



15 Years of Water Quality Monitoring in Southcentral Alaska

Presentation at the 7th National Water Quality Monitoring Conference

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Where we monitor: Alaska



Alaska

- 2,393 miles from Denver as the crow flies or 3,220 miles by car
- ~40% of all surface water outflow for the USA
- 714,000 miles of rivers and streams, with over 15,000 anadromous streams
- Over 3 million lakes and ponds
- Home to 686,000 people; ~60% of these people live in southcentral Alaska



Alaska's Water Quality

“The majority of Alaska’s waters are not subject to man-caused stressors and are considered unimpaired. DEC expects that 99.9% of Alaska’s waters can be classified as Category 1; however, no specific waters are identified in this category.”

Table 1: Number of Waterbodies

Category	Number of Waterbodies
1	Majority of Alaskan waters
2	11
3	303
4a	32
4b	4
4c	0
5	31



Cook Inletkeeper

To protect Alaska's Cook Inlet watershed and the life
it sustains

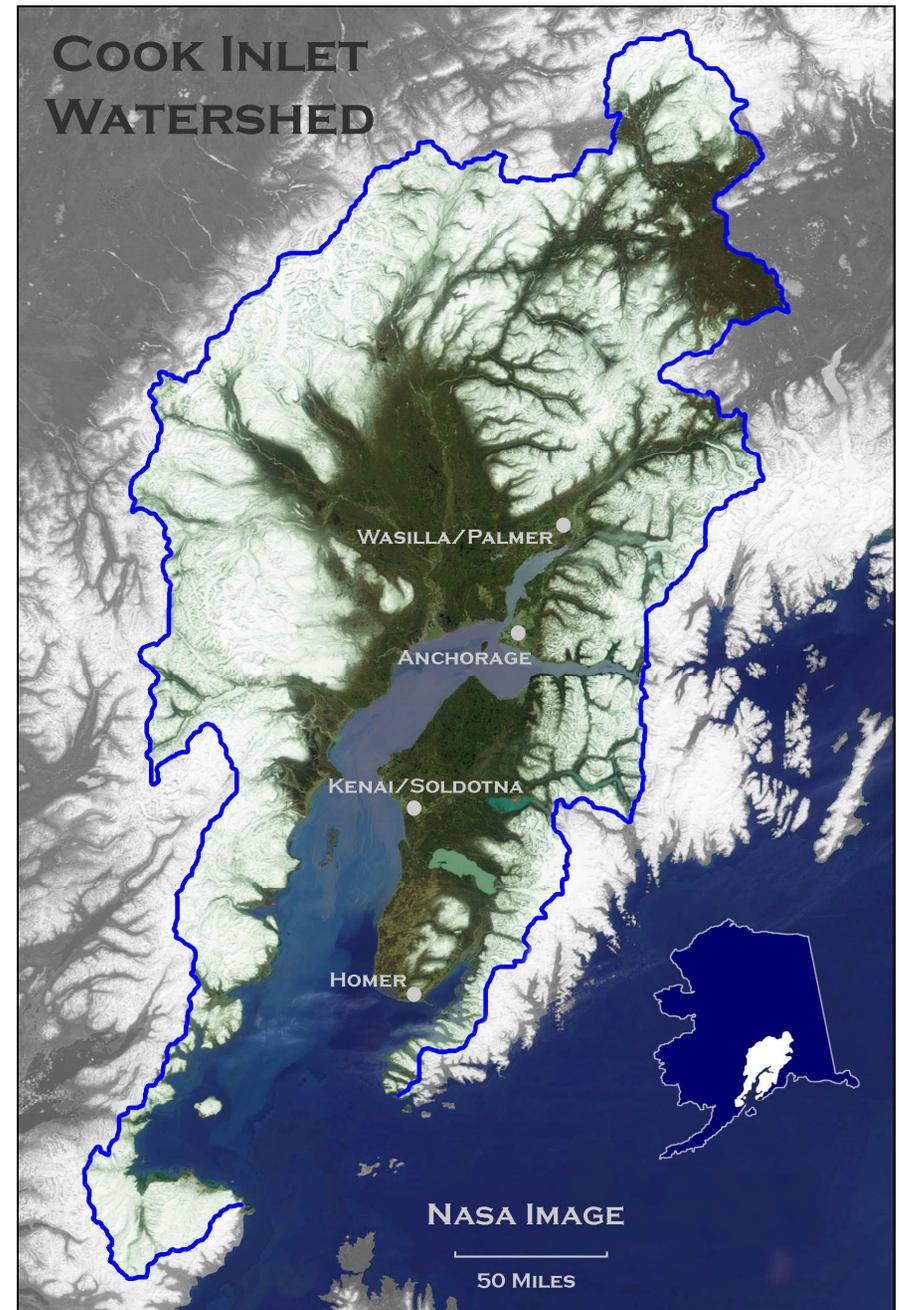


Cook Inlet Watershed

Drains 39,000 square miles – larger than the state of Maine!

92% of the watershed is public land, including 7 state Critical Habitat Areas

1996: established the 1st citizen-based water quality monitoring program in Alaska

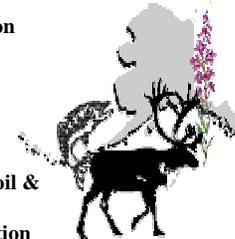


Citizens' Environmental Monitoring Program Partnership

- Inventory baseline water quality status in the Cook Inlet basin
- Detect and report significant changes and track water quality trends
- Raise public awareness of the importance of water quality through hands on involvement



Homer Soil and Water Conservation District



Upper Susitna Soil & Water Conservation District



Wasilla Soil & Water Conservation District



KENAI WATERSHED FORUM



UNIVERSITY of ALASKA ANCHORAGE

CEMP Partnership

CEMP Monitoring Partners:

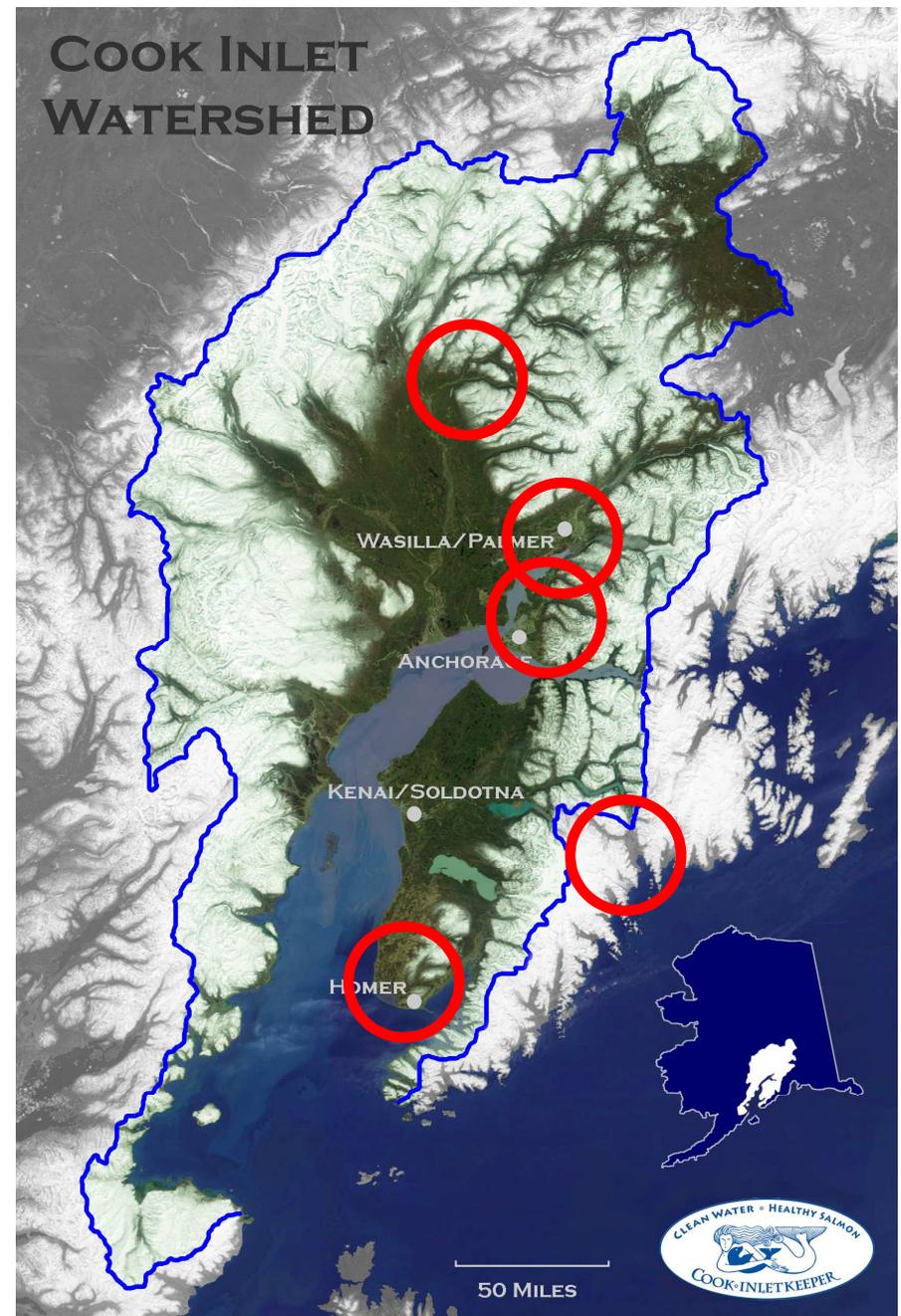
Resurrection Bay Conservation Alliance, Anchorage Waterways Council, Mat-Su Lake Monitoring, Wasilla SWCD, Upper Susitna SWCD

CEMP Outreach Partners:

Homer SWCD, Kenai Watershed Forum

CEMP Technical Partners:

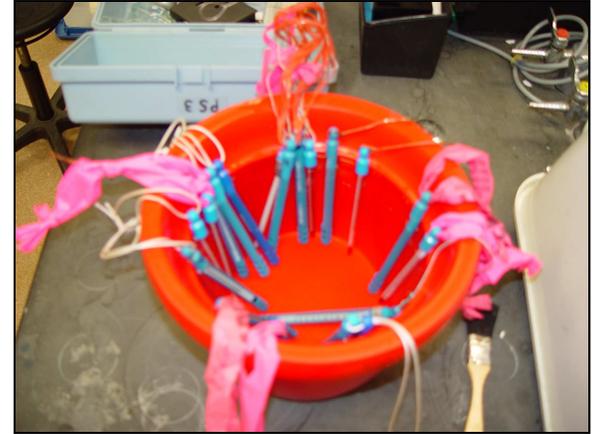
UAA Environment and Natural Resources Institute (ENRI)



Monitoring with the Partnership

Regionally consistent:

- Goals and objectives
- Data quality objectives
- Quality control & assurance
- Opportunities for networking & support



Monitoring with the Partnership

Volunteers:

820 monitors trained since 1997

19,193 hours donated by volunteers – an average of 1,600 hours/year!

\$345,474 of in-kind support

Monitoring sites:

6,909 site visits

211 lake, estuarine, and stream sites

15+ sites ready for baseline analysis in the next 5 years

Monitoring with the Partnership



15 Years Experience...

Lessons Learned:

- The benefits of a Partnership in tough financial times
- Refined monitoring strategies
- Importance of data integrity for long-term sustainability
- Region-wide support for CEMP
- Pitfalls to avoid, new ways to avoid old mistakes

Baseline Water Quality Library

Baseline water quality criteria:

- >80 site visits within 5 years
- At least 40 during the summer
- At least 5 per month year-round

Bioassessment

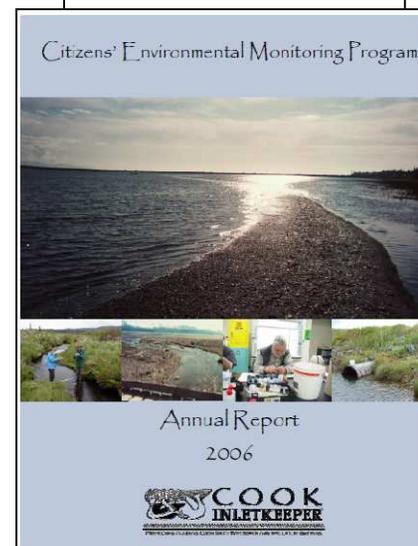
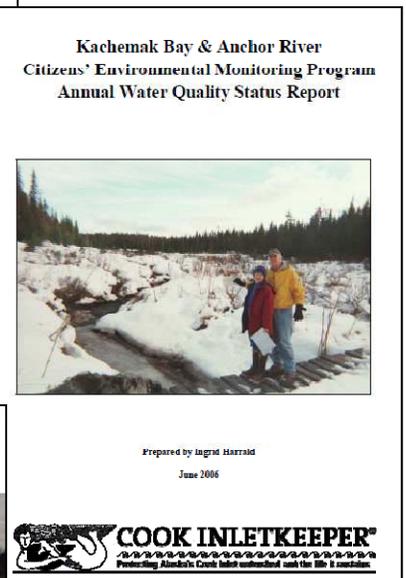
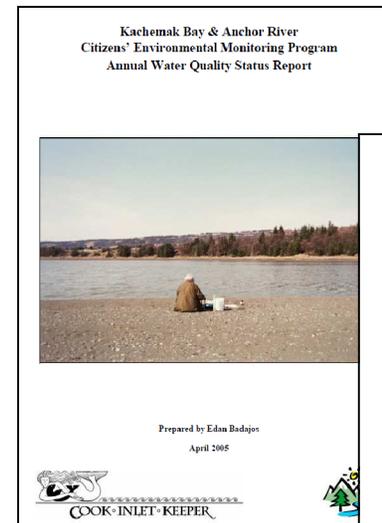
Continuous temperature

Habitat assessment

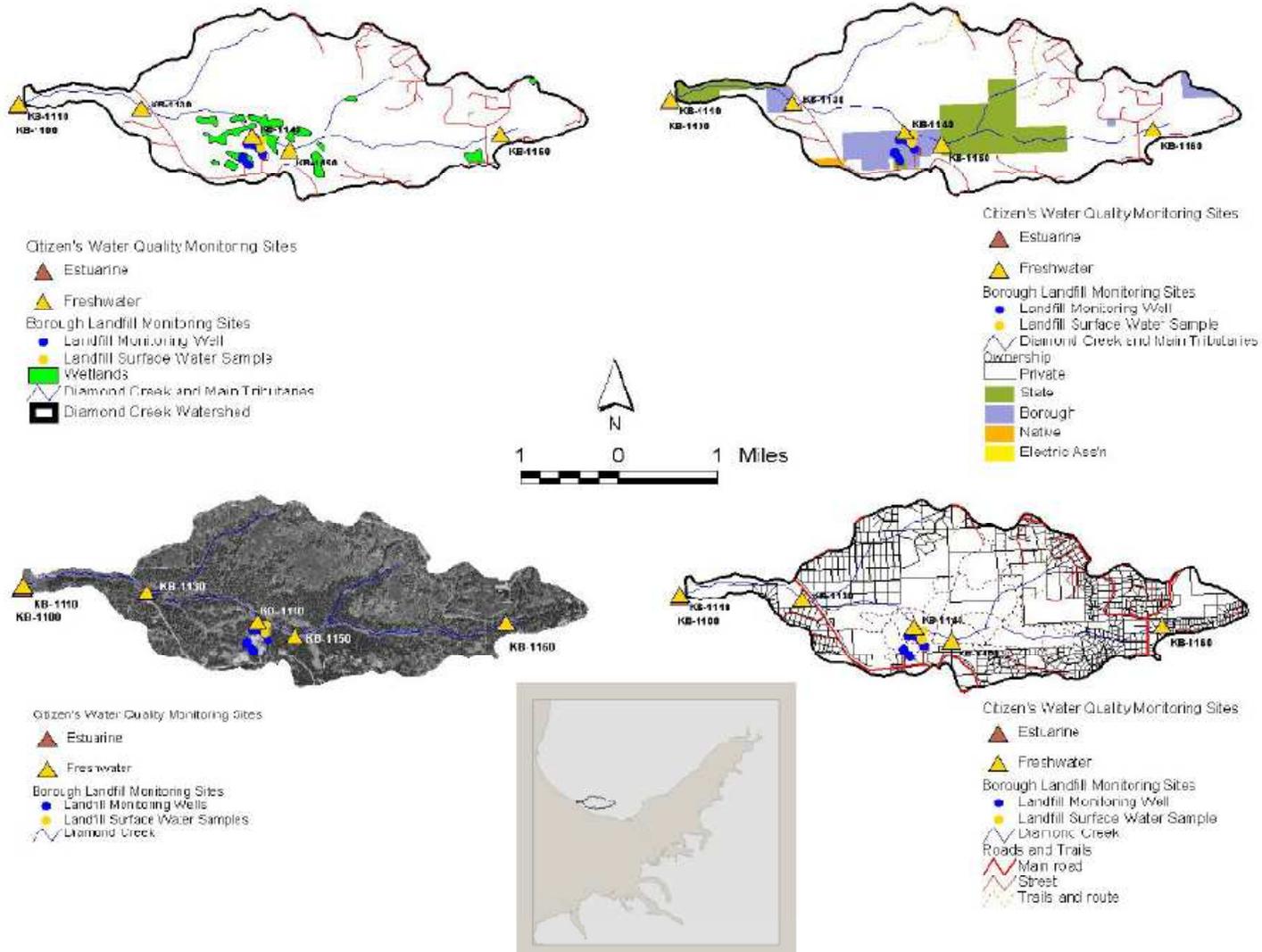
Invasive plant assessment

GIS Analysis

Future monitoring strategy



GIS Analysis



In the works...

- Continue to work together for funding opportunities
- Develop a complete regional monitoring strategy
- Further develop analysis & baseline library templates
- Independent technical audit
- Create training and education modules for regional use



Thank You!

Rachel Lord

www.inletkeeper.org

