

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

September 2017: Summary of Activities

General

Castle Foundation funding for coordination came through for most of the requested amount. Local match will be needed for DAR/NOAA grant to fill in the gap, but regardless this is a fantastic outcome. Received word several implementation and outreach projects were funded through NFWF and NOAA grant opportunities, so much more on-the-ground activity starting soon. Fair amount of coordination needed this month to get all permissions and access sorted out for camera installation.

Outreach/Education

R2RR Planning meeting: two planning meetings with volunteers to work out details and tasks for the upcoming event.

GIS training DAR/NOAA in Oahu: three-day workshop held by NOAA in support of DAR and partners increasing capacity and understanding of ArcGIS. Workshop included a facilitated GIS needs assessment that was later prioritized and shared with DAR Administrator, symposium including NOAA staff and outside partners highlighting use and resources of GIS and a hands-on training working through practical modules to increase user exposure to various levels of GIS skills. Also helpful to the R2R effort was the opportunity to meet with key State Planning office staff, better understand how the GIS layer consolidation and posting works, and begin a plan for how to use this state site as the location for unique geographic information created for our area. Next steps are following up on format, meta-data needs etc. and getting permissions and files from partners to post on the site.

Get the drift and bag it: organized a clean-up event as a component of International Coastal Clean-up day. At the request of volunteers, we focused at Mala Wharf and the most surprising finding from counting the garbage was the sheer number of cigarette butts (hundreds) in very small areas.

Meetings

Ka'ōpala camera set up meeting: met with regular volunteers on the Lower Road to discuss options for plume viewing camera mount options. Two possible mounts identified.

DPW re: Dam #8: met with John Smith, newly granted permanent status for Chief of the Highways Division, about steps to get a retrofit plan for Honokōwai Dam #8. He is generally supportive of the idea, but there are many steps and design requirements that will be needed, such as a mechanism for de-watering and for opening and closing portals. He has been working with DLNR on a location to dump the removed sediment (filling in the cinder mines on the west side) so the end use of the sediment is no longer a limiting factor and transportation cost has been reduced. Although the additional maintenance cost shouldn't be too high (based on a back of the envelope calculate), he still recommends making a case in monetary terms and getting buy-in from the county council. They should be presented with a conceptual plan and O&M cost. The council can ask for engineering designs funds to get it done, so good to keep them informed.

Lipoa Point project contractor meeting: with Chris Brosius, met with planning firm contracted by the state using funds from the leg to get community input and create a report of key issues and preliminary plan for this newly acquired state parcel. Provided feedback on sediment reduction actions from the WMP and the nutrient loading currently managed through non-profit funded porta-potties. The planning is limited to the site, but they are considering the surrounding watershed and bay area. Chris has a water quality study that is nearly completed for upper Honokōwai stream.

USACE stream gauge installation: three Corps staff came for a week working with CRWM to install stream gauges and take cross sections in Wahikuli, Honolua and mid-elevation Honokōwai. Joined for

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

one afternoon for taking cross sections and elevations of Wahikuli stream that will be used to calculate flow from the sensors. CORAL staff also joined for some days, ensuring there is local institutional memory for the work done.

Watershed Partnership Initiative metrics meeting: reviewed social metrics evaluation worksheets. Offered to test the process with the Working Group at our November meeting so we can pilot and give feedback.

Hui O Ka Wai Ola site selection: held meeting to review maps of significant data layers to inform selection of 24 south Maui water quality testing sites. Sites were picked and order of bringing them online was determined.

FAST meeting: updates from members including new timeline on Corps work (extending through 2019) and contracting USGS for ocean circulation work to fit in with hydrologic modeling Corps will be leading. Storm water infrastructure mapping (DOH funded- COM project) is half finished. Discussed project support needs and USCRTF necessity to create implementation and graduation plans.

Hui O Ka Wai Ola Steering Committee meeting: made a final decision on uninsured volunteers (desk work only). Discussed data base and app development needs. Funding and field updates.

DAR/OCCL Kaanapali Beach Re-nourishment review: met with DLNR OCCL, Land and DAR with consultants to review the project plan and baseline assessment for water quality. Provided feedback on what we know based on Bernardo's reef assessment and suggested using Task Force partners weigh in on monitoring plan. Drone and remote sensing images may also be helpful during the process, planned for Sept- Nov, potentially timed when reefs are temperature-stressed.

CORAL re: project updates: met with Wes to go through updates and next steps on projects where we are partnered closely. Need to move information forward for KLMC consideration for vetiver and stream buffers.

UH Modeling team call: skyped with Kirsten and Mary to review latest outputs of analysis that maps ecosystem service of reef against stressors to help prioritize where to focus on each issue. Learned while nutrient levels alone from OSDS are not concerning, Tom Oliver just finished a study the establishing a strong relationship between the presence of OSDS and areas where reefs died following bleaching events. Secured their participation as Chasing Coral panelists.

Facilities storm water property meeting, Kaanapali Beach Hotel: met with Gilbert about inclusion in the program and conducted property walk-through to determine where there may be opportunities to improve water quality. He has attended several of our trainings on Ocean Friendly practices, so is well versed and inclined towards taking action.

DLNR Dam Safety: spoke with Edwin Matsuda, new Dam Safety contact made through Lenore about our intentions in relation to Dam #8. He had good input and is generally supportive of the process. He clarified that we will need to get a Dam Safety Permit, review by a third party and engineering drawings. When we have something to review, this would be a good time to check in with him.

USGS camera installation: Curt and Tom were on island for a week removing in-water equipment and getting coastal cameras set up and tested at five locations. We completed installations at the Hyatt, Kaanapali Shores, Kaopala and Honolulu. Due to an unplanned location change we were not able to get a Fleming or Kahana camera mounted. Once the Kahana property manager returns we will know if this location can move forward. In comparison to the last round where I was left with a box of cameras to figure out, it was incredible to have such great support, superior planning and organization in getting these up with weather proof cases, double mounts and polarized lenses.

USCRTF Working Group meeting: EPA has offered to act as a co-lead for this group which is very helpful for getting traction and moving agenda items forward. Florida meeting highlights were shared. The plan to convene Watershed Coordinators in DC in February is still standing, and a list of groups that could assist with funding models is being generated to provide capacity building during this training.

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

Project Updates

Facilities Storm Water Management: moving forward smoothly. Consultant visit planned for October and work plan being updated to reflect actual contract dates.

Hui O Ka Wai Ola: news that NFWF grant to expand to South Maui was accepted. Science Café planned for next month. Updated water quality results maps posted on website. Strategic planning moved to November.

Wahikuli Stream Sediment Reduction: last vetiver planted will make it thanks to extra watering trips by CORAL and contractor. Working on monitoring plan and hoping to enlist EPA assistance.

R2R Rendezvous: science panel secured for Chasing Coral screening, over \$2000 in prizes donated, concept for scavenger hunt defined, prep weekend set, hui tent participants finalized, first lead in article on KHFMA submitted to paper and everything is on track for a successful event.

Urban Water Quality: received copy of final report and talked through interpretation and results with Kim F. She will attempt to clean up some of the error in the data so we can get closer to accurately comparing the land use to pollution loads, which was the goal of the project. Even without this, the findings about the lagoon loading levels and sites without error do indicate there are areas that need pollution reduction practices.

October 2017: Summary of Activities

General

Considerable time went in to assisting with putting on the annual R2RR event, with two evening functions, a “prep party”, communicating with partners and sponsors, coordinating press releases and logistics etc.

Outreach/Education

GIS training with Gretchen (NOAA): over a full day that included Wes C who is also getting back on GIS, went through all of the software basics with a NOAA GIS specialist. This was invaluable, since some of the barriers encountered were software glitches, so she taught go-arounds. The opportunity to ask any question that came up and work from a list of needs we had generated was incredibly helpful.

Climate Adaptation Webinar Presentation: supported climate adaptation webinar series put on by TNC and CCAP partners by joining the prep calls and first webinar in the series and giving the perspective of a participant in the development of the tool, as well as final product user. There were over 170 people signed up for the course from ~60 countries. It was a helpful reminder that as we plan each implementation project, we should take the time to go through the climate adaptation worksheets to make sure we are planning for the future.

TNC board field day: supported field day for TNC Hawaii board by providing an overview of the R2R and helping with a water quality activity. By attending the evening reception, useful conversations were enabled, including learning that Haleakala Ranch is working on watershed erosion mitigation projects in South Maui and has done extensive reforestation work (which we are welcome to see), and connected about timeline with TNC staff growing out native plants for our use.

Science Café, Water Quality: organized a public presentation featuring Hui O Ka Wai Ola work presented by Dana and volunteers. Sixty people were attentive to a 60-minute presentation, and remained focused for a 20-minute Q&A period. This event included a few of our regulars, but mostly drew new

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

people from the community that typically are not at our outreach events. The brewery is very supportive of hosting, and are happy to do so ~once per month. As learned initially at the “Save Water Drink Beer” event, a sociable environment creates a compelling learning setting where participants are happy to linger and learn.

Chasing Coral screening and panel: fifty-five people attended the movie screening at Whalers Village in Kaanapali, which was followed by a Q&A with Kirsten Oleson, Tom Oliver and Mary Donovan. They did an amazing job of entertaining questions and making the film feel personal and locally relevant to those who attended. In future years it would be good to plan for travel for visitors who are helping as they kindly assumed their own travel costs.

Meetings

ORMP Call: was invited by the Planning Department to join a Coastal Zone team call featuring a presentation by Katie Ersbak about the watershed work DOFAW is leading, including the efforts in W Maui. Meeting participants had several questions about sediment movement to the ocean, which I was able to address based on Stock’s findings.

Hui O Ka Wai Ola Steering Committee meeting: Discussed upcoming events, waiver, strategic planning invite list, permit needs, South Maui expansion, and more as needed for smooth operating. It followed that the understanding of what the strategy planning needs were, was misunderstood, and while we have now agreed to do a formal planning process in the coming months, first we need to set aside the time to determine how to strategically work together through basic management of a multi-partner initiative.

USCRTF Watershed Graduation Planning Call: sub-committee discussed plans for the DC workshop in February. Funding is being pursued for invitational travel. Decision was made to proceed forward, even with PR still in recovery mode, and Paul Sturm offered to stand in if need on Roberto’s behalf. We are looking at potentially separating out two half day workshops, one focused on refining implementation and sustainability plans, and the other meeting with outside groups on sustainable financing models.

Project planning- Paul and Wes: Paul was on island for four days, and so we met and conducted site visits to help refine what next steps and other projects that should be pursued. After a site visit through the Kaanapali area, we are considering the following nutrient reduction practices: nutrient curtain below sheet flow area of golf course, beemat in daylight area of drainage network by Westin, filter for the air conditioning drip by Westin, curb cuts along Kaanapali Parkway amended with biochar to help with standing water, salt tolerant floating wetland at Sheraton outlet, floating wetland at Hyatt entry and a biochar curtain where the grass sheet flows to pond by the Hyatt. In addition, discussed approach for getting feedback on measuring accumulation at vetiver sites and how to expand to KLMC lands. Past plantings were visited, and all seem to have made it through the dry season and should now take root since rain will be more regular. Swam Wahikuli reef to see health first hand and determine if the southern portion of the lagoon is hydrologically connected. Follow up testing will be needed, but it does appear to flow from the ponds, contrary to what we had been told from property managers.

USCRTF Metrics call: working on final edits to social engagement worksheets in preparation for testing with the working group early Nov.

WMSWCD Board meeting: provided update on R2R activities. Board voted in favor of hosting my next two-year contract for DAR/NOAA funding for coordination. There are two grading and grubbing permits in our area they are reviewing. These are at the Westin for the parking structure and Honua Kai, so these are areas we would be watching out for erosion issues.

NRCS Field visit: went to field with NRCS engineer, Ryan and Wes to look at ideas for sedimentation reduction in Wahikuli. He suggested we remove the idea of using the existing rail and road crossing restrictions over the stream from our list of options given they are precarious, old structures that likely

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

do not meet standards as they are, making modifications a major, not minor undertaking. In the R&R area, there was interest in the concept, and the suggestion that if we can get a conservation plan and include planting some native and/or crop trees, he may be able to provide technical support, such as helping to survey the grade and begin design based on physical parameters. Next, we went to Dam #8 and discussed retrofit ideas. One suggestion was adding a wall further back to allow settling back from the portal openings. We need to figure out if there is a mechanism through which NRCS can offer support, and DPW needs to be consulted about this idea.

USCRTF Watershed Working Group: Terri from EPA is acting as a co-chair for this group, and as such, consulted with watershed coordinators and is actively trying to make these calls more productive. Updates from other committees and watershed were covered, and plans for next meeting in DC were shared.

CORAL, HQ: Met with Jos Hill from HQ to discuss changes in staff, positions they are looking to fill, and what the priorities are in W Maui. They continue to be very focused on “Saving the Coral” and figuring out the niche they can fill. They are looking for a program manager to handle the project management and paperwork side of the efforts in Hawaii, as well as a grad student or person of comparable capacity to collect physical data with thoroughness that would be appropriate for potential future publishing. Chana has moved on and is now working for MLP at PKW.

EPA, Hudson: regular calls with Hudson to touch base on monitoring plan needs, digesting results of urban water quality study, technical contacts etc. The ongoing support and engagement has been very helpful in sorting through how to interpret and act on new information and developments since the context from the beginning is known.

Project Updates

Facilities Storm Water Management: full day visiting selected partner sites with consultant allowed proposed project ideas to solidify. In one case the manager had already acted on the problem area we identified in the previous visit by creating a planted, screened area for wash water to pass through before entering the drainage channel.

Hui O Ka Wai Ola: Science Café was hit. A volunteer wrote an article for the Lahaina News that helped draw more people to the event and shared more broadly the intent and actors involved in the coalition. Everything is lined up to start S Maui sampling Nov.6. It has been challenging to find dates everyone can keep to move the long-term planning needs forward, but hopefully we will start next month. There is a mounting list of critical issues related to the stability and sustainability of the coalition that need to be addressed.

Wahikuli Stream Sediment Reduction: most plants seem to have made it through the dry spell. There is an updated rendering of the proposed R&R site. There have been delays in getting a full-time field person on board as Maui Cultural Land navigates how to go from a volunteer only organization to one with staff.

R2R Rendezvous: feedback from partners and participants suggest it was the best year yet! We had the greatest number of participants (at least 225), \$4500 in prize donations, a successful keiki fishing tournament, food sponsored for 200 people, four Lahaina News articles (circulation 18,000), coverage in Maui News, Maui Now, Radio PSA, radio show replayed several times and shared as UTube content, ~24,000 Facebook impressions and 126 Facebook event responses. Engagement in the educational material provided by the 15 conservation groups present was the best yet owed to the use of a scavenger hunt for information required to win any prizes. The haunted reef tour was pulled off with the help of UH MOP students setting out skeletons on scuba mixing up the usual tour. The events leading up engaged different sets of people than the Saturday event, and gave many opportunities for the R2R volunteers to be involved and have ownership over what information was shared. Grateful for

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

the \$10K grant from the County (Project SEA Link support and supplies) that pulled this back from being cancelled due to lack of funding.

November 2017: Summary of Activities

General

Completed rain gauge downloads at mountain sites, with one faulty reading due to ant nest, assisted with access and communications for USGS weather station install at Kaanapali Shores to inform circulation model, conducted water sampling in lagoon and ocean outlet to determine salinity for wetland design planning and mounted coastal camera at Kahana stream mouth after securing permission from second land owner. Worked with USGS and DAR on approach to producing op ed in response to COM misrepresenting bioerosion science in interviews featured in several local publications. Sought groundwater science input on neighborhood opposition to R1 tank in Kaanapali needed to expand reuse.

Outreach/Education

Science Café, Curt Storlazzi: Curt presented on the role and value (in dollars and lives) of reefs in protecting coastlines in Maui and across the country. This drew a record number of attendees (~83) to the Brewery and prompted many questions. Some attendees requested we host a “Coral 101” talk to increase accessibility of more complicated studies, so we are tentatively scheduling for February with Donna Brown.

Kaanapali Redevelopment meeting: evening community meeting organized to give the public an opportunity to provide feedback on proposed plans for redeveloping Kaanapali Resort. Speaker after speaker came out against it, including the resort association, community and cultural organizers. While the state retirement funding rep said they will not do it if there is heavy opposition, it is not clear that they are stopping work on the next steps to move the process forward. Our concerns center mostly on the increased impervious surface, increased sewage generated and further pressure on the local beaches and reefs.

Lipoa Point Open House: various agencies and group set up tables of which R2R was one with staffing support from DAR to share information within the context of the Lipoa Point management plan underway. Unfortunately, this conflicted with the Science Night, cutting my attendance short, but Russell represented our information board.

Seatalk on Sunscreen: Craig Downs gave a community presentation similar to what he presented to the County Infrastructure and Environment committee earlier in the day, about the mounting science showing that oxybenzone and other active ingredients in sunscreens are negatively impacting reef health. COM will have the first full council vote Dec.1 on a sunscreen ban, and coming in with 3/7 council member support. This continues to be a topic the community gets strongly behind.

MNMRC Cruise: celebrated 10th year of MNMRC with partner sunset cruise that included reps from many organizations working on ocean health.

Meetings

USCRTF- Sustainable Financing call: Joined call with River LA ED Omar Brownson who shared ideas about alternate financing mechanisms. Tips included remembering philanthropic giving is often about *who* donors are giving to, used bike path to connect river restoration to larger user group and funding sources, identify who benefits most and have as allies, never waste a good disaster (leverage for attention and funding), if you can't solve a problem make it bigger, and integrating art and artists (Glenn

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

Kaino) can attract a new audience and level of appeal to your cause. Resources he mentioned included Henk Ovink as well-known advocate for water issues and Encourage Capital (investinvibrantocéans.org).

R2R Working Group: Used majority of time to pilot USCRTF social engagement metrics worksheets.

While there was some interest in developing a theory of change to define how we move forward with our projects, the group got lost in the sheets, and beyond updating our list of stakeholders and understanding power and interest dimensions, we didn't get very far (but have feedback to share with the subcommittee).

NOAA call re: program manager visit: over a couple of calls, figured out a site visit itinerary for NOAA Pacific Program Managers in early December. We are planning a reef tour at Kahekili, hopefully a hotel sustainability visit (although to this point Honua Kai has not been responsive) and a visit to the vetiver site in Wahikuli.

NFWF re: project funding needs: spoke with Michelle about the organization's funding strategy going forward for Hawaii and West Maui implementation project funding needs. Discussed need to set goals, e.g. quantify sediment reduction targets. There is a possibility NFWF can support sign up for some restoration work with NRCS funds, such as getting KLMC leasee set up for riparian buffers and conservation grazing.

Michael Reyes: met with S-W Maui watershed coordinator to discuss latest funding opportunities, progress with WMP, and skill set for potential West Maui projects. Discussed wetland projects, and if there are ideas ready for funding should it come available.

CORAL: full day meeting with Wes to go over steps to move Wahikuli and wetland projects forward. Revisited USCRTF metrics social engagement worksheets, and still struggled to follow logic to populate theory of change. Generated list of meetings needed to move plans forward.

USCRTF DC workshop planning call: full agenda planned over four days in DC. Discussed focusing watershed coordinator presentations on gaps in implementation plans where assistance is needed, and progress update on graduation goals, plus a discussion about how realistic these are in the various regions. An afternoon will also be set aside for watershed coordinators to do more direct knowledge transfer between sites, which is great, since there is not usually time for peer-to-peer exchanges.

Shoreline access meeting: evening meeting at County Planning to review proposed mapping tool for West Maui shoreline access. While facilitators had to work hard to focus discussion on tool, rather than access grievances, it was an opportunity to request other information be made available through the portal, such as links to water quality information and coral reef etiquette education.

USCRTF Metrics subcommittee: shared feedback from worksheet trial run with Working Group. Created a plan to make changes and update next iteration.

Hui O Ka Wai Ola planning meeting: full day meeting to work through long standing issues about how the steering committee works together in terms of decision making, logo and brand use, media releases, financial management, roles and more. Much was resolved making way for strategic planning in December when we can look forward to a 5-year vision.

John Smith, DPW: met with John and his deputy Eric Yamashige on Dam #8 retrofit ideas, Kahana Nui proposal for cleaning out, LID opportunity by Lahaina base yard and status of rules revision. They are supportive of both ideas for detention dams, and the installation of a rain garden by the base yard.

Rob Parsons, County Environmental Coordinator to the mayor: discussed role the county could play in R and R site (very little, since there is not capacity to take on more park space) and other partners who should be engaged (state trails system and Land Trust). Talked through issues with county communications person mis-representing bioerosion and KHFMA science to muddy waters on whether injection wells are harmful to the reef. If possible, he will facilitate follow up communication.

Kirsten Oleson re: workshop: Kirsten has successfully secured funding to support a structured decision-making workshop week with FWS and other partners to work through the best location for riparian

Quarterly Report: Sept – Nov. 2017

West Maui Watershed & Coastal Management Coordinator

buffers in West Maui on cattle lease land. Wes and I got an update on logistics and the plan for the five days in June 2018 so that we are better equipped to compel suitable stakeholders to participate. We need a modeler who can sort data in real time, and the decision maker who can authorize selected areas for riparian buffers, plus other relevant partners and stakeholders.

USCRTF Watershed Working Group: updates provided from various committees and watershed coordinators. A detailed presentation was given by the EPA on their [Water Finance Clearinghouse](#), which is a flexible, searchable database that can be used to find resources and funding opportunities for all water related work, including watershed management.

Dudley Kubo: followed up with retired NRCS contact from Cindy Barger, discussed ideas and work done to explore Dam #8 retrofit. He reviewed UH models and felt more scrutiny is needed in confirming rainfall for two-year storm into the future, running model when structure is already full and confirming particle size distribution. Retrofit ideas included floating intake valve, reducing turbulence in intake shoot to allow more settling, enlarging the basin, or looking upstream for additional basin sites. Next steps are to take ideas back to current NRCS engineer and see if we can get support for staff time to develop ideas further.

Scott Izuka, USGS: on recommendation from Hudson, spoke with Scott on vetiver sediment trapping monitoring methods based on past work on Kaho`olawe. We talked through a few techniques, and developed suggested approach that is low tech and accessible to be shared with the rest of the team for potential adoption prior to planned planting in two weeks.

Project Updates

Facilities Storm Water Management: a series of social media posts promoting positive practices for stormwater management already underway at partner properties were posted. Project timeline was updated and all project files and photos shared between partners.

Hui O Ka Wai Ola: South Maui sampling started successfully with Sofia de la Sota as the lead, and Dana providing oversight. Press release ran in local papers to mark expansion, and the program was featured in a NOAA newsletter. Hui data was checked and reposted, providing additional insight into QA protocols that are needed to ensure accuracy in the data.

Wahikuli Stream Sediment Reduction: Additional strategizing with CORAL about how to move components forward. Consulted with Jason Hew, Conservation planner at SWCD about how to get signed up, and have forwarded paperwork for completion my Royal Kaanapali Holdings LLC with support from managing consultant.

Floating Wetland: mini-wetland became liberated from the basin during a rain storm, travelled across the golf course and was stopped before entering the ocean by wave suppressors. The golf staff dragged back to top and reattached. Wes and I cleaned up area and floats so that plants are upright and back to looking good and have attached with sturdier rope. Water hyacynth was removed after one starter plant clogged entire area in less than 8 weeks.

N Isotope Testing: made plans with Dana and Meghan at DOH to test again at Pokahu and Kapalua (N hot spots), as well as Wahikuli (relatively high and reefs to protect) in December.