

ENCHANTED LAKE RESIDENTS ASSOCIATION

Newsletter

February 2008

Regular lake cleanups making a difference

In past years, the lake cleanups were done by volunteers and often only a few dedicated souls turned out.

Last year, the ELRA board decided to try a different approach and hire a cleanup crew to remove debris from the lake on a regular schedule.

Board member Bob Bourke generously volunteered to manage the operation. He now spends every other Sunday cleaning our lake with a paid crew of four teenage workers to assist him.

The crew started September 2nd cleaning algae that had accumulated at Ohiki Place. The crew pumped the algae into large bags sewn together from 6-ft by 20-ft lengths of shade cloth. After a few days most of the water had leaked out, the bags were opened and the algae was allowed to dry in the sun. After a week, the dried algae was used for compost for



Bob Bourke, right, and an assistant get ready to pump algae out of the lake.

a vegetable garden. The next cleanup focused on the mouth of the lake by the channel inlet from Aikahi Hills. Here they found a lawn mower, tires, Safeway cart, debris, and (gross!) a dog skeleton in a black plastic bag!

September 23rd the crew worked on removing mangrove at Kahili Street. Again on October 7th, more mangrove removed at Akuila. On October 21st the crew cleaned up algae and trash at Kimo's Cove. The algae was placed on the key walls and residents either discarded it in the trash or used it as compost. The crew was rained out on November 4th. On November 18th the crew worked over at Kimo's Cove and on the shoreline fronting Paumele Place to remove trash and algae. On December 2nd, clean up started at Keolu

Drive near the wetland and continued to the small island off the Kukilakila townhouses. On December 16th, Kukilakila island to Ohiki Place was cleaned up. The crew took a break during the holidays.

The crew will be cleaning up Kimo's Cove again as it seems to accumulate a large amount of flotsam from across the entire lake at one location.

ELRA is always looking for workers who are strong and don't mind getting dirty. The crew works four to six hours every other Sunday beginning at 7 am. Pay is \$15.00 per hour, call Bob Bourke at 256-2057 for more information.

If there are specific areas around the lake that need special attention, please let a board member know so that a clean up can be scheduled.

General Forum

**March 11, 2008
7 to 9 p.m.**

**St. John Vianney
Parish Hall**

Bring your ideas, questions and concerns for an informal discussion of Lake issues. Light refreshments will be served.

Don't miss this... your participation is important!

15 things you can do to help keep your lake clean

1. Pull any mangrove seedlings as soon as you see them.

2. Don't let your yard clippings or tree trimmings fall into the lake. Coconuts and palm fronds are a major part of the trash picked up during lake cleanups. Sweep yard waste such as grass clippings, fallen leaves, fruits and shrub trimmings and keep them out of the storm drain system. Do not blow or hose yard waste into the gutter. Use fallen leaves as mulch or for composting. Place green waste at the curb for recycling collection (see twice/ month schedules at www.opala.org).

3. Don't empty swimming pool water into the lake. Chemicals in pool water can kill fish. There is also a fine of up to \$50,000 for doing this. Pool water should be emptied into the sanitary sewer system (not the street gutters which go into the lake).

4. Periodically remove any seaweed growing in front of your property. You can dry it and use it as compost or throw it away with the greenwaste trash.

5. Oysters are efficient cleaners of the lake. If they are not a hazard (you probably don't want them on your boat landing), let them grow.

6. Keep fertilizer use to a minimum and don't use fertilizers if a rainstorm is expected in the next few days.

7. Don't sweep rubbish or street dirt into the storm drains. It ends up in the lake. Do keep sidewalks, curbs and gutters around your property clean by sweeping up debris and disposing of it in the trash.

8. If you see anyone tossing debris or tires into the lake, call the lake security watch, 366-6479.

9. Control soil erosion on your property. Plant ground cover or mulch erosion-prone areas. Schedule grading and excavation projects for dry weather. Cover excavated material and stockpiles of soil, sand or gravel to protect them from rain, wind and runoff. Sweep or scoop up cement washout or concrete dust instead of hosing into driveways, streets, gutters or storm drains. Do not over-water your yard.

10. Don't let your car wash water run into the lake via street gutters. Wash your car on a lawn or gravel drive where the water will soak into the ground. Use a bucket and or nozzle for your hose to keep water from running continuously. Dispose of leftover soapy water in your bucket into a sink. Use detergent sparingly. A rule of thumb is to use no more cleaner than can be rinsed using a 5 gallon bucket of rinse water.

11. Pick up your pet waste. Bring a bag, pick it up, and dispose of it properly, in the toilet or trash. A single gram of dog feces can contain 23 million fecal coliform bacteria. Pet waste is one of the many little sources of pollution that can add up to a major source of bacteria and excess nutrients that can cause algal blooms (overgrowth of aquatic plants that smother other aquatic life). These blooms use up the oxygen in the water that fish and other organisms need to breathe.

12. Use water-based paint whenever possible. Clean water-based paints in the sink, or oil-based paints with thinner. Wrap dried paint residue in newspaper or harden in its container and dispose of it in the trash. Never clean brushes or rinse paint containers near a storm drain. If you hire painters, make sure they do the same.

13. If you change your own oil, use an oil change box. The best practice is to have your oil changed by a shop that recycles their waste oil. Never use old oil to kill weeds or allow oil to go down a storm drain.

14. Contact city officials and let them know they need to keep sediments out of storm drains that empty into Kaelepulu Pond. Gravel and oil from streets combined with sediment runoff from construction projects deposits about 50 cubic yards of dirt into the lake during a typical heavy rainstorm.

Mayor's Office

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Phone: 523-4141
Fax: 527-5552

Dept. of Environmental Services

1000 Uluohia Street, Suite 303
Kapolei, HI 96707
Environmental Concerns: 692-5656
Fax: 692-5520
www.cleanwaterhonolulu.com

Spill Response (Hazard Evaluation and Emergency Response)

Local (Honolulu Fire Department):
911 (24/7)
State: 586-4249 (business hours),
247-2191 (after hours)
To report illegal discharge or dumping that has already occurred, call 692-5656
NPDES permit questions: 692-5207
Polluted runoff public outreach:
692-5208 (City), 586-4309 (State)

City Council

Barbara Marshall
Phone: 547-7003
bmarshall@honolulu.gov

15. Pass this information on to your friends and neighbors.

Kailua Waterways report focuses on pollution problems, legislation moves forward

Congratulations to Representative Pono Chong on his efforts in last year's legislature to get information about the Kailua Waterways and the excellent report produced by the DOH in response to his request. The legislative report entitled "Kailua Waterways" describes the relationship between the various waterways in Kailua, including Kaelepulu Pond, and the water quality on Kailua Beach.

The report includes the probable impact of estuary water on water quality in Kailua Bay and the potential health impacts to beachgoers. Despite lots of work that has been done by a variety of researchers tracking bacterial counts, they are not able to draw a significant relationship between these bacterial counts and adverse health impacts. "It may be inappropriate to conclude that recreational and other designated uses of these waters are impaired as a result of point-specific enterococci exceedances." The problem is that while the EPA's test for a certain bacteria called "enterococci" works well on the mainland, in Hawaii it results in a large number of false positives.

The report discusses all of the standard ways that non-point source pollution could be contaminating the waters of Kaelepulu and Kawainui (Hamakua) canal. These include sewage contamination, animal feces, dirt in runoff, pollutants washing off of home lots, and home use pesticides and fertilizers as well as many other minor sources of pollutants. The report gets a bit mired in all of the many possible sources of pollutants, but does not develop a priority list of sources that should receive our attention first. Without an analysis, or at least a best educated guess, as to which approaches are likely to offer the best chance of improvement for

the least effort, it is difficult for the report to reach a definite conclusion or course of action.

However, at the end of the report, the DOH offers 11 reasonable approaches that "could be investigated to improve the water quality and natural resources of the estuary." Of these 11 suggestions, Representative Chong has chosen three reasonable measures to include in this year's legislative package (House Bills 3341 and 2944) for funding. These measures include:

- Investigating a mechanism and examining environmental impacts of restoring some flow from Kawainui Marsh to Kawainui Stream (Hamak-

ua Canal, behind Kailua Town).

- Asking the DOH to assist the City to determine a "best" schedule and method to open the sand berm at the mouth of Kaelepulu Canal, and to determine the environmental and public health consequences of flowing these waters into Kailua Bay.

- Asking the State to investigate modifications to the Keopu flood control basin (above Keolu Drive) to limit the discharge of mud and debris from this main inlet to Kaelepulu Pond.

If you get a chance, please remember to thank Representative Chong for his efforts. The full report is available on the ELRA web site at www.kaelepulupond.org/waterwaysreport.

City drainage control project

Two years ago the City hired the world-wide environmental firm Earth Tech to conduct a study on the City storm drain inlets to Kaelepulu Pond. The study was to try to locate those drains that contributed the most debris to the pond, and then to come up with plans to fix the problem.

Earth Tech hired a local environmental firm TEC-Environmental to conduct the study and develop preliminary solutions. Scientists from TEC looked at the entire drainage system, and then came out and (with the assistance of the ELRA board) toured the lake and took samples of mud.

TEC recommended to Earth Tech that designs be developed for three of the four open channels entering Kaelepulu to control pollutants from these sources. The channels selected are those entering from Kaelepulu Elementary School, behind St. John Vianney School, and the one entering the cove at 900 Akumu St.

At this point, the project stalled for a lack of funding. However, just

last month funding was restored for the project and designs are being developed to control pollutants from these drains into Kaelepulu Pond. We hope to present the designs of the proposed structures in our next newsletter. Stay tuned.

ELRA positions open

We are sorry to announce the departure of two of our board of directors. Dean Nowack and Dale Barnes have been valuable members of the board and we appreciate their years of dedicated service to ELRA.

If you are interested in becoming a part of the board please contact us at board@kaelepulupond.org.

ELRA is also looking for a volunteer "Lake Security Officer" (we'll provide the boat) as well as teenagers to help with lake cleanups. The cleanup work pays \$15 per hour and is a few hours every other Sunday. Contact Bob Bourke at 256-2057 if you know any candidates.

Why does the lake stink – sometimes?

For those with any memory at all, it ain't nearly as bad as it used to be! Of course this is little comfort to those new to the lake — especially if you're living down wind.

Before the ELRA got rid of all of the mangroves from the vacant lots along the back side of Keolu Drive, many people (particularly in the summer) actually drove all the other way around Keolu to avoid the stench emanating from the lake in this area. Residents of Kukilakila and those adjacent to Kaelepulu Elementary often had to put up with weeks and weeks of bad smells every year. Since the mangrove were removed, there had been no re-occurrence of bad odors — until November 4 of last year.

Following the huge rainfall on November 4, there was a sewage spill into the lake and only quick action by a few local residents with shovels allowed the flood waters to break through the

sand berm at Kailua Beach and flow into the ocean. However, beginning the next day, many dead fish were seen and there was an oily film on the water. Strong tradewinds from the East pushed all of this material down wind where it piled up against the Keolu/Kukilakila shoreline, and the bad odors were back for a while.

The most common cause of the “swamp gas” or “rotten egg” smell from the lake is hydrogen sulphide, usually mixed with a bit of methane. These are normal products of decay in mud where there is no oxygen. These gasses are released following a storm primarily through two mechanisms:

1) The incoming fresh water from the rain has a lower pH (brackish water is slightly basic) and this lower pH causes the hydrogen sulphide to bubble out of the water into the air.

2) As the water flows out the the ocean, the elevation of the lake often

gets very low, exposing mudflats and allowing direct de-gassing to occur.

Both of these affects are usually fairly short term — from minutes to hours or a day at most. The effect from the hydrogen sulphide however can be extremely distasteful and at high concentrations can cause physical nausea, headaches, and other health problems.

Another even more obnoxious source of odors are the by-products produced by the rotting of oils. These gasses, with wonderful names such as putrescine and cadaverine, are extremely offensive and are typically associated with rotting flesh. Following the November 4 flood event, the release of oils from the sewage spill combined with the rotting of the many dead fish — all blown down wind on the surface of the lake — piled up on the leeward shore and caused very bad odors for at least three weeks.

Enchanted Lake Residents Association

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ADDRESS CORRECTION REQUESTED