

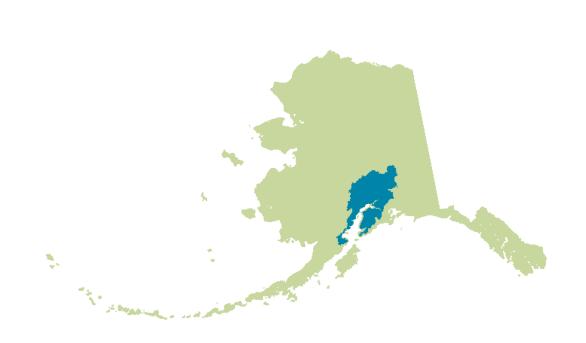
# Clean Boating on the Little Susitna River FY 2014 Final Report



Prepared for:

Alaska Department of Environmental Conservation Alaska Clean Water Action Grant #14-03

July 1, 2013—June 30, 2014



Cook Inletkeeper is a community-based nonprofit organization that combines advocacy, outreach, and science toward its mission to protect Alaska's Cook Inlet watershed and the life it sustains.

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Clean Boating on Big Lake FY14 Final Report

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### **INTRODUCTION**

The Little Susitna River is located in the densely populated Southcentral region of Alaska. It supports salmon and trout populations, making it a popular fishing destination for many in the Anchorage and Mat-Su Borough area. In addition to fishing, people come to the 'Little Su' during summer months for recreational boating, hunting, picnics and camping. The recreational and economic benefits afforded by the Little Su make it a high priority waterbody. The goal of this project is to reduce pollution and improve water quality in the Little Su.



The Little Susitna River Public Use Facility is heavily used by fishermen, primarily during the Chinook (May-June) and Coho (July—September) salmon fisheries. Emergency closures can dramatically reduce the boating pressure at this location.

The Alaska Department of Environmental Conservation has conducted water quality sampling on the Little Susitna River since 2004. High boat traffic on the Little Su helped catalyze preliminary testing for petroleum hydrocarbons and turbidity in 2007. Water quality monitoring on the Little Susitna River from 2007 to 2010 has documented levels of petroleum hydrocarbons that exceed state water quality standards, as well

as impacts from high turbidity levels around the Public Use Facility (PUF, river mile 25). This pollutant loading is associated with busy, high use times of the summer when Chinook salmon (May-June) and Coho salmon (July –September) are running in the river. More information on the ADEC efforts at the Little Su can be found online: http://dec.alaska.gov/water/wnpspc/protection\_restoration/LittleSusitnaWQ/index.htm.

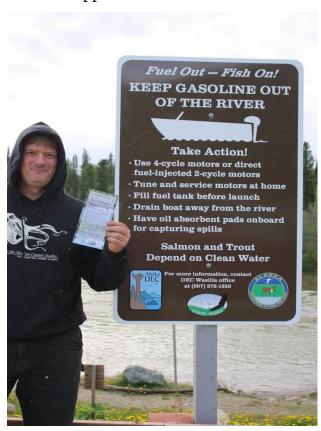
Fisheries are generally opened to recreational fishing by the Alaska Department of Fish & Game during these seasons unless closed due to low escapement. Unfortunately, we have seen regular Chinook closures during the past few years at the Little Su.

Boat use surveys done during the most recent sampling effort (2010) demonstrate how the PUF is heavily used by boaters during the summer. For example, on August 8, 2010, 72 boats were counted using the PUF during a 5.5 hour period. Similar to results seen on Big Lake, high boat use can lead to high levels of hydrocarbons in the water. With levels of hydrocarbons exceeding state water quality standards periodically during these high use times, this project focuses on the education needed to target motor boat users in order to address pollution from routine boating activities.

Everyone using motorized watercraft on the Little Susitna River should know and implement basic skills to maintain and run their engines with minimal fuel, oil, and other hazardous materials discharges into the water. Unfortunately, these skills are often not learned and tend to be overlooked by boaters throughout Alaska. Efficient and effective best management practices can be used by all boaters to dramatically reduce,

and in some cases eliminate, harmful discharges.

Boaters on the Little Su can no longer afford to recreate without understanding how they can be part of a solution to the pollution problems facing the river. Other regional waterbodies face similar pollution concerns as well, including Big Lake. Through this project, materials developed for similar clean boating outreach on Big Lake are now being effectively utilized on the Little Su, and through these efforts we can reduce petroleum-based pollution into our waterbodies, protect human health and fish habitat, and preserve recreational opportunities in Alaska.



A large sign was posted by ADEC, ADNR and ADF&G to start informing Little Su boaters about the problems with hydrocarbon pollution in the River.

The Little Susitna River is vulnerable to increased regulations and a negative image as a waterbody that does not meet water quality standards. Through this project, we are working with regional boaters to identify gaps in understanding and available resources for clean boating with the goal of reducing pollutant loading on the Little Su. We will continue to implement our successful and comprehensive educational clean boating campaign to institutionalize pollution reduction measures for all boaters, local business, and community members who recreate and can help protect the Little Su.

The long-term goal of this project is consistent with that of the FY14 goal: Reduce pollutant loading and improve water quality. The individual tasks under this project all move towards meeting this long-term goal. Objectives for this specific grant year were to:

- 1) Adapt the successful educational clean boating program developed for Big Lake during FY12/FY13, ensuring that boaters on the Little Susitna River have locally available resources and know how to practice clean boating skills with an understanding of the negative impacts of petroleum on human health and fish habitat; and,
- 2) Empower regional boaters to practice and encourage clean boating techniques through a broad clean boating outreach campaign.

This project builds on work that has been done already in Big Lake and has wide-reaching support, including from the Susitna Rotary Club, Alaska Department of Natural Resources, the Mat-Su Borough and local concerned boaters.

For more background on this ongoing effort, the FY13 Clean Boating on Big Lake final report can be found on Cook Inletkeeper's website: http://inletkeeper.org/resources/contents/fy-clean-boating-on-big-lake-final-report/view.

Building on this effort to include the Little Su, we have consistency in messaging and resources which is helping to build a strong base of educated boaters throughout the region who can implement pollution prevention actions when boating.

As the grantee for this project, Cook Inletkeeper utilized state fiscal year (FY) 14 (July 1, 2013-June 30, 2014) funding from the Department of Environmental Conservation to hire contractor Mat-Su Conservation Services (MSCS) to oversee the on-the-ground implementation of these goals, including establishment of the Launch Host program at the Little Su PUF and clean boating outreach to the wider regional community of boaters. MSCS hired local Big Lake resident Randi Perlman to assist further with the community outreach aspect of this project. Included in this final report are summaries of all activities related to Little Su boater outreach and wider community outreach done under this grant project in FY14. Outreach and education efforts will continue again at Big Lake and the Little Su, and expand to include the Deshka River, primarily through the continuation of the Launch Host Program and expanded media outreach, through FY15 (July 1, 2014—June 30, 2015) under the fourth year of ADEC funding. It is likely that high hydrocarbon levels at Big Lake and other waterbodies are closely linked with two-stroke outboard engine use. In addition to continuing educational outreach efforts in FY15, Inletkeeper will also work with regional stakeholder to develop a framework for a two-stroke buy-back/trade-up incentive program.





Top: Boater traffic on the Little Su illustrating large wakes that may contribute to bank erosion and increased water turbidity. Photo courtesy of L. Eldred. Bottom: Boater surveyed at the Little Su PUF in 2012. Photo courtesy of L. Eldred.

### LAUNCH HOST PROGRAM

Launch Host efforts at the Little Su build off of the program developed at Big Lake and was modeled from national efforts. Similar programs exist in other states, including a large "Dockwalkers" program in California (http:// www.coastal.ca.gov/ccbn/dockwalkers.html).

The foundation of this effort lies in one-on-one boater outreach on the docks or boat launches. Trained individuals engage with boaters as they launch and load their boats. Through this engagement, boaters receive free clean boating kits and are asked to fill out a clean boating survey. For this project, clean boating kits include an oil absorbent pillow to be used in the boat's bilge, an oil absorbent pad, a magnet with clean fueling tips, tip sheets on clean bilges/spill response/ clean oil changes, a floating keychain, a Clean Boating on the Little Su sticker, a clean boating fishing license holder, and a tote bag. Bilge pillows, which can hold up to 1.5 quarts of oil, are only distributed to boaters who can use them (i.e. those with inboards and contained bilges, not to people with open skiffs).

Clean boating surveys capture basic demographic information about boaters, as well as information on their boats, their clean boating knowledge and their relevant boating behaviors. We updated our survey during the winter, and so two different versions were used in FY14. Blank copies of the two FY14 boater surveys are included in the Appendix, along with copies of outreach materials. Summarized survey results are included in this report under 'Boater Surveys'.

During FY14, contractor MSCS worked closely with the Alaska Dept. of Natural Resources (ADNR) and Alaska Dept. of Fish & Game (ADF&G) staff to target boaters at the PUF launch ramp during the August 2013 Coho fish-





Top: An outreach table set up at the Little Su PUF. Bottom: Catherine and local hire Randi Perlman give out Clean Boating kit materials are on display Photos provided by C. Inman

ery. Volunteer launch hosts were difficult to find, and most of the outreach at the Little Su PUF was done by MSCS. Boaters at the Little Su are primarily focused on sport fishing, which is a different user demographic than that at Big Lake where boaters are more focused on general recreational opportunities including waterskiing and jetskiing. In May and June, fish could only be kept Saturday, Sunday, and Monday, so out-

reach was focused on these days. Two groups of boaters go out; the early morning fishers, and mid-day charters. Mid-day is a great outreach time, catching the early crowd coming in and the late crowd going out. There is a steady but slow flow of mid-day boaters, i.e. there are fewer boaters per hour average over a longer period of time. The site rangers recommend greeting early morning fishers, who are concentrated together at 5:00-6:00am. Although there are more concentrated numbers of boaters in the early morning, we found that these people are too focused on getting their boats launched and out fishing to make it an effective time for one-on-one outreach efforts. This experience will help guide efforts in FY15 for more boater contact time at the Little Su PUF.

Continuing with the successful approach from FY13 at Big Lake, an outreach table was set up during Launch Host efforts at the Little Su Public Use Facility. The table has a project banner, a boating kit, and a demonstration of the amounts of oil and gas lost with three types of common outboard engines. This continues to be a great, interactive, and fairly neutral way to get a message out about pollution prevention.

MSCS worked with PUF staff to hang Clean Boating on the Little Su banners at the entrance to the facility and at the "Kids Don't Float" life jacket station. A banner was also hung on the outreach table during Launch Host activities. ADF&G staff at the launch expressed appreciation for the positive, proactive message, and the kits were popular.

MSCS distributed 34 clean boating kits, with 27 surveys completed by boaters at the Little Su PUF during FY14. Results are discussed in the Boater Survey Results section on page 9. During

Launch Host and community outreach activities, MSCS and volunteers distributed over 300 Clean Boating on the Little Su stickers.

### **BOATER SURVEY RESULTS**

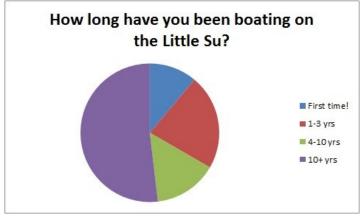
More boaters completed clean boating surveys at the Little Su PUF in the first quarter (17) as compared to the fourth quarter (10). Of these, 79% were male. Half (50%) were between the ages of 50 and 65 and 31% were between 31-50 years old.

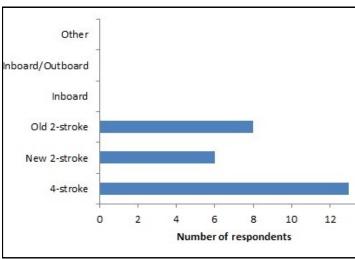
When asked where their primary residence was, Wasilla (41%) and Anchorage (17%) were the most common locations. This is a slightly different demographic than at Big Lake, where more of the respondents are from Anchorage than Wasilla. This is likely due to the remote nature of the PUF site, and the relative proximity to Wasilla.

When asked about their knowledge of impaired local waterbodies, 20% said they were aware that Big Lake was listed as impaired, and 48% said they knew the Little Su was at risk for being listed. The higher awareness for the Little Su may be related to the recent Board of Fisheries decision to stop the use of older 2-stroke engines on the river beginning in 2017.

Most boaters surveyed (90%) said they most frequently boat at the Little Su and 52% said they have been boating there for more than 10 years. This is likely due to the heavy emphasis on sport fishing at the Little Su, which would draw boaters from a smaller overall demographic of fishermen.

Nearly all boaters (76%) indicated that they usually fuel their boats at gas stations prior to arriving at the launch. Eight percent of boaters said they always use oil absorbs, 27% said sometimes, and 59% of boaters said they never use absorbs. We find that most people don't think of the need for spill prevention at gas stations. While this is





Top: Distribution of years spent boating on Big Lake. An increase from our results in FY13, a full 50% of respondents indicated they have boated on Big Lake for 10 years or more. Bottom: The majority of respondents indicated they have a 4-stroke engine on their boat, followed by inboards and older 2-strokes.

certainly a stormwater runoff issue, it is beyond the scope of this project.

Beginning in third quarter of FY14, we started asking the question of what boaters would be willing to do to reduce pollution while boating. The top three actions that boaters were willing to

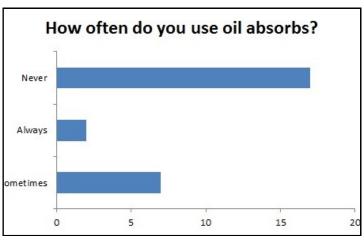
engage in were: 1) drain boats away from the launch; 2) fuel away from the water; and 3) use absorbent pads in the bilge. Spreading the word and talking to other boaters about clean boating practices was the least popular action. We found similar results at Big Lake.

When asked what type of engine they most frequently use while boating at the Little Su, 52% said a 4-stroke, 22% said older 2-stroke, and 29% said an inboard.

When asked when they would be most likely to replace their 2-stroke engine 21% said if there was a cost-share/buy-back program, 27% said if the engine breaks down beyond repair, 10% if it was required by law, and nearly 40% indicated that it was not applicable to them. These data show that there are barriers to engine replacement within the boating community, but that a buy-back program would be an incentive for some boaters to replace their older 2-strokes.

Over three days in March 2014, MSCS staff and volunteers talked with over 250 individuals about clean boating on Big Lake and other Valley waterbodies. Boaters completed 68 surveys and received clean boating kits in return. Of these respondents, 82% were male and 48% were between the ages of 50 and 65. When asked where their primary residence was, Wasilla (46%) and Palmer (18%) were the most common locations, highlighting that there are not many people who attend the boat show from outside the Mat-Su area. We saw that most respondents were still not aware of pollution concerns in the Mat-Su, since the majority of respondents (72%) said they did not know that Big Lake was listed as impaired, and 61% said they did not know that the Little Su was at risk for being listed.

Most boaters surveyed (40%) said they boat



Things You're Willing to Do	Little Su
Use absorbent pads in the	
bilge/when fueling	21
Drain my boat away from	
the launch ramp	26
Minimize idling	19
Fuel away from the water	
whenever possible	25
Consider upgrading to a 4-	
stroke or new 2-stroke	14
Talk to other boaters to	
encourage these practices	12

Top: Only 15% of respondents in FY14 indicated they always use absorbent pads while fueling. Bottom: A new questions in 2014 asked boaters what they are willing to do to help protect water quality while boating. Most boaters were willing to use absorbents and drain their boats away from launch ramps. This response was similar at both Big Lake and the Little Su.

most frequently at other Mat-Su Valley locations, followed by the coast/ocean (24%), and the Little Su (20%). This indicates that we were able to reach a wider boating audience at the Outdoorsman show, than at the individual launches.

Nearly 78% of those surveyed said they have been boating for more than 10 years. Four-stroke engines were the most common engine used by respondents, followed by inboard (29%), old 2-stroke (22%), and new 2-stroke (14%).

The top three actions that boaters were willing to engage in to support clean boating practices were: 1) use absorbent pads in the bilge and when fueling; 2) fuel away from the water; and 3) drain the boat away from the launch. Upgrading to a new 2-stroke or 4-stroke was the least popular option. Twenty-five percent of those survey said they always use oil absorbs, 21% said sometimes, and 54% said they never use them. When asked when they would be most likely to replace their 2-stroke engine 35% of respondents said that was not applicable to them, 26% said if there was a cost-share/buy-back program, 18% said if the engine breaks down beyond repair, 11% said if pollution continues in our waters, and 9% said if it was required by law. These data show that there are barriers to engine replacement within the boating community, but that a buy-back program would be an incentive for some boaters to replace their older 2-strokes.

I would be more likely to replace my older 2-stroke	
engine if:	Little Su
It was required by law	3
There was a cost-share/buy-	
back program	6
Pollution continues in lakes	1
and rivers	_
The engine breaks down	8
and can't be repaired	J
Not Applicable	11
Other	0



Top: Most people with older two-stroke engines at Big Lake were interested in some kind of a cost-share/buy-back program for replacing their engines with a less polluting one. Bottom: Little Su PUF from the river. Photo provided by L. Edlred.

### **COMMUNITY OUTREACH**

A major component of this ongoing project is raising awareness among boaters and the surrounding communities of the collective impact of individual spills of fuels and oils on water quality. Many boaters come to the Little Su from Anchorage, Eagle River, and other Valley communities. Therefore spreading awareness in these larger population centers is critical to achieving success. In addition to the Launch Host Program (described on page 7), specific actions to increase public awareness are described in detail below.

#### "Logo"

During the fall of 2013, MSCS worked with a local graphic designer to create a clean boating 'logo' for the Little Su. This effort was very successful in Big Lake, and gives a local feel to the outreach efforts at the Public Use Facility. Using the logo, MSCS produced four clean boating banners and printed 1,000 stickers. These stickers are very popular, and over a third were distributed to boaters during the second half of FY14.

#### **Print News**

Contractor MSCS worked with local hire Randi Perlman to write clean boating articles and letters to the editor for local and regional print media. Articles that included information on the Little Su outreach efforts were printed the regional newspaper Make-A-Scene and the Big Lake Chamber of Commerce Newsletter. Copies of these articles are included in the Appendix.

#### Radio

With so many boaters coming to the Little Su from large population centers in the region, radio advertising is an extremely effective way of





Top: MSCS volunteers at the Mat-Su Out-doorsman's Show Clean Boating booth. Photo provided by C. Inman. Bottom: A Little Su clean boating logo was developed as part of this project.

raising clean boating awareness.

Additional funding from ADEC allowed for paid radio advertisement placements during the fourth quarter. This was an exciting opportunity that we will expand upon in FY15.

During the fourth quarter, Cook Inletkeeper staff worked with a professional radio person in Homer and developed two versions of a 30 second clean boating radio advertisement. Optima Public Relations was contracted to do placement of one of the ads. Both versions of the ad can be heard at http://inletkeeper.org/resources/contents/clean-boating-radio-ad-version-2/view and http://inletkeeper.org/resources/contents/clean-boating-radio-ad-version-1/view.

Version 1 of this ad ran on 5 radio stations between May 15 and June 30 - KVNT 1020 AM/92.5 FM "Valley News Talk" (160 spots), KAYO 100.9FM "Country Legends" (130 spots, 50 of which were donated), KMBQ99.7FM "Q99.7" (60 spots donated), KXLW 96.3FM "The Wolf" (59 spots), and KEAG FM"KOOL" (35 spots, 5 of which were donated). Inletkeeper's Rachel Lord also called in to the Tom Anderson show on "Valley News Talk" on Friday, June 13 to talk for 15 minutes about clean boating efforts on Big Lake and the Little Susitna River. Shortly after the radio ads began running, Inletkeeper received positive feedback from a member of the Susitna Rotary and others who heard the advertisement/PSA for clean boating. This is a great way to reach a lot of boaters in the Valley and Anchorage with a positive and proactive message, and we look forward to continuing and expanding this effort in FY15.

#### Mat-Su Outdoorsman Show

As part of this project, MSCS hosted a table at the Mat-Su Outdoorsman's Show for three days in March at the Menard Sports Complex in Wasilla. Show organizers reported that 5,250 people attended the show – an 8% increase over 2013. This show continues to be a very effective early-season outreach event, and we will attend it again in FY15. Over three days, MSCS staff and volunteers talked with over 250 individuals about clean boating on the Little Su and Big

Lake. Boaters completed 68 surveys and received clean boating kits in return. We added a new survey question to ask boaters what actions they would take to protect water quality; this question was a great lead-in for more detailed conversations. Results from these boater surveys are in the Boater Survey section of this report (see page 9). Keychains and stickers continue to be the most popular items at our tables, aside from the oil absorbents which boaters highly value.

#### Little Su Appreciation Day

In FY14, contractor MSCS attempted to hold a one-day focused outreach event at the Little Su PUF – "Little Su Appreciation Day". MSCS held an initial event on August 3, 2013. There was little publicity, and not enough traffic to warrant the effort. A follow-up effort was planned for June 2014, however this was canceled after an emergency order closed the Chinook fishery at the Little Su, thereby dramatically reducing the boater traffic at the PUF. Although these



A Clean Boating on the Little Su banner hung at the PUF during the boating season of FY14, reminding boaters to practice pollution prevention measures while boating.

'Appreciation Days' were an interesting idea by our contractor, they will not be continued in FY15. Efforts will be more focused on preexisting boat and sport shows, and on media outreach to reach a larger and more regional audience.

#### Community Participation

In addition to the above efforts, MSCS engaged the following community partners in outreach efforts to raise awareness of clean boating practices and resources for boaters on the Little Su:

- Susitna Rotary Club (presentations in September 2013 and April 2014)
- Susitna Rotary Little Su Classic (May 31 event at the Little Su, with a clean boating emphasis)

We have received positive and appreciative feedback from agencies, boaters and other regional stakeholders and partners. Our approach of "common sense, good housekeeping tips" is appreciated, and has proven to be nonconfrontational.

### **FUTURE WORK**

Cook Inletkeeper received a fourth year of funding under the Alaska Dept. of Environmental Conservation Alaska Clean Water Action grant program to continue and expand this project through 2014 and into 2015 (FY15). During FY15, Inletkeeper's new Alaska Clean Boating Coordinator staff person (based in Talkeetna) will take over the on-the-ground implementation of the Clean Boating in the Susitna Valley efforts, including on the Little Su. The FY15 project objectives are expanded to include:

- Continue and expand the educational clean boating program developed through previous ACWA grants;
- Broadly educate regional boaters on the impacts of older carbureted two-stroke engines on sensitive waterbodies and aquatic life; and,
- 3. Work with stakeholders to develop the framework for a regional two-stroke engine "buyback" or "trade up" incentive program.

In FY15 we will include outreach efforts on both Big Lake and the Little Susitna River, and also the Deshka River. We will again host a clean boating table, with information on Big Lake, the Little Su and the Deshka, at the Fall Fishing Derby at Big Lake in September 2014, the Mat Su Outdoorsman's Show in March 2015, and the Big Lake Boat and Sports Show in May 2015.



Cook Inletkeeper staff are excited to continue work on expanding clean boating outreach in the Susitna Valley during FY15 under a fourth year of ACWA funding. Photo provided by C. Inman.

### **ACKNOWLEDGEMENTS**

Cook Inletkeeper would like to thank the community of Big Lake for their engagement, support, and dedication to developing clean boating outreach efforts that have informed the efforts at the Little Su. We'd like to especially thank Head Ranger Damon Hemple, State Parks staff, the Susitna Rotary Club, Randy Robinson, Randi Perlman, and Barb and Don Smith of A-1 Signs. We'd also like to thank Catherine Inman, Frankie Barker, Cindy Gilder, Laura Eldred, and Wayne Biessel for their ideas, critical involvement, and support throughout this project and for their efforts on other efforts to protect water quality on the Little Su for present and future generations.

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