

**Greater Monterey County Integrated Regional Water Management Program
Regional Water Management Group Meeting
August 16, 2017
Location: Moss Landing Marine Labs, Moss Landing, CA**

RWMG Attendees:

Horacio Amezcuita – San Jerardo Cooperative, Inc.
Ross Clark – Central Coast Wetlands Group (CCWG)
Lisa Emanuelson – Monterey Bay National Marine Sanctuary
Kamille Hammerstrom – Central Coast Wetlands Group
Sarah Hardgrave – Big Sur Land Trust
Tom Harty – Monterey County Resource Management Agency
Bridget Hoover – Monterey Bay National Marine Sanctuary
Elizabeth Krafft – Monterey County Water Resources Agency
Heather Lukacs – Environmental Justice Coalition for Water (EJCW)
Mike McCullough – Monterey Regional Water Pollution Control Agency (Monterey One Water)
Christina McGinnis – Monterey County Agricultural Commissioner’s Office
Heidi Niggemeyer – City of Salinas
Kevin O’Connor – Central Coast Wetlands Group
John Olson – California State University Monterey Bay
Paul Robins – Resource Conservation District of Monterey County
Rachel Saunders – Big Sur Land Trust
Eric Tynan – Castroville Community Services District

Non-RWMG Attendees:

Rachid Ait-Lasri – State Water Resources Control Board
Jeff Condit – Monterey Regional Stormwater Management Program
Gary Conley – 2NDNATURE Consulting
Ann Drevno – UC Santa Cruz
James Gregory – Environmental Science Associates (ESA)
John Hunt – UC Davis
Robin Lee – Public Member
Brian Lockwood – Pajaro Valley Water Management Agency
Colby Pereira – Costa Farms
Susan Robinson – Greater Monterey County IRWM Program Director

Meeting Minutes

1. Brief Introductions.

2. Greater Monterey County Storm Water Resource Plan (SWRP): John Hunt presented an annotated bibliography and asked the Regional Water Management Group (RWMG) for input. Several suggestions were made, such as: SAM report; 2NDNATURE will have a portal for watershed pollutant loading soon; Heidi offered to share City of Salinas reports (watershed pollutant loading); Elizabeth wanted to make sure that General Plans would be considered, and suggested State of the Salinas River (Brown & Caldwell); Robin suggested a study conducted for Marina Coast Water District by Stanford University.

John noted that the Pajaro River Watershed IRWM region is not developing a SWRP, and therefore the Pajaro River and Elkhorn Slough areas are not covered in a SWRP. Projects in those areas can be submitted to the Greater Monterey County SWRP.

John said that Proposition 1 (2014) provides \$186 million for storm water management projects. Senate Bill 985 requires SWRPs to receive grants for storm water and dry weather runoff capture projects. The SWRP must: 1) identify projects (John mentioned that there will be a public workshop on August 30th to discuss the project solicitation); 2) prioritize projects; and 3) analyze projects (how well they achieve benefits based on quantitative metrics). For prioritizing projects, John demonstrated how projects were prioritized for the Greater Salinas Area SWRP (a matrix that showed how projects address primary and secondary benefits, with weighted ranking). John said the Greater Monterey SWRP would follow a similar approach, ensuring that the Prop 1 Storm Water Guidelines are followed. He emphasized that the ranking would not necessarily determine which projects would get funded. Susan asked: What entity will be responsible for keeping the plan alive in the future, incorporating new projects for eligibility for future grant opportunities? This hasn't been determined.

John said the SWRP will look at opportunities to maximize regional benefits. The SWRP will evaluate: Is the project built in the right place? Will it operate at the right time? How does implementing one project affect the ability to implement another project? He said the project team is using this opportunity to look at the region as a whole.

Ross Clark reviewed the five primary goals. The SWRP represents an effort to integrate storm water goals within a watershed context. The SWRP process will bring in current data and modeling techniques. The process will identify areas with defined or modeled water resource management opportunities, and overlay regional information that helps prioritize areas for implementation of various types of projects. The project team will use reports, maps, plans, and models to highlight priority areas and understand projects in a regional context. He briefly reviewed the data, models, and tools that will be used, respectively, for flood management, water supply, water quality, and social and environment goals. Sarah suggested the Urban Greening Plan (bike and pedestrian plan) for Salinas by the Transportation Agency for Monterey County. Heather said that EJCW has been partnering with the California State University system on mapping disadvantaged communities, and offered to help with that part of the analysis.

Ross reviewed a basic work plan:

- 1) Water Resources Annotated Bibliography
- 2) GIS Data Layer Compilation and Analysis
- 3) Habitat Assessment
- 4) SWAT Model Expansion
- 5) Base Flow Evaluation
- 6) Watershed Integration for use in selecting projects
- 7) Hydraulic Modeling (ESA)
- 8) TAC Input

Ross presented a brief GIS exercise to identify storm water infiltration areas to address water supply and flood management goals. They started with a GIS layer to show well-drained soils in potential areas for floodplain infiltration along Gabilan Creek (open space and ag lands); these included low-lying areas with high percolation soils. Other areas were shown to have good percolation but were not good floodplain, and these areas, he explained, might lead to other types of projects. The team also looked at historic wet areas, at FEMA flood maps, and at areas already designated as storm water detention areas for potential ponding/capture project areas. Ross said there is a "hodgepodge of loss" following a flood event; perhaps

there is a way we can work with growers to share the burden and also share the benefits. He said the modeling helps the project team understand how the five goals come together.

Ross presented a second GIS exercise in which habitat areas were identified, using Rapid Assessment Method (RAM) scores, as being low quality (= potential restoration areas) or high quality (= potential conservation areas). He also showed a map that summarized expected habitat base flow. The SWAT model is being used to identify pollutant loading priority areas (pollutant sources based on land use). Those would be the areas to focus projects. Combining all of this information allows the project team to project potential project areas (e.g., water reuse, flood ponds, riparian conservation area).

Ross said the project team is using modeling to determine how projects can meet flood and water supply goals in order to 1) reduce winter storm flooding; 2) increase (or maintain) summer base flow; and 3) capture excess water for infiltration, capture, and reuse. He noted that ESA, the consulting firm that is conducting modeling for this project, have said they can model how a specific type of project would work, but cannot tell where the best place to put the project would be. Therefore the CCWG team has identified zones and created some “what if” scenarios: “what if in these areas we put water reuse projects, and in those areas we put...”

James Gregory, a hydrologist with ESA, further explained the modeling approach, which includes: 1) water balance model (which includes a simplified daily water balance, can test water supply impacts of SWRP projects, and provides backup for water quality modeling), 2) flood models (which can evaluate flood events and test the flood benefit of SWRP projects), and 3) lagoon modeling (including modeling lagoon and beach management flood alternatives).

James described the water balance model concept. ESA is developing a water balance model throughout the entire watershed. They will then incorporate project types and model how those projects will affect downstream flows, etc. The key water balance inputs are: soils (grouped by hydrologic soil group), land use (based on a 2011 data set), and curve number (how much water will be captured and infiltrated, and how much will run off). He demonstrated the flood model concept, showing the expected effects of a floodplain restoration project on 100-year flow. He also demonstrated the lagoon model concept, with an objective of managing breaches.

James explained how the modeling can be used for project analysis. For example, for flood pond projects, the water balance model could be used to assess retention/infiltration potential. For floodplain projects, the model can show what might occur in the 100-year event. The water balance model could also be used to analyze the effects of water extraction.

Elizabeth said she worried about using the 100-year flood event as a starting point, noting that all the water they had this year didn't even hit the 5 or 10-year event, but there was plenty of flooding. Therefore it might make sense to look at smaller events. Ross said he had read that a 4-year event can lead to flooding in the Salinas Valley. Ross suggested perhaps they begin by asking, what is the peak hydrograph that we don't want to exceed? And then develop projects based on that. Elizabeth said that MCWRA may be able to help with that.

Heidi asked whether the model could be run for smaller sub-watersheds. James explained that the scale of representation is tied to the scale of the model, and said the goal is to provide the *relative* benefit of a project. Sarah added an example of a smaller scale LID project, which might be a very viable project but whose benefits might not be well represented on a large watershed scale. Robin noted that smaller projects all contribute to larger watershed goals; so the modeling can be useful as a predictive tool of long-term results.

Heidi asked how the model would be accessed. Ross responded that the model is being built specifically as a tool for analysis for purposes of the SWRP; how the model might be used in the future has not been determined. Heidi also asked whether a project could still be in the SWRP if the project proponent does not want the project to be prioritized based on the modeling. John responded that a project would not be ranked entirely (or even largely) on the modeling results. The modeling might be used as an “extra category” for prioritization, this hasn’t been determined. The real value and function of the modeling will be for long-term planning of storm water management projects in the watershed.

The next RWMG meeting will be held on September 20, 2017, 1:30PM – 3:30PM, location TBD.