Public Comments

2006 Integrated Report of Assessed Waters in Hawaii

Prepared Under the Clean Water Act §303 (d) and §305 (b)

	2006 Comment Received			2006 Comments Log						
ID	Name	Affiliation	phone	email	address	city	Gen	Coastal	Stream	Ground
1	Jo Ginger and Steve Schroeder			josteve2002@yahoo.com	2817 Panepoo Street	Kihei	Y	Y	Y	Y
2	Patricia Covici			covici@sbcglobal.net				Y		
3	Vicki Schulte			loangal@hawaii.rr.com	385 Kaupakalua Road	Haiku	Y	Y	Y	Y
4	Maury King		874-5955	maury@mauryonmaui.com	3500 A Kehala Drive	Kihei	Y	Y		
5	Brooke Porter			brooke@pacificwhale.org	Street	Lahaina		Y		
6	Alicia Mallo			alicia@pacificwhale.org	181 Hui F Road #7	Lahaina		Y	Y	Y
7	Lucienne de Naie			laluz@maui.net	PO Box 610	Haiku		Y	Y	Y
8	Michael Howden	Maui Water		om				Y	Y	Y
9	Janet Hashimoto	EPA		hashimoto.janet@epa.gov			Y	Y	Y	
10	Carl Berg	HWH		cberg@pixi.com		Hanalei		Y		
11	Thomas Young	HBWAG		net	529 Kukuau St.	Hilo	Y	Y	Y	
12	Ann Fielding			annf@maui.net	P. O. Box 1107	Makawao	Y	Y	Y	Y
13	Janet Ashman	HARC	877-6916	ashman.janet@gmail.com	P. O. Box 88	Puunene	Y	Y	Y	
14	Sheldon Braidman			sbraidman@hawaiiantel.net	2387 S. Kihei Rd., C-402	Kihei		Y		
15	Robin Knox	Maui Tomorrow	579-9802	wqcinc@clearwire.net	P. O. Box 299	Makawao	Y	Y	Y	Y
16	Sharyn J. Matin	West Maui Preservation Association		wqcinc@clearwire.net	P. O. Box 10818	Lahaina	Y	Y	Y	Y
17	Sean O'Keefe	Alexander & Baldwin, Inc.	877-2959		P. O. Box 266	Puunene	Y		Y	
18	Alan Takemoto	Hawaii Farm Bureau	848-2074		2343 Rose St.	Honolulu	Y			
19	June Harrigan-Lum		955-8588		2311 Bingham St.	Honolulu	Y	Y	Y	Y

1 – Jo Ginger / Steve Schroeder

Jo Ginger and Steve Schroeder
2817 Panepoo Street
Kihei, Hi 96753

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814

via barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

1. Marine and Estuaries: Too many of our test sites in Maui County are shown to be in level 5 category. We need full funding to correct this water quality deterioration.

2. Streams; 11 of our streams are listed as category 3 & 5 wherein existing data indicated non-attainment, TNDL needed, and more data needed. Again, full funding is requested so that we may meet our legal obligation to provide quality water to Maui's residents.

3. Groundwater: It is shocking to us as residents of Maui County, that we have virtually no monitoring and reporting of our groundwater quality. There appear to be no standards developed. We support full funding to establish and develop monitoring standards and the subsequent gathering and reporting of the data.

General comments: We need to develop more monitoring strategies and data management and make the data available to the public in a timely fashion and accessible via internet. Further notification of reports and data being available should be made to the general public via our news media or mass emailing list kept and updated by the DOH from all those individuals who have previously written comments on past public reports.

We request a written confirmation of receipt of our comments.

Jo Ginger Steve Schroeder

Any questions? Get answers on any topic at Yahoo! Answers. Try it now.

2 – Patricia Covici

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814 via

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

I paddle outrigger canoes on South Maui most every morning. There are days when I have been appalled by the sludge, fecal matter and oil slicks I have seen. Last week I saw a group of spotted rays feeding on an oily sludgy slick that spanned many 100 yards that had small plantlike or animal substances in it. I often see turtles with cancerous tumors on their backs. Last thursday off the Maui Lu resort I saw unmistakable human fecal matter floating on the surface.

Many boats still dump their waste into the waters. There is no current law that prohibits this. Three miles is not enough as the currents bring the sludge into the beaches of Kihei and Wailea. During the summer I was swimming at a beach near Wailea and swam right into fecal matter and toilet paper. .

The oceans around Maui are a sanctuary for the majestic humpback whales. It is difficult for me to understand why the federal government does not protect them and us more from the pollution and contamination in the waters of Maui.

Page 26 of the integrated report of assessed waters under clean water act 303{d} and 305[b} that has a table of results for Maui waters states that no microbiological testing was done. I strongly suggest that testing be started on a regular basis if this is in fact the case.

Please confirm receipt of this letter. Thank you for your attention.

Sincerely,

Patricia Covici

Kihei, HI

3 – Vicki Schulte

Vicki Schulte
385 Kaupakalua Road
Haiku, HI 96708

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814
via barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

I am an active ocean user and 18 year Maui resident.

1. Marine and Estuaries; I am concerned about storm runoff into the ocean, most particularly silt runoff as well as agricultural chemicals. I would like to see those chronically affected areas identified and assessed after wet weather events. I want to see pollution prevention and controls in place and support full funding for these activities.

2. Streams: I would like to see the streams meeting all categories of attainment as "11 Maui streams were listed in category 3 & 5- existing data indicated non-attainment, TMDL needed, more data needed". I support full funding for complete monitoring, data collection, data reporting and subsequent corrective actions to ensure clean water quality for Maui's residents and future.

3. Groundwater: There are no water quality standards for our groundwater. This is the source of our drinking water. I am outraged by this. Your report states that 81% of our aquifers are highly vulnerable to contamination. We need standards to protect the quality of the water and monitoring to determine if the standards are being met. I request full funding to achieve these goals.

General comments: We wish that there was a laboratory on Maui that we could take water samples for bacteriological testing and reporting. I request confirmation of receipt of my comments.

Sincerely,

Vicki Schulte

4 – Maury King

Maury King
3500 A Kehala Drive
Kihei, HI 96753

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814
via barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

I support formal confirmation of designated uses for water.

I request that we increase monitoring of all beaches, marine waters and offshore waters and that we fully fund this monitoring so that it will be complete for all areas of Maui County.

I request confirmation in writing of receipt of my comments by the DOH.

Mahalo & aloha

Sincerely,

Maury King

Maury King
rides@CarpoolMaui.com
CarpoolMaui.com
808-268-3656 - Verizon Mobile
808-874-5955 - Home Phone/Fax

5 – Brooke Porter

Brooke Porter
3932 Mahinahina Street
Lahaina, HI 96761

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814 via
barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

1. Marine and Estuaries: Please realize that there needs to be a better
system in place for water quality testing, specifically bacteriological, to protect ocean users and ensure the health of the ocean around Maui County.

Enterococcus is a serious concern for me as I am a frequent ocean user. Most of the coastal areas where I surf are not shown as tested areas for this bacteria. Additionally, I have been involved in the Blue Water Task force projects wherein we test for this specific bacteria. Results have shown that many times we are surfing in severely contaminated waters.

I request a written confirmation of receipt of my comments.

Sincerely,

Brooke Porter

6 – Alicia Mallo

Alicia Mallo
181 Hui F Road # 7
Lahaina, HI 96761

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814
via barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

I am a marine biologist and have lived in Hawaii for 3 years, 2 of those on Maui.

1. Marine and Estuaries; I am deeply concerned about the state of offshore reefs. The lack of monitoring in these areas concerns me. I feel that there need to be funds allocated to test waters offshore including the entire marine sanctuary. These offshore areas within the 100 fathom mark off of Maui are highly protected but there is no testing to ensure that we are meeting the highest standards as set for these waters. Agricultural runoff in the near coastal zones is also of high priority to me. I request full funding for monitoring in areas of known nearby agricultural zones and full data collection and reporting.

2. Streams; In reference to the Maui Stream Waters table, it seems that most of the areas still have insufficient data for us to ensure Maui's residents of clean water. I support full funding for monitoring, data collection and reporting along with full corrective actions as needed to ensure our future clean water supply.

3. Groundwater: Your report indicates that there is insufficient data to make a proper assessment of the Honokohau streams which is the water I drink. Coming from an urban and agricultural area of California where I could drink tap water that was clean, pure and tasted good, it was appalling to me after moving to Maui, a tropical paradise, to find that my water for drinking was contaminated, and yet it is supplied by the COUNTY OF MAUI. I itch after every shower!

I request a written confirmation of receipt of these comments.

Sincerely,

Alicia Mallo

7 – Lucienne de Naie

Lucienne de Naie
POB 610
Haiku, HI 96708

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814
RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act ß303(d) and ß305(b).

Dear Department of Health,

Thanks for your outreach for public comments. Please note my comments on the above report:
Marine and Estuaries: I am concerned about impacts to the quality of many of our marine waters due to runoffs of nitrates and other contaminants from non point source pollution, especially along the West Maui and South Maui coastlines. I hope that this report will result in increased funding so that these sites can be regularly monitored and neighboring landowners can be brought into compliance, so as not to continue to discharge these pollutants.

I am concerned about 7 houses that have been recently constructed immediately North of Puu olai in Maui which are dependent upon septic tank systems for their sewage needs. This area has some of the most friable soils on the whole Island of Maui and the houses overlook an ancient fishpond and wetlands which could be impacted by their leach fields. The wetlands area has a green growth on it since the houses have been constructed. There should be monitoring done at this site to make sure that nutrients are not entering the groundwater table and impacting the wetland processes.

I noticed in your above listed report that waters just off this area adjacent to Puu ola'i (Oneuli Beach) already have some impairment problems listed.

I hear constant citizen complaints about water quality at Baldwin beach park just outside Paia in Maui. Surfers and swimmers are subject to staph infections and the area where Kailua gulch meets the sea has flooded with muddy waters several times in 2006 closing the whole beach park. This area should be given more of a priority in terms of efforts to create natural riparian restoration in Kailua gulch that can help minimize the floods and allow storm waters to be absorbed and filtered mauka of the coastal dunes. This is a very popular area with visitors and residents that needs to have the healthiest possible conditions.

Groundwater: I support statewide groundwater quality standards being put in place to protect not only our drinking water, but also aquatic life in our streams and oceans. Groundwater interacts at all levels of our water supply. As a user of well water from the Honopou aquifer, I would be willing to submit water samples to be used as part of the State data collection and testing program if one were established.

There is a great need for the State and County to partner and commission testing of groundwater for multiple contaminants in the Central Maui aquifers (Waikapu, Kahului, Paia, Kamaole) since all of these are being proposed for municipal water sources in the future.

I request a written confirmation of receipt of these comments.

Sincerely,

Lucienne deNaie

8 – Michael Howden

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814

via barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

1. Marine and Estuaries

From the above referenced report, I can see that there are numerous injection wells either on or close to the ocean. All these injection wells need to be monitored for potential pollution both of our near shore waters and also of our connected aquifers. I would question the sense of even having such injection wells, given the nature of our island geology. Also, large developments close to or even on our shorelines raise much the same concerns.

2. Streams

So much water is taken illegally and without adequate compensation to the public interest from thoroughout the East Maui Watershed, to the detriment of the natural ecologies of these streams, as well as to cultural uses such as taro growing. What is left in these streams cannot support taro cultivation and is indeed a health concern as inadequate stream flow supports disease mechanisms such as leptosporosis and giardia. All these water resources need to be monitored to insure adequate instream flows. This is imperative especially with Na Wai Eha, where large corporate owners have not cooperated in supporting the public interest.

3. Groundwater

Groundwater is the most important resource for the community at large; it is also the most neglected and subject to continuous pollution/impairment, especially from the large agricultural corporations such as HC&S and MLP. Known carcinogenic chemicals are freely used directly over our conncected aquifers, to the detriment of the public at large. All wells, whether public or privately owned, need to be accurately monitored both for pollutants and to guage sustainable withdrawal.

General comments: There is so much information to be gathered that is necessary for the public interest, especially for the equitable distribution and care of our water resources. The government's participation and support of such monitoring would be greatly appreciated by our island residents.

I request a written confirmation of receipt of my comments.

Sincerely,

Michael S. Howden, Lic.Ac.
Member, Maui County Board of Water Supply

9 – Janet Hashimoto

January 18, 2007

Kelvin Sunada, Chief
Environmental Planning Office
Environmental Management Division
State Department of Health
919 Ala Moana Blvd., Rm 312
Honolulu, HI 96814

Dear Mr. Sunada:

This is in response to your public notice of Hawaii State Department of Health's (HIDOH) Draft 2006 Integrated Report of Assessed Waters in Hawaii prepared under Clean Water Act 303(d) and 305(b). This letter identifies areas of the draft Integrated Report that should be clarified and revised prior to your submittal of a final report to EPA for approval.

It should be consistently noted that the time frame for establishing TMDLs is 8 to 13 years from the date of the original listing. Although the TMDL activities of HIDOH are negotiated each year, EPA policy is to complete TMDLs within 13 years of the original listing. EPA suggests the removal of the sentence in Part 2, page 6, "[T]his schedule is negotiated on a continuing basis and is influenced by…," and replace with the same presented in Part 1, page 8, "[T]he time frame for establishing TMDLs should be 8 to 13 years from the date of the original listing. For example, a water segment originally included on the 1998 section 303(d) list, and still identified on the 2006 submission as requiring a TMDL, should be addressed by 2011." Also, the HIDOH TMDL development plans described in Part 2, page 20 need to be reviewed and updated.

The Assessment Decision Table in Part 4 does not appear to show a consistent logic in applying multi-category designation to all waterbodies. For example, numerous water bodies with attainment for some pollutants or attainment for all parameters except enterococci do not include a Category 2 designation. On the other hand, some waterbodies show no attainment for any parameters and yet have a Category 2 designation. Some waterbodies do not show any non-attainment and have a Category 5 designation. Waterbodies with no adequate data for all parameters or waterbodies with attainment for all parameters except enterococci which has no adequate data may not really be considered impaired or under a Category 5 designation. Additional comments are shown in the attached table with EPA's comments shown in red. EPA suggests that HIDOH reevaluate, provide a consistent logic for category designations, provide specific clarification and justifications for any deviation from the logic, and revise the table and pertinent text accordingly.

We also noted that "Table 7: List of Changes to 2004 Listed Coastal Waters" was not included in your Public Notice. Please include Table 7 in your submission of the final Integrated Report to EPA in the future.

Thank you again for the opportunity to comment. Please contact me at (415) 972-3452 or Pam Tsai at (415) 947-4196 if you have any questions regarding EPA's comments and suggestions.

Sincerely,

Janet Hashimoto, Chief
Monitoring and Assessment Office

Attachment
cc: Alec Wong (CWB) w/o attachment
Watson Okubo (CWB) w/o attachment
Dale Mikami (CWB) w/o attachment

10 – Carl Berg

Review of 2006 Waterbody Assessment Decisions (Integrated 303d List 305b) report for Hawaii

Dr. Carl J. Berg
Hanalei Watershed Hui
January 16, 2007

Here are some comments on the Waterbody Assessment, with reference to page numbers in Part 1 Marine Waters.

Pg. 10 and pg 15. There does not appear to be sufficient evidence to establish Clostridium standards and material cited as footnote #4 is not in a scientific peer-reviewed journal. Therefore the use of Clostridium as even as secondary indicator is of suspect value. More research is needed to determine the persistence of viable Clostridium spores in tropical soils. New quantitative gene identification and other technologies will speed measurements and probably make culture methods obsolete.

Pg. 13. Were the secondary checks in question for the Hydrolab multiprobe only? Then what relevance does that have to either turbidity measurements taken with another machine, or with the Enterococcus values determine by the DOH laboratory. You are getting rid of much valuable data. In addition, the review does not include the extensive data sets collected by HWH under the Targeted Watershed Initiative program. This includes valuable nutrient and turbidity data, as well as Enterococcus data. The rejection of these data severely jeopardizes the accuracy of the determinations for streams estuaries in Hanalei Watershed.

Pg. 17. Note that Hanalei Bay and the North Shore of Kauai are part of the National Marine Sanctuary. This should be specifically noted in its classification.

Pg. 25. Hanalei Bay at Waioli Beach Park turbidity values are available in DOH data collected by HWH.

Pg. 42. Decision code NC= should be Ac=Attained.

Pg. 43. Waioli Stream rows for wet and dry should be next to each other. I question if enough sampling was done and over enough of the stream to make this determination. Was HWH data used?

Pg. 45-48. The order in which these sites are listed seems haphazard, rather than with respect to geographic location. Many are misclassified coastal codes. I made corrections mainly for the Hanalei area.

Hanalei Bay Landing #156 and #93 should be combined. Check salinity. This is estuarine.

Hanalei Bay Pavilion 158 & 92 should be combined. DOH has turbidity data from HWH collections and its own weekly collections. Check salinity. Estuarine?

Hanalei Bay Mooring #157. Estuarine? HWH data does not support N

Hanalei Bay at Pinetrees #159 = Waioli Beach #91. Estuarine? Where is DOH turbidity data?

Hanalei Bay upstream from Dolphin #160 is Estuary, not bay, about 2 miles up-river.

Waioli Stream Estuary #163 is estuary, not Bay. HWH submitted lots of data on bacteria, turbidity, and nutrients. All far exceed state standards.

Hanalei Bay Weke Rd. #161 you have years of data for bacteria collected by both DOH and HWH. Also exceeds for nutrients and turbidity.

Hanalei River HI385259 is where? What stations? Why not use all of the nutrient data?

Pg. 46. Kalihiwai Bay should be next to Anini. DOH has data on turbidity. Should be estuary, not open coastal.

Waimea, Lucy Wright Beach Co. Park is Estuary. DOH data is available.

Pg. 47. Waikoko should be back in Hanalei Bay. HWH provided data on turbidity, nutrients, and bacteria. One of the most polluted places.

Pg. 48. Waipa Stream Estuary should be back in Hanalei Bay. HWH provided data on turbidity, nutrients, and bacteria. One of the most polluted places.

PART 2. Streams
I reviewed this Part and found it accurate and well done.
Part 3. Groundwater
I did not review.

11 – Thomas Young
Les Takayama
Lesley Hill

Environmental Planning Office
Hawaii State Department of Health
919 Ala Moana Blvd. Rm 312
Honolulu, Hawaii 96814
Email: barbara.matsunaga@doh.hawaii.gov

As a member of the Hilo Bay Watershed Advisory Group (HBWAG) Steering Committee, I have been authorized by the group to **formally request an additional two weeks to allow us adequate time to provide you with our comments on the current Draft 2006 Integrated Report of Assessed Waters in Hawaii Prepared Under Clean Water Act §303(d) and §305(b)** -- via a fully coordinated commenting letter which will be coming to you from our HBWAG Spokesperson.

However, at this time, I also wish to offer my comments as long term resident and property owner and an individual HBWAG steering committee member on the current Draft 2006 Integrated Report of Assessed Waters in Hawaii Prepared Under Clean Water Act §303(d) and §305(b). I am limiting my comments to a discussion of two streams, the Alenaio and the Waiakea, that I believe have been inappropriately listed and targeted for TMDL prioritization. However, the application of my comments to the bigger picture of how water bodies are listed in the State of Hawaii is requested.

My comments are as follows:

- Water Quality Inventories and Problem Identification - Recent work efforts of the Hilo Bay Watershed Advisory Group to prepare a Watershed Restoration Plan for the Hilo Bay Watershed were facilitated by an EPA grant via the Hawaii Department of Health (DOH) with report assistance under a contract with the University of Hawaii at Manoa. These funds were part of the EPA program to bring impaired waters into compliance with water quality standards. The work focused on the collection of background information and input from the community on their perception of the causes of water body impairment and the preparation of a draft Watershed Restoration Plan. These Watershed Restoration inventories and findings generated a wealth of information regarding public ***perception*** but fell short in obtaining any meaningful or measurable water quality impairment data. The data that was reviewed proved insufficient to pinpoint actual causes of impairment within the watershed.

- Inappropriate Listing - I believe that the decision to list the Alenaio and Waiakea Streams during the 2004 listing cycle was inappropriate and should be corrected by de-listing these streams at the present time. The DOH listing chart indicates that enterococci, turbidity, and total suspended solids contamination is unknown (?) and that the source of information for the three contaminants: total nitrogen, $NO_{3+}NO_2$, and P are a 'visual listing from legacy sources' (V). I do not understand how a listing decision could have been made given this lack of data, especially since the ramifications of these listings are so significant. These are DRY STREAMBEDS; therefore what are the declared existing

and designated uses of these two streams and are they appropriate? As you are aware, uses identified in section 101(a)(2) of the clean water act (Hawaii's Water Quality Standards are similar) include: public water supplies, protection and propagation of fish, shell fish and wildlife, recreation in and on the water, agriculture and industrial uses. The Alenaio and Waiakea streams are ephemeral streams along their full reaches. Because of the lack of water flow or any permanent or semi-permanent aquatic habitat in these ephemeral streams and after discussions with biological experts familiar with these specific areas, we question the existing uses of the streams (using the regulatory definition of that term). I would like clarification on the declared existing use and the designated use, if there are any.

- A Use Attainability Analysis should be conducted - Due to these factors, I respectfully request that the DOH conduct a Use Attainability Analysis to ensure that the actual uses can be attained. The Clean Water Act Section 131.3(g) Use Attainability Analysis is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors. States may remove a designated use which is not an existing use, as defined in sec. 131.3, or establish a sub-category of a use if the State can demonstrate that attaining the designated use is not feasible because (1) naturally occurring pollutant concentrations prevent the attainment of the use; or (2) natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use.

- Use of the recently conducted USGS sampling study results - In 2003, the DOH EPO contracted the USGS to study the Alenaio and Waiakea streams at three sites. The objectives of this study (at a cost not to exceed $296,000) were to provide stream flow and water quality (suspended-sediment and nutrient) data in support of TMDLs to be prepared for five streams draining into Hilo Bay. A goal was to collect base flow and storm flow. It was acknowledged that collection of stream flow, contaminant concentration, and discharge data is not an easy or inexpensive task. Data collected as part of the study is to be used to estimate loads for Waiakea and Alenaio streams. Moreover, the data is supposed "to provide some of the information necessary to calibrate various hydrologic and water-quality models and provide a benchmark for monitoring improvements in water quality related to implementation of best management practices." We understand this to mean that the results of this study are to be applied to improve models that will be used in other parts of the State. This is of great concern to us for the following reasons.

- Sampling Questioned - I am very concerned that due to the infrequency of rainfall during the study period, the USGS study was unable to accumulate baseline data. The project concentrated on the Waiakea stream while the investigation of the Alenaio stream received only a limited amount of time at the end of the contract period. During the study period, there were four rainfall events for Alenaio and not many more for Waiakea stream. In addition, the data quality for the Waiakea Stream was compromised by a major stream construction project that was conducted during the sampling study, at the mid-point on the stream between the USGS recording stations. This State and County project entailed the construction of a concrete bridge and other work that resulted in major discharges to the area.Therefore I believe that the data collected at the lower USGS site has limited, if any, value and should not be used in establishing or modifying any

model that will be used for the remaining one hundred and thirty two TMDLs to be done in Hawaii.

- TMDL Requirement for Listed Streams and Probable Waste of Limited Resources at Issue - In contracting to perform the work requested by DOH, USGS warns that, "As previously discussed with the DOH, implementation of TMDLs for these streams will probably not be sufficient to bring Hilo Bay into compliance with State water-quality standards, in part because of the many nonpoint sources along the shoreline of Hilo Bay that do not discharge into these streams, specifically those along the commercial harbor. In addition, much of Hilo Bay is less than thirty (30) feet deep. It is quite possible that contaminant-laden sediments have accumulated in Hilo Bay. The breakwater and reef, in particular, would shelter the bay from wave activity that might resuspend and transport these sediments out of the bay. These sediments may be acting both as a trap and source of nutrients, other contaminants, and suspended sediment on those occasions when resuspension does occur."

- Future Cost Issues – I am very concerned that our limited public resources will be spent on costly projects that are meaningless and, if implemented, prove to be futile. Given the lack of water in these two streams, the insufficiency of data to establish a baseline, and the cost involved in any further attempts to do gather data and to establish TMDLs that have a very poor likelihood of successfully improving water quality.

Based on the inputs and concerns I have expressed above, I respectfully request that these two streams be de-listed and not considered for TMDL activity.

I appreciate the opportunity to provide my comments and sincerely hope that these comments are taken into serious consideration before finalization of this document. As I mentioned above, a formal letter to you providing coordinated comments of the HBWAG will also be transmitted to you for your consideration within the next two weeks.

Sincerely,

Thomas Young
Member Hilo Bay Watershed Advisory Group Steering Committee
Member Hamakua Soil and Water Conservation District
529 Kukuau Street
Hilo, Hawaii 96720

Les Takayama Chair
Waiakea Soil and Conservation District
154 Waianuenue Avenue #322
Hilo, Hawaii 96720

Lesley Hill Chair
Hamakua Soil and Conservation District
154 Waianuenue #322
Hilo, Hawaii 96720

12 – Ann Fielding

Ann Fielding
P. O. Box 1107
Makawao, HI 96768
(808) 572-8437
annf@maui.net

January 17, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard, Room 312
Honolulu, Hawaii 96814
via barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

I have been a marine biologist in Hawaii since 1974. In that time, I have been involved in near shore and stream activities. I am also a homeowner living in Haiku and am concerned about our drinking water.

1. Marine and Estuaries; I am concerned about storm runoff into the ocean, most particularly silt runoff as well as agricultural chemicals. I would like to see those chronically affected areas identified and assessed after wet weather events. I want to see pollution prevention and controls in place and support full funding for these activities.

2. Streams: I would like to see the streams meeting all categories of attainment as "11 Maui streams were listed in category 3 & 5- existing data indicated non-attainment, TMDL needed, more data needed". I support full funding for complete monitoring, data collection, data reporting and subsequent corrective actions to ensure clean water quality for Maui's residents and future.

3. Groundwater: There are no water quality standards for our groundwater. This is the source of our drinking water. I am outraged by this. Your report states that 81% of our aquifers are highly vulnerable to contamination. We need standards to protect the quality of the water and monitoring to determine if the standards are being met. I request full funding to achieve these goals.

General comments: I would like to see a laboratory on Maui where the public could take water samples for bacteriological testing and reporting.

I request confirmation of receipt of my comments.

Sincerely,

Ann Fielding

13 – Janet Ashman

HAWAII AGRICULTURE RESEARCH CENTER

MAUI SUBSTATION • P.O. BOX 88 • PUUNENE, HAWAII 96784

TELEPHONE: (808) 877-6916

January 19, 2007

Environmental Planning Office
Hawaii State Department of Health
919 Ala Moana Blvd., Rm 312
Honolulu, Hawaii 96814

RE: Comments on Draft 2006 INTEGRATED REPORT OF ASSESSED WATERS IN HAWAII PREPARED UNDER CLEAN WATER ACT §303(d) AND §305(b)

The Hawaii Agriculture Research Center (HARC) offers the following comments on the Draft 2006 INTEGRATED REPORT OF ASSESSED WATERS IN HAWAII PREPARED UNDER CLEAN WATER ACT §303(d) AND §305(b).

HARC has reviewed the above document and, as noted in comments submitted in previous years, continues to have serious concerns about the methods by which waterbodies, particularly streams, are being listed as impaired. We are extremely concerned about the long-term ramifications to the State of those listings, especially since TMDLs will have to be done for these streams even if there is no scientific justification for the impairment classification.

The following is an outline of our concerns.

Use of limited and unreliable data to support listings
The use of photographs to assess water quality is scientifically unsound and unacceptable. As noted in the document itself, this practice is inappropriate and should not be used to support listings.

State Water Quality Standards cannot be met even under natural conditions
Natural levels of turbidity regularly exceed our state water quality standards set for turbidity. Other states account for their background levels as part of the standards setting process and there is no sound justification for Hawaii to ignore our own conditions. Instead, our standards seem to have been set using drinking water standards. This is an impossibly high standard that is unnecessary and unrealistic.

Scientifically questionable habitat and biotic assessment protocol still being used
We continue to object to the use of the Hawaii Stream Bioassessment Protocol to assess stream health within the regulatory context. This protocol has been rejected as not scientifically rigorous and has no place in impairment determinations.

Listing of dry gulches with prioritization for TMDL development
We fail to see the point of spending hundreds of thousands of dollars to try to determine whether

a dry (undiverted) gulch that has no water in it except during heavy rainfalls and cannot support aquatic life, is impaired and requires TMDLs. Common sense must be applied to these determinations and expenditures of public resources.

Hawaii has limited resources and should use them to list truly impaired waterbodies so that TMDLs can be developed and implemented speedily for those waters that are in fact unhealthy.

Thank you for the opportunity to comment.

Sincerely,

Janet Ashman
Environmental Specialist

14 – Sheldon Braidman

SHELDON BRAIDMAN
2387 S. KIHEI RD., C-402
KIHEI-MAUI, HI 96753

January 20, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814 via
barbara.matsunaga@doh.hawaii.gov

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

Dear Department of Health,

Please note my comments on the above report:

Marine and Estuaries: Please note that there a better system is required and put into service for water quality testing, specifically bacteriological, to protect ocean users and ensure the health of the ocean around Maui County.

I and many of my friends are members of the Maui Canoe Club and the Kihei Canoe Club. We are frequent ocean users. Combined club membership is approximately 350 people. Many of the coastal areas that we paddle in are not shown as tested areas for this bacteria known as Enterococcus. This is a serious concern.

It is my understanding that the Blue Water Task force projects where test for this specific bacteria were made, have shown that many times we are canoeing in contaminated waters.

Please confirmation an email receipt of my comments and inform me of your departments plans for more extensive testing. .

Sincerely,

Sheldon Braidman

15 - Robin Knox

MAUI TOMORROW

Ron Sturtz *President*

Lucienne de Naie *Senior Vice President*

Judith Michaels *Executive Vice President*

Richard Michaels *Secretary*

Vicki Schulte *Treasurer*

Susan Bradford

Sean Lester

Ed Lindsey

Mark Sheehan

Renee Loux Gordon

Lance Holter

Michael Howden

January 19, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

To Whom It May Concern:

We commend the Department of Health (DOH) for completing a major milestone in preparing the state's first Integrated Report of Assessed Waters. It is obvious that a great deal of thought, time and attention was given to this important effort. Respectfully, we submit the following comments on the above referenced report:

Part 1 - Marine and Estuaries

Comment No. 1 - Scope of waters included
We support the expansion of the geographic area of assessment units to include the larger waterbody area that the sampling station represents.

Comment No. 2 – Marine Monitoring Program

Shoreline bacteriological monitoring (BEACH program) -
We request that the report include the location of beach monitoring stations used in the assessment, preferably by mapping. We question whether 13 beach monitoring stations are sufficient for the entire island of Maui given the extensive shoreline, proximity of sewage sources to coastal areas, and large number of recreational users.

We request that the monitoring strategy include locations where wet weather events cause elevated bacterial levels, and that sampling events include wet weather conditions.

P.O. Box 2990 • Makawao, HI 96768 • Phone: 579-9802 • Fax: 572-1579 • aina@maui-tomorrow.org • www.maui-tomorrow.org

16 – Sharon J. Matin

West Maui Preservation Association
P.O. Box 10818
Lahaina, Maui, HI 96761
www.SAVEWESTMAUI.com
info@SAVEWESTMAUI.com

January 19, 2007

Manager
Environmental Planning Office
Department of Health
919 Ala Moana Boulevard Rm 312
Honolulu, Hawaii 96814

RE: 2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b).

To whom it may concern:

We commend the Department of Health (DOH) for completing a major milestone in preparing the state's first Integrated Report of Assessed Waters. It is obvious that a great deal of thought, time and attention was given to this important effort. Respectfully, we submit the following comments on the above referenced report:

Part 1 - Marine and Estuaries

Comment No. 1 - Scope of waters included

We support the expansion of the geographic area of assessment units to include the larger waterbody area that the sampling station represents.

Comment No. 2 – Marine Monitoring Program

Shoreline bacteriological monitoring (BEACH program) -
We request that the report include the location of beach monitoring stations used in the assessment, preferably by mapping. We are concerned that there is not adequate monitoring of recreational waters in West Maui. In particular we are concerned about bacterial contamination in the vicinity of Honokowai Channel given the extent of the North Beach shoreline and the presence of three recreational parks in close proximity to the Lahaina Wastewater Reclamation Facility and associated infrastructure such as pumping stations, lift stations, and

aging sewer pipes. The large number of housing developments currently under construction will only bring more population into contact with these already impaired waters.

We request that the monitoring strategy include sampling of the discharge of Honokowai Channel and other locations where wet weather events cause elevated bacterial levels, and that sampling events include wet weather conditions. The monitoring strategy should coordinate shoreline monitoring with monitoring of contaminated runoff in the Honokowai Channel to discern if the channel is conveying bacteria to coastal waters.

Open coastal waters bacteriological monitoring – We request that the monitoring program include bacteriological monitoring of open coastal waters in addition to shoreline areas. Turbid plumes of water are observed offshore of Honokowai Channel in wet and dry conditions, and extend well beyond the 300 meters from shore that is currently designated as recreational waters. Recreational users including long distance swimmers and kayakers frequently use the waters beyond the reef line. The monitoring in this area should extend seaward beyond the location of any existing or planned injection well sites.

Shoreline and offshore chemical monitoring – The report indicates that shoreline and offshore chemical monitoring has been curtailed due to limitations of available resources. We request that the DOH plan for full funding of this monitoring. The report indicates that not all marine waters have been assessed, and of those assessed, most are considered impaired by the levels of nutrients present. The report indicates that the coastal segment from Honokowai Point to Kaanapali is impaired by nutrients. It is imperative that monitoring of these impairments continue in support of the legally required TMDL

We request that the monitoring program include testing for toxic pollutants (heavy metals, organic chemicals, herbicides, pesticides). Every chemical for which there is a marine water quality standard should be monitored. Monitoring of toxic chemicals is needed to protect the aquatic ecosystems. Healthy aquatic ecosystems are necessary to protect the fishery and the Hawaiian cultural practices that depend on the existence of the fishery. These cultural practices are protected by recorded unilateral declaration of restriction that includes the entirety of North Beach Shoreline and the three recreational parks. We request that these protected areas be monitored for toxic chemicals, in addition to nutrients.

Comment No. 3 – Enterococcus Standard Attainment

The report in Section C.1. (page 15 of 29) discusses the use of *Clostridium perfringens* as a secondary indicator of the presence of sewage. While we support development of criteria that are more specific indicators of pathogenic organisms, we strongly object to an attainment methodology that is based on anything other than the promulgated standard. *C. perfringens* should not be

used as a criterion at this point in time because it has not been subject to the rulemaking process and required public review. We request that all waters exceeding Enterococcus criteria be listed as non-attainment status without regard to the levels of C. perfringens present.

It is our understanding that the state is considering changing the current recreational bacteriological standards, specifically raising the criteria value from 7 cfu/100 ml to 33 cfu/100 ml. We request that DOH provide a written rationale that explains basis of current criteria and the basis of proposed criteria. We request public access via internet to data or reports that underlie the rationale. Because this is a complex issue of great concern to the public, we request an advance notice of rulemaking. We request that informational meetings be held in West Maui prior to rulemaking in order to inform the public about the proposed change and the science and regulatory rationale supporting the change.

Comment No. 4 – Collaboration with other monitoring programs

We support the Department in its efforts to collaborate with other state and federal agencies, private consulting firms, and volunteer monitoring programs. However, we are concerned that the data be of adequate quality to use for assessment. We are specifically concerned that the experimental design of studies not be biased and that such studies specifically adhere to EPA guidance. We urge the state to conduct outreach to county governments in order to strengthen the implementation of the water quality management program through county decision-making and permitting (such as Special Management Area permits that require marine water quality studies). We urge the DOH to provide specific guidance regarding the design of water quality monitoring programs that are supportive of and compliment the state monitoring program.

Comment No. 5 – Documentation of Data Submitted

We request that the marine assessment report include documentation of public participation, in particular of the data submitted by parties other than DOH. West Maui Preservation Association, a Hawaii non-profit organization, submitted water quality data for use in the preparation of the State's water quality assessment (305(b) report) and 2006 listing of impaired waters (303(d) list. The data were accompanied by photos showing the plumes of turbid water observed in the nearshore waters in the vicinity of Honokowai channel in both wet and dry weather conditions.

These data indicate impairment of the water quality in the nearshore coastal waters in the vicinity of the discharge of Honokowai Stream to the ocean. The data were collected by Dr. Richard Brock of Environmental Assessment Co. The data , along with study methodology, sampling locations and other information needed for 305(b) assessment are contained in a report entitled, entitled " A Quantitative Assessment of Water Quality and Marine Communities In An Area Fronting the Development of the North Beach Project Site (Former Kaanapali Airstrip)", December 2004, EAC Report No. 2004-16. This report documents

study in which samples were collected at 21 locations and 7 control locations during 8 biennial surveys (February and August 2001 thru 2004) and two heavy rainfall event surveys (four inches or more within a 24-hour period) December 1, 2001 and January 5, 2004.

Part 2 - Streams

Comment No. 6 Increase scope of stream monitoring – The report indicates that all streams assessed were placed into Category 3 (insufficient data to make a use support determination). We urge the DOH to plan for full funding for this program. We specifically request monitoring of Honokowai Stream and Honokowai Channel. The current listing of Honokowai Stream is based on visual assessment alone. Visual observation of the channel indicates the presence of contaminated runoff. Dr. Brock's reports (previously referenced) implicate the Honokowai Channel as the source of observed exceedances of water quality criteria.

Part 3. Groundwater Assessment

Comment No. 7 Establish groundwater quality criteria –

The report indicates that groundwater quality standards have not been established for the state. We request that DOH make the establishment of groundwater quality standards the highest level of priority. It is clear that in West Maui the protection of the quality of our groundwater resources is inadequate. We request development of criteria for use as source of drinking water supply, and for aquatic life protection of the freshwater and marine ecosystems which may ultimately be impacted by groundwater flows.

Comment No. 8 Establish ambient groundwater monitoring network-

The groundwater assessment identifies areas of existing groundwater contamination; great potential for additional contamination to occur, and classifies 213 Maui aquifers as" highly vulnerable to contamination". The current assessment data appears to have come exclusively from testing of finished (treated) public water supply wells. This data indicates that 12 West Maui drinking water wells are contaminated. We request that DOH place the highest priority the establishment of an ambient groundwater monitoring network that includes not only aquifers that may be potentially used for drinking water, but also monitors areas with high potential for contamination of any aquifer. A monitoring program that only detects problems at the point of use is not adequate to protect the resource.

Comment 9 Comprehensive Groundwater Protection Plan

The report indicates that the Comprehensive State Groundwater Protection Program is under review by EPA. The assessment report documents 29 different

state programs or activities designed to protect our groundwater resources. Despite numerous programs and the involvement of three state agencies, groundwater quality on Maui is not being protected. We request that DOH hold informational meetings in West Maui to present the plan to the public prior to the public comment period. The development of a comprehensive groundwater protection plan and the monitoring and standards necessary to implement the plan should be the highest priority of state government. Water is life and quality of water is a major factor in quality of life.

Part 4. Assessment Decision Table

Comment No 14. Priority ranking for TMDLs – We request that DOH include priority ranking for TMDLS for all waterbodies included on the 2006 303(d) list. We request that the schedule for completing those TMDLS be developed. We request that Honokowai Stream and the marine segment from Kaanapali to Honokowai Point be given high priority. This area has a long history of documented water quality problems and documented exceedances of state water quality criteria in an area of exponential population growth.

General Comments

Comment No. 9 Provide supporting data – We request that future assessment reports include a section that provides information on the data underlying the assessment. We request that meta data for data sets used in assessment be included. At a minimum the meta data should include contact information regarding owner of data and where data resides, database software or access needed, geographic area covered, parameters covered, and period of record,

We request that future assessment reports Include period of record, frequency of monitoring, and summary statistics for data used in the assessment to include: Minimum value, maximum value, mean or geometric mean, number of data points; coefficient of variability, and standard deviation.

We request that DOH move quickly to make environmental data more available to the public via internet, preferably as a searchable database.

Comment No. 10 Designated Uses – We request that the state revise the state water quality standards to include specific designated uses. This will make the applicability of criteria to a given waterbody clear and unambiguous.

Closing Remarks

In closing, we recognize the tremendous challenges faced by the state in protecting the precious water resources on which we all depend for life itself. We are appreciative of the hard work of everyone involved in these programs. However, we believe it is inexcusable for state government to neglect critical needs for water quality planning and management due to reported lack of resources, while the state has a budget surplus in excess of $400 million. As the public comment period for this report closes, the legislature debates how to spend the budget surplus. We urge DOH to immediately make these critical funding needs known to our lawmakers, and to ask for dedication of part of the budget surplus to meeting these needs

Sincerely,

Sharyn J. Matin, President
West Maui Preservation Association

17 – Sean M. O'Keefe

ALEXANDER & BALDWIN, INC.

January 19, 2007

State of Hawaii Department of Health
Environmental Planning Office
Attention: Mr. Kelvin Sunada
919 Ala Moana Boulevard, Third Floor
Honolulu, HI 96814

Subject: **Draft 2006 Integrated Report of Assessed Waters in Hawaii**

Dear Mr. Sunada:

Alexander and Baldwin, Inc. (A&B) is pleased to provide comments regarding the draft report titled *2006 Integrated Report of Assessed Waters Prepared Under Clean Water Act §303(d) and §305(b)*. Our major comments and concerns are with those portions of the report relating to the draft 303(d) list of impaired waters and are summarized below.

Errors, Inconsistencies, and Insufficient Information Make Meaningful Evaluation Difficult or Impossible:
While we appreciate the time and effort which the Department of Health has obviously put into preparing this report, key errors or omissions make meaningful evaluation and comment difficult or in some cases impossible. Most notably, detailed information regarding the analytical data used to make listing decisions is not included in the draft report, as it was for the 2004 303(d) report (see "Results" section, pages 15 through 23, and Appendix C of the *Final 2004 List of Impaired Waters in Hawaii Prepared Under Clean Water Act §303(d)*). The inclusion of this information in the 2004 report allowed stakeholders to identify errors in the proposed listings for Wailoa/Waipio Stream (Hawaii) and Waihee Stream (Maui), and to identify and comment on streams for which listing decisions appeared to be based on inadequate information. The omission of this information from the 2006 report precludes such a detailed evaluation of listing decisions without requesting and obtaining the actual data from the Clean Water Branch, an effort which was not possible given the constraints of the public comment period. Other errors or inconsistencies which inhibit meaningful evaluation include the use of the decision code "Ac" throughout the Assessment Decision Table in Part 4 of the report with no definition of this code provided, and apparent inconsistencies between the Assessment Decision Table in Part 4 and Table 3, Detailed Summary of Changes in Part 2 with regard to the 2004 303(d) list. We strongly recommend that the Department revise the report to provide more detailed information regarding listing decisions, and to address errors and inconsistencies, prior to closing the opportunity for public comment.

Environmental Affairs • P.O. Box 266 • Puunene, Hawaii 96784 • Telephone (808) 877-2959 • Fax (808) 871-7663

Inadequate Public Comment Period

Although the Department noticed the availability of the draft report and provided for a nominal 30 day public participation period, we believe that the opportunity for public comment on the draft report has been inadequate, particularly given the complexity of the document and the major changes entailed by the integration of the requirements of §303(d) and §305(b) into one report. The publication of the notice of availability just days before the Christmas holidays effectively reduced the time available for stakeholders to review and assess the report. Moreover, the *Hawaii Continuing Planning Process* (DOH; May 1991), which is supposed to guide the water quality planning process, provides for a public comment period of at least 45 days. We therefore strongly believe, and hereby request, that the public comment period should be extended to provide adequate time for interested stakeholders to complete a comprehensive review and evaluation of the report.

Use of Visual Assessments to Support Listing

Many of the streams currently included on the 303(d) list are listed based solely on "visual assessments" of water quality with little or no actual water quality data available to support those listings. Virtually all of these streams were originally included on the 1998 303(d) list based on an analysis by the Environmental Protection Agency of photographs taken during the assessments; EPA staff involved in the listing decision did not actually visit these streams. In many cases, the pre-1998 visual assessments do not meet the present-day listing criteria approved by EPA. (Data sets for evaluation of narrative criteria must include at least three sampling events and represent conditions in both wet and dry seasons, and must be supported by adequate QA/QC procedures. According to EPA's "Revised Review of Hawaii's 1998 Section 303(d) Water Body List", its visual assessments were based on one to three ("usually one") visits to a limited number of sites on the water body, generally during dry weather conditions, "and therefore represents an incomplete evaluation".) Recognizing the inherent limitations of basing listing decisions on a review of photographs, DOH-EPO stated in its 2004 report that they "do not support future listing determinations based on photographic assessments only". These limitations are further highlighted by the streams for which subsequent visual assessments or numerical water quality data refutes the previous visual assessments. A&B strongly urges a review of past listing decisions based on visual assessments and delisting of streams for which listing is not supported by other, more reliable water quality data. Failure to do so will result in the expenditure of enormous resources in developing and implementing TMDL's for water bodies that may not actually be impaired.

Under Hawaii's water quality standards, waters cannot be determined to be impaired for turbidity based solely upon a visual assessment if the visual observation fails to account for the provisions of HAR Section 11-54-4(c). Under this section of the water quality standards, the narrative water quality standard relating to "soil particles resulting from erosion on land" (typically a major contributor to observed turbidity) is deemed met when the land on which the erosion is occurring is being managed in accordance with soil

conservation practices or when the discharge is receiving the best degree of treatment or control and the impact on the water body is deemed to be "acceptable". That is, a visual observation of turbidity is not a violation of water quality standards unless it can be shown that the requirements of §11-54-4(c) are not being complied with. To our knowledge, the visual assessments evaluated and considered by EPA contained no information that would allow a determination as to whether the requirements of this section were being met at the time of the assessment. Visual assessments that do not consider §11-54-4(c) should not be used as the basis for listing streams as impaired for turbidity.

Listing Criteria

As in the past, we have serious concerns regarding listing criteria for waters under the *2004 (& 2006) Priority Ranking and Listing/Delisting Criteria for Hawaii State Surface Waters*. In some cases, the existing listing criteria allow listing of waters which do not actually exceed water quality standards and should be revised. Specific concerns include:

- Listing for impairment by conventional pollutants can be based on as few as five water quality samples. A&B believes that data sets of this size do not provide a statistically valid basis for comparison with the water quality standards as they may be widely skewed by the inclusion of one or more samples collected during or soon after large storms. While a minimum sample size of five is consistent with a 1998 recommendation by EPA, EPA's recommendation was based not on whether such a small sample size would provide reliable data, but rather on the limited data then available for analysis and a concern that "use of a larger minimum sample size would result in exclusion of streams from consideration for listing". This is simply not a statistically valid justification for evaluation, and amounts to allowing streams listed based on poor quality data for not other reason than because that is all that is available.
- For conventional pollutants, Listing Priority 2 allows sample data collected during wet and dry seasons to be combined where there is insufficient data to evaluate the wet and dry standards separately. Water bodies can be listed if (1) the geometric mean of the data (including wet season data) exceeds the dry season standard and a majority of dry season data exceed the dry season standard or (2) the geometric mean of the data exceeds both the wet and dry standards or (3) the majority of sample values in a smaller data set (five to nine samples) exceed the geometric mean criteria by a factor of two or more. In each of these cases, water bodies could conceivably be listed without the geometric mean of the wet or dry season data exceeding the corresponding wet or dry standard – that is, without an actual exceedance of the applicable water quality standard. The wet and dry season standards are separate and distinct standards. In order to determine whether a water quality standard is exceeded, wet season data should be compared to the wet season standard, dry season data should be compared to the dry season standard, and a minimum sample size (at least ten samples) should be established for comparison to each standard.
- For comparison with the "ten percent of the time" and "two percent of the time" criteria, DOH requires a minimum of 100 and 500 samples, respectively, for Listing Priority 1 or 50 and 250 samples, respectively, for Listing Priority 2. These standards

are intended to allow for exceedances of the "geometric mean" standards for relatively short periods of time due to large rainfall events, when larger pollutant concentrations in streams are unavoidable. Appropriately, the listing criteria require significant data sets for comparison with these standards in order to ensure a reliable assessment of the data. However, if one were to evaluate whether a stream was meeting the numerical water quality standard for a total suspended solids over the six month wet season, it could reach 50 mg/L ten percent of the time and 80 mg/L for two percent of the time but would have to meet the "geometric mean not to exceed" standard for the remaining 90 percent of the time. Although some statistical variance is allowed for by use of a geometric mean, it would seem that the size of the data set used to evaluate compliance with the standard which applies ninety per cent of the time should be comparable to the size of the data set required to evaluate compliance with the "ten percent of the time" and "two percent of the time" criteria. As such, a minimum sample size considerably larger than is specified in the listing criteria would appear to be appropriate. A single anomalously high data point (such as might be collected during a large storm) may so skew the geometric mean of a small data set as to suggest impairment even where the criteria applicable to storm events (i.e., the "ten percent of the time" and "two percent of the time" criteria are never exceeded).

Water Quality Standard for Turbidity

A large number of streams included on the proposed 303(d) list are listed either solely or partly due to reported impairment by turbidity; many based on visual assessments only. The current numerical water quality standard for turbidity (2.0 NTU dry season/5.0 NTU wet season), which applies to all streams in the state, is as strict or stricter than the turbidity standard for drinking water and does not consider the normal background turbidity present in streams, particularly during storm events (when turbidity greater than 200 NTU is common), irrespective of any inputs from human sources. As a result, many streams are currently listed as impaired, and many more will undoubtedly be listed as more data is collected, based on turbidity data that is wholly consistent with healthy Hawaiian streams (according to EPA, low turbidity streams and rivers – those typically located at the upper reaches of an undeveloped watershed – are those with turbidities less than 20 NTU – *four to ten times the Hawaii standard*). In comparison, roughly two-thirds of the states which have a numerical turbidity standard at all employ a relative criteria based on background turbidity levels (typically establishing their WQS at 5-10 NTU *above background*). We believe strongly that a review and revision of the State WQS for turbidity is necessary in order to prevent the continued listing of streams for turbidity levels that exceed the current standard but are in fact not indicative of actual water quality impairment.

Impaired Gulches?

Some "streams" are listed as impaired even though they are ephemeral streams that are normally dry except during large storm events. These "streams" are more accurately described as dry gulches, and it is unclear why the Department has chosen to devote scarce resources to monitoring and developing TMDL's for these "water bodies". The most obvious examples are Alenaio Gulch and Waiakea Gulch, both located in the Hilo

Bay Watershed on the island of Hawaii. Neither of these gulches is even listed in the Hawaii Stream Assessment, yet both are listed as impaired (based on visual assessment only) and are currently undergoing development of TMDL's. Clearly no designated uses could possibly be attained in these dry gulches, due to the very limited time when water is present. Moreover, since flow in these gulches occurs only during large storm events, water quality commensurate with periods of high runoff can be expected virtually all whenever there is flow. We have similar concerns for other stream systems where impairment decisions have been based solely on stormwater flows in normally dry lower reaches. We strongly recommend that the Department carefully consider the normal flow regimes and actual uses of water bodies such as these prior to making determinations regarding impairment, and prioritize its efforts to address water quality issues in streams (or stream segments) where there exists a potential for designated uses to be achieved.

A&B appreciates the opportunity to provide comments on the proposed list of impaired waters, and would welcome the opportunity to discuss any of our comments with DOH-EPO staff.

Sincerely,

Sean M. O'Keefe
Director, Environmental Affairs
Alexander & Baldwin, Inc.

cc: G.S. Holaday, HC&S
D. Heafey, HC&S
M. Ching, A&B
J. Ashman, HARC

18 – Alan Takemoto

Hawaii Farm Bureau
FEDERATION
2343 Rose Street, Honolulu, HI 96819
PH: (808)848-2074; Fax: (808) 848-1921
e-mail hfbf@hfbf.org

January 19, 2007

Environmental Planning Office
Hawaii State Department of Health
919 Ala Moana Blvd., Rm 312
Honolulu, Hawaii 96814

Subject: Draft 2006 INTEGRATED REPORT OF ASSESSED WATERS IN HAWAII PREPARED UNDER CLEAN WATER ACT §303(d) AND §305(b)

The Hawaii Farm Bureau Federation (HFBF) appreciates the opportunity to offer the following comments on the draft report.

This document is of extreme importance to all farmers in the State and should be on the radar screen for all Hawaii citizens because the listing of a waterbody as impaired dictates that at some time in the future, a TMDL assessment will have to be done and that the TMDL should be implemented. The cost of these activities in terms of human and fiscal resources is enormous. Because of this, every possible effort should be made to ensure that when the decision is made to list a waterbody, it is (a) based on water quality standards that are meaningful and scientifically supported and (b) based on appropriate and adequate sampling.

As a long-time member of the Hawaii Department of Health Water Quality Standards Technical Advisory Group, we know that some of our Hawaii water quality standards (e.g., the turbidity standards) were set arbitrarily and are not achievable. Before any further listings are made, these standards must be amended. In fact, those listings based on violations of the current turbidity standard should be removed immediately and re-evaluated at such time as an appropriate standard is in place.

Furthermore, we continue to object to the listing of streams for which only a "visual assessment" provides the basis for the listing. This is scientifically unsound and only serves to call into question all listing decisions made by the Department.

HFBF respectfully requests that rather than expend Departmental energy on adding new waterbody impairment listings at every assessment, the focus should be on working with the scientific and regulated community to promulgate appropriate and meaningful standards that can be used to rationally assess the health of the State's waters. The consequences of ignoring this as a prerequisite to any listing is the inevitable eventuality that all of Hawaii's waterbodies, regardless of the scientific reality, will be considered unhealthy and impaired.

Thank you for your consideration of these comments.

Alan Takemoto
Executive Director

Alan Takemoto

19 – June Harrigan-Lum

From: June
To: Linda.Koch@doh.hi.gov
Sent: Friday, January 19, 2007 4:21 PM
Subject: Comments on 2006 CWA PIntegrated 305(b)/303(d) Report

Aloha, Linda: I have only two major comments on the format and content of the 2006 Integrated Clean Water Act 305(b)/303(d) Report:

1. Part 1 - Marine Waters: part 1 opens with the sentence "Overall, the quality of the waters of the State is very good." However, the Report goes on to state that of a total of 534 coastal water bodies tallied (how? is this the number of watersheds delineated in the State?), 219 out of 264 coastal water bodies with adequate data have been listed for at least one pollutant. Because 219/264 = 82.9 per cent of coastal waters assessed for this Report have been listed, there can be no logical argument made that "the quality of the waters of the State is very good," especially since much of the measured pollutant load, including bacteria, derives from the adjacent watershed. If the true percent of assessed and unpolluted marine waters is 100-82.9 = 17.1%, then, using the ranking scale 0-20%="poor"; 21-40%="fair"; 41-60%="good"; 61-80%'"very good";and 81-100% = "excellent" places Hawaii's coastal waters in the "poor" category. In other words there needs to be a rational connection between data analysis and judgment of the results. The beginning sentence should read, "On the basis of available data, the quality of the marine waters of the State is ranked as poor".
2. Part 2 - Streams: This section is well-prepared and logical. In order to clarify the decision criteria, I urge staff to start the process of connecting the numerical and narrative Water Quality Criteria to designated stream uses listed in HAR Chapter 11-54, Water Quality Standards.
3. Part 3 - Groundwater: Hawaii's groundwater is in generally good condition, but many potentially toxic chemicals are not included in the State and Federal drinking water standards. Protecting groundwater is a result not only of standards assessment but of keeping up with the toxic status of many new dissolved chemical contaminants and is an ongoing process. The Report should mention the dynamic nature of protecting groundwater sources of drinking water from toxins.

Thank you for the opportunity to review the 2006 Report. Please contact me via reverse e-mail if you have any questions, June

June F. Harrigan-Lum, Ph.D.
2311 Bingham Street
Honolulu, Hawaii 96826
e-mail to: jharrigan@hawaii.rr.com
cell phone ; (808)387-9857
landline: (808)955-8588