

**CITY OF HOMER  
HOMER, ALASKA**

Aderhold

**RESOLUTION 24-077**

A RESOLUTION OF THE CITY COUNCIL OF HOMER, ALASKA, SUPPORTING A PARTNERSHIP BETWEEN THE CITY, UNIVERSITY OF ALASKA AND THE KACHEMAK BAY NATIONAL ESTUARINE RESEARCH RESERVE TO SUBMIT A GRANT APPLICATION TO THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION FOR FUNDING TO ACQUIRE AND PROTECT LANDS WITHIN THE BRIDGE CREEK WATERSHED PROTECTION DISTRICT.

WHEREAS, Land Acquisition in the Bridge Creek Watershed Protection District has been a priority in the City's Capital Improvement Plan for over a decade; and

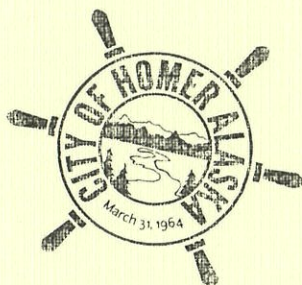
WHEREAS, The Kachemak Bay Research Reserve through the University of Alaska is eligible to apply for grant funding which would pay for acquisition and protection of lands within the watershed; and


WHEREAS, The City of Homer has long worked on strategic land acquisition in the watershed and these grant funds would leverage ongoing City efforts; and

WHEREAS, A partnership between the City and the Research Reserve would allow for a grant application and potential award of funds to benefit the City of Homer and would further efforts to preserve lands within the Bridge Creek Watershed Protection District, the sole source of public drinking water for the City of Homer.

NOW, THEREFORE, BE IT RESOLVED that the City Council of Homer, Alaska supports a partnership between the City, University of Alaska and the Kachemak Bay National Estuarine Research Reserve to submit a grant application to the National Oceanic and Atmospheric Administration for funding to acquire and protect lands within the Bridge Creek Watershed Protection District.

PASSED AND ADOPTED by the Homer City Council this 22nd day of July, 2024.



CITY OF HOMER  
  
KEN CASTNER, MAYOR



ATTEST:



RENEE KRAUSE, MMC, ACTING CITY CLERK

Fiscal Note: NA



# MEMORANDUM

---

**Resolution 24-077, A Resolution of the City Council of Homer, Alaska, Supporting a Partnership between the City, University of Alaska and the Kachemak Bay National Estuarine Research Reserve to Submit a Grant Application to the National Oceanic and Atmospheric Administration for Funding to Acquire and Protect Lands within the Bridge Creek Watershed Protection District.**

**Item Type:** Backup Memorandum  
**Prepared For:** Mayor Castner and City Council  
**Date:** July 10, 2024  
**From:** Julie Engebretsen, Community Development Director

---

**Recommendation:** Approve Resolution 24-144 to pursue funding for the purchase of lands in the Bridge Creek Watershed Protection District.

## Background

The Kachemak Bay Research Reserve is eligible to apply for grant funding that would pay for the purchase of property in the Bridge Creek Watershed Protection District. This is the same funding source as the Kachemak Sponge project, however this Bridge Creek project is much less complicated. (An update on the Kachemak Sponge project will be included in the City Manager's Report at this meeting.) While the sponge project is groundbreaking in many respects, the Bridge Creek project is straightforward land acquisition. This grant presents an excellent opportunity to leverage city efforts to acquire key properties in the watershed. The City's Capital Improvement Plan has land acquisition in the watershed as a long term goal, and has listed this project for twenty some years.

Attached to this memo is the project as it was submitted to NOAA last year for funding. Despite being a thorough letter of interest, NOAA declined the project. With Council approval of this resolution, staff and Research Reserve and Kachemak Heritage Land Trust staff will collaborate to refine this proposal and resubmit the project.

Public Works Director Kort and Community Development Director Engebretsen will attend the Committee of the Whole to discuss the resolution with Council.

## Attachments

Letter from Katherine Schake, Reserve Manager, Kachemak Bay Research Reserve  
Draft 2023 Submittal to NOAA





# Kachemak Bay National Estuarine Research Reserve Alaska Center for Conservation Science

UNIVERSITY of ALASKA ANCHORAGE

2181 Kachemak Drive Homer, Alaska 99603 (907) 235-4799

July 15, 2024

Homer City Council and Staff

Re: NOAA Bipartisan Infrastructure Law Funding Opportunity: NERRs Land Acquisition and Restoration

Dear Homer City Council,

On behalf of the Kachemak Bay National Estuarine Research Reserve (KBNERR), this memo serves as an invitation to the City of Homer to collaborate with KBNERR in applying for funds to acquire and protect lands in the Bridge Creek Watershed. The NOAA Bipartisan Infrastructure Law NERRs Land Acquisition and Restoration grant provides an excellent opportunity to leverage federal dollars to meet the City's long-term goal of preserving the quantity and quality of the sole source of public drinking water, which is predominately recharged through groundwater filtering through surrounding properties in the Bridge Creek Watershed (Brigino et al., 2023). Project partners include the Kachemak Heritage Land Trust (KHLT) and the KBNERR Community Council. Pre-proposals are due August 15<sup>th</sup>, finalists for the full proposal stage are alerted in November, and full proposals are due in January 2025. Funds are awarded spring of 2025 with a 3-year project period.

The Research Reserve does not own or manage any land, yet has a rare opportunity to pass through federal funds to acquire lands for the protection and conservation of threatened, important habitats. KBNERR has and will continue to apply for the NOAA BIL funding that is specifically available to the NERR system to purchase ecologically important land and/or implement restoration projects that significantly benefit surrounding watersheds. Over the past two years KBNERR has held community meetings to receive input on priority locations and conservation opportunities surrounding Kachemak Bay. KBNERR's Community Council Lands Committee and KHLT have thoroughly evaluated the properties suggested, and prioritized those that best fit the funding criteria. This is the same source of funding that KBNERR applied for and received for the City of Homer to purchase lands along Kachemak Drive to support the city's stormwater infrastructure project (aka 'Kachemak Sponge' project).

This past spring, community members submitted new project ideas, and priorities were updated in preparation for drafting new proposals. Applying for funding to purchase lands in the Bridge Creek Watershed resurfaced as a priority for community partners. Last year, KBNERR, KHLT and the City of Homer collaborated on a letter of intent that served as a pre-proposal for acquiring lands in the Bridge Creek Protection District (Attachment A). This project was not selected to the full proposal stage due to a lack of landowner interest in selling at the time. However, by expanding the geographic scope of the project to the entire Bridge Creek Watershed, not just the Protection District, KHLT has received interest from landowners who would like conservation outcomes for their properties.

Therefore, KBNERR is inviting the City of Homer to collaborate on a pre-proposal to acquire lands in the Bridge Creek Watershed in order to protect the City's drinking water, and continue to provide water for the fish of the Anchor River. Similar to the Kachemak Sponge project, KBNERR would pass through the majority of funding to the City of Homer to purchase and own the lands with conservation easements. A



**Kachemak Bay National Estuarine Research Reserve**  
**Alaska Center for Conservation Science**  
UNIVERSITY of ALASKA ANCHORAGE

**2181 Kachemak Drive Homer, Alaska 99603 (907) 235-4799**

subaward to the Kachemak Heritage Land Trust (KHLT) would enable KHLT to handle landowner negotiations and deed restrictions on behalf of the city.

Details regarding this funding opportunity are described below:

**Specifically, this NOAA BIL funding opportunity seeks projects that enhance coastal resilience.**

Examples of strengthening coastal resilience are: protecting lives and property; sustaining commercial, recreational, and subsistence fishing; recovering threatened and endangered species; and maintaining and fostering vibrant coastal economies and lifestyles. NOAA aims to fund high-impact projects that can have a transformational effect on an ecosystem or community.

**Land Acquisition Projects: \$500,000 - \$1.5 million each**

Lands must be free from any infrastructure and preserved for conservation in perpetuity. KBNERR does not own or manage land. A final landowner must be identified.

**BASIC CRITERIA FOR PROPOSED LAND ACQUISITION:** Projects must...

- Demonstrate a significant ecological value
- Demonstrate the need for protection
- Demonstrate a clear public benefit
- Be managed and protected in perpetuity by a non-federal entity
- Be located within the Reserve Boundary or Targeted Watershed
- Be purchased at fair market value

**TIMELINE**

August 15th: Pre-proposals (aka Letters of Intent) due to NOAA

November: NOAA invites finalists to full proposal phase

January 2025: Full Proposals due to NOAA

Please let me know if you have any questions or concerns.

Sincerely,

Katherine Schake, Reserve Manager  
Kachemak Bay National Estuarine Research Reserve  
[kschake@alaska.edu](mailto:kschake@alaska.edu)  
907-235-1593

Enclosed: Attachment A: Bridge Creek Watershed Protection District Letter of Intent 2023

# 2023 DRAFT

## **COVER PAGE**

### **Applicant:**

Kachemak Bay National Estuarine Research Reserve

### **Project Title:**

Acquiring Land to Protect Drinking Water in the Bridge Creek Watershed Conservation District

### **Type of Project:**

Land Conservation

### **Names and Affiliations of the lead principal investigators (PI) with contact information**

Katherine Schake

Reserve Manager, Kachemak Bay NERR

Alaska Center for Conservation Science, University of Alaska Anchorage

[kschake@alaska.edu](mailto:kschake@alaska.edu) (907)235-4799

2181 Kachemak Drive, Homer, AK 99603

Julie Engebretsen

Economic Development Manager, City of Homer

[jengebretsen@ci.homer.ak.us](mailto:jengebretsen@ci.homer.ak.us) (907)435-3119

491 East Pioneer Ave, Homer, AK 99603

### **Proposed Project Start and End Dates**

August 1, 2024 - July 31, 2027

### **Total Federal Funding Request**

\$2,081,450



**Statement of Purpose:** Water scarcity is a growing concern for rural Alaskan communities including the City of Homer and the surrounding populations due to recent climate change impacts and development pressures. The Bridge Creek Reservoir is the primary source of potable water for Homer residents, providing drinking water to over 1600 residential and 500 commercial customers in addition to water that is trucked to residents outside of the city limits. With this BIL project, KBNERR will partner with the City of Homer to purchase and protect properties within the Bridge Creek Watershed Protection District to prevent the degradation of the watershed's water quality and quantity, ensuring the reservoir continues to be a suitable public water source for the City while functionally recharging salmon-bearing streams.

**Brief Project Description:** KBNERR and the City of Homer have a rich history of partnering in research, conservation, and water quality and weather monitoring. The lands being considered for acquisition revolve around the Bridge Creek Watershed and Reservoir as the focal area, considering the reservoir's value as a drinking water source and KBNERR's expertise in long-term monitoring. Currently the Reserve is near the conclusion of a study that will result in a water budget for the City of Homer, providing valuable insight into the City's changing water needs. This study puts into practice the decades of Reserve research developed with the University of South Florida's groundwater team to understand the hydrology, recharge, and discharge of groundwater in the landscape of the southern Kenai Peninsula. Groundwater models developed by this team indicate that the properties in this project as well as those adjacent to them contain flow paths that are necessary for directing water to the reservoir and nearby salmon-bearing streams. Ongoing research indicates that during the summer the majority of water in the reservoir comes from groundwater seeps and springs and during the winter 100% of the water resource is dependent on groundwater. That same groundwater is vital to the survival of juvenile salmon in headwater streams, regulating stream temperatures so that sections of salmon habitat remain unfrozen during the winter and cold water refugia are available during the summer. Groundwater flow paths also deliver essential nutrients to these streams, carrying nitrogen and carbon from upland alders and peatlands respectively. With the residential population of Homer growing rapidly, the demand for drinking water increases, and because the reservoir is reliant on groundwater recharge from the watershed, the availability of water for other people and juvenile salmon decreases concurrently. Protecting these properties will have a transformational effect by ensuring that these groundwater flow paths remain intact, protecting vital salmon habitat and drinking water resources for the residents of Homer.

Furthermore, conserving the Bridge Creek Watershed properties will expand the monitoring opportunities available to the Reserve. KBNERR is in the preliminary stages of establishing a new System-Wide Monitoring Program (SWMP) weather and water quality station, and the Bridge Creek Reservoir offers many benefits both to KBNERR and the partnership with the City of Homer as a potential SWMP site. This will broaden the Reserve's capability to track patterns in water use, sample groundwater, and provide further insight into the changing water needs of the Homer area. Continuing KBNERR's involvement in this high priority area will greatly enhance awareness and understanding of the Reserve's mission. Currently KBNERR is developing a communications plan to reach a broader audience beyond the immediate stakeholders and partners. By utilizing the Reserve's expertise in research and monitoring to ensure the protection of such a vital resource, the City of Homer validates the Reserve's role as a source for science that benefits the public and strengthens the public perception of the Reserve.

Ecosystem and community benefits of acquiring these properties extends beyond the protection of water resources and juvenile salmon. They currently provide intact habitat for local, culturally significant wildlife with open meadows, wetlands, cottonwood groves, spruce, and mature willow. The vegetation provides food for

hundreds of moose to browse during the summer and fall, black bears are drawn to the abundance of berries, birdlife is diverse attracting many birders, dolly varden and rainbow trout reside in the reservoir itself, and numerous other animals including wolves, porcupines, and hares can be found making their way through this habitat. However, all of these things: wildlife, fish, and water security, are threatened by the possibility of development in this region.

Over the last decade, Homer has led all other Kenai Peninsula cities in new home construction. The continued tremendous growth of residential subdivisions has resulted in land clearing, ditching to direct water away from and dewater building sites, and increased impervious surfaces. The northeast properties in this project have already been subdivided with intent to develop for residential use. A platted road runs just north of these properties, making them easily accessible for development. The central properties directly border the reservoir, making them the highest priority for conservation for source water protection. Because the properties of this project are within the boundaries of the Bridge Creek Watershed Protection District, there is a clear precedent to prioritize their conservation. The City of Homer has continued to purchase properties within the Watershed Protection District as they become available and contingent on funding. Since 2009, the City has purchased over 85 acres within the Watershed Protection District specifically for conservation. They also paid the stewardship fee to help protect the 302 acres that the Kachemak Heritage Land Trust (KHLT) holds a conservation easement on. Currently funding for the City is exhausted for this purpose. The Alaska Department of Environmental Conservation (ADEC) has also identified the Bridge Creek Watershed as a priority in their Drinking Water Program. The properties are located within the ADEC Drinking Water Protection Zones. In addition to alignment with city and state watershed protection plans, several other private owners and non-profits including Kachemak Moose Habitat Inc. and Center for Alaska Coastal Studies have purchased land adjacent to those in this project for the sole purpose of conserving important wildlife habitat. This project will both expand the range of continuous protected acreage for local wildlife, and support the City in achieving the drinking water goals established for the Bridge Creek Watershed Protection District.

**Milestones: Years 1-2:** Execute Letters of Intent to Purchase Property Owners; Appraisal; Draft Phase I Environmental Reports; Title Reports

**Year 2:** Establish Conservation Easements; Documentation review

**Years 2-3:** Property closing - Purchase Property / Property Protected

**Communications Products Developed & Published:** Engaging with community stakeholders will be on-going throughout the process of real estate acquisition. The Research Reserve and the City will develop a Communication Plan, which will include news releases, Fact Sheets on the City's/Reserve's website and other materials will be developed and published as new information arises.

**Site Monitoring Begins:** The properties will be monitored to document the efficacy of the conservation efforts.

**Site-Based Field Opportunities:** Field Trips and other activities will be developed to showcase the ecological value of the wetlands and peatlands comprising the properties.

**Equity and Inclusion:** The Bridge Creek Watershed Protection District was selected by community members as one of two of the highest priority conservation areas from a list of community-identified conservation projects. Planning for this project involved a participatory process that started with KBNERR's twelve-member volunteer Community Council. Council membership represents residents from the communities and Indigenous populations that surround Kachemak Bay and was established to provide an organized structure for substantive and meaningful dialogue. Recommendations among agencies, local governments, researchers, environmental educators, conservation groups and those interested in natural science research and education,



including KBNERR staff, have co-developed the identified priority lands for conservation. Public outreach by KBNERR alongside the Kachemak Heritage Land Trust, an organization with extensive experience in conservation land acquisition and prioritization, provided public information sessions to orient community members, stakeholders, and partners to the BIL opportunity. This inclusive process garnered a total list of 19 projects, and ultimately, the Community Council decided that the Bridge Creek Watershed was a top priority for its significant ecological value, public benefit via water resource protection, and the imminent threat of development.

Populations living on the Southern Kenai Peninsula are classified as “underserved communities” as defined by Executive Order 13985, wherein rural populations meet the condition of being systematically denied a full opportunity to participate in aspects of social, economic, and civic life. Schools in the southern Kenai Peninsula are particularly underfunded and have high rates of poverty. If this project is funded KBNERR and the City of Homer will host field trips to the reservoir for Chapman School, a local Title I school, to tour the water treatment plant, learn about groundwater, and visit juvenile salmon habitat.

**Climate:** Water scarcity is a growing concern in Alaska and the reality of seasonal droughts and increasing populations threaten the available supply. In recent years, local villages such as Seldovia and Nanwalek have experienced near to complete depletion of their water resources. During the summer, water usage in the Homer area increases markedly, as the residential population nearly triples and tourists arrive. Protecting and monitoring properties like the ones in this project is vital to ensuring the availability of the already-limited freshwater resource to a consistently growing population. While KBNERR develops a water budget to assess and forecast the needs of the area, this project will provide a critical safeguard to the source water quality and quantity.

**Geography and Maps:** The targeted properties are vacant lands located in or adjacent to the Bridge Creek Watershed Protection District which lie within the City of Homer limits. The City, situated at the south end of the Kenai Peninsula and within the boundaries of the Kachemak Bay National Estuarine Research Reserve has a population of 5,515 and is the regional commercial hub for an additional 14,000 residents outside city limits. Soils are primarily Beluga silt loam and peat. The parcels contain “Moderate Rank” to “High Rank” wetlands, Discharge Slope Wetlands and Drainageway Wetlands that gently slope downward towards the reservoir.

**Pre-Existing Uses:** A Kenai Peninsula Borough Road runs between the western properties to access the reservoir. The central property just east of the reservoir access road is adjacent to the water line that runs along the western property boundary.

**Partnerships:** This project represents a continuation of the collaborative partnership between KBNERR, University of Alaska Anchorage (UAA), and the City of Homer, formalized in a Memorandum of Understanding (MOU). After the Community Council unanimously supported this project in their assessment of local conservation priorities, KBNERR and the City partnered with Kachemak Heritage Land Trust (KHLT) to strategically develop a plan to initiate due diligence and acquire these properties. The City of Homer will be the final landowner once these properties are acquired and protect them in perpetuity. The proposal will be submitted through KBNERR, UAA. UAA, the fiscal agent, has experience with grant management and project oversight. The City of Homer is a municipal government, experienced in the planning, design, construction and operation of municipal infrastructure as well as in the protection of sensitive open spaces. The City already actively manages and protects many acres of land for public benefit, specifically 172 acres with formal

conservation easements purchased with Exxon Valdez Oil Spill funding, and notably acreage in the Bridge Creek Watershed Protection District to protect the quality of the City's drinking water supply.

It is intended that KHLT will be a subcontractor for the City of Homer to perform the landowner contact and all necessary phases of the due diligence in this project. As a nonprofit land conservation organization founded in 1989, KHLT land conservation work has focused, in part, on land conservation projects in Bridge Creek in partnership with the City of Homer, including a recent 302-acre conservation easement within the watershed protected in perpetuity.

**Project Readiness:** KHLT and KBNERR jointly sent letters to eight landowners in the Bridge Creek Reservoir. Two landowners have since responded to KHLT indicating that they would be interested in a conservation outcome for their properties. Negotiations will continue and purchase and sale agreements will be entered into with the landowners, contingent upon acceptance of appraised fair market value. Working with KHLT and with City of Homer approval, contractors, due diligence in the field and appraisals, title opinions and other documents will be completed within the performance period. Due diligence will confirm that these parcels do not have title uncertainties or the need for remediation.

**Project Timeline:** During the first three months of the project, UAA will establish the award and sub-award with the City of Homer. The first project year will involve conducting necessary due diligence to consummate real estate transactions which consists of acquiring property purchase agreements, appraisals, phase I environmental reports, and title reports. In the second year conservation easements will be established, documents will be reviewed, and properties will be purchased and protected. Communications products will be created and delivered throughout the remainder of the project period beginning in the second year. Once properties are purchased, site monitoring will begin and field opportunities will be implemented.

**Budget Summary:** The total project request is \$2,081,450

**KBNERR Personnel:** \$36,241

**Subaward to City of Homer:** \$2,028,029

Personnel: \$32,280

City of Homer Contracts: \$527,383 includes Kachemak Heritage Land Trust (\$55,383); Engineering & survey services, appraisals, environmental review, legal services and recording fees (\$472,000)

Land Acquisition: \$1,284,000 for ten parcels totaling 85.73 acres

City of Homer 10% Indirect: \$184,366

**Other Direct Costs:** \$5,500

Signage acknowledging NOAA Funding \$5,500

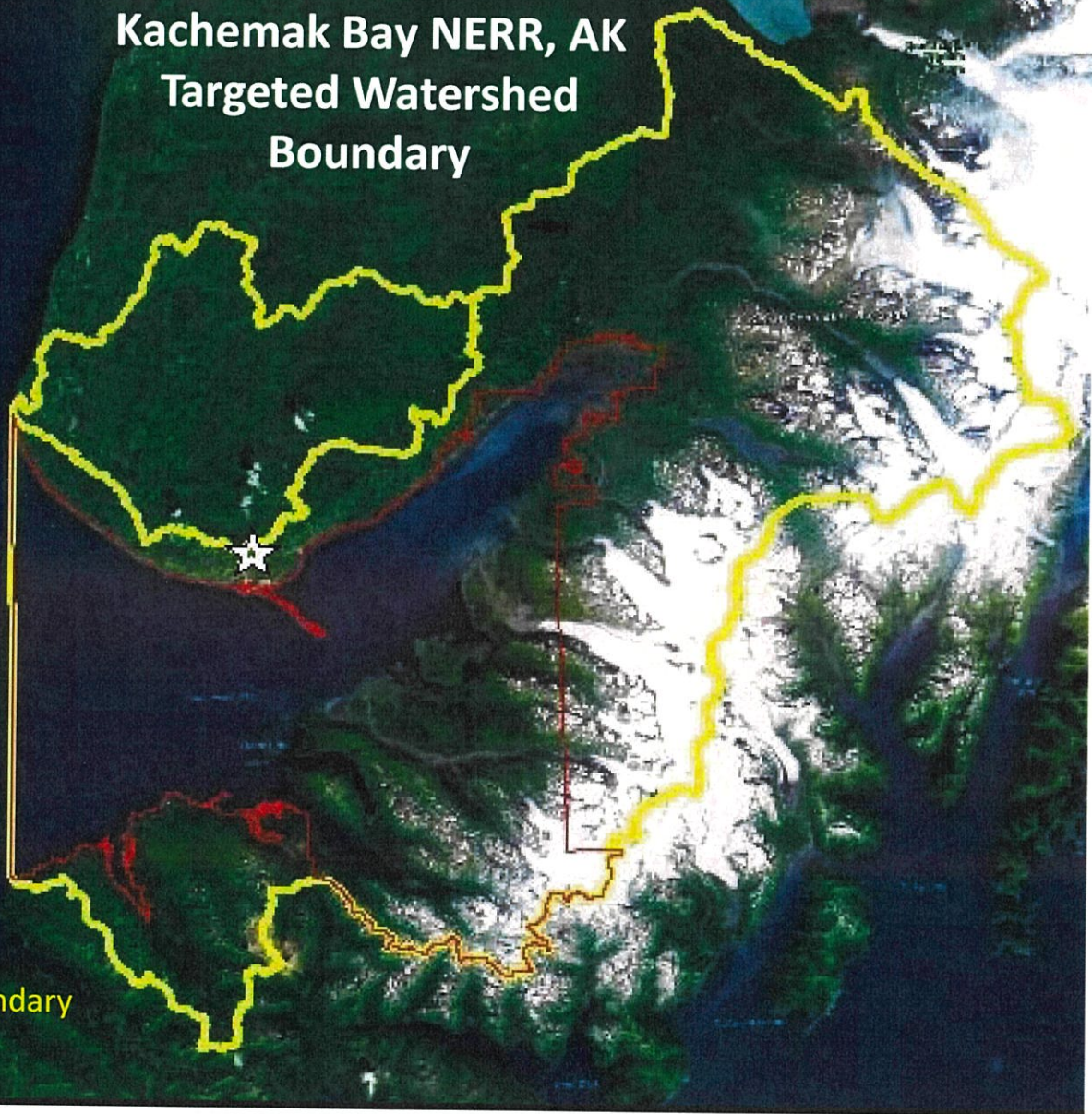
**KBNERR/UAA Project Indirect:** \$11,680

Calculated for UAA costs and first \$25,000 of subaward. Facilities and Administrative (F&A) Costs for Cooperative Ecosystem Studies Unit projects are calculated at 17.5% of the Modified Total Direct Costs.

**Match & Leveraged Funds:** Informally, leveraged funds include a KBNERR weather & water quality station valued at \$50,000 to be established at the City of Homer Reservoir; BIL Non-competitive Capacity Building Funds distributed to KBNERR, secured at \$200,000 for supporting project engagement and monitoring activities; and this work builds on a 2023 award of \$50,000 from City of Homer to KBNERR and the University of South Florida to establish a Bridge Creek Reservoir water budget.



## Kachemak Bay NERR, AK Targeted Watershed Boundary



Reserve Boundary  
Targeted Watershed Boundary  
Project Area ★



# Bridge Creek Watershed Protection District Boundary

