

**Greater Monterey County Integrated Regional Water Management Program  
Regional Water Management Group Meeting**

**June 17, 2020  
Google Meet Conference Call**

**RWMG Entity Attendees:**

Alan Arvin – California Marine Sanctuary Foundation  
Ross Clark – Central Coast Wetlands Group  
Beth Febus – Big Sur Land Trust  
Elizabeth Krafft – Monterey County Water Resources Agency  
Mike McCullough – Monterey One Water  
Heidi Niggemeyer – City of Salinas  
Paul Robins – Resource Conservation District of Monterey County  
Rachel Saunders – Big Sur Land Trust  
Eric Tynan – Castroville Community Services District

**Non-RWMG Attendees:**

Emily Gardner – Salinas Valley Basin Groundwater Sustainability Agency  
Michael Gardner – Aqaix  
John Hunt – UC Davis  
Kelli McCune – Sustainable Conservation  
Susan Robinson – Greater Monterey County IRWM Program Director

**Meeting Minutes**

**1. Brief Introductions and Check In.**

**2. Public-Private Funding Models:** Kelli McCune, Project Director for Conservation Incentives at Sustainable Conservation, provided a presentation on public-private funding models, sharing lessons learned from Sustainable Conservation’s experiences in testing some of these approaches. She remarked that market-based funding models can be challenging, and take a lot of time and hard work. But this funding approach can also be highly worthwhile, accelerating community-based restoration, connecting beneficiaries with project proponents, quantifying environmental outcomes, and focusing on shared priorities.

Kelli provided a definition of conservation finance: “Mechanisms and strategies that generate, manage and deploy financial resources and align incentives to achieve nature conservation outcomes” (Meyers et al. 2020. [Conservation Finance: A Framework](#)). Kelli walked through several points to consider when trying determine what funding model is the best fit for the outcome one is trying to achieve. She emphasized that the focus is on benefits: What are the outcomes to achieve (for example, water quality, water supply reliability, and ecosystem resiliency)? The next question to ask is: Who are the beneficiaries, and why do they care? Kelli also acknowledged the value of benefits that can’t be measured (which is

ok). To determine which benefits to quantify, she suggested that the person seeking funds consider the *shared priorities* between the project proponent and the beneficiaries.

For the question “*who* benefits?” (e.g., ecosystems? water users?), Kelli noted the spatial component – where are the beneficiaries located in relation to the benefits being generated? She commented that market-based funding is a lot about relationship building. “Why do they care? What’s in it for them?” Kelli categorized beneficiaries broadly into the public (e.g., taxpayers, utilities), companies, impact investors, and banks and insurance. The question to ask is: How does investment in benefits reduce risk, e.g., to a company’s supply chain, or to impacts to operations? A company may want to participate, for example, to protect the company brand and reduce reputational risk. Reducing regulatory risk is also a major driver for investment in benefits. The other case for investment besides reducing risk is to help achieve an entity’s purpose. For a company, this could mean that their investment in conservation outcomes helps them meet a commitment they have made to stakeholders, attract and retain talent, increase market share, or access patient capital.

Kelli emphasized that if one seeks to engage in this sort of funding approach it is important to have sufficient organizational capacity to do so, a “hub” to first get to know and build relationships with the beneficiaries before setting up a funding model. It is also important to have this organizational capacity to efficiently and effectively connect the project proponents with potential funding partners.

Kelli then provided some examples, including a project in the Pajaro Valley implemented by a partnership between UC Cooperative Extension, RCD Santa Cruz, Driscoll’s and strawberry farmers, which focused on improving irrigation and nitrogen use efficiency to achieve healthy surface waters and groundwater. Cooperative Extension helped define the indicators of efficiency. Kelli commented that while quantifying benefits is important, it takes time and money, and therefore cautioned not to attempt to “quantify everything.” Kelli gave another example of a partnership between Sustainable Conservation, the RCD Santa Cruz and California FarmLink, that developed a loan program where FarmLink offers growers a rebate on their loan interest for achieving irrigation and nitrogen use efficiency (as demonstrated through monitoring conducted by the RCD).

John Hunt noted the challenge in defining beneficiaries, and asked Kelli for other examples. Kelli gave an example of water utilities as the beneficiary, where they have an interest in paying for watershed health management in order to protect source water. Another example might be a flood protection agency interested in funding conservation actions in order to reduce the impacts of hurricane events in the future. Emily Gardner asked, who should bear the cost of monitoring? Kelli said that cost could be passed on to the beneficiary, as part of the payment for the outcome. She noted the “transaction costs” inherent in the market-based funding model and the need to build those costs in. Mike Gardner commented that reducing transaction and monitoring costs is partly what his company, Aqaix, is aiming to do (great segue to the next agenda item!).

**3. Aqaix Demonstration:** Michael Gardner provided an overview and demonstration of the Aqaix software platform that he has created to support the financing of water infrastructure. Mike has a degree in resource economics from UC Berkeley, and has had a long career as an entrepreneur and managing engineering and Big Data groups at companies in Silicon Valley. Two years ago Mike founded Aqaix, an

Impact startup, to try to help bring more funding to water infrastructure projects of all types. Aqaix uses data and software automation to support finance campaigns and innovative environmental finance models such as pay for performance, performance bonds, restoration credits, and others. Mike commented that he lives in Santa Cruz and has a personal interest in helping water resource projects in this region find funding.

Mike founded Aqaix based on the desire to bring more capital to water resource projects. He noted that traditional funding models aren't optimal for funding projects; e.g., there are long wait times for government grant funds, and bonds are complicated. Mike saw an opportunity in using software to bring together huge amounts of data with innovative finance models. Green bonds, for example, are data/information-based bonds. Use of the proceeds need to fit with a "green" purpose; but it often takes too long to get that information to the bond issuers. Another example of need for data: restoration or conservation credits are ways to monetize project benefits, but it takes data to demonstrate the benefits.

Mike then gave a demonstration of the Aqaix tool, using the Greater Monterey County Storm Water Resource Plan (SWRP) projects as an example. Aqaix contains a catalogue of projects with photos, descriptions, ratings on various factors/attributes (e.g., financial capacity to pay back funds, environmental and social benefits), and other information such as prior investments for the specified project, details regarding preliminary stages of the project. One of Aqaix's strengths is that it allows users to access data from external data models (such as the Regional Board's CCAMP water quality database). The "data room" is a way for all parties to attain access to documents, pulling data from various external data sources. Since it can be very expensive to monitor/quantify environmental outcomes, these external data sources can help significantly to reduce monitoring costs. The platform also has capability of "smart contract": providing an immutable record of data values, a set of books in the Cloud, a system of record for any disputes that may arise in the future.

Mike provided some examples noting, as Kelli did, that these transactions take quite a bit of time. Aqaix can match a project with potential funding sources, but someone still needs to "knock on the door" and persuade that funder to fund their project.

A feature that Aqaix can offer is to match projects to its database of funders. They can also work at the portfolio level, not just the project level. He used the Storm Water Resource Plan portfolio of projects as an example. (John Hunt added that SWRP project proponents can access the Aqaix database and refine the project benefit estimates.) Working with a portfolio allows one to be more strategic in thinking about funding, can appeal to a variety of sources (donors, impact investors, government grants, etc.), and can break the funding plan into phases. Mike pointed out another feature of Aqaix, which is to create private sites – partitioned sites with their own URLs, login, and security measures.

John wondered whether Aqaix might facilitate the issuance of bonds. John pointed out the extremely high transaction costs in putting bond measures together and suggested perhaps the software could reduce those transaction costs so as to promote the issuance of small and medium-sized bonds. Mike responded that it's possible, using data to unlock value to things that are currently externalities in the economic model. He gave an example of a project in Washington D.C. implemented by Quantified Ventures. Quantified Ventures is a company founded by Eric Letsinger, who invented the "environmental

performance bond.” Eric came up with the idea for a variable interest rate bond for a massive green infrastructure project: if the benefits were not reached the investors would get lower payback. The project was a great success. Another example was a small community in Appalachia that wanted to build mountain bike trails and turn the area into a resort. Funding came from room occupancy taxes from local hotels. Mike pointed to Eric Letsinger as a master at *inventorying the stakeholder*: What do they care about in terms of risks and benefits? Mike concluded with the question: Using a performance model like Eric’s, might we consider designing one here?

**4. Should Salinas Valley Basin GSA be Invited to Join RWMG?** Ross Clark, who is a member of the East Side Subbasin Committee for the Salinas Valley Groundwater Sustainability Agency (GSA), said he had made a recommendation to the Committee that the GSA become a voting member of the Greater Monterey County Regional Water Management Group. He noted that there are certain activities that are outside of the institutional capabilities of the GSA, which may limit the programs the GSA could adopt to improve groundwater conditions. Ross pointed out, however, that the GSA has partners in IRWM who may be able to achieve those goals.

Eric Tynan said he was in favor of the GSA joining the RWMG as a voting member, but wondered whether there might be any conflicts since there is so much overlap in membership (i.e., RWMG members who have seats on the GSA Advisory Committee, etc.). Others agreed there is a great deal of overlap, but didn’t think there appeared to be conflict of interest. Elizabeth Krafft commented that she is supportive of the idea. Susan Robinson offered that she had always thought the GSA should have a seat at the IRWM table since they are a major water resource agency in Monterey County. Susan added that this idea has been suggested previously; and Gary Petersen (who at the time was the GSA General Manager) indicated he was open to the possibility. Rachel Saunders voiced support (“unless there is a compelling reason why not”), and Emily Gardner (who currently is Deputy General Manager of the GSA) said she was also supportive of the idea. Susan suggested that a formal vote be held at the next RWMG meeting.

**5. Other Business:** There was no other business.

*The next RWMG meeting will be held on August 19, 2020, 1:30PM – 3:30PM.*