From:	John Kemmerer
To:	Wendy Wiltse
Cc:	Albright.David@epamail.epa.gov; eberhardt.doug@epa.gov; Janet Hashimoto
Subject:	Re: Hawaii Priority Watershed...Maui
Date:	05/29/2007 08:57 AM
Attachments:	Hawaii_Macroalgae_Workshop_Proposal.doc

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re: #1 - No discussion of Kealakehe WWTP?

re: #4, in the NPDES discussions the concept Doug raised was that HDOH could send the WWTP operator (Hawaii County in the case of Kealakehe) a CWA 308 letter requiring that they conduct an investigation to answer questions about the potential impacts from subsurface discharges on surface water. I don't know if there are corresponding SDWA-UIC authorities.

▼ Wendy Wiltse/R9/USEPA/US

Wendy Wiltse/R9/USEPA/US

05/25/2007 09:31 PM

To	John Kemmerer/R9/USEPA/US@EPA, Audrey Shileikis/R9/USEPA/US@EPA, hudson.slay@doh.hawaii.gov, Janet Hashimoto/R9/USEPA/US@EPA, David Albright/R9/USEPA/US@EPA, Rebecca Tuden/R9/USEPA/US@EPA, Nancy Rumrill/R9/USEPA/US@EPA
cc	DavidW Smith/R9/USEPA/US@EPA
Subject	Hawaii Priority Watershed...Maui

FYI. Here are a couple of updates regarding Maui algal blooms, priority watershed work, and injection wells.

1. Watson and I met today with Chip Hunt from USGS. Watson will fund Chip to (a) identify and characterize plumes from coastal cesspools and septic systems in Kualoa-Punaluu Beach Park areas, Oahu, and (b) do "swath" mapping of injection well plume in coastal water at either Kihei and Lahaina (probably one site this year and one next).

2. CWB will conduct nutrient and turbidity monitoring at approx. 5 stations in Lahaina-West Maui Area to assess any water quality improvement associated with land use change and sewer line hookups (i.e. better define listings, potentially delist some). I gave Watson a list of priority stations where we have historical wq data (and blooms or coral declines) Depending on CWB lab/field capacity he and I will decide on stations and begin this summer. Likely frequency of monitoring = 1x every 2-3 weeks. Sampling 2 stations per site (wading depth and <25 ft from shore).

3. NOAA's Harmful Algal Bloom (HAB) program solicited a proposal from Chip Hunt (attached) for a workshop to evaluate the state of knowledge about Maui algal blooms and the causes. I think it's important for EPA to participate from the beginning so that our management questions are well addressed (better than the

Hanalei workshop). Does EPA have any money that we might contribute to this workshop effort?

4. AS we discussed at negotiations (iin the NPDES session?), might we leverage some injection well tracer work through the UIC permit? Can we require the County to pay for Chip's mapping of the plume or documenting wastewater tracers in ocean?

5. I learned some interesting things about Chip;s recent work on the ww injection well plume at Kihei. He sampled groundwater downgradient of the Kihei injeciton wells. (a) Wastewater tracers were in shallow groundwater downgradient of the injeciton wells, i.e. although the wastewater is injected >100 ft deep, it's on surface before it gets to the shore. (b) Chip estimates that the travel time for the injected wastewater to reach the shore 1 mile away is 3 years (MUCH longer than previously estimated) (c) Chip thinks the worst algal bloom areas in Kihei are outside the injeciton well plume, based on his modeling.

Wendy Wiltse
EPA-PICO
300 Ala Moana Blvd. Box 50003
Room 5-152
Honolulu, HI 96850
Phone: (808) 541-2752
FAX: (808) 541-2712
----- Forwarded by Wendy Wiltse/R9/USEPA/US on 05/25/2007 06:06 PM -----

Charles D Hunt <cdhunt@usgs.gov>

05/25/2007 05:32 PM

To Wendy Wiltse/R9/USEPA/US@EPA
cc
Subject Fw: Proposed Hawaii macroalgae workshop

Hi, Wendy, below is correspondence with NOAA about a possible workshop to re-evaluate algal and nutrient issues. Here's a brief proposal I wrote up, and there's discussion in email below.

If you endorse this idea conceptually, perhaps EPA would be willing to co-sponsor or help organize? I'm envisioning UH will take a lead role because many of the pertinent researchers are affiliated there.

Our point of contact at NOAA for the workshop is Danielle Luttenberg Meitiv

Danielle.Meitiv@noaa.gov

_____
Chip Hunt - USGS 808- 587-2414 cdhunt@usgs.gov

USGS Pacific Islands Water Science Center
http://hi.water.usgs.gov

Nutrient Flux to Coastal Waters, Wastewater Injection Modeling --
http://pubs.usgs.gov/sir/2006/5283/
Wastewater and Nutrient Source Tracking for Beach Monitoring --
http://hi.water.usgs.gov/studies/project_sourcetracking.htm

----- Forwarded by Charles D Hunt/WRD/USGS/DOI on 05/25/2007 05:23 PM -----

Charles D Hunt / WRD / USGS / DOI

05/21/2007 09:23 AM

To Quay Dortch <Quay.Dortch@noaa.gov>

cc celia@hawaii.edu, sansone@hawaii.edu

Subject Re: Proposed Hawaii macroalgae workshop Link

My estimates in red below. Celia, Frank, your thoughts?

One caution here: I shouldn't be the main driver for this (it's mainly a marine topic), and can't volunteer Celia's and Frank's endorsement for it without their concurrence. It may seem an opportune time -*to me*- to assess this topic in a workshop forum, but we'd really need to hear from the marine community to that same effect. They already have regular meetings of the Hawaii Coral Reef Initiative research group, so maybe they'd consider this separate workshop unnecessary or redundant. One area that may merit more coordination that it gets is pairing up marine folks with terrestrial folks. That's happening under efforts like the Hanalei Bay watershed group and some USGS work on Molokai, and maybe those effors are adequate, I dunno - I haven't really been plugged into other watershed / nearshore waters groups except for our Kihei work, so I'm quite a beginner in coastal eco topics.

So a funding placeholder may be appropriate for now, I think, but in pretty short order we'd want to get buy-in from researchers closer to the topic and from co-sponsors like UH Marine Science, Dept. of Aquatic Resources, and EPA (Wendy Wiltse is a good contact, she cooridnated the 1990s Lahaina work). I can't take the lead on phoning around for coordination because I've got to move on to other funded projects here at USGS. However, I will take the time to get Celia and Frank on the phone to see if they're generally in favor of this and think it's warranted and feasible.

Thanks,

Chip Hunt - USGS 808- 587-2414 cdhunt@usgs.gov

How many participants?
30-40 presenting and participating in breakout groups, more in audience for presentations
How many days?
2-3 days
How many participants that will need travel reimbursement and lodging?
6-8 from neighbor islands ($200 airfare)
2-4 from mainland US (I'm thinking NOAA macroalgae specialists and program managers)
Does the university or a local government entity have a facility where a

meeting could be held at no or low cost?

Yes, I the UH Marine Science Building has a large auditorium, smaller conference room that's used for afternoon seminars, and probably separate smaller rooms for breakout working groups. There's also the East-West Center on campus, but that would come at greater charge, I'd expect. Marine Science could probably host most cost-effectively.

Right now I am thinking on the order of $20,000, but that could be too low.

We'd have to run the numbers. We'd also probably need to fund workshop planning and labor on the summary report writeup.

Quay Dortch
<Quay.Dortch@noaa.gov>

05/21/2007 02:42 AM

To Charles D Hunt <cdhunt@usgs.gov>

cc Catherine Naum <Catherine.Naum@noaa.gov>, celia@hawaii.edu, Danielle Luttenberg Meitiv <Danielle.Meitiv@noaa.gov>, sansone@hawaii.edu

Subject Re: Proposed Hawaii macroalgae workshop--RESEND

The proposal lays out what is needed for me to use it as a place holder here. I also need a ball park cost, but I realize that you haven't had time to think abut the details. It should cover travel costs for participants, facility costs for the meeting, and printing of the workshop report. I would expect it to be reasonably cheap since most people will not be coming any distance. So I have a couple of questions for you and ball park answers would be enough.
How many participants?
How many days?
How many participants that will need travel reimbursement and lodging?
Does the university or a local government entity have a facility where a meeting could be held at no or low cost?

Right now I am thinking on the order of $20,000, but that could be too low.

Quay

Quay Dortch, Ph.D.
Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) Program
Program Coordinator
NOS/NCCOS/CSCOR/COP
N/SC12
1305 East West Highway
Building IV Rm 8220
Silver Spring, MD 20910
Phone: 301/713-3338 ext 157
Fax:301/713-4044
http://www.cop.noaa.gov

The content of this message is mine personally and does not reflect any position of the Government or of OPM

Charles D Hunt wrote:
>
> Yes, now that I've gotten the news release out of the way, here's a
> 2-page workshop pre-proposal as a start and as a placeholder. This is

> real rough, it's what I could throw together in an hour or so. Anyone
> feel free to reformat or hack it down to 1 page.
>
>
>
> Celia, I've listed you and I as initial points of contact, hope you
> don't mind. If this does go, a larger coordinating group will need to
> be identified and funded to plan and bring off the workshop.
>
> To answer Quay's question on participants: Yes, I think we'd attempt
> to include all people working on the issue, though the emphasis should
> be on synthesis rather than details of individual research. I can
> readily foresee at least 3 types of groups:
>
> 1. Those who worked on the 1990s Lahaina studies
> 2. Those who worked on the 2000s Kihei studies
> 3. Those working on general aspects of blooms, grazers, nutrients, etc
> on an ongoing basis. Would include UH researchers from the Hawaii
> Coral Reef Initiative as well as State agencies that take an active
> role in management, such as administrating no-take fishery areas to
> let grazers recover, etc. Here, I'm mainly thinking of State Dept. of
> Aquatic Resources (DAR) -- the news article at the bottom of this
> email quotes a couple DAR folks and describes some of their efforts.
>
> I'd envision brief presentations from participants but a main
> component, I think, should be panel discussions and breakout working
> groups that seek to synthesize the state of the science, identify
> major gaps in knowledge, and provide recommendations on how to direct
> future study design to best fill those gaps.
>
> And here, I've got to say that most of the experts on this topic are
> other than me. It's mainly the marine researchers that this workshop
> would pull together, although land-based work is also be relevant,
> such as my Kihei work and various other researchers land-based
> assessments at Lahaina in the 1990s, and earlier at Kaneohe Bay, Oahu.
> And elsewhere. Again, I'm a peripheral player in this topic and
> don't necessarily know all the key players and key research, I've only
> bumped up against a bit of it over the past 5 years. But it does seem
> that we need to continue to develop the nexus between marine and
> land-based research on the algal-bloom problem.
> _____
> Chip Hunt -- USGS Pacific Islands Water Science Center
> http://hi.water.usgs.gov
> 808-587-2414 cdhunt@usgs.gov
>
> Nutrient Flux to Coastal Waters, Wastewater Injection Modeling --
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Hawaii_Macroalgae_Workshop_Proposal.doc