



March 28, 2014

Jeffrey Anderson
U.S. Fish & Wildlife Service
43655 Kalifornsky Beach Road
Soldotna, AK 99669

Dear Jeff,

This letter serves as Cook Inletkeeper's final financial and performance progress report for the project: *Science-based Land Conservation Phase I* (F12AC01025) for the period of July 1, 2013 through September 30, 2013. The request for a 90-day modification of the final reporting deadline to March 28, 2014 was granted on December 16, 2013.

The overall goal of the Science-based Land Conservation project is to improve landscape-scale resilience for salmon on the lower Kenai Peninsula. Phase I of the project was focused on identifying critical salmon habitat, not already in conservation status, using thermal infrared imagery and other relevant local research. Below are the project tasks and a final progress report of what was accomplished during the overall project timeline and final reporting period.

1. Acquire thermal infrared imagery of the surface water temperatures of 15 miles of the north fork Anchor River.

Cook Inletkeeper contracted Watershed Sciences Inc. (WSI) to collect thermal infrared imagery to identify and map groundwater sources for 21 miles of stream on the North Fork Anchor River, including Chakok River. WSI collected the imagery on July 10, 2012.

2. Final report from contractor with all images and thermal data.

WSI submitted a final report with all the GIS files, longitudinal profiles, project data, and a final report on September 7, 2012. We forwarded the WSI final report to you in September 2013 for your review and files.

3. Import data into Cook Inletkeeper's GIS to create useful maps for KHLT-led discussions and ground truthing.

Cook Inletkeeper reviewed the WSI report and GIS files, which were then forwarded to the Kenai Watershed Forum for future mapping tasks.

4. Partners and other appropriate organizations meet to discuss other relevant research, and strategy for accomplishing overall project goals and Phase II objectives.

To solicit input from other researchers, Cook Inletkeeper's Science Director presented project information at three scientific conferences: Alaska Chapter of the American Fisheries Society (Kodiak, October 2012), Kenai Peninsula Fish Habitat Partnership's Science Symposium (Homer, April 2013); and National Adaptation Forum (Denver, April 2013). In addition, Cook Inletkeeper participated in numerous teleconferences with federal and borough staff, land trust organizations, and habitat conservation organizations to discuss strategies for permanent conservation of land identified as significant for salmon.

To increase public awareness, Cook Inletkeeper presented project information at two community-based venues: Kachemak Bay Research Reserve's "What's New in the Bay" Discovery Lab (March 2013) and Homer-Kachemak Bay Rotary Club (March 2014). Also, Project partners presented a workshop at the Land Trust Rally in Louisiana (September 2013) to share our strategic approach to protecting cold-water habitat and solicit input from other land conservationists across the country. As a result, the Land Trust Alliance featured our work in *Saving Land* - the nation's leading magazine written by and for land conservationists. Local coverage of the project can be seen in an article (attached) that ran in the Homer Tribune on October 30, 2013.

On December 11, 2013, Project partners met with U.S. Fish and Wildlife Service staff to discuss recently received GIS layers from the Anchor River RIPPLE model and how these data could be integrated into our identification of key salmon habitat. Since that meeting, Cook Inletkeeper has incorporated the model output into the final report. A follow up meeting is scheduled for April 8th with Project partners and other local scientists to discuss the analysis of the thermal imagery and RIPPLE model and identification of key salmon habitat.

5. Ground truth TIR imagery on the north fork Anchor River.

In July 2013, Cook Inletkeeper analyzed the north fork Anchor River thermal imagery to identify potential cold-water refugia. Groundwater inputs were significantly less than on the south fork. During August, we attempted to ground truth the imagery on numerous days; however, due to the lack of roads and public access, we were unable to field verify the imagery without trespassing. It may be necessary to use a small inflatable to get to many of the sites. Cook Inletkeeper will coordinate with Kachemak Heritage Land Trust and potential land owner cooperators to field verify specific locations in 2014-15.

6. Final report to KPFHP

The final report is attached. After the meeting on April 8th, the report may be revised with support from the Alaska Sustainable Salmon Fund. We will send you any future versions of the report, which can then be shared with the Kenai Peninsula Fish Habitat Partnership.

Cook Inletkeeper has used the Department of the Interior's Automated Standard Application Payments (ASAP) process to draw down funds totaling \$4,739.50 this reporting period. Please see the attached SF425 and Expenditure Summary Report for details about how these funds

were spent to achieve project objectives. In addition, Cook Inletkeeper has contributed \$3,528 this reporting period in match support through cash and in-kind contributions. Please let me know if you have any questions about this report or project tasks.

Sincerely,

A handwritten signature in black ink that reads "Sue Mauger". The signature is written in a cursive style with a large, sweeping flourish at the end.

Sue Mauger
Project Officer



Land Trust increases land ownership on Anchor River

By Carey Restino
Homer Tribune

Climbing through the tangle of willow bushes and tall grasses topped by cottonwood trees and interlaced with streams, Kachemak Heritage Land Trust Executive Director Marie McCarty stops, looks around and comments on how beautiful the surrounding scene is.

“And you know the best thing,” she asks, sidestepping a large, groundwater-fed pool. “The best thing is that this land is going to stay just like this.”

For several years, the land trust has been working to identify parcels along the Anchor River that have significant value in protecting the health of the popular fish resource. The Anchor River, as well as many other rivers in Alaska, runs the risk of being impacted by increasing water temperatures as the Alaska climate changes. Areas of the stream with overhanging banks help provide cool spots for salmon, as long as they aren’t developed or damaged by human impacts.

More than a decade ago, the land trust began to identify parcels of interest from a conservation standpoint along the river. A 55-acre donated parcel near Blackwater Bend jumpstarted those acquisitions. The land trust was able to use that donation to help acquire another 64 acre parcel on the other side of Black Water Bend. More recently, the focus has moved to the other side of the river, off the Old Sterling Highway, where it purchased the 11.76-acre parcel in 2011 after years of effort searching for funds and grants to help buy the valuable land. This property, along with a 12-acre chunk owned by Kachemak Moose Habitat Inc., started to make a significant portion of stream-abutting land protected from development. Add to that a parcel across the river owned by the Alaska Department of Natural Resources designated for moose habitat and public access under the Kenai Area Plan and the strength of the protection value increases geometrically.

Then, last summer, the land trust was able to add yet another chunk of land with Anchor River frontage beside the land it purchased in 2011. This new 15.35 acre parcel on the South Fork will add the those dedicated for permanent conservation to protect important salmon habitat.

Land trust board member Donna Aderhold, a biologist, pointed out features of the land as the group toured the land last week. Having large portions of land next to each other protected adds significantly to each acre’s value, she said, because streams move through all the parcels uninterrupted. The groundwater-fed streams found on the land that flow into the Anchor River not only keep the water cold in the summer, but also provide open water sources in the winter, thus making the properties even more valuable. Juvenile Coho have been found in the backwater channels.

“We’ve been slowly patchworking these pieces together,” said McCarty. “They are important to the people, to the local economy and to us recreating.”

McCarty said the land trust began identifying these parcels of importance with help of the Homer Soil and Water Conservation District and the Cook Inletkeeper.

Cook Inletkeeper stream ecologist Sue Mauger flew the river with a heat sensor and helped to identify these pieces as high-value spots for the river's overall health. In a 2011 statement, Mauger noted the importance of providing these cool water habitats.

"Water temperature plays a critical role in all phases of the salmonid lifecycle in freshwater systems where fish hatch from eggs and later return to spawn," Mauger said in the statement. "Warm stream temperatures are frequently associated with increased stress in fish, making them increasingly vulnerable to pollution, predation and disease. By protecting key private parcels, the land trust is leading the way to ensure the long-term resilience of Anchor River salmon during this time of thermal change."

The attention to the south fork of the Anchor River represents a shift in the evolution of the land trust, which started in the '80s in an attempt to find a way to conserve land in the area in its natural state. The land trust still does a significant amount of its work by holding conservation easements on properties — stipulations on the land that protect natural elements through restrictions on use and development — but when possible, land acquisition is also part of their portfolio. Sometimes those lands are purchased, other times donated, McCarty said.

While in its early years, land trust acquisitions were driven more by availability and interest, today, the land trust is able to guide where it would like to see more landholdings based on the goals stated by its board.

"These are properties on the Anchor River that are especially important to conserve for salmon habitat," she said. "These two parcels are spectacular, with both river frontage and backwater channels for young salmon."

McCarty said the land trust isn't opposed to development, but rather sees the value in preserving some land that is vital to the overall environmental health of the Southern Kenai Peninsula, such as the Anchor River. Since all land turned over to the land trust is done so voluntarily, the land trust serves as a vehicle for preserving the wishes of landowners, many of whom have strong connections to their property and the desire to see it remain undeveloped.

"That's the nice thing," McCarty said. "You can drive what your land looks like forever."

McCarty said the nonprofit organization has identified other parcels of interest along the river and has reached out to other landowners, providing them with information about the land trust and the opportunities it provides.

"Our outreach is to willing landowners," she said. "People are invited to work with us or to not."

The land trust is also not opposed to maintaining public access to the river for non-destructive recreational uses such as fishing. As the group got ready to leave, a local fishing enthusiast clambered into the river downstream as an eagle soared through the cottonwoods. McCarty asked him if he might be interested in helping to monitor the property, part of the trust's responsibility of taking ownership of the parcels. As the land trust moves forward, McCarty said it hopes to acquire more parcels in the area to add further to the patchwork of land protecting salmon and habitat in the area for generations to come.

"In our ownership, these properties will continue to be places for young salmon to grow and for adult salmon to seek refuge in their cool waters," she said.

Expenditure Summary Report
Science-based Land Conservation Phase I
(F12AC01025)

Grant Award	\$30,452.00
Prior Drawdowns	\$25,712.50
Draw 9/11/2013	\$ 4,739.50
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Total Current Period Draws	\$ 4,739.50
Balance	\$ 0.00

This report summarizes drawdowns from September 11, 2013 which covered expenses incurred from July 1, 2013 through September 30, 2013.

Direct Costs:	
Wages (KHLT)	\$ 2,827.00
Travel	<u>\$ 1,912.50</u>
Total Direct Costs	\$ 4,739.50
Indirect Costs	\$ 0.00
Total Costs	\$ 4,739.50

Explanation of Expenditures as related to Grant Objectives

1. Kachemak Heritage Land Trust's Executive Director (52 hours; \$1,640); Kachemak Heritage Land Trust's Conservation Director (52 hours; \$1,187); Travel: 2 KHLT staff, 1 CIK staff to Land Trust Rally (\$1,912.50). All expenditures relate to Objective 1.

FEDERAL FINANCIAL REPORT

(Follow form instructions)

1. Federal Agency and Organizational Element to Which Report is Submitted U.S. Fish & Wildlife Service	2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment) F12AC01025	Page of 1 1 pages
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3. Recipient Organization (Name and complete address including Zip code)
 Cook Inletkeeper, PO Box 3269, Homer, AK 99603

4a. DUNS Number 136-567-356	4b. EIN 92-0156450	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment)	6. Report Type <input type="checkbox"/> Quarterly <input type="checkbox"/> Semi-Annual <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Final	7. Basis of Accounting <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accrual
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8. Project/Grant Period (Month, Day, Year) From: 05/01/2012 To: 09/30/2013	9. Reporting Period End Date (Month, Day, Year) 03/28/2014
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10. Transactions Cumulative

(Use lines a-c for single or combined multiple grant reporting)

Federal Cash (To report multiple grants separately, also use FFR Attachment):

a. Cash Receipts	
b. Cash Disbursements	
c. Cash on Hand (line a minus b)	

(Use lines d-o for single grant reporting)

Federal Expenditures and Unobligated Balance:

d. Total Federal funds authorized	30,452
e. Federal share of expenditures	30,452
f. Federal share of unliquidated obligations	
g. Total Federal share (sum of lines e and f)	30,452
h. Unobligated balance of Federal funds (line d minus g)	0

Recipient Share:

i. Total recipient share required	21,247
j. Recipient share of expenditures	21,247
k. Remaining recipient share to be provided (line i minus j)	0

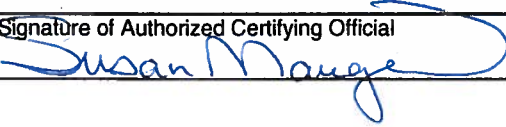
Program Income:

l. Total Federal share of program income earned	
m. Program income expended in accordance with the deduction alternative	
n. Program income expended in accordance with the addition alternative	
o. Unexpended program income (line l minus line m or line n)	

11. Indirect Expense	a. Type	b. Rate	c. Period From	Period To	d. Base	e. Amount Charged	f. Federal Share
g. Totals:					0	0	0

12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:

13. Certification: By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and intent set forth in the award documents. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

a. Typed or Printed Name and Title of Authorized Certifying Official Sue Mauger, Science Director	c. Telephone (Area code, number, and extension) (907) 235-4068 x24
	d. Email Address sue@inletkeeper.org
b. Signature of Authorized Certifying Official 	e. Date Report Submitted (Month, Day, Year) 03/28/2014
14. Agency use only:	

Standard Form 425 - Revised 10/11/2011
 OMB Approval Number: 0348-0061
 Expiration Date: 2/28/2015

Paperwork Burden Statement
 According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 0348-0061. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0061), Washington, DC 20503.