolled up to the regional scale. This information could then be used inform the California Water Plan too someday.

As far as how SGMA affected IRWM, in our county we were trying to do things at a regional scale but we didn't have the institutional structures at the groundwater basin scale to implement solutions. Now that we have some groundwater sustainability agencies, we have governance with authority to implement solutions.

I think SGMA is going to be helpful to our IRWM program but, unfortunately, we only have the resources to do robust analyses for the six high- and medium-priority basins out of the 23 [basins in our region]. So, while groundwater sustainability plans and their water balances and solutions will help inform the IRWM plan for the region, we have to fill in the gap with water balances for the remainder of the county. That's a little bit of a challenge but we are trying to leverage the frameworks set up under SGMA to develop water balances and solutions for the remaining groundwater basins in San Luis Obispo County. By doing this, we will have a picture of current and future conditions, what sustainability looks like, and what solutions we need to implement.

One big challenge moving forward in my area is timing. We have a lot of concurrent analysis activities going on. The priority for resources will be the six basins subject to SGMA. We'll need to coordinate the

timing of all the documents to come out, as well as the messaging about what the conditions and solutions are. With time, we may have to improve analyses and solutions for the six basins and then address the remaining basins later.

If we can have common data sets, common projections, and common methodologies, I think that would really go a long way in helping reduce inconsistent messages and data sources that can be confusing to the public, and to managers. We are trying to focus on efficiency — if we're all working in silos and are not aware of what each of us is doing, that will prevent sharing and lead to other inefficiencies.

So, in summary, to enhance the connection between IRWM and SGMA, we need to work in partnership and line up the timing, data availability, and analysis methodologies between efforts. By doing this, we will be efficient and will develop common understanding and messaging.

John Ricker

The Santa Cruz IRWM region includes most of Santa Cruz County and it follows watershed boundaries. Our region includes four large watersheds and some smaller coastal watersheds. We have two groundwater basins subject to SGMA.

For us, IRWM and SGMA complement each other. SGMA provides tools to implement IRWM and in turn, IRWM provides tools to implement SGMA.

We are a small IRWM region and do not have any single large water agency. Within our IRWM region we have county government, three cities, four urban water suppliers, a resource conservation district, and a couple of sanitation agencies. All of these entities are signatories to the memorandum of agreement for our IRWM region. We essentially have all of the public agencies that deal with water in our region on board with IRWM.

All of our water is local — it's a mix of surface water and groundwater. Our surface water comes primarily from stream diversions so we're very dependent on streamflow and very impacted by droughts. Our surface water supply is also impacted by the need to reduce diversions and leave more water for Steelhead Trout and Coho Salmon.

Our groundwater basins are overdrafted. We have depressed groundwater levels, sea water intrusion (in the coastal basins), and depleted stream flows as the result of the overdraft.

We have been well aware of the issues with our groundwater and surface water supplies since about the 90s. We started to work together in the late 90s to address them. The IRWM program really helped to push us together to develop an IRWM plan, and secure Proposition 50 funding. We have continued to work together since then.

We managed to connect all the different water agencies with emergency interties. Those agencies are now talking about using those interties for conjunctive management of groundwater and surface water. We would use our excess winter surface water, treat it, and then recharge the groundwater basins through direct recharge or in-lieu recharge. This will help restore the groundwater basins and provide storage for drought [back-up] supplies for the surface water agencies.

IRWM really has worked well for us but it has taken a little while. The water supply agencies in our region were talking a good line but did not really want to work that closely together, until recent years. Now we're really working on joint projects and moving ahead with things that will benefit multiple

agencies, and potentially the entire region. The sanitation agencies were some of the last to come on board but now they are talking about the potential for recycled water and purified recycled water use. The sanitation agencies are much more engaged in the IRWM process now.

Through the IRWM program, we are looking at managed aquifer recharge as a tool, both to deal with stormwater, and to augment our groundwater supplies. Of course, anytime we bring our groundwater levels back up we are putting more water into our streams for summer base flow which supports riparian habitat and steelhead habitat. So, we're really seeing a lot of these things as win-win situations that provide multiple benefits throughout the region and pretty much for all of our agencies.

As far as the challenges we've had, it's been pretty smooth. We've been doing watershed management at the county level since the 70s, so we do have a pretty long history of that and engaging with our stakeholders. We seem to get a new batch of private citizens to work with almost every five years and have to start all over again with the education process. We have also had a new batch of citizens become involved along with the advent of SGMA.

Our groundwater sustainability agencies are joint powers authorities with multiple agencies in each GSA. We also bring in some of the other stakeholder agencies and private well owners as representatives on our agency boards. We are trying to reach out and engage with everybody in those particular basins and that's been a pretty successful effort. Obviously, State funding and technical assistance have helped us out.

We really appreciate the approach of SGMA in terms of laying out the framework but letting us define how we do it, as opposed to the State stormwater program. The State's stormwater program is very prescriptive and directs us to spend limited local resources and local funding on things that may, or may not, have much long-term impact. On the other hand, so far, SGMA looks like it's providing a good model for us to move ahead and address our issues.

Eric Osterling

In general, the Kings Basin IRWM Region, and the Tulare Lake Hydrologic Region, have significant groundwater level decline issues.

Our IRWM group has fallen apart to a certain degree, but not entirely. We still are doing some really good things. My agency, the Kings River Conservation District, covers primarily two groundwater subbasins — the Kings Subbasin (approximately a million acres in area) and the Tulare Lake Subbasin (about 525,000 acres in area). This large area is highly dependent on groundwater.

The claim that there's a direct nexus and fit between IRWM and SGMA is probably most strongly made, I think, for areas like the south-Central Valley. We also think that there are some things that are unique to IRWM, and outside of the scope of SGMA, that are beneficial. That is why we continue to promote and apply IRWM in the south-Central Valley.

Of the two groundwater subbasins in our region, the Kings Subbasin, has a long history of integrated planning beginning in 2001. We have been actively meeting over time and have significantly expanded the Kings Subbasin stakeholder group to 54 members and interested parties spanning the spectrum of interest groups.

We have developed very strong relationships in our IRWM group over time. I was talking with a colleague of mine in the audience earlier today and we joked that we probably wouldn't be sitting next to each other now if it hadn't been for IRWM.

I think the foundation that IRWM created for SGMA, at least in the Kings Subbasin, is very important. I think it catapulted a lot of the efforts required under SGMA, particularly stakeholder outreach and identifying needs for the development of sustainable groundwater management plans.

As I mentioned previously, the Kings Subbasin is highly dependent on groundwater, so a subbasin hydrologic model was developed as an initial step to support IRWM planning. This model was developed before the Central Valley DWR and USGS models were developed. We developed our hydrologic model to better understand our overdraft issues. Understanding the overdraft condition continues to be a priority for us as it is for many of the subbasins in the south San Joaquin Valley. That modeling work under IRWM is allowing us to quickly address some of the efforts required by SGMA in a very short timeframe.

We are also very lucky for all those relationships developed under IRWM without there being a whole lot of pressure at the time. Now that we're up against a statutory deadline to get groundwater sustainability plans done, we need to work quickly to develop additional relationships with stakeholders who maybe we missed in the IRWM process. We need to understand what these stakeholders' needs and concerns are. This won't be as heavy of a lift as it would have been without the efforts under IRWM.

IRWM spawned a number of other coordination efforts that I think are very valuable. One of them is called the Central Valley Groundwater Monitoring Collaborative. This collaborative consists of various entities, mainly regulatory ones, such as the irrigated lands, dairy, and oil fields regulatory programs, and others. Everyone is working together to develop smart monitoring networks and to not duplicate efforts and waste money and effort. Under IRWM I think we've been very successful with disadvantaged communities. The Tulare Lake Hydrologic Region was the recipient of a $2 million-dollar grant through Proposition 84 to do a disadvantaged community needs assessment. The Kings Basin and other IRWM planning groups also received similar grants. The information and relationships that were developed through these IRWM grants are invaluable to the development of the groundwater sustainability plans.

I am fully supportive of the bottom-up approach discussed during the previous panel session [*Building the Next Update (2023) of the Water Plan from the Local/Regional Level Up*]. One thing I am cautious about in supporting any approach is to keep in mind that what might be good for some, may be detrimental to others. An example of this, something that was kind of a waste of time and resources for us, was SB 985. There's been a lot of discussion about storm water capture and recycled water in the coastal areas of the state. As a closed system, we've been capturing and making use of storm water and recycling water in the Central Valley for a very long time. There are cooperative arrangements between cities and agricultural interests to use recycled water for irrigation in lieu of groundwater and there are agreements between water and flood agencies, cities, and farmers to capture storm water. Now, because of mandates like SB 985, we are required to develop a stormwater resources plan to describe the things that we've already been doing and that are, in large part, already described in our IRWM plan and other plans.

Another cautionary point is on integration. There's a degree to which you can safely integrate. You don't want to completely erode individual processes. I've heard DWR staff say many times that IRWM plans are intended to be "plans of plans." I'm concerned that there potentially is an effort to move towards full integration where basically an IRWM plan is top-down to facilitate what goes on with SGMA. I think that might work for some areas, but not for others. Our area is highly dependent on groundwater and our IRWM plan describes that, and our IRWM implementation efforts illustrate that. Bear in mind as you look at IRWM regions throughout the state there are some regions that have very little, if any, areas subject to SGMA. You don't want to boilerplate something and then cause an adverse impact because of being overly prescriptive, such as with SB 985.

John Woodling

For about the past nine and a half years, I've been managing two regional joint powers agencies in the Sacramento region, one of which is the Regional Water Authority.

Among other things, the Regional Water Authority houses the integrated regional water management group. The other regional joint powers agency, the Sacramento Groundwater Authority, has become the groundwater sustainability agency for our region.

For about the same amount of time that I've been managing these two regional authorities, I previously worked for DWR, including at the beginning of the State's IRWM program. When the IRWM Program started I, as a manager, had to figure out what integrated regional water management meant, how to develop it, and how to use grant funds to make some things happen. I also managed DWR's groundwater programs at the same time.

SGMA isn't just about groundwater, it is really about integrated water management through a groundwater lens. When you start doing your SGMA water budget, and you've only been a groundwater manager, you're going to realize that there's now a bunch more things to think about, but that's a good thing. Developing a hydrologic budget provides opportunities, especially in those areas where you have a scarce resource. Any drop of water you can generate through management of the whole water resource system, such as through an offset to groundwater use, or through groundwater recharge operations, is something that someone doesn't have to give up.

To the extent IRWM groups are devolving into everybody backing into their corners and fighting over that "small pie" they have left, that's when you know the scarcity model [of everyone-for-themselves] is probably not the most productive. Ultimately, I think everyone that's doing that will realize it's a problem and will come back together at some point.

IRWM and SGMA are two different institutional frameworks around the same issue. I think the better you can coordinate the strengths and weaknesses of each framework, the better you're going to be at solving your problems.

SGMA clearly identifies some objectives related to groundwater. If you are an IRWM region that overlies a medium- or high-priority basin, and you didn't have objectives related to groundwater management before, you were probably missing the boat. Under SGMA, groundwater management objectives are clearly defined and there's also responsibility for them. In theory, groundwater overdraft, subsidence, sea water intrusion, and other groundwater mismanagement problems can't be subsidized by pushing off negative impacts on to somebody else anymore.

SGMA creates clear objectives and the authorities to deal with them. The intent of the SGMA legislation was to create tools for solving problems. SGMA also creates the opportunity to fund some aspects of groundwater management. That's important and it's something that IRWM hasn't necessarily had in a lot of places. In some areas of the state, IRWM has been somewhat dependent on State funding to keep it alive.

On the IRWM side, it brings a culture of inclusiveness, stakeholder involvement, collaboration, and some innovation that maybe groundwater management hasn't fully had in the past. To the extent we marry IRWM and SGMA and align all the objectives around management of the whole water resource, there's a lot of opportunity to accomplish a lot of things.

There are those who have said that the key to IRWM and making it sustainable is giving it some legislative authority. I disagree with that because IRWM regions have been free to develop however they want to in their region and that's been very beneficial. I think mandating their role would ruin a lot about what is good about IRWM. I think the match between IRWM and SGMA could be one made in heaven. SGMA has its clear and strict groundwater sustainability agency authority and funding mechanisms and IRWM has its collaborative entrepreneurial groups that bring people together to solve problems.

For the American Basin, the relationship between IRWM and SGMA really isn't a big new issue we need to face. We were already managing groundwater in coordination with IRWM.

In the early 1990s the American Basin was experiencing a number of problems:

- Growing population and economy and the need to divert more surface water in the future to serve those demands.
- Declining groundwater levels, on average two feet per year with a cumulative overdraft of about 80 feet since World War II.
- Major groundwater contamination plumes. Here at McClellan, we are sitting atop a plume right now. Another major plume exists south of the American River at Aerojet.
- Major legal battles over surface water diversions. We needed more water but were sued by environmental groups every time we tried to divert more water. The County of Sacramento was suing East Bay Municipal Utilities District not to divert water from the Central Valley Project.
- Threatened Steelhead in the lower American River that had to be protected.

We needed to come together around how we were going to solve these problems. The powers at the time, largely city and county officials, created the Sacramento Water Forum. The forum brought together business representatives, local environmental representatives, water suppliers, and municipalities. Some of the municipalities are water suppliers, but they also served as representatives of the constituent public.

In the beginning, some of the people helping facilitate the Sacramento Water Forum discussions said that it would take a lot of hard work and about 18 months for the forum to work out a deal for managing regional water resources. It took seven years to reach an agreement that all parties signed onto. That agreement is the precursor to the American Basin IRWM plan.

We began IRWM in 1998/99. When State funding for IRWM came along it was a good thing for us, we were already in motion. We began groundwater management as a part of the Water Forum Agreement in 1998. So, in complying with the new groundwater law, we are not faced with major new pressures, including having no idea how to come together to comply with SGMA.

David Orth

That was a really good discussion. I think we could sit here another hour and have a deeper dive into this conversation.

We have a few minutes for audience questions.

***Member of the audience*:** Thank you to the panel for a very insightful and well-stated discussion. I learned a lot.

Do you panel members think the requirements for groundwater sustainability plans in your areas may change the way groundwater sustainability agencies are organized by encouraging consolidation, or even splitting in different ways?

***John Ricker's response*:** Our GSAs already conform to our groundwater basin boundaries, so I think they're going to be pretty stable.

***Courtney Howard's response*:** We do have cases where we have multiple groundwater sustainability agencies overlying one basin. In developing agreements between those agencies to develop one plan for the basin, we recognize that there's going to be another decision point on how to implement the plan once it is developed. We could end up forming a joint powers authority for implementation efforts. It could turn out instead that there will be an agreement between agencies and the county to divide up the implementation tasks. When we develop agreements for developing one plan for a basin we need to revisit the governance structure later.

***Eric Osterling's response*:** The Kings Subbasin had an IRWM group to begin with and then, as the result of SGMA, the group fragmented back to the boundaries of their coordinated SB 1938 plans (groundwater management plans). Even without an IRWM process for the Tulare Lake Subbasin to the south, the multiple groundwater sustainability agencies in that subbasin are going the direction of developing a single groundwater sustainability plan for the subbasin.

The scope of work for the development of a single groundwater management plan for the Tulare Lake Subbasin is to proceed as far as possible in reaching the goal of a single plan that all the subbasin agencies can adopt. They've provided some "off ramps" for their effort in case they encounter any insurmountable obstacles in attempting to develop a single plan.

Just the opposite is happening in the Kings Subbasin. The various groundwater sustainability agencies are going to develop individual plans in a coordinated fashion. They may get to the point where they decide to bring all the separate plans together into one plan. The agencies may also consolidate at some point, possibly just because of possible economies of scale.

Regarding groundwater sustainability agencies, there are some small agencies that I wonder how they are going to make it, not just from a concern about geographic scale, but also due to resource considerations (water and finances). My personal opinion is that there will be some consolidation in our area, how much, I'm not sure. Any consolidation will probably occur over a pretty lengthy period of time.

Colin Bailey, Environmental Justice Coalition for Water

Regarding the intersection between IRWM, SGMA, and disadvantaged communities, our perspective it is in some ways it felt like that, just as disadvantaged communities were starting to get a foothold in IRWM efforts through the involvement program, the emphasis now has shifted tremendously towards SGMA. SGMA efforts have been a lot less open than IRWM.

Some of the panel members, including Eric Osterling, spoke to some of the synergies that are there between IRWM and SGMA. In speaking with Ara Azhderian with the San Luis Delta Mendota Water Authority, they are putting out a holistic disadvantaged community outreach plan solicitation for SGMA. There's a current solicitation open to support GSP formation.

What are your plans to dovetail the gains you have made with disadvantaged communities under IRWM with SGMA (including the involvement program, needs assessments, outreach, etc.) for this upcoming grant round?

***John Woodling's response*:** Being in largely the urbanized portion of northern Sacramento County, we don't have standalone or isolated disadvantaged communities. We certainly have economically disadvantaged parts of water agency service areas, but they are already served by water systems, so we don't have to address the needs of those areas quite as directly. I think the IRWM disadvantaged community involvement grant funds need to address the issue of economically disadvantaged areas like [the ones] we have.

If we are going connect IRWM and SGMA we need to leverage advances made with disadvantaged communities under IRWM with SGMA.

***Colin Bailey's added comment*:** I would add private well owners to that group too.

***Lance Eckhart's response*:** Even though my region doesn't have to deal with SGMA, we are under a groundwater basin adjudication which can be considered an analog to SGMA. We've gone through a couple of IRWM planning rounds. In our 2005 plan, disadvantaged communities were not on our radar screen. In our 2014 update, disadvantaged communities were one of our highest priorities. Through the various IRWM grant rounds we've done a lot of things for disadvantaged communities in our region. Conversely, disadvantaged communities are not even part of the conversation with our adjudication. Again, our groundwater adjudication is an accounting exercise that we turn over to a judge to make sure that the basin is sustainable. Disadvantaged communities are not part of that conversation.

All this illustrates the contrast between what is to be accomplished through groundwater basin adjudication/SGMA as opposed to bigger picture, more holistic objectives under IRWM. Disadvantaged communities didn't have as much of a voice ten years ago as they now have under IRWM.

David Orth — Panel Session Summary

My quick take-aways for this session are:

- We heard consistently that the local management approach works and is preferred — several of the panelists made that comment.
- IRWM clearly set up a foundation for collaboration. Those regions that had good IRWM efforts also established good relationships and trust which translated into good data and groundwater sustainability actions.
- I am really surprised to hear that SGMA really didn't derail integrated planning processes in the panelists' regions. SGMA is viewed as giving GSAs tools that can help integrated planning, and integrated planning provides tools that can help SGMA.
- There is a need for continued technical assistance support as groundwater sustainability plans emerge to ensure consistency between IRWM and SGMA.

Biographical Summaries

Panel Moderator

David Orth, of Clovis, is principal of New Current Water and Land, LLC, which offers strategic planning, program implementation, and water resource development services. Mr. Orth is a member of the California Water Commission, appointed by Governor Brown in 2014. He served as general manager of the Kings River Conservation District from 2002 until August 2015, and as executive officer of Friant North Authority from August 2015 until December 2016. Mr. Orth has more than 35 years of financial and water resource management experience, serving previously as vice president of resource management at California Valley Land Company, the director of finance and general manager positions at Westlands Water District, and various positions with the Fresno County Auditor-Controller/Treasurer.

Panel Members

Lance Eckhart is the director of basin management and resource planning for the Mojave Water Agency (State Water Contractor) and has been with the agency since 2001. Lance has worked in the public and private sectors during his approximate 20 years of experience in water resources management. Prior to his employment atMojave Water Agency (MWA), Lance worked for a variety of consulting firms focusing on groundwater remediation and assessment. His responsibilities include leading a team of scientists, engineers, data analysts, technicians, and planners to manage the water resources for the approximately 5,000 square mile Mojave Water Agency service area. Recent major work consists of directing the agency's urban water management plan, the integrated regional water management plan, salt and nutrient management plan, groundwater management plans, basin conceptual models, and direct input regarding water policies for the region. Lance received his Bachelor of Science degree in in geology, and a Master of Science degree in environmental science from California State University, Fullerton. He is a licensed professional geologist and certified hydrogeologist in the State of California.

Courtney Howard is a registered civil engineer serving as the Water Resources Division manager for the County of San Luis Obispo Public Works Department. She received a bachelor's degree in environmental engineering from California Polytechnic State University, San Luis Obispo, in 2000. In 2001, after operating and maintaining groundwater treatment systems in the Bay Area, she transitioned to regional water resource management for the county, developing local and county-wide water plans and groundwater management studies, and serving as secretary for the county's Water Resources Advisory Committee. She is currently a member of the State's Sustainable Groundwater Management Act Practitioner Advisory Panel.

John Ricker is the Water Resources Division director for the Santa Cruz County Health Services Agency-Environmental Health Division and is a director with the Santa Cruz County Resource Conservation District. He is also on the steering committee for the Santa Cruz Integrated Regional Water Management Program and is a lead staff member for Sustainable Groundwater Management Water Plan Update efforts for two basins in Santa Cruz County. John has worked for Santa Cruz County in watershed planning, water quality protection, and water resources management since 1974. He serves on various State and regional advisory groups dealing with beach water quality, groundwater management, stormwater management, onsite sewage disposal systems, water supply planning, and watershed

protection. John holds a degree from the University of California, Santa Cruz, in environmental studies and biology.

Eric C. Osterling is the water resources manager of the Kings River Conservation District. He serves as program manager/administrator for several collaborative planning efforts within the district, including the South Fork Kings Groundwater Sustainability Agency, North Fork Kings Groundwater Sustainability Agency, and Kings Basin Water Authority. He is a member of the Kings County Water Commission.

John Woodling is executive director of the Regional Water Authority, a coalition of more than two dozen water purveyors and associated agencies in the greater Sacramento region. He also heads the Sacramento Groundwater Authority, a joint powers agency managing the groundwater basin in Sacramento County north of the American River. With over 30 years in water resources management, John has provided innovative leadership at local, State, and federal levels. John previously served at DWR, managing groundwater programs and directing development of the State's Integrated Regional Water Management Program. John holds a bachelor's degree in geology from Whittier College and a master's degree in hydrogeology from the University of California, Davis. He is licensed as a professional geologist and a certified engineering geologist and hydrogeologist in California.

Priorities for Sustaining, Broadening, and Strengthening Regional Water Management

California Water Plan Update 2018

Third Plenary Meeting

Civic Center Galleria, West Sacramento

October 10, 2018

Panel Session Interpretive Transcript[10]

Priorities for Sustaining, Broadening, and Strengthening Regional Water Management

California Water Plan Update 2018

Third Plenary Meeting
Civic Center Galleria, West Sacramento
October 10, 2018

Description: During this first panel session of Day 2 of the plenary, panelists shared their experiences with integrated regional water management (IRWM) and discussed priorities for sustaining, broadening, and strengthening the practice.

Opening Speaker: Kris Tjernell, Deputy Director of Integrated Watershed Management, California Department of Water Resources (DWR).

Moderator[11]: Lynn Rodriguez, Watersheds Coalition of Ventura County and Co-Chair of the IRWM Roundtable of Regions.

Panelists:

Mike Antos — Santa Ana Water Project Authority.
Karen Gaffney — CEO West Coast Watershed & Staff to the North Coast Resource Partnership.
Holly Alpert — Inyo-Mono IRWM Region.
Brandi Brown — North Coast Resource Partnership Tribal Policy Review Panel.
Cathy Pieroni — City of San Diego.

[00:16:45] Kris Tjernell — Opening Remarks

Based on my experience at the Resources Agency, and now at the Department of Water Resources, it's really time for us to move beyond just talking about the value of integration. Whether it's planning or project implementation, we must recognize that if we truly want to be successful with these efforts, we must know that integration is not about making things more difficult, it's about recognizing that integration is fundamental to success.

There's a saying we had for the Yolo Bypass project, which I worked on previously, that is still applicable today. That saying is that "all boats must rise." This phrase came from somebody with one of the participating local agencies and it recognizes that, for anybody to achieve anything in a landscape as

[10] This "interpretive transcript" is not a verbatim record. Changes were made between the panel session recording and this written record for the sake of readability and understanding. Careful consideration was given to preserving the original content and meaning of each speaker's contribution, subject to the limitations of the panel session recording. The panel session recording is available at: https://www.youtube.com/watch?v=zm8EOBoKkIY.

[11] Biographical summaries are provided at the end of this transcript.

complex as the Yolo Bypass, like the complex areas that you all work in, we must take a larger systems approach and recognize that we all benefit when each party achieves its objectives.

One of the things that I'm excited about at DWR is the creation of a new division under my deputyship called the "Division of Multi-Benefit Initiatives." It will be a combination of hard-core flood engineering married to environmental benefits with a focus on the Delta and system-scale projects in the Central Valley. Projects will include large setback levee projects that will also have positive impacts far away from the specific geographic location of the projects themselves.

DWR has a long history of figuring out where in the organization these pieces fit best together. What's exciting is that the Department will be marrying flood engineering and environmental restoration together under one division. For us to get past all the adverse impacts of past flood management, mining, agriculture practices, and other factors, we need to get the right people working together. This change will create many great professional opportunities and we are looking to attract talent from both inside and outside of DWR.

Concerning today's conversations, this second day of the plenary, I want to share what I read in a New York Times article by David Brooks. In his op-ed piece, Mr. Brooks made repeated reference to something called "collective impact initiatives." The focus of his article was about what's happening now and for the past few years in Spartanburg, South Carolina related to K-12 education. The advantages of collective impact initiatives for education will also be obvious for water management as I proceed. Integrated regional water management is ahead of the game in terms of the long view and getting to solutions collectively.

In the article, Mr. Brooks was excited that there was the realization that, in dealing with problems such as student retention, graduation rates, and test scores, the path to success is longitudinal — it's about the long game rather than making sudden large shifts in response to declining test scores. In water management, just like the situation in Spartanburg, it's important to take the long view and have a long-term plan.

We must recognize that planning is slow. We need to get away from the expectation that things must change on a day-to-day basis. By taking a step back, and taking a collective breath, we'll be better served by recognizing that some of the things we want to see happen will take time to do. To achieve tong-term goals, we all need to exercise collective patience.

Another thing that David Brooks mentioned is the recognition that over specialization is constraining. Wendell Berry, an advocate for sustainable agriculture, was quoted as saying that "the disease of modern character is specialization." I think the main underlying point here is that we can be overly focused and narrow in our perspective in addressing challenges. We need to think bigger, broader, and more holistically. We need to take a systems approach.

The third observation that David Brooks mentioned in his article is about being "program rich but system poor." In this new, collective impact initiatives approach being used in Spartanburg to address education, one of the private partners in the effort, Procter & Gamble, brought up the concept that, while there can be many good programs to address various needs, there can be a problem about how all of the programs work together to address broader, higher-level goals. Relating this to the water sector, DWR, as an example, has a lot of good programs with plenty of merit, but we must ask ourselves about whether our programs are actually working together toward sustainability. Are our programs aligned and consistent

with one another in a systems approach, and are they as effective and efficient as possible? Also, are we aligned with various interests (regulatory, stakeholders, etc.) as we move forward?

Mr. Brooks' fourth realization was "let's think about what is actually going on when we are getting things done." We need to be mindful of how we are doing system-wise as we work on individual projects. Are things remaining aligned?

Each of the four concepts from David Brooks' article are relatable to the basic nature and value of IRWM and I want to give a shout-out to all the IRWM practitioners in the room today in recognition of this. With that said, there's a lot more for all of us to do when it comes to water management integration.

While the education sector is learning that it's important to bring in a wide range of stakeholders, including private interests and nongovernmental organizations, into discussions about how to deal with educational issues collectively, it's the water sector, especially in California, that has been doing this for quite a long time, at least formally since the IRWM Planning Act of 2002.

There's a lot for us to be proud of when it comes to IRWM in California. Huge strides have been made but there's still a long way to go. I want to give a big shout out to, and strong endorsement of, the IRWM stakeholder perspectives document[12]. It came out a couple of years ago and is a really clear articulation of the inherent, intrinsic, and lasting value to IRWM. IRWM is a way of doing business, life, and thinking and interacting. IRWM is an ethos. IRWM transcends the State grant program that was established to help support it.

I'm really looking forward to hearing from all of you today, and working with you in the future, as we dive into the stakeholder perspectives document and related conversations today taking a clear, deep-breath approach to thinking about what's really necessary. There are hard questions we need to deal with. It's easy to get frustrated in the short term, but again, it's important to keep the long view in mind. We all need to be patient and to not lose sight of the long-game as we deal with all of our day-to-day challenges. As we move ahead we need to be aware of what is working and what isn't and then determine how we get better while never leaving the fundamentals of what IRWM really is about. As articulated in the stakeholder perspectives document, IRWM is all about getting the right people in the room, recognizing that we all have interests that have inherent value but also recognizing that there is something intrinsically more valuable about the collective objective beyond just individual objectives. These are concepts that won't go away — they are the bedrock of IRWM.

We have a lot of work to do to expand the IRWM program and its ethic across DWR and across other State agencies. We need to increase assistance to local agencies and tribal governments, many of who are represented in the room today. The State needs to help all of you do the work which all of you know much better that us needs to be done. That's what I'm looking forward to.

My special thanks go to the IRWM Roundtable of Regions, who I met with on Monday. It was an enlightening conversation, as it always is. I'm looking forward to a lot more of those conversations, including today. Let's not wait for another year before we have another conversation.

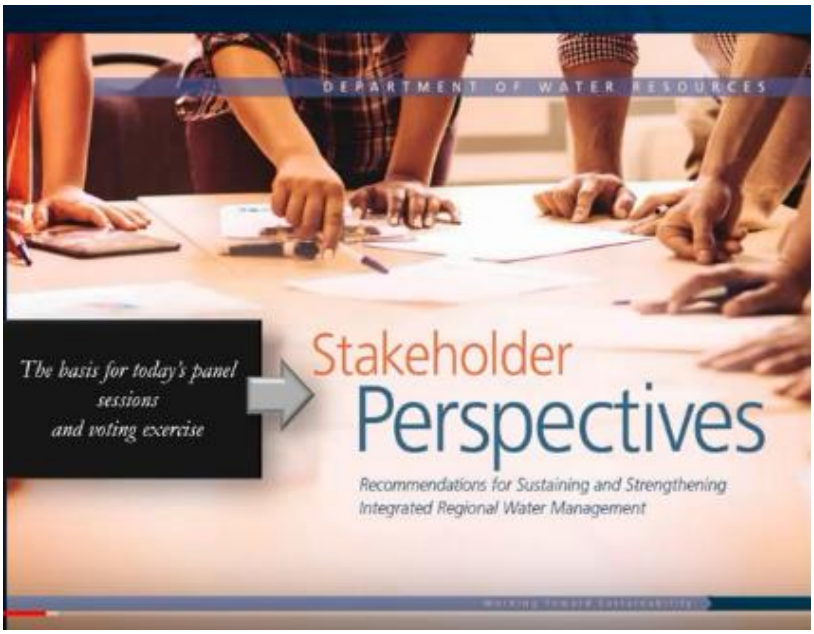
[12] Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Integrated-Regional-Water-Management/Files/stackholder_perspectives_IRWM_Recommendations.pdf.

[00:33:08] Mike Floyd — Setup Presentation

Today's conversations are all about regional water management in case anyone is still guessing. Before I get going on my part, I want to mention the regional water management atlas that is being demonstrated in the back of the room. I also want to point out the folks here today from the Department's IRWM grant program and the Sustainable Groundwater Management Program.

The basis for today's conversations and the voting exercise is the IRWM stakeholder perspectives document that Kris mentioned in his discussion. I'm going to talk about the document a little bit, just in case some of you are not already familiar with it.

Several years ago, Mark Cowin, a former director of DWR, asked staff to begin work on a strategic plan for IRWM. At that time a lot of time, energy, and funds had already been devoted to IRWM by local and regional organizations throughout California. State investments included Proposition 84, 50, and 13, although Proposition 13 was mainly about supporting the conjunctive management of surface water and groundwater. IRWM was identified in the [2009] Water Plan as one of two key initiatives for ensuring reliable water supplies.



Director Cowin asked us to work with stakeholders to determine how IRWM can continue and be broadened and strengthened. We started the effort by holding public scoping sessions. We found out right away that we needed to establish a stakeholder focus group to help guide our outreach efforts and to hold us accountable for documenting stakeholder input, and then, ultimately doing something with it.

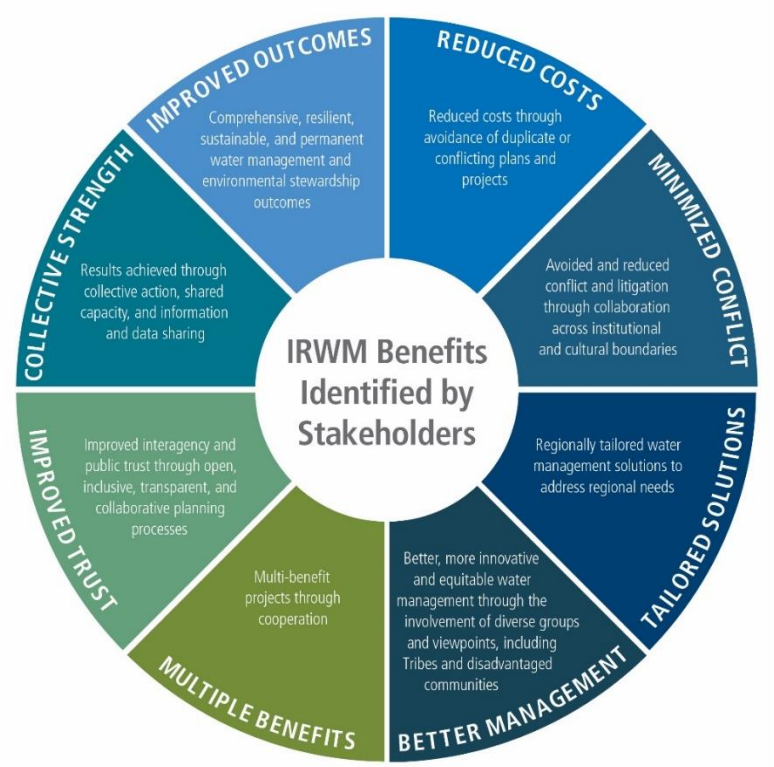
We formed a stakeholder focus group consisting of about thirteen members including IRWM practitioners throughout the state, some of who are here today, as well as representatives of tribal interests, Association of California Water Agencies (ACWA), and others. In addition to advising us on stakeholder engagement processes and holding us accountable to properly document what we heard from stakeholders, the focus group helped us synthesize everything we heard into the stakeholder perspectives document.

Stakeholder engagement efforts centered around 10 public workshops — 2 rounds consisting of 5 workshops each — held throughout the state. After the workshops were completed, we looked at who participated in the workshops and the type of input we received. We then conducted interviews of various water leaders throughout the state to get more specific input about regulatory alignment needs. What we heard from the interviews is that many regulatory practices are not aligned with the practice of IRWM — in essence, we are not really working across levels of government in partnership to support the practice of IRWM. Information about the workshops, including stakeholder input that we received, and an "assay" of IRWM practices throughout the state conducted for the effort can be found at DWR's IRWM website.

In May of 2015, at an IRWM conference in San Diego, we released the draft strategies and actions derived from stakeholder input. They were released as final in April of 2017. The final strategies are essentially the same as the draft strategies and actions.

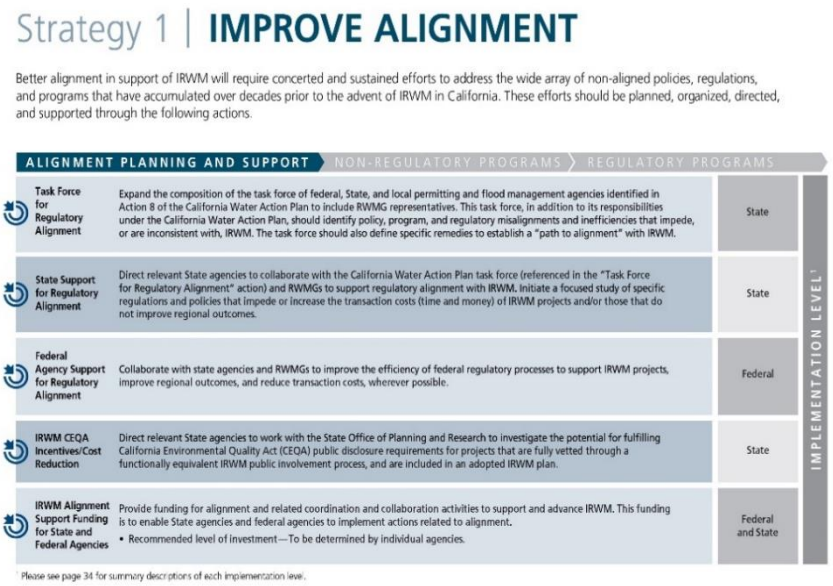
One of the things that I was really surprised, even shocked about, after talking with so many people during the process is that no one told me that IRWM was not the way to go. There were plenty of suggestions for making it better, but no one I spoke to said that IRWM isn't worthwhile.

The diagram on the screen is from the stakeholder document and it summarizes what we heard from stakeholders about the broad range of benefits of IRWM.



In the stakeholder perspectives document, the seventy or so actions synthesized from stakeholder input were sorted under four strategies and then were further sorted into themes under each strategy.

The following slide is an example of what's in the stakeholder perspectives document in relation to each of the actions. Tables for each strategy and theme provide a title and description for each action and identify what level(s) of government would be appropriate for each action.



Strategy 1 | IMPROVE ALIGNMENT

Better alignment in support of IRWM will require concerted and sustained efforts to address the wide array of non-aligned policies, regulations, and programs that have accumulated over decades prior to the advent of IRWM in California. These efforts should be planned, organized, directed, and supported through the following actions.

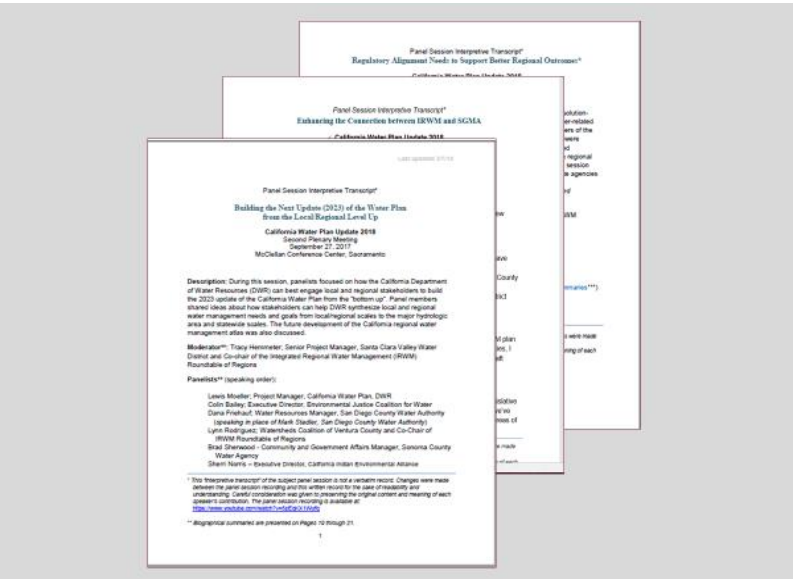
ALIGNMENT PLANNING AND SUPPORT › NON-REGULATORY PROGRAMS › REGULATORY PROGRAMS

		IMPLEMENTATION LEVEL[1]
Task Force for Regulatory Alignment	Expand the composition of the task force of federal, State, and local permitting and flood management agencies identified in Action 8 of the California Water Action Plan to include RWMG representatives. This task force, in addition to its responsibilities under the California Water Action Plan, should identify policy, program, and regulatory misalignments and inefficiencies that impede, or are inconsistent with, IRWM. The task force should also define specific remedies to establish a "path to alignment" with IRWM.	State
State Support for Regulatory Alignment	Direct relevant State agencies to collaborate with the California Water Action Plan task force (referenced in the "Task Force for Regulatory Alignment" action) and RWMGs to support regulatory alignment with IRWM. Initiate a focused study of specific regulations and policies that impede or increase the transaction costs (time and money) of IRWM projects and/or those that do not improve regional outcomes.	State
Federal Agency Support for Regulatory Alignment	Collaborate with state agencies and RWMGs to improve the efficiency of federal regulatory processes to support IRWM projects, improve regional outcomes, and reduce transaction costs, wherever possible.	Federal
IRWM CEQA Incentives/Cost Reduction	Direct relevant State agencies to work with the State Office of Planning and Research to investigate the potential for fulfilling California Environmental Quality Act (CEQA) public disclosure requirements for projects that are fully vetted through a functionally equivalent IRWM public involvement process, and are included in an adopted IRWM plan.	State
IRWM Alignment Support Funding for State and Federal Agencies	Provide funding for alignment and related coordination and collaboration activities to support and advance IRWM. This funding is to enable State agencies and federal agencies to implement actions related to alignment. • Recommended level of investment—To be determined by individual agencies.	Federal and State

Please see page 34 for summary descriptions of each implementation level.

Following the release of the stakeholder perspectives document in March of 2017, DWR partnered with the IRWM Roundtable of Regions to conduct three regional water-management-focused panel discussions at the September 2017 Water Plan Plenary Meeting. The panel discussions focused on how Water Plan Update 2023 can be built from the regional level up, improving the connection between IRWM and SGMA, and regulatory alignment needs to support better regional outcomes. Transcripts for each of these sessions are available today in the back of the room.

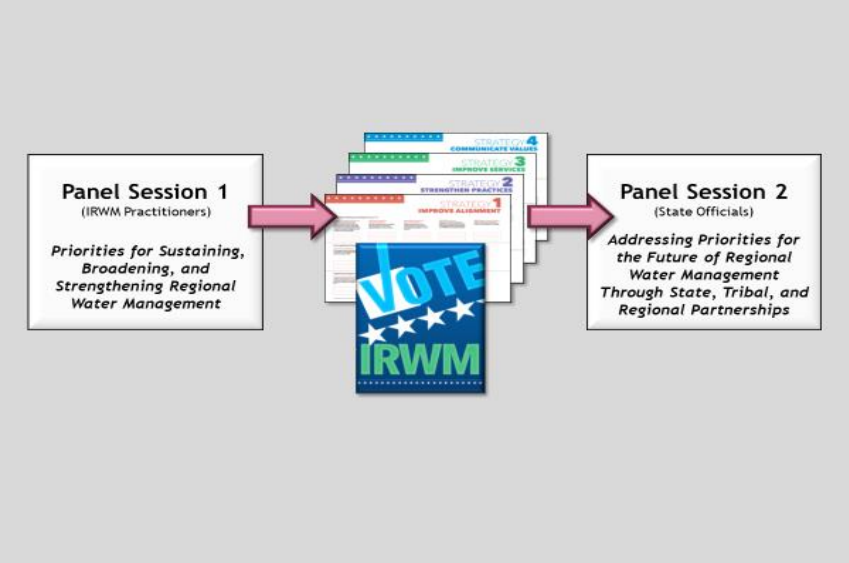
We received a lot of great input from each of those panel sessions that adds to what's discussed in the stakeholder perspectives document. The input provides valuable information about how some of the actions in the document can be implemented.


Panel Session Interpretive Transcript*
Regulatory Alignment Needs to Support Better Regional Outcomes*

Panel Session Interpretive Transcript*
Enhancing the Connection between IRWM and SGMA

Panel Session Interpretive Transcript*
Building the Next Update (2023) of the Water Plan from the Local/Regional Level Up
California Water Plan Update 2018
Second Plenary Meeting
September 27, 2017
McClellan Conference Center, Sacramento

Today, we have two panel sessions. During the first panel session, we'll hear from IRWM practitioners about what they believe are the priority actions in the stakeholder perspectives document for implementation. After that, we will have a breakout session where audience members will have an opportunity to vote for the actions they believe are a priority.



All of the actions in the stakeholder perspectives document have been listed on voting boards in the back of the room. Each person will receive 10 colored dots to vote with. Every voter is free to place as many of their 10 dots as they want on an individual action, or they can spread them out among the actions as they choose.

[NOTE: The voting instructions below were provided following a brief exchange with audience members about how the affiliations of voters could be identified from the color of dots used and any lettering added to them.]

If you are an IRWM practitioner or other stakeholder, you will receive yellow dots to use for voting. If you are representing a tribe, please write a "T" on your yellow voting dot.

State and federal employees will receive 10 smaller dots that are green in color. If you work for DWR please put a "D" on your dot. Employees of the State/regional boards should write "B" on their dots. Federal employees should write "F" on theirs.

Also, regarding the voting exercise, you have an opportunity to have a little fun by voting for a favorite rock and roll lyric that's been changed to say something about IRWM. You'll receive different voting markers for that if you want to participate. And lastly, everyone that votes who is not a DWR employee gets a chance to receive a small prize (paid for by DWR staff) at the end of today's session.

Panel Discussion — Priorities for Sustaining, Broadening, and Strengthening Regional Water Management

[00:47:08] Lynn Rodriguez

Just a comment about the voting exercise, in my IRWM region we look at State agencies that participate in our processes as our stakeholders too. For today's voting exercise I think it's okay to separate out the State votes.

Thank you, Kris, for your amazing opening for this first panel session. It's good to have something inspirational when you start a discussion like this which can quickly get "into the weeds."

Hi, I'm Lynn Rodriguez, Co-chair of the IRWM Roundtable of Regions. I manage the Watersheds Coalition of Ventura County, which is the IRWM region in the Ventura area, just north of Los Angeles County. As part of my role as IRWM program manager, I work closely with State partners to help make sure we are successful with IRWM.

Before getting into our first discussion, we wanted to dedicate today to our dear colleague Carl Morrison, who many of you knew. Carl passed away in April of this year flying his airplane out of the Petaluma airport. Carl was highly engaged in the IRWM program.

Here he is participating in one of the IRWM strategic plan meetings. Carl represented the Bay Area, Bay Area Flood Protection Agencies Association, and a number of other clients. He lived in the north area of San Diego County and flew his airplane to many of his meetings.

Carl was always very polished and dressed impeccably. He was very involved in just about everything we did. He was an amazing person and connected with everyone in the room. We are very sad that he's not with us anymore and miss his passion for other people and how he contributed to the success of IRWM across the state.

This photo is from the IRWM alignment panel at the previous Water Plan Plenary Meeting [2017]. This photo is on DWR's webpage for that meeting.

This last photo shows Carl in his glory along with his airplane. He was a member of the civil air patrol and flew his airplane a lot. In that first picture he's in his plane with Grant Davis, former director of DWR, flying Grant around to all his meetings after the fires in Sonoma County.

We miss Carl and we dedicate this day to him.

Moving on to the panel discussion, I want to briefly touch on something that Kris said earlier. We all look for "hooks" or ways to be excited about what we are doing. IRWM is a combination of being in the weeds but also seeing things at a higher level. I love David Brooks, the author of the article Kris mentioned that discusses "collective impact initiatives." Your comments, Kris, about this concept gives us a perfect way to take another look at what we do (in IRWM). I'm a former school board member and I totally see the parallels between educational challenges and the challenges we face with water management.

I was so happy to hear yesterday about all the themes coming from the water plan update to be released, including the importance of **partnerships**. All of us know the importance of partnerships in our lives. That's what's really at the heart of making all this work. If we don't work together we won't be successful. Director Nemeth recognized the importance of State partnerships with local agencies and that the State can't succeed without what we do at the local level. I hope all of you that work at the local level feel that what we do matters and that's it's appreciated by high-level folks at the State.

Another related message I heard yesterday was the recognition that 80 to 90 percent of what happens in water-management is done at the local level. We're here today to learn from the State, work with the State, and hopefully encourage the State to do things that help us at the local and regional level, so we can be successful.

We can't afford to wait to take some of the actions necessary for IRWM to succeed. Yes, there's a long view. Those of us that have been doing IRWM for 16 years (since the IRWM Planning Act of 2002) know it's a long road that we travel. IRWM is more of a marathon than a sprint. Sometimes we have to sprint, but we work hard to keep the long view in mind and not waver too much from our goals.

We have an amazing panel here from different parts of the state. The panel was handpicked to run the gamut of IRWM demographics — urban and rural, north and south, coastal and inland, desert, eastern Sierra, etc. What we want to do in this session, carrying on from what Mike Floyd mentioned earlier, is to focus in on what's in the stakeholder perspectives document and then, by the end of the day after the two panels and the voting exercise, have a clearer picture of where we go from here. I don't think we want to walk away from this meeting wondering, "gee, what should be done next—where should the energy be focused?" There's so much to do, over seventy actions are listed in the stakeholder document. We can't possibly do them all at once, so we are asking our panel members to share their perspectives, based on their expertise, about what needs to happen and what we practitioners are asking of the State in terms of assistance and partnering.

While the panel comes up to the table and sits down, I want to thank DWR for partnering with the Roundtable today to have these discussions. I also want to thank Mike Floyd of DWR for his work on the stakeholder perspectives document. It required a lot of work to develop from all the stakeholder input received and it serves as our blueprint for moving ahead.

Going down the line of our panelists, there's Mike Antos with the Santa Ana Water Project Authority (SAWPA). Mike was previously with the Council for Watershed Health and has been at this business a long time. If you're not familiar with SAWPA it's in Orange, Riverside, and San Bernardino counties and was the subject of the pilot study discussed yesterday.

Next to Mike is Karen Gaffney who is with West Coast Watershed. Karen has been involved with the North Coast IRWM region since its inception. That region, as well as SAWPA, has been a leader in IRWM over the years.

Holly Alpert is with the Inyo-Mono IRWM Region. Holly has extensive expertise in IRWM and works on climate change. She also works closely with tribes and disadvantaged communities in her region.

Next, we have Brandi Brown with the North Coast Regional Partnership. She is a member of the Pomo Indians of the Redwood Valley Rancheria and we're excited to have her here. She participates in the North Coast regional water management group.

And last, but not least, we have Cathy Pieroni who is with the City of San Diego and has been involved with IRWM for a long time. Cathy is also the chair of the Association of California Water Agencies IRWM Committee and is a strong advocate for IRWM and its intrinsic value.

What we are going to do to start with is to quickly hear from each panelist about what their experience is with IRWM and what they see as opportunities and challenges going forward to sustain this great water management practice. IRWM is at a cross road and we need to know where to go next.

[00:57:25] Mike Antos

Following what Kris Tjernell said earlier, which I really appreciate, is something we've been talking about in our IRWM region recently: because we are so interdependent, resilience gained anywhere is resilience gained everywhere. When we are thinking about how to parcel out resources across our entire IRWM region, we have to stress that projects can be beneficial to everyone because we are so interdependent.

In our region we have the "One Water, One Watershed" program. We are one of the few places in the state that has the luxury of an IRWM region and an IRWM funding area that are the same geography. So, this allows us to work together at a watershed scale — an important aspect of how work gets done in our region.

Speaking from my academic background, one thing that's been borne out of experience is that when you have the authority to manage across an entire system, you can be more effective at managing that system. The fact that our IRWM region's boundary is the same as a watershed boundary, our regional water quality control board's boundary, and our funding area, is quite powerful. This allow us to bring everyone together at the same scale and make sure that everyone is involved in the decision making.

The perspective of our region is that there are things that need to be done at the regional and statewide scale that won't get done absent IRWM. From the State's programs and the stakeholder perspectives document, it's apparent that the State agrees that regional scale planning and regional scale projects are something that need to be sustained and are worthy of State investments. Regional plans must be coordinated where there are shared resources. IRWM is a critical investment and must continue.

[1:00:35] Karen Gaffney

I really want to thank the IRWM Roundtable of Regions and DWR for putting this session on. It's such a great opportunity to learn from the folks at this table, and beyond, about their experiences and views about IRWM. I'm here representing the North Coast Resource Partnership which has been in place for 14

years and covers a 19,000 square mile region, which is about 12 percent of California. We like to call ourselves a "source region for water, biodiversity, and carbon."

The thing I want to focus on in terms of success and what should be continued is collective impact infrastructure, without which nothing we do would be possible. The way we mean that in the North Coast Region is that we have tribal and county elected leadership operating together under established clear decision-making criteria that everyone understands, which is democracy at its finest. By working together everyone can be equally informed and things can be done more cost-effectively.

Our regional water management group is informed by technical advisors to help us make science-informed decisions and ensure cost effectiveness. Finally, we have tribal coordinators, agency staff, and consultants throughout the region helping support the group by providing data and by conducting assessments.

One thing that's emphasized in our region is local knowledge and autonomy. We have seven counties in our large region along with a lot natural capital infrastructure. To deal with this, we recognize that we're all good friends and that we work together and learn from each other. For example, we all benefit from having tribal members in the group and learning about tribal ecological knowledge, along with people at the forefront of restoration in our region. Involving water supply and wastewater groups really helps us understand what the cutting-edge opportunities are for enhancing our water and wastewater infrastructure, including for entities that operate on a shoe string budget. And then finally, there are the counties sharing with us how to deal with the issue of fuel load reduction for forest health and, along with that, creating local jobs to strengthen our economy. IRWM allows us to work together using local knowledge, while respecting local autonomy and our differences, to assess the situations we face and find common ground to address needs and issues.

I want to give DWR a shout out for setting the standard and principals of IRWM — regional cooperation, truly integrated planning, transparency, equity, and a focus on disadvantaged communities. This initially was almost a throw-down challenge from the State to the North Coast IRWM Region, but our very diverse set of groups decided that we wanted to come together and practice IRWM. Since then we've continued working together evolving and adapting in the practice. Today, we still have the foundational water supply and water infrastructure challenges to deal with but now we've almost transcended water. We have grown to consider community health, economic vitality, resiliency, and integrating water management.

[1:05:14] Holly Alpert

I have the pleasure of living in one of the prettiest parts of the state, the Owens Valley. The Inyo-Mono IRWM Program began about 10 years ago making us a sort of a "middle-generation" IRWM program in California. We started right at the beginning of Proposition 84 when Proposition 50 was still around.

We are seeing a lot of progress and successes in our region. We have 16 projects that have been completed. By involving stakeholders and elected community leaders together, we have received about $4.5 million in grant funds in our region; a drop in the bucket compared with most IRWM regions.

It's been very important for our stakeholders to see successes result from all the hard work. Yes, it is a long game, but successes along the way are important. The challenge that we are starting to run into now, after ten years of working together, is keeping people at the table. It's important to remind people why we are all at the table and what we can provide each other — it's not just about money.

Going forward, we would like to see more alignment with IRWM. It's important that local planning efforts and documents be coordinated through IRWM. It's also important that all water-related grant and loan programs come through IRWM groups. The bottom line is that the more we work on things together as a group, the better.

[1:08:14] Brandi Brown

From a tribal perspective, as a member of the North Coast IRWM Region and Ukiah Valley Groundwater Sustainability Agency, I can't over emphasize the importance of having tribal engagement in an IRWM region. Providing a means for everyone to come together and provide everyone an equal voice is key to tribal engagement and addressing needs and issues.

The challenge for many regions across the state is how participants use what limited funding they have to work together under various organizational structures for IRWM while still accounting for the institutional constraints of their member organizations. For tribes participating in IRWM, it's the same challenge. It's important that tribes are able participate in IRWM to come together with others to address issues and solve problems. There are outreach opportunities for increasing and enhancing tribal participation in IRWM.

[1:10:21] Cathy Pieroni

The IRWM Roundtable of Regions has seen the ultimate benefit of IRWM and we want to keep it going. As time has progressed, and progress has been made, people have asked the question: "What happens if the grants go away?" If there are no grant funds, will people still be at the table? Although there will always be a reason for the State contributing to IRWM, grants can sometimes work as a distraction to IRWM if people focus primarily on money and not on the intrinsic value of IRWM. The IRWM stakeholder perspectives document was developed to address the overall question about how IRWM can be sustained and strengthened.

Of the $8.877 billion provided by Proposition 1, only $5 million is for IRWM specifically, which is 0.6 percent of the total amount of funding in Proposition 1. There are larger, separate pots of money for safe drinking water, fisheries, habitat protection, improved water conveyance, groundwater, surface water storage, etc. in Proposition 1. Yes, there's a lot of work to be done in relation to all these aspects of water management, but how will they be integrated? The State should look at how all these efforts can be coordinated though IRWM processes.

I am also a big champion of regulatory alignment, one of the four strategies identified in the stakeholder perspectives document. We need to move toward integrated common-sense regulatory approaches at the regional level. IRWM provides the most efficient and efficacious approach to water management and involving stakeholders.

As an example, in the City of San Diego, we have a huge project called "Pure Water San Diego," which is a water purification project. This project came about because our wastewater treatment plant has an ocean discharge and doesn't treat wastewater to secondary standards. We are the last remaining wastewater discharger in the United States that doesn't treat wastewater to at least secondary standards.

Regarding Pure Water San Diego, if you only look at achieving numerical secondary discharge limits as a measure of success after spending upwards of $2 billion, that can be a problem. What Pure Water San Diego does is supplant the need to increase the treatment level of the discharge with water purification to create a new water supply for San Diego and reduce the volume of the ocean discharge to achieve what is

essentially better than secondary equivalency for the discharge — that's powerful. For this project, we got the mayor, business community, environmental groups, regulatory agencies, and the public on board. This effort started in 2004 and we are just about to break ground.

What made this project possible was regulatory alignment. We all worked together to develop a common-sense regional solution as an outcome, as opposed to just meeting a numeric limit. The outcome we all achieve is what we all want.

IRWM is the approach where we can all work together under a collaborative framework to achieve common-sense regional solutions to meet regionally determined priorities following triage principals. When you have a regionally integrated planning framework, you can address things on a first-things-first approach with the cooperation of all stakeholders. With regulatory alignment, we can achieve what's best and meet regional priorities, as opposed to just adhering to a regulation. IRWM provides for long-term success.

[1:16:39] Lynn Rodriguez

I really appreciated hearing the perspectives and experiences of all our panelists about IRWM. One of things that's important to realize from this conversation is how different each of the regions can be from one another across California. Relatively speaking, some IRWM regions with great collaboration and stable funding have an easier time, while other regions are really struggling. For regions that are struggling, keeping people at the table in the face of declining grant incentives will be a bit more challenging.

A goal for today is to consider all the actions listed in the IRWM stakeholder perspectives document and identify the priorities for keeping everyone at the table and working together. So, starting with Cathy Pieroni, who happens to represent the IRWM region with the largest urban component on the panel today, is there anything you would like to add to what you mentioned previously about priority actions in the stakeholder perspectives document?

[1:17:59] Cathy Pieroni

If you are familiar with the San Diego Region you know that we normally don't receive a lot of precipitation. In 1990 and 1991 we faced 50 percent water cutbacks in the City of San Diego. We were in the middle of a drought and didn't have much redundancy and resiliency in our region.

After that experience we began work on a water supply diversification program that includes ocean water desalinization, direct potable reuse of wastewater, water conservation, and water transfers. Our region is extremely complex as far as all the water systems that exist and the different jurisdictions. We have 28 reservoirs in our region, but not a lot of groundwater.

One of the opportunities that we are pursuing in our region is stormwater management. Our stormwater management infrastructure is complex, dated, and difficult to model. We are hoping that the State will align their regulatory efforts with our regional stormwater management initiatives to improve stormwater management outcomes, including the development of a new, stormwater-based water supply.

[1:22:00] Holly Alpert

Although we get great representation and participation in our regional water management group from across the Inyo-Mono IRWM Region, there are not a lot of resources to support coordination and collaborative planning. Contributions from the few larger local agencies in the region range from about

$5,000 to $7,000 a year from each entity, which doesn't add up to a lot. Contributions from smaller entities, such as small water districts and nonprofits, are on the order of $250 per year.

While I completely agree that IRWM regions need to become more self-sufficient to sustain IRWM, regions like ours in rural areas really need State funding to stay afloat. For us, a little bit of funding will go a long way. It's nice to see that the State explicitly supports IRWM.

[1:23:23] Karen Gaffney

Several people today have acknowledged the principals behind IRWM. One of the key things that I think is important is for DWR to continue to set/reinforce the standards and principals for IRWM, but then leave it up to each region to figure out how meet them in consideration of regional goals and priorities.

Another thing that's important is for the State to provide incentives for the outcomes it desires. The prospect of reduced State incentives for IRWM going forward is quite concerning. Stable base level/block funding for IRWM would be very helpful. We also need to diversify the sources of funding for IRWM, including State agencies other than DWR.

[1:25:06] Mike Antos

The Disadvantaged Community Involvement Program (DACI) under Proposition 1 has the potential of being revolutionary. We've learned a lot from the program, including the importance of including disadvantaged communities in discussions concerning what needs to be done. Information from the program can be used to inform the Legislature about disadvantaged community needs and involvement. Also, what's been learned from the program could be applied across the state, perhaps in the form of a model for IRWM regions to follow.

Another thing coming out of the DACI program is the value of State investments in helping IRWM regions improve their "soft skills," including outreach and engagement and how to incorporate disadvantaged community participation in decision-making. These investments have value beyond just IRWM.

[1:26:33] Brandi Brown

I want to encourage funding for tribal outreach for regional decision-making, including regional issues beyond just water, such as housing. One of the many benefits of bringing everyone together to addresses regional concerns is that entities without a lot of staff support can receive direct and indirect support from others.

Tribal outreach is important for getting everyone that needs to be at the table to the table. It's not about getting just one person to speak for all the tribes in a IRWM region. Tribes don't all share the same agenda, or all have the same issues.

[1:27:50] Lynn Rodriguez

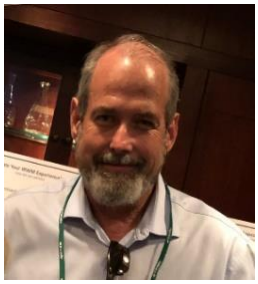
I really appreciate our panelists for participating in this discussion. As a final comment about the strength of IRWM, the IRWM Roundtable of Regions surveyed its membership in 2016 and 93 percent of those that responded said that IRWM is a worthwhile investment for them, despite all the challenges and complexities. I really like Kris' comment about what a good day looks like. For me, the definition of a good day is when people in your region are working well together and there's energy and synergy — there's really no better feeling than that. I really believe that IRWM has created possibilities for us that never existed before.

Biographical Summaries (alphabetical order)

Holly Alpert, Ph.D., lives in Bishop, California, and works on California water issues in two capacities: as Director of the Inyo-Mono Integrated Regional Water Management Program (IRWMP) and as IRWMP Coordinator for the California Rural Water Association. Through these two efforts, Holly has been working with small, rural, and disadvantaged communities for the past 10 years with the goal of building capacity and increasing self-sufficiency with respect to water resources. Holly has served on the boards of Sierra Classic Theatre and the Bristlecone Chapter of the California Native Plant Society, and she is currently board president for the Amargosa Conservancy. Holly holds a B.A. in Environmental Science and American Studies from Wellesley College and a Ph.D. in Environmental Studies from the University of California, Santa Cruz. In her leisure time, Holly enjoys skiing, hiking, traveling, and eating chocolate. The best find during a 2017 European trip was Fassbender & Rausch Chocolatiers in Berlin.

Mike Antos is a Senior Watershed Manager for the Santa Ana Watershed Project Authority, facilitating the One Water One Watershed program and leading engagement with members of disadvantaged communities for collaborative watershed management. He is a board member of the nonprofit Environmental Justice Coalition for Water and is a Fellow of the Robert & Patricia Switzer Foundation. Mike holds a Ph.D. in Geography from UCLA and serves as co-chair of the American Water Resources Association Integrated Water Resources Management committee. Contact: mantos@sawpa.org, 951.354.4238 (office), 909.371.6297 (mobile).

Brandi Brown is the North Coast Resource Partnership Tribal Policy Review Panel Tribal Representative.



Mike Floyd's 38-year career in water resources includes positions with DWR's Statewide Water Resources Planning Program, Integrated Regional Water Management Program, Suisun Marsh Program, Delta Levees Special Flood Control Projects Program, and Water Quality Evaluations Program. He also served as DWR's Staff Ground Water Hydrology Specialist and Well Standards Specialist. Mike also held positions with the State Water Resource Control Board's Division of Water Rights and Division of Water Quality, preceded by a position with the Central Valley Regional Water Quality Control Board. Prior to working for the State, Mike was a project manager and hydrologist at two nationally-based consulting firms and worked for the University of Arizona, Department of Hydrology and Water Resources conducting research for the development and evaluation of groundwater models. Mike is a California Registered Professional Engineer and served as a Planning Commissioner for the City of Dixon, CA, and as a member of the City's Wastewater Advisory Committee. Mike enjoys time off with his family and is obsessed with motorcycles. Contact: Michael.Floyd@water.ca.gov.

Karen Gaffney is the co-founder and CEO of West Coast Watershed and on the staff of the North Coast Resource Partnership since its inception in 2005. A riparian ecologist, Karen is the past president of the California Society for Ecological Restoration, is a Switzer Environmental Leadership Fellow, and has served on the board of directors of the Watershed Management Council and Conservation Corps North Bay. A graduate of UC Berkeley, she has a Master's Degree in Ecology from Sonoma State University.

Cathy Pieroni is the Government Relations Water Policy Manager at City of San Diego, Office of San Diego Mayor Kevin L. Faulconer. She also serves on the Association of California Water Agencies Legislative Committee. Prior to joining the Mayor's Office in February 2018, she spent 25 years working for the City of San Diego as a Program Manager and Senior Water Resources Specialist. She also worked for the Metropolitan Water District in a similar capacity. Cathy has an MBA from the University of San Diego and a BA from State University of New York College at Plattsburgh where she majored in Latin American Studies and Spanish.

Lynn Rodriguez has been a water resource professional for 38 years, focusing on water use efficiency, urban water management and integrated regional water management, primarily in Ventura and Santa Barbara counties. Since 2005, she has managed the Watersheds Coalition of Ventura County (WCVC) Integrated Regional Water Management (IRWM) Program. In collaboration with stakeholders in the region, she prepared and oversees two IRWM plans, has worked on numerous IRWM grants, and manages ongoing stakeholder engagement within WCVC. She serves as co-chair of both the statewide IRWM Roundtable of Regions and the LA-Ventura Area Disadvantaged Community Involvement Task Force. Lynn has served on numerous local, statewide and national committees addressing water-management issues. She graduated from UCSB and still lives in Santa Barbara. In her free time, she serves on a local non-profit board and spends as much time outdoors as possible.

Kris Tjernell was appointed Deputy Director of Integrated Watershed Management at DWR on May 14, 2018. This position is responsible for advancing policies and programs that integrate and provide multiple benefits, including flood management, local water supply, and ecosystem restoration. He previously was the Special Assistant for Water Policy at the California Natural Resources Agency (CNRA) where he accelerated and coordinated implementation of Yolo Bypass flood and habitat restoration projects, California EcoRestore projects and related planning, and other actions to further the California Water Action Plan. Kris worked closely with Secretary John Laird to develop and negotiate proposed voluntary settlement agreements for each of the major Delta tributaries as part of the State Water Board's ongoing Bay-Delta Water Quality Control Plan process. Earlier in his career, Kris was a policy consultant for Conservation Strategy Group, LLC, where he specialized in integrated water management, Sacramento-San Joaquin Delta restoration and governance, ESA/CESA issues, land conservation, water supply, ecosystem conflict resolution, and public finance. He advised a broad array of local public water agencies and non-governmental organizations to advance their federal, State, and local natural resource funding and policy objectives. He graduated from the University of California, Santa Cruz, with a Bachelor of Science degree in Ecology and Evolutionary Biology.

Voting: Priorities for Sustaining, Broadening, and Strengthening Regional Water Management

California Water Plan Update 2018

Third Plenary Meeting
Civic Center Galleria, West Sacramento
October 10, 2018

Introduction

DWR wanted to hear from IRWM practitioners about what they believe are the priority actions from the stakeholder session. To perform this task, a breakout session was conducted to solicit input from audience members on their priorities for IRWM. To do this, each audience member was provided an opportunity to vote for the actions they believe are a priority.

In the stakeholder perspectives document, the seventy or so actions synthesized from stakeholder input were sorted four strategies. Each strategy had actions from the stakeholder perspectives document. For this exercise, voting boards were developed for the four strategies, listing actions with each strategy. Each person received 10 colored dots to vote with. Every voter was free to place as many of their 10 dots as they want on an individual action or could spread them out among the actions as they choose.

IRWM practitioners or other stakeholders, received yellow dots to use for voting. Tribal representatives were supposed to write a “T” on their yellow voting dot. State and federal employees received 10 smaller dots that are green in color. Individuals that work for DWR were requested to place a “D” on the dot. Employees of the State/regional boards should have written “B” on their dots. Federal employees should have written an “F” on theirs dots. The following pages show the results of this effort.

Panel Session Interpretive Transcript[13]

Addressing Priorities for the Future of Regional Water Management Through State, Tribal, and Regional Partnerships

California Water Plan Update 2018

Day 2 10:40 Panel Session

October 10, 2018

West Sacramento Civic Center Galleria, Sacramento

Description: Panelist explored addressing priorities for the future of regional water management through State, Tribal and regional partnerships. Time was set aside for Q&A.

Moderator: Lance Eckhart, Mojave Water Agency.

Panelists:

Lance Eckhart — Director of Basin Management and Resource Planning, Mojave Water Agency.
Kris Tjernell — Deputy Director, California Department of Water Resources.
Erik Ekdahl — State Water Resources Control Board.
Carl Wilcox — Director, California Department of Fish and Wildlife.
Anecita Augustinez — Tribal Policy Advisor, California Department of Water Resources
John Andrew — Assistant Deputy Director, California Department of Water Resources.
Leslie Laudon — Manager, Bond Section at State Water Resources Control Board.

[13] This "interpretive transcript" of the subject panel session is not a verbatin record. Changes were made between the panel session recording and this written record for the sake of readability and understanding. Careful consideration was given to preserving the original content and meaning of each speaker's contribution. The panel session recording is available at: https://bit.ly/2QsK0ZL.

Mike Floyd — Opening Remarks

Alright thank you very much. Well, it was said there is some clustering going on in the dot voting. There is clustering relating to baseline funding for IRWM. I was also impressed with the wide scatter of other items, so it looks like there is something that resonated for everybody here. Regulatory alignment was another big one. So, in this panel discussion we are taking what we heard from the first panel session and the voting exercise and now we are talking about how we move together as State officials. I would like to turn it over to Lance Eckhart, the moderator here.

Lance Eckhart

Thank you very much. Lance Eckhart from the Mojave Water Agency. I have been in an adjudicated basin, about 20 years for the most part. So, I feel like I've gone through a SGMA process. Today, we're going to be talking about integrated planning and what these agencies can do to support it. I will say that going through the throes of the new adjudication, the integrated planning can be really embraced. We realized that the way we had done business, an overdrafted basin couldn't continue, and the integrated planning process really forced and encouraged us to begin to work with DWR for integrated solutions, and it made the process a whole lot easier. I see a lot of similarities as we're moving into the era of SGMA. So, we're going to have a few questions for the panel and there are a couple of things I want to keep in mind. Earlier Kathy mentioned Proposition 3, and not having a lot of money for integrated planning and the propositions that are coming through seem to have a little more solid for wastewater supply, and so are we going in the right direction? The other thing; we worked very hard to develop boundaries on these integrated planning areas and standards to build white areas on the maps. The State is very well covered with integrated plans that deal with watersheds, that deal with managing on a watershed basis. So, I kind of just wanted to lay those out because those are really threats. And so, with that, I am going to ask the panel to start, and do just a little bit of Q&A and go where the conversation takes you.

So, I'm going to pass the mic, and panel if you could go over what your organization's perspective is on regional water management, and how does it advance the State's interest including attainment of regional sustainability. Basically, what is your organization's perspective on integrated planning, and how do you see that role in making the State's water resources sustainable. What is IRWMPs goal in today's environment?

Kris Tjernell

That is a great question, so my answer might be brief. I would say that State's perspective again, there are a lot of pieces to the State's perspective on IRWM on the reasons such as why it's valuable and why we should be supportive of it, irrespective of whether it ends up in places such as bonds, and that should not be used as the litmus test for the State's perspective on IRWM. I know it's easy to do that. I strongly encourage broader thinking. I think one thing that is very true is that there are limited resources with the State. 80 to 90 percent of investments in water management come from local agencies. My question for us is what do we do with that relatively small amount from the State's perspective, where A: it's a smaller amount like it was said, and B: we don't have the day-to-day interpersonal connection with everything that is happening at the local level. And as almost by rule, we set State policies that have to blanket the entire State with approaches. How do we do both of those things? I would never say one size fits all. But for this conversation I will say that blanket policies hoping to advance things across the State irrespective of local conditions can do so with very limited funding. I would say the value of IRWM is hopefully that we can make transformative change with the policies and through the modest incentives we're creating at the top if you will. It's really just making the best use of limited funding and the policies that we can set with the understanding that we're actually not the big players.

Erik Ekdahl

Thank you. I work with the State Water Board in our Division of Water Rights and water rights doesn't typically have a strong connection to IRWM, if you look at it from a direct funding category. But if you look at some of the things we're working on at the State Board from a policy perspective, it points toward a really critical need for an integrated approach for all these management issues. And really these are focused on water availability, so there are three things that we really consider that we're looking at. One is some pretty big policy changes related to our Bay-Delta Water Quality Control Plan. These aren't secret that we are looking for higher instream flows in both the San Joaquin and Sacramento watersheds. And that is potentially going to result in different water availability for agricultural, municipalities, and other uses. How do we balance those competing interests and do so in a reasonable way that accommodates the needs of all the different stakeholders in the state? You cannot look at only one little diversion from a stream in an arm of the Sacramento, or a far southern San Joaquin tributary, you have to look at all of these things together. All the flows contribute, all the projects, all the habitat restoration, these are important integrated components and point towards a need for really strong and balanced integrated approach at the watershed or even greater level.

The other is SGMA, that is kind of a textbook example of groundwater availability that points to the need again, of integrated approaches of more than just sub-basin at the sub watershed level. We're not there yet with SGMA. I think we have 267 GSAs right now. That is not going to work, now that's just my perspective, but we're going to have to look at how we integrate those levels and bring people together, maybe at the IRWM level, maybe at something even greater like the greater basin level, but this fragmentation is a challenge to SGMA going forward.

The third is climate change. Maybe we'll hear more about this in a little bit, but Felicia Marcus likes to say, "wetter wets and drier drys." And that's what we have to look for. So, a lot is going on at the State level, a lot going on policy-wise a lot going on with water availability that points towards the need for IRWM or something like it at the local level to absorb and kind of plan for those changes as they come down at the local level.

Carl Wilcox

I'm Carl Wilcox and I am a Policy Advisor to the Director on the Delta for the Department of Fish and Wildlife. The Department's perspective echoes what Kris and Erik said. We are very interested in landscape approaches to dealing with issues because everything from our perspective is ultimately connected. With our habitat conservation and natural community conservation planning programs, we see that as a way of dealing with land use issues and biological conservation and diversity conservation, but it doesn't necessarily tie in very well with the Integrated Water Management Planning. It sets some land use parameters, sets some criteria as to how we develop and move forward but it doesn't really deal with water issues. I think that is an area where better coordination could occur. My experience with Integrated Regional Water Management planning is that it doesn't necessarily capture the ecological context side of things that well and I think that's an area where more attention could be placed. As far as how regional plans are developed and when considering their context with DWR's priorities and from the Department's perspective, when you look at the Bay Delta Water Quality Control Plan, it created an integrated process. What goes on in the upstream, what goes on in the Bay, it also affects the rest of the components regarding how water resources are allocated. A lot of projects are focused on one component trying to deal with one aspect and I think that is what we went through with the Water Storage Investment Program. So, what is that uplift where on the biological resources side, is a part of the purview of this project? So, I think that is an element that needs to be incorporated in the water planning more to really get at the underlying issues for species conservation, habitat conservation, and floodplain restoration

John Andrew

Thank you, Carl. John Andrew with the Department of Water Resources, where I oversee our climate change activities. I would like to thank the first panel for their feedback, and on that panel there were a couple of milestones noted regarding DWR and climate change. It was 10 years ago this month that the Department issued what we call the climate change white paper; the adaptation white paper, where the official title was *Managing an Uncertain Future*, and I was a lead author along with Justin Pearson, who is now executive officer of the Delta Stewardship Council.

That paper has held up pretty well over the last 10 years. IRWM played a major role in it and it was one of 10 recommendations, it was actually the second recommendation of the 10. In the draft, the first recommendation was actually financing. In the draft right before it went final, IRWM up until that point was the first recommendation in that white paper and got swapped out and financing won out. In October of 2008 we were going through a global fiscal crisis, so you can understand what was on Lester's mind and all of our minds at that time.

In terms of climate change, if IRWM didn't exist as a way to adapt to climate change, we would have to invent IRWM. I really see no other way to do it. On the greenhouse gas side, there was a lot of law and policy regulation along with money, that we don't have on the climate adaptation side. While you can do global, statewide approaches to greenhouse gas emission mitigation, all climate adaptation is going to be local, fiscally. And it just fits the IRWM model very well. It is what we believed in at DWR as the flagship way to adapt to climate change, and it again that has not changed in 10 years. I see it that way going forward.

Leslie Laudon

Hi, I'm Leslie Laudon with State Water Board's Division of Financial Assistance, and I administer a bunch of those "siloed" programs, so I think they're really important and I wouldn't say that we should abandon them and say they are all now IRWM. We have had a long history of a program working with Disadvantaged Communities through our Small Community Waste Water Program, and it's a continued funding source for those types of projects, and I think that's really important. These projects take a long time to plan and design and construct, and so we have to have that long term steady funding source, and we've been able to do that through some of our loan programs.

So, we have interest in repayments coming in constantly. And that's there to fund some of these really big infrastructure projects that IRWM is not going to have the funding for. But I think those programs support the IRWM group and IRWM planning, and so I just think it's a lot of work that we do, that DWR does to support us, that supports IRWMs plans. I'll tell you what, we have an entire group working with our Office of Sustainable Water Solutions just dedicated to working with disadvantaged communities because it takes a lot of staff, and a lot of dedication, a lot of time and a lot of working with stakeholders and technical assistance providers.

We are really blessed with Proposition 1 to get a huge amount of money compared to what we got from other bonds to support disadvantaged communities. We were really able to expand what we are able to do. All of our Proposition 1 money has been committed to our Disadvantaged communities. We were able to fund a lot of planning work. We've been working closely with DWR and their IRWM, and we think that this really is going to be a great opportunity to have our projects ready to go. They've gone through planning and they'll be ready to be funded potentially through IRWM. I think the level of cooperation that we've had with DWR and the combination of our programs is really complimentary.

And I did want to mention also that we've been moving away from the one issue project. The one water quality benefit to multi-benefit projects, and that lends itself to the IRWM planning. We've really seen it come along with the storm water area where storm water resource plans are really adopted into the IRWM and instead of us just funding a water quality project, we're looking at water supply, groundwater recharge. All of these multi-benefits when we fund projects. And I think that's been a huge benefit of that planning and looking broader, and I just wanted to put in a picture of that approach.

Anecita Augustinez

Thank you, Leslie. I believe that the Department's goal and vision has become more specific and representative than in the past. My name is Anecita Augstinez and I am the Tribal Policy Advisor. I wanted to take this time to share with you the role of the Department of Tribal Policy and how that works with DWR's integrated water management and work with stakeholders who represent tribal communities. Some of them are volunteers and some of them are interested parties. Many of you are actually part of being in that position of being an elected spokesperson. So that responsibility we do here is far reaching in terms of representing the whole populace of California.

I want to recognize also the tribal governments. That these are elected leaders and elected government officials within their tribal communities. So, we are here to take that and acknowledge it and understand that role that tribal government officials have. I want to thank all of you and also to show the progress that we have done with tribal engagement.

So, my role obviously as the Tribal Policy Advisor is making sure our Department is adhering to statutes and mandates regarding Tribal Consultation, in government to government relationships, what we do at the State level, and how that translates in how we can advise at the local level, and be a resource not only for integrated water management, but as a strong representative with SGMA process and how we've had to roll that out and as I mentioned earlier, tribal governments have looked at the IRWM process as more of a courtship. Are we involved? Do we like it? Do we like each other? And we really have to decide are we going to be involved, are we going to go out there are we really going to make that relationship work? So that's still happening, and that's still the challenge I think with tribal governments.

The other thing on the Policy level is also having a tribal voice at the guidelines and regulations levels. When we are looking at recent State mandates, and that's been an important voice and only recently brought to the table with Governor Brown's Executive Order for Tribal Consultation. I don't believe you've seen a level of tribal input not only in our stakeholder's perspectives at DWR, but also in some of our obligations and mandatory projects.

So, with those policy regulations and guidelines, what are the major concerns with tribes? It really does fall on governance issues. We're talking all of two days about integration. Tribes also have the same issue with integration, with dealing with a tribal government on sovereign land, dealing with federal partner's language. Because we're looking at sovereign land, and tribes are not only responsible for sovereign land, but also fee land. That's where you also have the crossover with your communities and your jurisdictional boundaries. And that's the integration process that I think is a challenge for tribal governments when you're dealing with governance issues. And we could spend a half a day on those hurdles, which are contracting issues, the requirements and guidelines, regulations requiring legislation of sovereign immunity. Once you get to the table, labor contracting issues as well as forms of governance issues that we commonly throw out such as: "Oh, you can easily do this if you do a MOU or a JPA." What does that really mean to have tribes at the table. Those are some of the things I can share with going through the process with tribes.

Lance Eckhart

Okay, thank you. Now, we talked earlier about how we have Integrated Plans up and down the State. Erik talked about the 267 GSAs, these new governments that have been formed to operate the basins. We have voluntary processes and the regulatory process. It is pretty clear that regulatory processes are our last option.

So, my question is, we all want to work together. We've worked very hard to make these watershed management areas, we've worked very hard to break down these walls to bring in regulatory, waste water, water supply, water quality, flood, and all of these folks. What can we do to support your organizations to keep Integrated Planning relevant? And what can you do to keep Integrated planning relevant. Especially over the next few years, moving through this new regulatory process the State is dealing with. Who wants to go first?

Kris

I'll go first, and I'll do a little bit to amend a little bit of what I was saying the first time around. So, I think what the State can do that would be most useful for IRWM would be to figure out what can we catalyze that otherwise wouldn't happen but for State involvement. You know we do have to be mindful of that fact that when we are spending State funds or bonds or general funds, those benefits need to accrue generally to the whole of the State. As opposed to the expenditure of local tax payer dollars, the benefits of which are hopefully of general help at the local level.

And so, I think what the State can do is get even better at refining grant administration, policy administration, and just basic strategic planning and thinking around Integrated Water Management and figure out what is that thing we can catalyze that but for State financing wouldn't happen at all, or maybe as quickly or as integrated or as successfully on its own.

It's really getting super precise about what the official increment is doing. It's not just about the last 20 percent of a particular water management project. That's interesting, and it's an integrated project, but is that 20 percent doing something that wouldn't otherwise happen, that changes the dynamic a little bit more, that furthers the objectives and broadens the opportunities of multiple agencies.

As far as what local agencies, tribal governments, NGOs, and others involved in this at the non-State level can do, I think it's looking ahead and making sure there are clear lines of communication through the roundtable of regions and a stakeholder guidance document, whatever that may look like so that you and the State are always in the loop and that we are always fully fluent in the challenges and opportunities that you are presenting to us.

Erik

I think that what locals can do it's probably not a reflection of what happens in this room, but if you go down in scale a little bit, if you think about Water Board and the State agencies, it's actually a tremendously small group when you consider the population of the State of California. It's 40 million people, and so you have this sort of disconnect where you have a small group of people who know a lot about how it works and a large amount of people who don't have any idea about how it works. And yet you have these new things coming down like SGMA, or new funding opportunities, and people pick up on little bits and pieces of it, and so sometimes there can be misinformation and sometimes there can be misunderstandings. Those misunderstandings can sometimes trickle upwards to different entities and different political groups that exist within a basin or watershed, and so how do you mitigate all of that?

So, talk to us. Pick up the phone and give us a call. And if I don't answer it, someone is going to answer the call. Tell that to you constituents. We actually love talking to people because then we can get in front of an issue instead of reading about it in the newspaper a few days later.

By example, I know that Bo Mazzetti was here earlier, and I wanted to point out a recent example, but there was an issue involving SGMA. It was incredibly complex because there were several different tribal organizations, we had up to eight different water districts, we had a county involved, and there were some really gnarly issues that had to be worked through, and they called us. We worked with the Department of Water Resources, we worked with local entities, we had a facilitator funded by the State that came in and we talked through issues. It took a lot of work and in the end, I think it worked. I think we got to a point where all the different parties developed political trust with one another and developed a situation where hopefully it looks like it's going to work out further down the road.

Thinking about what Kris said, needing to identify things that the State can catalyze to create the best circumstance. Looking at that circumstance the State could catalyze that SGMA conversation. So, looking where the State can come in and help do that. It would be helpful, it does take time and it does take money. For every meeting that your staff does go to it means there are other grants or projects that we are not reviewing, but in the long term I think that saves time and money. Because we solve these issues before there's a problem.

Comment:

***Bo Mazzetti* —** It worked out well with all of us working together with the Water Board, DWR. It was very technical it involved past treaties. So, we all worked together. I think it was the most complicated basin in the state. So, working together we discussed the problems as a team. It was a team effort.

Carl Wilcox

We have an interest in, and there are relationships between groundwater management and stream flows that are critical in how that issue is addressed results in how public trust is affected.

The Department's capacity to participate is very limited in many of these instances. I think particularly in the context of Integrated Regional Water Management, particularly on the ecological sides of things, these topics aren't always addressed consistently all that well. Part of that I think is the lack of our ability to participate in the process. I think moving forward, we need to recognize the importance of working with collaborators to develop plans that fit into the larger picture and/or support the resources.

So, reaching out is probably a good thing even if may or may not always respond with help, just given our different limitations and priorities. I think we're interested and we're there as a resource to support local groups that are participating. I think the State Wildlife Action Plan provides a good context for how regional groups or smaller groups are looking into these issues and need guidance in their work.

John Andrew

Well, from a climate change perspective I think one of the main things the regional water management groups do for us is to give us the assurance that you're considering the risks of climate change, and what our investments are worth to you.

This is an investment process. We're spending money at the local level to get effective water management in California and that water management is rapidly more affected by climate change. So, this would be a good idea from a financial point of view, if you went to an investment banker looking for money, they would want to know "so this climate change thing, how is it going to affect my investment or my business?" That is not just good financial practice. There is Executive Order B-30-15, and that is codified by AB 1482 and AB 2800 that actually requires that the Department make that assessment in our investments. That we ensure that our investments at the local level are not going to be considered a risk to climate change. Work with us on doing that because that is something that is just prudent financially and also, it's a part of the statute.

I think what we can do from a climate change point of view is, I think after many years of mitigation in GHG emission reduction having taken the center stage with all the legislation, including Cap and Trade, that adaptation as a policy area was "asleep" and as an issue, has started to "wake up." We see it in recent legislation and at least a couple executive orders on adaptation. In addition to IRWM, which has had climate change as a consideration for some time now, you're going to see it in a lot of other planning programs as Kris mentioned earlier, a lot of those planning programs are ours. So, it's incumbent on us that when we're asking you for climate change information in your IRWM, as much as possible, its hopefully something that you can use in other water management planning, or the SGMA process. The State Board has processes where they're asking for the climate change information. There is even SB 379 that now requires local governments to include climate change in their General Plans, so I think it's incumbent upon State agencies, and primarily DWR, to be consistent in what we're asking for regarding climate change.

Leslie Laudon

I'm going to look at how we, the Division of Financial Assistance, are doing to support the integrated planning. I want to talk about our infrastructure projects and our funding programs and the history of the program. Over 38 years, we've always had enough money to fund any of these new projects. Well, that's not the case anymore. And, of course, some of the things we're looking at with these projects is that they have to be included in the regional plans and have local support without any conflicts and having things all resolved in order for us to fund them and put them on our priority list. That's one of the things we're incorporating along with all our other grant programs, IRWM included, is looking at IRWM planning to see that incorporation into the new plans so that they gain extra points for that. I think that as you can see as we're moving to these really large and complex projects, they've got to have the local support as a part of the IRWM plan.

When I look at what IRWM can do for us, probably our biggest challenge right now is providing safe drinking water to our disadvantaged communities. We have hundreds of communities that don't have safe drinking water and they can't afford the operation and maintenance. It's going to take everybody to support them. It's going to take the locals to figure out how they can help with fixing this. We're going to have to find the money source for that, and that is a big challenge. And that's going to be a challenge for the IRWM region as well.

Anecita Augustinez

Thank you. I would like to add to this conversation. It's really important to have partnerships. Take Proposition 1 funding for tribes and to then consider them being an eligible applicant on their own. So, despite that hurdle, there is still that push with IRWM, which I really attribute to stakeholders and their commitment to projects. There are100 federally recognized tribes in the state plus 70 non-federally recognized tribes, so there is a big void on those partnerships. And it's important in the planning process, as Carl mentioned, to look the ecological point of view. What can be learned from the first inhabitants who were probably living in the watershed you are protecting. How can we translate traditional ecological knowledge into what we are doing today? There was a lot of traditional ecological knowledge that can help us today. So, when we're looking at a holistic approach to your planning, it's not just about getting this project done for this immediate need; this immediate project engineering need but look at the sustainability and the resiliency we are looking at that we can tie into SGMA and put it into a water balance, for example. Water balance is this working forward to a hundred-year plan. And a hundred-year plan isn't just about growth or another emergency. It's a partnership and stakeholder understanding of who everyone is and who they represent and the goal of sustainability.

How then can we tribal water rights not only with your stakeholders and then understanding that tribal matrix. I really believe that has been a big hurdle for tribes. And what we have learned with innovation and partnerships, we just have to come together because it's a new generation of leadership and a new generation of understanding and we have to create that partnership, and there's only a limited amount of funding. So, there's a very strong need to make sure that State funding is explicit. I am really looking forward to how we assess the disadvantaged communities funding. This is the very first time, there wasn't really even a thought of it until 2014. What we do there for that under represented and disadvantaged communities, tribes understand that is another avenue for their participation. So, I think that is something to look for. For tribes to say, why don't we have a tribal IRWM? Why don't we have a tribal carve-out under State funding? Those are the issues that have to dealt with outside of the State's interests and those are perspectives shared with me through tribal outreach.

Lance Eckhart

Alright, so we heard some things about integrated planning, we're all converts to integrated planning to fully address the bigger issues, being a model for how we address climate change. How does it trickle down to the local level? We've heard about how if we didn't have an IRWM model we'd have to spend 10 years inventing a new one. We've been talking about DAC funding for years and there has been a lot of criticism of a lot of the State Propositions because we're just now starting to get that money out to disadvantaged communities who really need it. In my region, the integrated planning process seems to be working. Hopefully it's a model that will continue. There's also been advances with tribal issues using integrated planning process. So, we believe, and they believe, this may be above your pay grade, but a lot of you folks administer regulations and programs that come down the pipe. Now what we don't have here today are a lot of the legislators.

I would like to ask the panel; we would like to help each other keep integrated planning going because we've taken great strides with that in the last 20 years. Is this legislature paying attention to integrated management? Does it know what it is? Is it part of their vocabulary? And you're closer to the legislature than me and a lot of us here in Sacramento. How can we keep it relevant to the legislature and make sure that the integrated planning is clued in to policies and programs that come from the State?

Leslie Laudon

As we talk, it's usually a project and an individual issue, but we always try to put it in the context of the State and of the region and in resolving local conflict and things like that. The State Board probably doesn't speak "IRWM" as much as say, at DWR, but we always talk about those principles and having been here we can make more of a conscious effort to put those letters into the conversation than we do. I think most of the legislators we talk with do understand the concepts and support it, but I think with getting specific program support we have to do a little bit more.

Anecita Augustinez

As many of you may know or do not know as we do, every five years the Department of Water Resources hosts a Tribal Water Summit. We just had our 3rd Water Summit. One in 2009, 2013, and now a Water Summit 2018. That Water Summit came about because of the questions on legislative actions. Why weren't tribes able to be participants in direct funding? The other thing is with the Water Plan itself. The Water Code itself does not spell out that the tribes should be called out as a public water agency.

Now I came to the Department of Water Resources in August of 2013. At the end of that Water Summit I was involved in how to push forward those recommended actions after the Water Summit. So, I only participated in one Tribal Water Summit, which was this year. What we did was we recapped the highlights of that Water Summit from the tribal perspective, the Tribal Advisory Committee at that time reviewed methods of the Natural Resources Committee. We centered them on joint actions and what was missing in why tribes were not at the table or being involved in water management, particularly from an ecological perspective. That was in 2013 of August. And also, then tribal advocacy on the ground and it really had a direct impact on 2014 legislation, and in SGMA, as well as Proposition 1. And that was just a great way of showing that this Tribal Advisory Committee was actually working and doing legislative advocacy. So, it can be done and is really about that local engagement level.

Kris Tjernell

So, I think it goes without saying that we probably have a good agreement about this but the process of legislation, or a citizen's initiative process or making a general application bond isn't pretty. That's kind of fact one.

Fact two is that legislators are humans as well, and they want to feel at the end of the day, they secured something very concrete and very real for their constituencies. And so, to the extent that we aren't acting together as an IRWM community and advocating at various levels so that a legislator understands that IRWM does mean concrete, meaningful work. It does mean the region's water needs are being met. It does mean flood protection is improved. It's not this other thing. It's not this other thing where there has to be the next billion dollars pulled from somewhere to make happen. But that it's actually fundamental and that they see a win in going to work on and pushing for a bond that has IRWM funding. What is the currency of IRWM? How do we frame that? How do we advocate for that?

Carl Wilcox

I think, adding onto Kris's point this point whether it's IRWM or something else, a critical engagement plan; engagement strategy. If there is something that is brought forward that has brought work. If there is something brought forward that has everybody generally involved and that from some perspective that solves multiple problems, then that is ultimately going to get support and recognition if legislation is needed or a legislative support perspective for inclusion in a bond. And in instances in most familiar cases where the Baylands Ecosystem goals that were developed in the late 90s, that ended up in having $150 million in Prop 50 that included grants for the objectives of the Bay.

So that had broad local support from local communities and environmental groups. I think that's kind of an example of how to bring something forward that gives a legislator something he can draw on.

Lance Eckhart

Okay, so we're just about out of time. I'm going to do a quick lightning question. Knowing you want to preserve integrated planning, the thoughts, the process, the ethos, in an era of greater difficulty carving out money for integrated planning. In an era where we've created 267 new other little governing districts that are probably going to be internally focused for at least the near term.

What do we need to do to keep irrigated planning relevant and alive?

Help disadvantaged communities.

Support the projects for our disadvantaged communities to get them help.

Roundtable of Regions.

Focus on at least for the GMA level, groundwater recharge, and figure out how IRWM is going to play a role in those efforts.

Successfully mentor the best darn round of implementation grants that the community has ever seen. That are responsive to local needs, timely, not forced on anybody, but responsive to what's actually necessary. Going on.

Appendix A

Voting for IRWM Needs

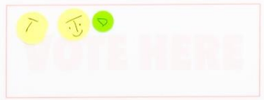
STRATEGY 1
IMPROVE ALIGNMENT

Alignment Planning and Support (Page 13)*

Task Force for Regulatory Alignment
The State should expand the federal, State, and local regulatory agency task force (under the State Water Action Plan) to include IRWM representatives and formulate remedies for regulatory misalignments and inefficiencies that impede IRWM.

State Agency Support for Regulatory Alignment
State agency personnel should collaborate with and support the "Task Force for Regulatory Alignment" (see left).

Federal Agency Support for Regulatory Alignment
Federal agency personnel should collaborate with and support the "Task Force for Regulatory Alignment" (see left).

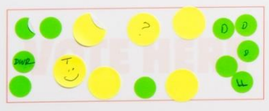


IRWM CEQA Incentives
State agencies should investigate how IRWM plans could potentially satisfy CEQA process requirements for projects addressed in an IRWM plan (functional equivalency).

IRWM Alignment Support Funding
Federal and State agencies should be funded to improve alignment with IRWM.

Non-Regulatory Programs (Page 14)*

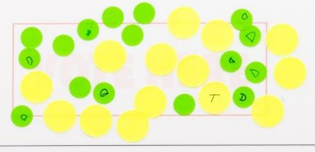
Agency Program Alignment
To the degree possible, align federal, tribal, State, regional, and local water-related agency programs to support IRWM.



Funding Alignment
Align State and federal grant and loan programs (schedules, processes, funding criteria, etc.) with IRWM.

IRWM Incentives for Non-IRWM Grants and Loans
For all water-related State grants and loans, State agencies should comply with Water Code Sections 10544 and 10608.50, and give preference to projects included in an adopted IRWM plan.

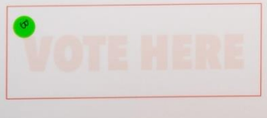
DWR Program Alignment
DWR should align all its programs (Water Plan, flood management, groundwater, climate change, data, water use efficiency, etc.) to support IRWM, to the extent possible.



Regulatory Programs (Page 15)*

One-stop Environmental Permitting
Establish a pilot program for one-stop federal and State environmental permitting for projects included in an adopted IRWM plan.

Delegated Regulatory Authority to IRWM Regions
Determine the need for, and means of, delegating some regional water quality control board responsibilities to IRWM regions, upon mutual consent.



Alignment of Local Planning Requirements with IRWM
Better align State requirements for water-related local planning (stormwater management, urban water management, etc.) with IRWM.

General Plan Integration
The State should change general plan guidelines to ensure consistency with IRWM plans.

* **Stakeholder Perspectives** – Recommendations for Sustaining and Strengthening Integrated Regional Water Management (DWR, March 2017).

STRATEGY 2
STRENGTHEN PRACTICES

Support for Regional Capacity Building (Page 17)*

Base-level Funding for IRWM Regions
The State should provide noncompetitive base-level funding to IRWM regions (up to $250,000 per region per year) to help support key operations (stakeholder engagement, IRWM planning, underrepresented group participation, data sharing with the State, etc.).

Regional Priorities Funding
The State should provide competitive grants to IRWM regions ($600 million statewide every 4-6 years) to accelerate and leverage local and regional investments to address regional water management needs.

Inter-Regional and Statewide Priorities Funding
The State should provide noncompetitive grants to IRWM regions ($200 million statewide every 4-6 years) to address inter-regional and statewide water management priorities.

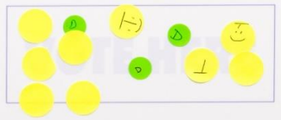
Capacity Needs Identification
IRWM regions should inform DWR of their capacity needs (technical, organizational, and financial) for practicing IRWM.

Inter-Regional Cooperation and Collaboration
The State should promote inter-IRWM region cooperation and collaboration and help resolve any barriers to IRWM regions working together to address inter-regional water management needs.

Tribal Participation
The federal government and the State should provide funding to California Native American Tribes (Tribes) to support participation in IRWM.

IRWM Conferences
The State should work with the IRWM Roundtable of Regions and other stakeholders to organize and conduct IRWM conferences.

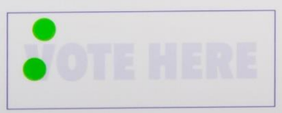
Disadvantaged Community (DAC) Involvement
The State should establish a taskforce to help increase DAC involvement in IRWM along with other actions including establishing a State DAC coordinator for IRWM, and DAC-focused training programs and needs assessments.



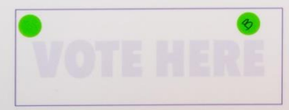
Tribal Involvement
The State should establish a task force to help increase tribal involvement in IRWM along with related actions including establishing a tribal liaison for IRWM, and tribal-focused training programs and needs assessments.

Regional Governance (Page 20)*

Strengthened Governance
IRWM regions should, where appropriate, strengthen the form of governance they use to ensure IRWM can be sustained and that regional goals can be met.



Adaptation to New Legislation
IRWM regions should, on an ongoing basis, modify the form of governance they use, where appropriate, to address new legislation (such as the Sustainable Groundwater Management Act).



Representation in Governance
IRWM regions should modify the form of governance they use, where appropriate, to improve tribal representation in IRWM. Regions should take similar actions to improve DAC representation in IRWM.

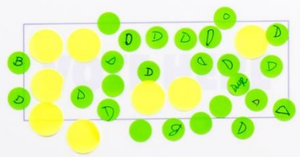
Collective Representation
IRWM regions should work together, and with other stakeholders, to establish a representative advocacy association for IRWM.

* **Stakeholder Perspectives** – Recommendations for Sustaining and Strengthening Integrated Regional Water Management (DWR, March 2017).

STRATEGY 2
STRENGTHEN PRACTICES

Regional Practices *(...where appropriate)* (Page 21)*

Land Use Alignment
IRWM regions and local agencies should coordinate and align water management plans, projects, and decisions with land use planning in their regions.



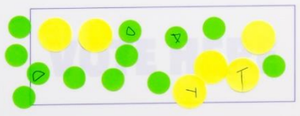
Consistency of IRWM Projects
IRWM regions and local agencies should improve consistency between IRWM projects and local water agency capital improvement and operational plans in their regions, as appropriate.

Plan Updates
IRWM regions should update their IRWM plans, as needed, to remain relevant and to adequately reflect regional conditions, priorities, and progress.

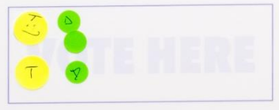
Inter-Regional Collaboration
IRWM regions should collaborate with adjoining regions and work toward addressing any inter-regional water management issues such as flood management, groundwater sustainability, source water protection, etc.

Promotion of IRWM Projects
IRWM regions should encourage their members and others to develop and implement IRWM projects.

Resource Pooling
IRWM regions and their members should identify and leverage opportunities to pool personnel and fiscal resources.



Funding Source Identification
IRWM regions should seek IRWM project funding from multiple potential sources including federal, State, and private organizations.

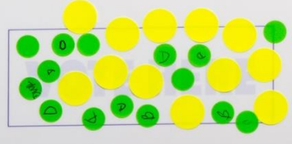


Participation Barriers
IRWM regions should work to remove barriers to stakeholder participation in their regional processes.

Promotion of Participation
IRWM regions should encourage stakeholder participation in regional processes.

Agency Participation
Local and regional agencies should establish policies, protocols, and budgets, where needed, to increase levels of participation in IRWM processes.

Disadvantaged Communities (DACs) Participation
IRWM regions should work with DWR and DAC representatives to increase DAC participation in IRWM processes.



Tribal Participation
California Native American Tribes should consider establishing policies, protocols, and budgets, where needed, to increase tribal participation in IRWM.

Grant Management Support
Local and regional agencies should continue to improve project management controls, where needed, to ensure compliance with, and timely fulfillment of IRWM grant agreement terms and conditions.

* **Stakeholder Perspectives** – Recommendations for Sustaining and Strengthening Integrated Regional Water Management (DWR, March 2017).

Strategy 3: **Improve Services**

STRATEGY 3
IMPROVE SERVICES

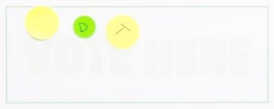
Customer Service Principles and Practices (Page 25)*

DWR IRWM Program Operating Principle

DWR should adopt an operating principle such as: *Help all IRWM regions successfully practice integrated water management and increase regional self-reliance by forging stronger partnerships between DWR and IRWM regions, founded on respect for regional decisions and improved services.*

Customer Service

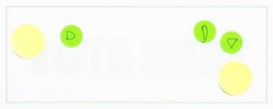
DWR should adopt measures to support the enhancement of customer services to IRWM regions and establish an IRWM customer service advisory group, develop performance standards and metrics for services, and conduct customer surveys.



Regional Service Representative (RSR) Training

DWR should help meet the coordination and support needs of IRWM regions, and provide comprehensive training to RSRs.

(Note: DWR's RSR Program for IRWM was significantly reduced because of budget constraints.)



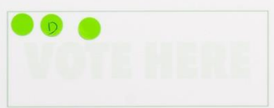
IRWM Grant Program (Page 26)*

Deference to IRWM Regions

DWR should work with stakeholders to improve provisions in IRWM grant guidelines, and ensure maximum possible deference to regional project priorities and decision-making processes.

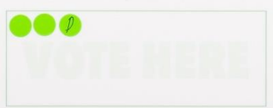
Diversity Accommodation

State IRWM grant programs should account for the widely ranging needs and circumstances of IRWM regions (fiscal, technical, geographic, hydrologic, etc.) to promote the practice of IRWM and ensure that no regions are left behind.



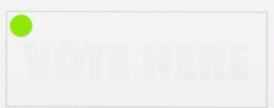
Strengthened Inter-Regional Partnerships

State agencies should seek necessary authority from the Legislature to develop appropriate grant-funding guidelines to help reduce inter-IRWM region competition and to strengthen cooperation within grant funding areas.



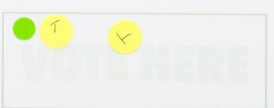
Plan Update Flexibility

The State should allow IRWM regions to exercise discretion in updating IRWM plans (such as plan revisions through addenda) in response to changes in State IRWM plan requirements.



Improved Contracting Processes

DWR should improve the timeliness and efficiency of grant agreement and contract execution.



Contract Management Training

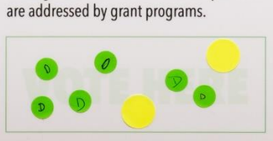
DWR should periodically provide joint training to both DWR and grantee contract managers to ensure consistent understanding and application of grant contract management requirements.

Improved Reimbursement Processes

The State should simplify grantee invoice requirements for public agency grantees willing to assume increased fiduciary responsibilities and accountability.

Disadvantaged Community (DAC) Listening Sessions

The State should hold DAC "listening sessions" before issuing water-related grant guidelines, application requirements, and scoring criteria to ensure that DAC priorities are addressed by grant programs.

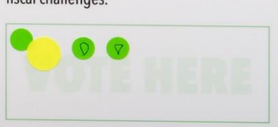


Simplified Disadvantaged Community (DAC) Grant Applications

The State should work with DAC representatives and IRWM regions to simplify grant application criteria for DAC grants under Proposition 1 and other grant programs.

Advance Disbursement of Grant Funds

The State should develop and implement guidelines and procedures for the partial, full, or incremental advance disbursement of grant funds to grantees with significant fiscal challenges.



* **Stakeholder Perspectives** – Recommendations for Sustaining and Strengthening Integrated Regional Water Management (DWR, March 2017).

STRATEGY 3
IMPROVE SERVICES

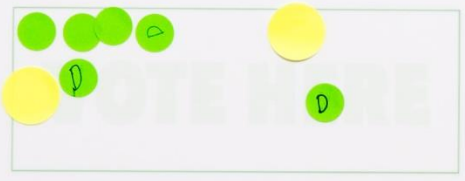
Technical Support (Page 28)*

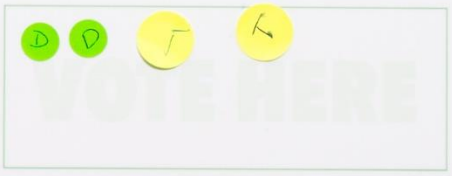
Communication of Needs
IRWM regions should work with DWR's regional service representatives (RSRs) on an ongoing basis to inform DWR about their technical, facilitation, communication, and coordination assistance needs.

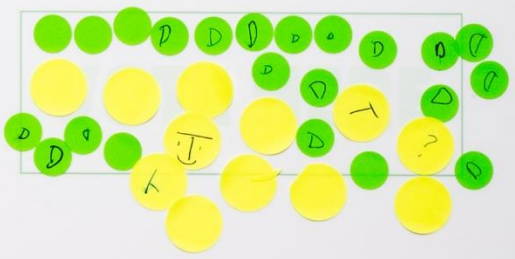
(Note: DWR's RSR Program for IRWM was significantly reduced because of budget constraints.)

Training
DWR should provide training for IRWM practitioners and other stakeholders on topics including public outreach, collaborative planning, and a wide variety of technical topics relevant to IRWM practices.

Technical Support Services for Water Budget Development
DWR should work with IRWM regions, groundwater sustainability agencies, California Native American Tribes, and disadvantaged communities, when requested, to provide technical support and training for the development of local and regional water resource budgets.



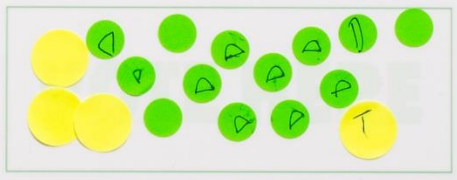




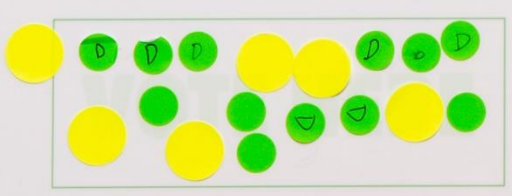
Technical Support Services for Data Management
DWR should work with IRWM regions to determine local, tribal, regional, and statewide IRWM data management needs, and develop a plan for addressing those needs.

Technical Support Services for Climate Change Analyses
DWR should work with IRWM regions to address climate change.

Center of Excellence
DWR should seek long-term funding to establish a "center of excellence" to assist IRWM practitioners with their emerging technical needs.



Regional Assistance Funding
DWR should be funded to provide technical, facilitation, communication, and coordination services to IRWM regions, and to reestablish its Regional Service Representative Program to support IRWM regions.



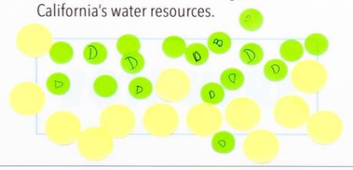
* **Stakeholder Perspectives** – Recommendations for Sustaining and Strengthening Integrated Regional Water Management (DWR, March 2017).

STRATEGY 4
COMMUNICATE VALUES

Official Recognition (Page 31)*

Intrinsic Value Recognition
With or without State incentives, local and regional agencies should officially recognize IRWM and adopt the practice for its intrinsic value.

Legislative Recognition
The Legislature should add language to California Water Code Section 10531 to officially recognize IRWM as a key means of increasing regional self-reliance and helping achieve the sustainable management of California's water resources.



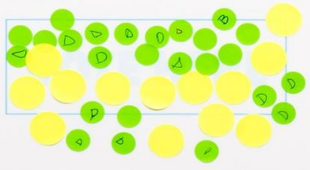
State Administrative Directive
The State administration should consider directing all State agencies involved in, or affecting, any aspect of water management to officially recognize IRWM, and work cooperatively in promoting and supporting IRWM.

Agency Recognition
Federal, tribal, State, regional, and local agencies should modify their operating principles, where appropriate, to officially recognize the critical role of IRWM in water management and to support integration across all levels of government.

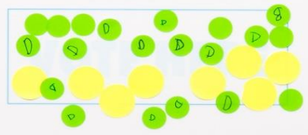
Information Sharing (Page 32)*

IRWM Information Officer
DWR should establish a full-time statewide IRWM information officer to collaborate with the IRWM Roundtable of Regions and other stakeholders, and to develop statewide IRWM information, including values and accomplishments.

Performance Metrics
DWR should work with the IRWM Roundtable of Regions and other stakeholders to develop performance metrics and reporting processes to measure and track the value and accomplishments of IRWM.



Information Sharing Tools
DWR should, in collaboration with the IRWM Roundtable of Regions and other stakeholders, develop tools for collecting and reporting information on the value and accomplishments of IRWM, including an IRWM atlas and educational videos.



Reporting
IRWM regions should collect and report IRWM project benefit information, in coordination with DWR, to document the value and accomplishments of IRWM.

Lessons Learned
IRWM regions should share unique and innovative water management solutions, and lessons learned, with other IRWM regions and DWR.

Education (Page 33)*

Curricula
DWR should develop and promote educational curricula for universities and K-12 classrooms to instill knowledge and understanding of the value of California's water resources, and the need for, and practice of, integrated water management.

IRWM Region Websites
IRWM regions should maintain and enhance publicly accessible IRWM region websites with up-to-date information about regional water management challenges, IRWM projects and benefits, and other relevant information.

Local Media
IRWM regions should work with local media, where feasible, to promote understanding of water management issues and the values and successes of IRWM.

* **Stakeholder Perspectives** – Recommendations for Sustaining and Strengthening Integrated Regional Water Management (DWR, March 2017).

Appendix B

Voting Summary
For
IRWM Needs

STRATEGY 1
IMPROVE ALIGNMENT

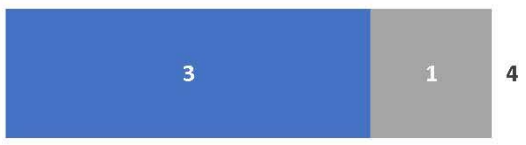
Task Force for Regulatory Alignment
The State should expand the federal, State, and local regulatory agency task force (under the State Water Action Plan) to include IRWM representatives and formulate remedies for regulatory misalignments and inefficiencies that impede IRWM.

State Agency Support for Regulatory Alignment
State agency personnel should collaborate with and support the "Task Force for Regulatory Alignment" (see left).

Federal Agency Support for Regulatory Alignment
Federal agency personnel should collaborate with and support the "Task Force for Regulatory Alignment" (see left).

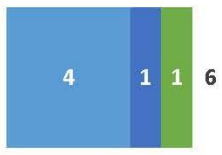
IRWM CEQA Incentives
State agencies should investigate how IRWM plans could potentially satisfy CEQA process requirements for projects addressed in an IRWM plan (functional equivalency).

IRWM Alignment Support Funding
Federal and State agencies should be funded to improve alignment with IRWM.

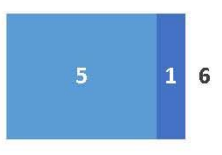


Agency Program Alignment
To the degree possible, align federal, tribal, State, regional, and local water-related agency programs to support IRWM.

Funding Alignment
Align State and federal grant and loan programs (schedules, processes, funding criteria, etc.) with IRWM.



IRWM Incentives for Non-IRWM Grants and Loans
For all water-related State grants and loans, State agencies should comply with Water Code Sections 10544 and 10608.50, and give preference to projects included in an adopted IRWM plan.

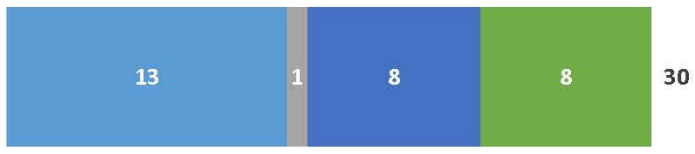


Stakeholder | DWR | Federal | Other State | State Boards/ Regional Boards | Tribal

STRATEGY 1 (cont)
IMPROVE ALIGNMENT

DWR Program Alignment

DWR should align all its programs (Water Plan, flood management, groundwater, climate change, data, water use efficiency, etc.) to support IRWM, to the extent possible.



One-stop Environmental Permitting

Establish a pilot program for one-stop federal and State environmental permitting for projects included in an adopted IRWM plan.

Delegated Regulatory Authority to IRWM Regions

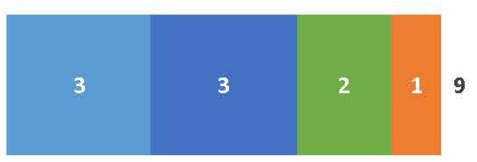
Determine the need for, and means of, delegating some regional water quality control board responsibilities to IRWM regions, upon mutual consent.

Alignment of Local Planning Requirements with IRWM

Better align State requirements for water-related local planning (stormwater management, urban water management, etc.) with IRWM.

General Plan Integration

The State should change general plan guidelines to ensure consistency with IRWM plans.



STRATEGY 2
STRENGTHEN PRACTICES

Base-level Funding for IRWM Regions

The State should provide noncompetitive base-level funding to IRWM regions (up to $250,000 per region per year) to help support key operations (stakeholder engagement, IRWM planning, underrepresented group participation, data sharing with the State, etc.).

Regional Priorities Funding

The State should provide competitive grants to IRWM regions ($600 million statewide every 4-6 years) to accelerate and leverage local and regional investments to address regional water management needs.

Inter-Regional and Statewide Priorities Funding

The State should provide noncompetitive grants to IRWM regions ($200 million statewide every 4-6 years) to address inter-regional and statewide water management priorities.

Capacity Needs Identification

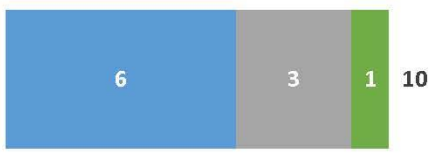
IRWM regions should inform DWR of their capacity needs (technical, organizational, and financial) for practicing IRWM.

Inter-Regional Cooperation and Collaboration

The State should promote inter-IRWM region cooperation and collaboration and help resolve any barriers to IRWM regions working together to address inter-regional water management needs.

Tribal Participation

The federal government and the State should provide funding to California Native American Tribes (Tribes) to support participation in IRWM.



IRWM Conferences

The State should work with the IRWM Roundtable of Regions and other stakeholders to organize and conduct IRWM conferences.

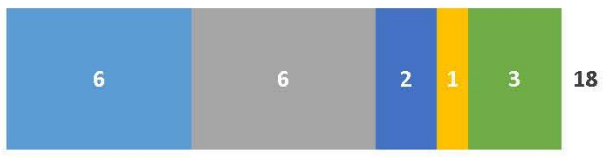
STRATEGY 2 (cont)
STRENGTHEN PRACTICES

Disadvantaged Community (DAC) Involvement

The State should establish a taskforce to help increase DAC involvement in IRWM along with other actions including establishing a State DAC coordinator for IRWM, and DAC-focused training programs and needs assessments.

Tribal Involvement

The State should establish a task force to help increase tribal involvement in IRWM along with related actions including establishing a tribal liaison for IRWM, and tribal-focused training programs and needs assessments.



Strengthened Governance

IRWM regions should, where appropriate, strengthen the form of governance they use to ensure IRWM can be sustained and that regional goals can be met.

Adaptation to New Legislation

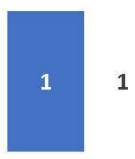
IRWM regions should, on an ongoing basis, modify the form of governance they use, where appropriate, to address new legislation (such as the Sustainable Groundwater Management Act).

Representation in Governance

IRWM regions should modify the form of governance they use, where appropriate, to improve tribal representation in IRWM. Regions should take similar actions to improve DAC representation in IRWM.

Collective Representation

IRWM regions should work together, and with other stakeholders, to establish a representative advocacy association for IRWM.

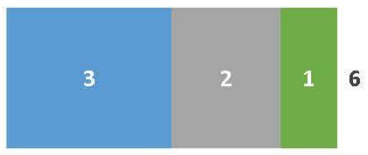


Land Use Alignment

IRWM regions and local agencies should coordinate and align water management plans, projects, and decisions with land use planning in their regions.

STRATEGY 2 (cont)
STRENGTHEN PRACTICES

Consistency of IRWM Projects
IRWM regions and local agencies should improve consistency between IRWM projects and local water agency capital improvement and operational plans in their regions, as appropriate.



Plan Updates
IRWM regions should update their IRWM plans, as needed, to remain relevant and to adequately reflect regional conditions, priorities, and progress.

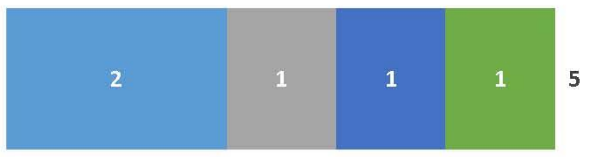
Inter-Regional Collaboration
IRWM regions should collaborate with adjoining regions and work toward addressing any inter-regional water management issues such as flood management, groundwater sustainability, source water protection, etc.

Promotion of IRWM Projects
IRWM regions should encourage their members and others to develop and implement IRWM projects.

Resource Pooling
IRWM regions and their members should identify and leverage opportunities to pool personnel and fiscal resources.

Funding Source Identification
IRWM regions should seek IRWM project funding from multiple potential sources including federal, State, and private organizations.

Participation Barriers
IRWM regions should work to remove barriers to stakeholder participation in their regional processes.



Agency Participation
Local and regional agencies should establish policies, protocols, and budgets, where needed, to increase levels of participation in IRWM processes.

STRATEGY 2 (cont)
STRENGTHEN PRACTICES

Promotion of Participation
IRWM regions should encourage stakeholder participation in regional processes.

NO VOTES

Disadvantaged Communities (DACs) Participation
IRWM regions should work with DWR and DAC representatives to increase DAC participation in IRWM processes.

Tribal Participation
California Native American Tribes should consider establishing policies, protocols, and budgets, where needed, to increase tribal participation in IRWM.

Grant Management Support
Local and regional agencies should continue to improve project management controls, where needed, to ensure compliance with, and timely fulfillment of IRWM grant agreement terms and conditions.

Stakeholder
DWR
Federal
Other State
State Boards/ Regional Boards
Tribal

STRATEGY 3
IMPROVE SERVICES

DWR IRWM Program Operating Principle

DWR should adopt an operating principle such as: *Help all IRWM regions successfully practice integrated water management and increase regional self-reliance by forging stronger partnerships between DWR and IRWM regions, founded on respect for regional decisions and improved services.*

Customer Service

DWR should adopt measures to support the enhancement of customer services to IRWM regions and establish an IRWM customer service advisory group, develop performance standards and metrics for services, and conduct customer surveys.

Regional Service Representative (RSR) Training

DWR should help meet the coordination and support needs of IRWM regions, and provide comprehensive training to RSRs.

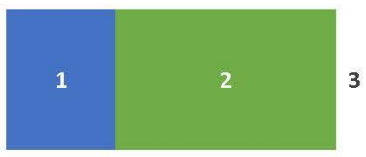
(Note: DWR's RSR Program for IRWM was significantly reduced because of budget constraints.)

Deference to IRWM Regions

DWR should work with stakeholders to improve provisions in IRWM grant guidelines, and ensure maximum possible deference to regional project priorities and decision-making processes.

Diversity Accommodation

State IRWM grant programs should account for the widely ranging needs and circumstances of IRWM regions (fiscal, technical, geographic, hydrologic, etc.) to promote the practice of IRWM and ensure that no regions are left behind.



Strengthened Inter-Regional Partnerships

State agencies should seek necessary authority from the Legislature to develop appropriate grant-funding guidelines to help reduce inter-IRWM region competition and to strengthen cooperation within grant funding areas.

STRATEGY 3 (cont)
IMPROVE SERVICES

Plan Update Flexibility
The State should allow IRWM regions to exercise discretion in updating IRWM plans (such as plan revisions through addenda) in response to changes in State IRWM plan requirements.

Improved Contracting Processes
DWR should improve the timeliness and efficiency of grant agreement and contract execution.

Contract Management Training
DWR should periodically provide joint training to both DWR and grantee contract managers to ensure consistent understanding and application of grant contract management requirements.

Improved Reimbursement Processes
The State should simplify grantee invoice requirements for public agency grantees willing to assume increased fiduciary responsibilities and accountability.

Disadvantaged Community (DAC) Listening Sessions
The State should hold DAC "listening sessions" before issuing water-related grant guidelines, application requirements, and scoring criteria to ensure that DAC priorities are addressed by grant programs.

Simplified Disadvantaged Community (DAC) Grant Applications
The State should work with DAC representatives and IRWM regions to simplify grant application criteria for DAC grants under Proposition 1 and other grant programs.

Advance Disbursement of Grant Funds
The State should develop and implement guidelines and procedures for the partial, full, or incremental advance disbursement of grant funds to grantees with significant fiscal challenges.

STRATEGY 3 (cont)
IMPROVE SERVICES

Communication of Needs

IRWM regions should work with DWR's regional service representatives (RSRs) on an ongoing basis to inform DWR about their technical, facilitation, communication, and coordination assistance needs.

(Note: DWR's RSR Program for IRWM was significantly reduced because of budget constraints.)

Training

DWR should provide training for IRWM practitioners and other stakeholders on topics including public outreach, collaborative planning, and a wide variety of technical topics relevant to IRWM practices.

Technical Support Services for Water Budget Development

DWR should work with IRWM regions, groundwater sustainability agencies, California Native American Tribes, and disadvantaged communities, when requested, to provide technical support and training for the development of local and regional water resource budgets.

Technical Support Services for Data Management

DWR should work with IRWM regions to determine local, tribal, regional, and statewide IRWM data management needs, and develop a plan for addressing those needs.

Technical Support Services for Climate Change Analyses

DWR should work with IRWM regions to address climate change.

Center of Excellence

DWR should seek long-term funding to establish a "center of excellence" to assist IRWM practitioners with their emerging technical needs.

Regional Assistance Funding

DWR should be funded to provide technical, facilitation, communication, and coordination services to IRWM regions, and to reestablish its Regional Service Representative Program to support IRWM regions.

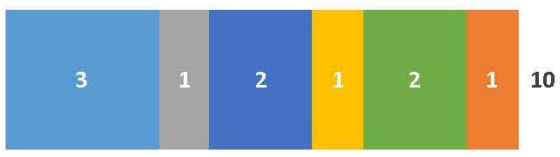
Stakeholder | DWR | Federal | Other State | State Boards/ Regional Boards | Tribal

STRATEGY 4
COMMUNICATE VALUES

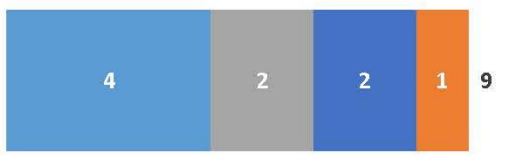
Intrinsic Value Recognition
With or without State incentives, local and regional agencies should officially recognize IRWM and adopt the practice for its intrinsic value.

Legislative Recognition
The Legislature should add language to California Water Code Section 10531 to officially recognize IRWM as a key means of increasing regional self-reliance and helping achieve the sustainable management of California's water resources.

State Administrative Directive
The State administration should consider directing all State agencies involved in, or affecting, any aspect of water management to officially recognize IRWM, and work cooperatively in promoting and supporting IRWM.



Agency Recognition
Federal, tribal, State, regional, and local agencies should modify their operating principles, where appropriate, to officially recognize the critical role of IRWM in water management and to support integration across all levels of government.



IRWM Information Officer
DWR should establish a full-time statewide IRWM information officer to collaborate with the IRWM Roundtable of Regions and other stakeholders, and to develop statewide IRWM information, including values and accomplishments.

Performance Metrics
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STRATEGY 4 (cont)
COMMUNICATE VALUES

Information Sharing Tools
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Reporting
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Lessons Learned
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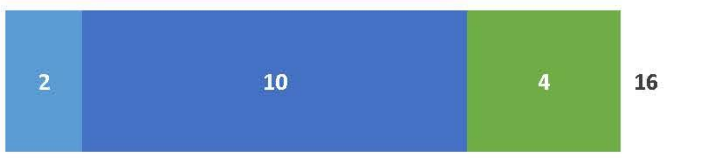

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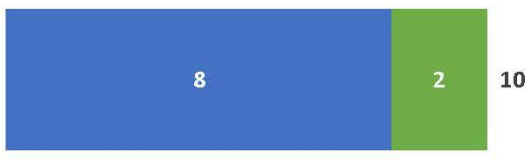

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