



Inletkeeper's Monitor News

ISSUE 7

SEPTEMBER 2010

Busy Summer, Sunny Fall!

There's already white fluff on the tips of our fireweed—you know what they say about the onset of winter following the fireweed... It's always hard to believe that summer has come and gone, especially this year with such a beautiful fall to ease the transition. This summer felt especially busy! You all did an excellent job in the field—see the 'Watershed Summaries' for a recap of your tremendous summer sampling efforts. We're sad to have said goodbye to super-monitor Sara Thompson (top photo). She left us this summer to begin an adventure working with the Peace Corps in Burkina Faso—we look forward to hearing updates and seeing pictures! Also, a big thanks to our spectacular summer interns, Marcella (left) and Iris (right), for their help this summer!

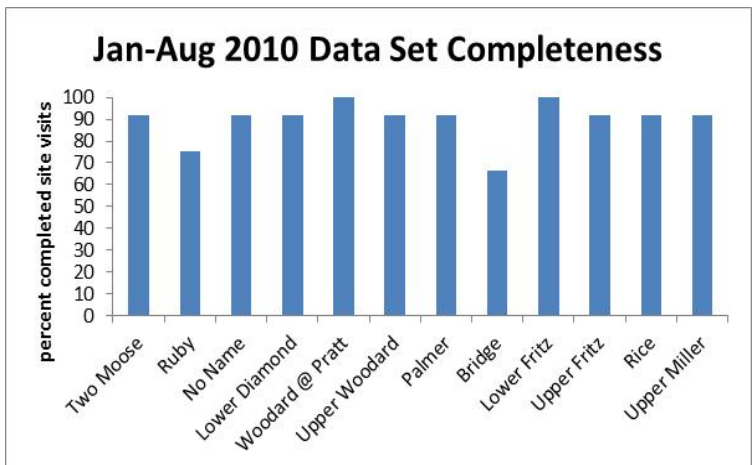


INSIDE THIS ISSUE:

- Field & Lab Notes: Turbidity 2
- Project Updates 2
- Watershed Summaries, continued 3
- City of Homer Water & Sewer Tours 3
- Dates to Remember 4
- Do you know where your salmon are? 4

Watershed Summaries

What a great year it's been for CEMP Sampling! You all have made a tremendous effort to visit your sites each and every sampling day. Since January, we've made 140 site visits at 16 sites. Just this summer (from May through August) there were 87 site visits at 13 sites. 3 sites were closed out in March for baseline reporting—Bidarka Creek, Beaver Creek, and Upper Diamond Creek.



Since January there have been 12 CEMP sampling days. Each site in the graph above has a bar that shows how complete the 2010 data set is so far this year. 100% would mean that site was visited for all 12 of the 12 possible sampling days from Jan—Aug.



Rachel Lord
 Outreach & Monitoring
 Coordinator
 Cook Inletkeeper
 3734 Ben Walters Ln.
 Homer, AK 99603
 (907) 235-4068 x29
 rachel@inletkeeper.org

(continued on Page 3)





**Volunteers
have donated
over \$300,000
in their time
through
water quality
monitoring
with the
CEMP
Partnership
throughout
the Cook
Inlet
watershed!**

Field & Lab Notes

Turbidity: the secret behind the white-capped bottles! Turbidity is a measure of clarity and can help us understand the amount of total suspended solids (TSS) in the water. Cloudy or muddy water has higher turbidity. We use your water samples from the field to test for turbidity using a *turbidimeter* (pictured on the right). This instrument measures the scatter of light through a vial containing your sample water. The amount of scattering correlates with the amount of particles in the water that cause higher turbidity. Turbidity measurements are in Nephelometric Turbidity Units (NTUs), which refers to the way the scatter is estimated.



F.Y.I. Project Reports

BEACH * We sampled for bacteria at 3 sites this summer: Land's End, Mariner Park, and Bishop's Beach. Karen West was a remarkable Beach Monitor and did the weekly sampling nearly all summer! See our table at the Homer Rotary Health Fair for BEACH results and more on the program.

Bugs * This year we moved bug sampling to a new set of 5 CEMP sites. 8 of us collected, counted, and catalogued aquatic insects at No Name, Lower Diamond, Bridge, Upper Woodard, and Upper Miller Creeks in June and again in August. A bug report is forthcoming this fall!

Kachemak Bay Clean Harbors Day * We hosted the 2nd Kachemak Bay Clean Harbor Days around Kachemak Bay this summer. Together with community volunteers we picked up over 900 pounds of locally-produced marine debris in Homer, Seldovia, Port Graham, and Nanwalek. Check out Inletkeeper's website for more on these fun days!

Clean Harbors Alaska * This summer we finished up the pilot phase of the Alaska Clean Harbors program. ACH will work with harbors around the state to reduce pollution from routine boating activities. Check out the new website at: www.alaskacleanharbors.org

Safe Drinking Water * Inletkeeper will be hosting a table at the Homer Rotary Health Fair on November 13th. We'll be holding another well water testing class and group testing opportunity in late-November. Tell your friends and neighbors and take advantage of this great opportunity to ensure your water is safe for you and your family!

Watershed Summaries (cont. from page 1)

This summer we had 6 exceedences of state water quality standards (WQS) at our sites. Two Moose Creek, a listed anadromous stream (see page 4), exceeded temperature standards for spawning (13° C) twice—once in early June and again in early July with temperatures of 13.5° and 13.0°C respectively. Lower Diamond Creek exceeded the lower pH WQS, 6.5, in early May with a pH of 6.33. There were 3 preliminary bacteria exceedences this summer. 2 occurred in early June, one at Palmer Creek (250 colony forming units, or CFU/100mL) and the other at Rice Creek (267 CFU/100mL). There was one exceedence in early July also at

Palmer Creek (233 CFU/100mL). Bacteria exceedences are considered ‘preliminary’ since our sampling is used to indicate potential problems. In the event that we find persistent exceedences with our Coliscan method, we will send samples to an Anchorage lab for more formal testing and increase our sampling frequency to meet the requirements of the state WQS. After persistent elevated levels of bacteria at Fritz Creek this spring, Inletkeeper research & monitoring staff worked to develop a clear exceedence plan for high bacteria levels detected through CEMP. (Bacteria levels at Fritz Creek have been consistently below WQS since April.)

City of Homer Water & Sewer Tours

Earlier this summer the City of Homer public works department gave the staff and interns of Cook Inletkeeper tours of the new water treatment facility and the wastewater treatment plant. Below are some pictures from those tours. Top row (l-r): membrane filters at the new water treatment facility up on Skyline Drive, the laboratory facilities at the new treatment plant, bags of salt used to make the chlorine that is used to treat the water. Bottom row (l-r): All of the raw sewage in town flows beneath this door!, clarifying tanks that separate the solids from the liquids, biosolids are dried in sludge beds and currently transported to the landfill. Thanks to Todd Cook for showing us around!



“
If there is
magic in this
world, it is
contained in
water.
”

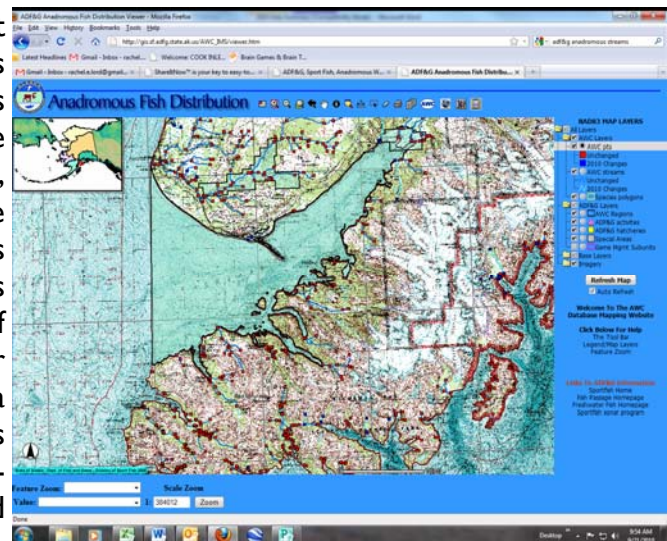
Loran Eisely

Dates to Remember:

- October 14 Inletkeeper Membership Meeting
@ Captain's Coffee from 5:30-7 PM
Bob & staff will be on hand to discuss issues and ideas with Inletkeeper's members—*bring a friend!*
- October 31 CEMP Spooky Sampling (okay, it's just regular sampling, but you *could* dress in costume!!)
- November 13 Homer Rotary Health Fair
Safe Drinking Water & BEACH presented by Inletkeeper

Do you know where your salmon are?

The Alaska Department of Fish & Game maintains a catalog of anadromous streams in Alaska. There are over 17,000 streams, rivers, or lakes in the Anadromous Waters Catalog. While this is certainly less than *all* of the important waters for anadromous fish in Alaska (ADF&G estimates it's less than 50% of the actual total waterbodies used by anadromous fish), this catalog allows us to explore our watersheds and see where our salmon, Dolly Varden, and other anadromous fish are migrating, spawning, or rearing! Check it out at:



A screen shot from the web-based interactive anadromous waters catalog at the ADF&G website

<http://www.sf.adfg.state.ak.us/SARR/awc/>