



US Army Corps
of Engineers
Alaska District

Public Notice Modification of In Lieu Fee Program – Site Addition

Regulatory Division (1145)
CEPOA-RD
Post Office Box 6898
JBER, Alaska 99506-0898

PUBLIC NOTICE DATE:	DECEMBER 11, 2014
EXPIRATION DATE:	January 12, 2015
REFERENCE NUMBER:	POA-2010-132
WATERWAY:	Mulchatna River

FEDERAL PUBLIC NOTICE

The District Engineer has received a project proposal to establish an In-lieu Fee (ILF) wetland compensatory mitigation site for Federal permits as described below:

In Lieu Fee Sponsor
The Conservation Fund
1655 North Fort Meyer Drive, Suite 1300
Arlington, VA 22209
Email: webmaster@conservationfund.org
Phone: (703) 525-6300

Program POC
Mr. Brad Meiklejohn
Eagle River, AK 99577

WATERWAY AND LOCATION OF THE PROPOSED WORK: The Conservation Fund has prepared this instrument modification request to establish the SW-1 Kaleak mitigation site to protect 124.97 acres at the confluence of Old Man Creek and the Mulchatna River in Southwest Alaska. The project would protect palustrine and riverine wetlands and buffers.

PROPOSED SITE: The sponsor proposes to preserve the 124.97 acre site. The goal of the mitigation site is to provide appropriate mitigation for impacts, within the authorized service area, by providing wetland preservation. The sponsor has proposed that The Conservation Fund's Southwest Service Area be used as the service area for the proposed site. The Southwest Service area contains most of the USGS' Southwest Alaska sub-region. It also contains a small portion of the Southcentral Alaska sub-region, mostly along the southern side of the Alaska Peninsula. These sub-regions correspond directly to the level 2 hydrologic unit codes 1903 and 1902 respectively. The political boundaries of the Lake and Peninsula Borough and the Kodiak Island Borough were considered in the creation of the Southwest Service Area.

Oversight of this mitigation site will be by a group of federal and state agency representatives. This interagency oversight group will be known as the Interagency Review Team (IRT). The Alaska District of the U.S. Army Corps of Engineers shall chair the IRT.

This mitigation site may be one of a number of practicable options available to applicants to compensate for unavoidable wetland impacts associated with permits issued under the authority of Section 404 of the Clean Water Act (Public Law 95-217) and/or Section 10 of the Rivers and Harbors Act.

The actual approval of the use of this mitigation site for a specific project is the decision of the Corps pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. The Corps provides no guarantee that any particular individual or general permit will be granted authorization to use this mitigation site to compensate for unavoidable wetland impacts associated with a proposed permit, even though compensatory mitigation may be available.

AUTHORITY: Issuance of a public notice regarding proposed mitigation sites is required pursuant to the "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule," (Rule) as published in the April 10, 2008, Federal Register, Vol. 73, No. 70, Pages 19594-19705 (33 CFR Parts 325 and 332).

FEDERAL EVALUATION OF PROPOSAL: The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate this proposed mitigation site. This is not an application for work in Waters of the United States. The Corps of Engineers in evaluating this proposal will consider any comments received. Comments are used to assess the viability of the compensatory mitigation site.

COMMENT PERIOD: Comments on this project should be made in writing, addressed to the Alaska District Corps of Engineers (ATTN: Sheila Newman), CEPOA-RD-SA, Post Office Box 6898 JBER, Alaska 99506-0898 or by email to sheila.m.newman@usace.army.mil with the project name and number in the subject line. Comments must be received by the close of business on January 12, 2015.

If you have any questions, please contact Ms. Sheila Newman, Chief, Special Actions, Alaska District, Regulatory Division at 907-753-5556 or by email as above.

FOR THE DISTRICT ENGINEER
U.S. Army, Corps of Engineers

Enclosure

Instrument Modification Request**Kaleak Mitigation Plan Proposal**

Alaska In-Lieu Fee Compensatory Mitigation Program

The Conservation Fund

Project Specifics:

TCF Project Name:	Kaleak Mitigation Site
AKILF Tracking Number:	SW-1 Kaleak
Mitigation Type:	Wetland and Upland Buffer Preservation
General Location:	Old Man Creek and Mulchatna River, Bristol Bay watershed
8-Digit HUC:	19030302
Coordinates:	<u>59.9234, -156.4536</u>
Service Area:	Southwest
Project Partner:	Bristol Bay Heritage Land Trust
 Total Area Protected:	 124.97 acres
Proposed Palustrine Credits:	95.98
Proposed Riverine Credits:	6.27

1. OBJECTIVES (33 CFR Section 332.4(c)(2))

The Conservation Fund has prepared this instrument modification request to establish the SW-1 Kaleak mitigation site to protect 124.97 acres at the confluence of Old Man Creek and the Mulchatna River in Southwest Alaska. The project will protect palustrine and riverine wetlands and buffers.

The Conservation Fund requests approval from the U.S. Army Corps of Engineers to modify the Alaska In-Lieu Fee Compensatory Mitigation Program Instrument and generate credits to offset unavoidable impacts to waters of the United State authorized through the issuance of Department of the Army permits pursuant to section 404 of the Clean Water Act and/or sections 9 or 10 of the Rivers and Harbor Act of 1899.

2. SITE SELECTION (33 CFR Section 332.4(c)(3))

2.1. Overview. The Kaleak property is located at the confluence of Old Man Creek and the Mulchatna River, which are major rivers to the Bristol Bay region. The property contains high-functioning riverine and palustrine wetlands and provides important habitat for five species of salmon and other regional fish and wildlife (Appendix A - Bristol Bay Regional Map).

2.2. Priority. The Kaleak property ranked second highest for conservation and cultural values in a GIS parcel prioritization completed for the Bristol Bay Heritage Land Trust. This prioritization, titled Nushagak-Mulchatna Watershed Native Allotment Evaluation, used 75 total values and attributes in the analysis, including waterfront complexity, fish species diversity, spawning habitat, subsistence use, moose habitat, caribou habitat and cultural sites. Total score summed

the values of biological diversity and public use score plus non-null values for Wood-Tikchik State Park and confluence. The complexity of the total score analysis indicated that comparing property scores to one another provides more valuable information about conservation interest than comparing single property scores to the maximum score possible.

Of the 345 Native allotments analyzed, the Kaleak property ranked second highest with a total score of 26 points (the highest score is 29 points; the lowest score is 2 points). This analysis suggests that the Kaleak property is an important candidate for conservation protection.

The results of this analysis identified the Kaleak property as a priority for the Bristol Bay Heritage Land Trust. State and federal agencies also determined this property to be a priority for conservation. The adjacent landowner is the State of Alaska.

2.3. Threat. The Kaleak property is located in an area renowned for recreation and subsistence fishing and hunting. Recreational fishing lodges, which are found throughout the watershed, contribute to direct and indirect (e.g., habitat conversion from development, pollution, increase pressure on resources) negative impacts to aquatic resources. The primary threat to the Kaleak aquatic resources is conversion from development of a recreational lodge. The preservation of the Kaleak mitigation site will forever alleviate that threat.

3. SITE PROTECTION INSTRUMENT (*33 CFR Section 332.4(c)(4)*)

The Kaleak property was purchased by TCF, and it is owned, protected, and managed by Bristol Bay Heritage Land Trust (BBHLT), a 501(c)(3) charitable conservation organization and a local land trust in the Bristol Bay region. Additional protection is provided in the deed in which TCF incorporated a restrictive covenant when the property was conveyed from the landowner to BBHLT. The restrictive covenant provides guidance on use of the property that protects and maintains aquatic resources and their functions.

BBHLT is dedicated to the preservation of salmon and wildlife habitat of the greater Bristol Bay region of southwest Alaska. With strong leadership and dedicated staff, BBHLT has capital, support and the conservation expertise to effectively manage and protect valuable habitats throughout the Bristol Bay region. BBHLT is a member of the Land Trust Alliance, a national conservation organization representing interests of land trusts across the United States.

BBHLT has intentions of transferring the property to a local Native entity while retaining a conservation easement encumbering the property to ensure that aquatic resources are forever protected under Native ownership. Should this occur, the Corps will be notified prior to the transfer of ownership and execution of the conservation easement.

4. BASELINE INFORMATION (*33 CFR Section 332.4(c)(5)*)

4.1 Overview. The Kaleak property is a 124.97-acre Native allotment located at the confluence of Old Man Creek and the Mulchatna River in the Southwest Service Area. The Mulchatna River is a major tributary of the Nushagak River, which flows into Bristol Bay.

Property boundaries were identified in GIS using the 1987 U.S. Survey 8499, Lots 2-5 and 2010 high-resolution aerial imagery. Discrepancies in plat drawings and aerial imagery revealed that erosion and accretion have likely occurred due to natural migration of the Mulchatna River. TCF used best professional judgment to visually interpreting the property boundaries in GIS, resulting in a 136.35-acre mapped area.

HDR Alaska, Inc. (HDR) completed the wetland delineation and functional assessment using a GIS desktop approach. No field data were collected from the property. HDR has extensive wetland experience in this region (e.g., contracts with Pebble Mine) and represents the best professional judgment available at the time for this project.

4.2 Wetland Delineation. HDR and TCF used high-quality aerial imagery, U.S. Survey 8499 and best professional judgment to map property boundaries in GIS, resulting in 136.35 acres. Within this property boundary, HDR identified a total of 98.86 acres of palustrine wetlands, which include 11.18 acres of emergent wetlands, 71.02 acres of scrub-shrub wetlands and 16.66 acres of forested wetlands. HDR identified 0.24 acres of riverine wetlands, consisting of small streams and seeps throughout the property (Appendix B - Wetland Delineation Map).

4.3 Buffers. Buffers provide important ecological services and functions to adjacent wetlands and aquatic resources. Buffers are critical to the maintenance and protection of aquatic resources on the Kaleak property and in the Mulchatna River watershed. A distance of 100-feet was applied to buffers for the Kaleak property wetland analysis.

4.4 Functional Assessment. HDR, Inc., a private consulting company in Anchorage, completed the wetland delineation and functional assessment. HDR represents the best professional judgment available for remote wetland analysis. Due to several rounds of erroneous guidance from the Corps, TCF has produced numerous versions of the functional assessment document. To prevent further edits and waste of funding, TCF will wait for clear guidance from the Corps before addressing new edits to the functional assessment document.

The U.S. Army Corps of Engineers Regulatory Guidance Letter No. 09-01 functional assessment methodology was used by HDR to analyze the functions of wetlands and upland buffers on the Kaleak property. The functional assessment mapped and analyzed in GIS 136.35 acres of wetlands and uplands. Results from the functional assessment found a total of 11.43 Category I wetlands, 87.68 Category II wetlands, and 24.06 Wetland Buffers (Appendix C - Wetland and Buffer Functions Map). By wetland type, the property contains 11.19 acres Category I palustrine wetland, 0.24 acres Category I riverine wetland, 87.68 acres Category II palustrine wetlands, 10.91 acres palustrine buffers, and 13.15 acres riverine buffers (Table 1).

4.5. Acreage Multiplier. The GIS mapped area produced a property size of 136.35 acres, while U.S. Survey 8499, which is the legal property description, recorded a property size of 124.97 acres. To best represent the property described in the survey, an *acreage multiplier* was utilized, which was generated by dividing 124.97 acres by 136.35 acres.

$$124.97 \text{ acres (surveyed area)} \div 136.35 \text{ acres (GIS mapped area)} = 0.92$$

All wetlands and buffers from the GIS mapped area were multiplied by the *acreage multiplier* to adjusted acres. Utilizing the *acreage multiplier* resulting in 10.29 acres Category I palustrine wetlands, 0.22 Category I riverine wetlands, 80.67 acres Category II palustrine wetlands, 10.04 palustrine wetland buffers, 12.10 riverine wetland buffers (Table 1).

Table 1. Functional Assessment and Adjusted Acres

Wetland Function	GIS Mapped Area (acres)	Acreage Multiplier	Adjusted Area (acres)
Category I - Palustrine Wetland	11.19	0.92	10.29
Category I - Riverine Wetland	0.24	0.92	0.22
Category II - Palustrine Wetland	87.68	0.92	80.67
Buffer - Palustrine	10.91	0.92	10.04
Buffer - Riverine	13.15	0.92	12.10
Non-Buffer Upland	13.18		11.65
Sum - Palustrine wetland and buffer	109.78		101.00
Sum - Riverine wetland and buffer	13.39		12.32
Total	136.35		124.97

5. DETERMINATION OF CREDITS (33 CFR Section 332.4(c)(6))

5.1. Overview. The Kaleak property contains Category I wetlands, Category II wetlands and wetland buffers from which credits by wetland type (e.g., riverine, palustrine, lacustrine, or marine) are proposed to be generated. These credits will be used to satisfy compensatory mitigation requirements in authorized 404 permits.

5.2. Credit Units. For the credit/debit system to function for purposes of compensatory mitigation, the credit unit shall be the same for the impact site and the mitigation site. TCF receives debits in the Southwest Service Area subject to compensatory mitigation guidance shown in Appendix B of the *2009 Alaska District Regulatory Guidance Letter* (Table 2).

Table 2. Sample Ratios for Compensatory Mitigation - USACE Alaska District

Impacted Wetland or Other Waters of the U.S.	Type of Compensatory Mitigation	
	Preservation	Restoration and/or Enhancement
<u>Low</u> Category III or IV	1.5:1	1:1
<u>Moderate</u> Category II or III	2:1	1:1
<u>High</u> Category I or II	3:1	2:1

To the extent possible, TCF proposes to generate credits for the Kaleak property that match the credit units used for the wetland impacts. However, discrepancies beyond the control of TCF in the conversion of acres to credits remain.

5.3. Functional Multiplier. To effectively generate credits by wetland/buffer type from this preservation mitigation site, wetland functions need to be converted to a standard credit metric. TCF proposed to use Appendix B: Sample Ratios for Compensatory Mitigation presented in the 2009 Alaska District Regulatory Guidance Letter to create four *functional multipliers* based on the four categories of wetlands. For all wetland types, TCF proposes to use four *functional multipliers* that assign a higher credit value to Category I and II wetlands (1.00), while Category III (0.66), Category IV (0.33), and Category I-III wetland buffers (0.50) are assigned a lower credit value relative to function. (Table 3).

Table 3. Proposed Functional Multipliers by Wetland Function for all Wetland Types

Preserved Wetlands and Buffers	Functional Multiplier
Category I and II Wetland	1.00
Category III Wetland	0.66
Category IV Wetland	0.33
CI-III Wetland Buffers	0.50

5.4. Credit Generation. *Functional multipliers* are applied to adjusted wetland and buffer acres generating 90.96 Category I-II palustrine credits, 5.02 palustrine buffer credits, 0.22 Category I riverine credits and 6.05 riverine buffer credits. For the Southwest Service Area, this mitigation site will generate a total of 95.98 palustrine credits and 6.27 riverine credits (Table 4).

Table 4. Proposed Credits Generation Methodology

Wetland Function	Adjusted Acres	Functional Multiplier	Credits
Category I - II - Palustrine Wetland	90.96	1.00	90.96
Category I - Riverine Wetland	0.22	1.00	0.22
Buffer – Palustrine	10.04	0.50	5.02
Buffer – Riverine	12.10	0.50	6.05
Sum - Palustrine wetland and buffer	101.00		95.98
Sum - Riverine wetland and buffer	12.32		6.27

6. MITIGATION WORK PLAN (33 CFR Section 332.4(c)(7))

This property contains undisturbed wetlands and no immediate work is needed to maintain, increase or alter their functions

7. MAINTENANCE PLAN (33 CFR Section 332.4(c)(8))

No construction is needed to maintain and/or improve the wetland conditions on this property.

8. PERFORMANCE STANDARDS (33 CFR Section 332.4(c)(9))

Performance standards are observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation

project meets its objectives. For this project, performance standards include those used in the office-based wetland functional assessment.

Aquatic Resource Identification

Aerial photographs, existing mapping and documentation and oblique photographs were used to determine the presence or absence of wetlands. By combining datasets into a GIS database, wetland scientists delineated probable wetlands and other waters by using vegetation clues, evidence of soil saturation, and topography.

Results: Wetlands are identified on the property.

Aquatic Resource Function

In accordance with the 2009 USACE Regulatory Guidance Letter (RGL) N. 09-01, wetlands were assessed to determine functional capacity from ten functions: flood flow alteration, general habitat suitability, sediment removal, general fish habitat, nutrient and toxicant removal, native plant richness, erosion control and shoreline stabilization, educational or scientific value production of organic matter and its export, and uniqueness and heritage.

Results: Wetlands are high-functioning wetlands in the Mulchatna River watershed.

Aquatic Resource Categorization

In accordance with the 2009 USACE Regulatory Guidance Letter (RGL) N. 09-01, wetland scientists assigned each wetland type to a category: Category I - high functioning wetlands; Category II - high to moderate functioning wetlands; Category III - moderate to low functioning wetlands; and Category IV - degraded and low functioning wetlands.

Results: Category I and II wetlands and buffers are identified on the property.

HDR Alaska Inc. completed the wetland functional assessment using a desktop approach. No field data were collected from the property. HDR has extensive wetland experience in this region collecting field data and applying GIS analysis (e.g., contracts with Pebble Mine). Therefore, HDR's methods to analyze the aquatic resources are based on the best professional judgment available, and a site-visit is not warranted at this time to confirm the results.

The Kaleak property contains Category I and Category II wetlands and buffers. The management objectives for the Kaleak property will be to ensure that the quantity and function of these wetlands are maintained.

9. MONITORING REQUIREMENTS (33 CFR Section 332.4(c)(10))

Monitoring of the Kaleak property will determine if the performance standards continue to be met. Following the approval of this mitigation plan, TCF will provide an annual monitoring report to the IRT for five (5) years. TCF will work directly with BBHLT to produce the monitoring report. Following this five (5) year monitoring period, BBHLT will only consult with TCF if a significant threat to the aquatic resources is identified.

TCF and/or BBHLT will monitor the property annually from aircraft to view the physical condition of the property and associated wetlands. Should a physical alteration of concern be identified, TCF and BBHLT may conduct an on-site visit to further assess the impacts to

wetlands. If an alteration to the property has been identified as having significant impact to the wetlands, then TCF and BBHLT will take action to resolve the issue and restore the wetland values to baseline conditions. TCF will consult with, and occasionally assist, BBHLT on remediating the violations. Alterations to the property may result in an additional functional assessment to determine if the performance standards continue to be achieved.

10. LONG-TERM MANAGEMENT PLAN (33 CFR Section 332.4(c)(11))

The principal threat to aquatic resources on the Kaleak property is conversion by human development. This threat has been alleviated by conveying the property to BBHLT, a dedicated conservation entity. BBHLT will own and manage the Kaleak property to maintain the performance standards and keep the property in an unimpaired and undeveloped state. The principal management activity will entail monitoring to ensure that the performance standards continue to be met.

11. ADAPTIVE MANAGEMENT PLAN (33 CFR Section 332.4(c)(12))

If BBHLT discovers significant negative impacts to aquatic resources on the property, BBHLT will inform TCF and the IRT of said impacts. BBHLT, in consultation with TCF, will restore the property to baseline condition. If restoring to the baseline condition identified in the performance standard is not feasible or financially viable for BBHLT or TCF, a reduction of release credits may be warranted by the Corps, in consultation with the IRT.

Should BBHLT ceases to exist, Article V of BBHLT's Articles of Incorporation provides guidance to the management of assets and properties, such as the Kaleak property. As stated below, the Board of Directors to BBHLT will identify nonprofit organizations whom will acquire these assets for conservation purposes. Such partners may include The Nature Conservancy, Great Land Trust and The Conservation Fund.

ARTICLE V

Upon the dissolution or final liquidation of this corporation, its assets remaining after payment, or provision for payment, of all debts and liabilities of the corporation shall be distributed by the Board of Directors to one or more nonprofit funds, foundations, or corporations having similar or analogous character or purposes that are organized and operated exclusively for charitable purposes and which have established tax-exempt status under Section 501(c)(3) of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent federal tax laws.

12. FINANCIAL ASSURANCES (33 CFR Section 332.4(c)(13))

TCF will provide BBHLT with \$15,000 for monitoring, stewardship and long-term management. These funds will be released to BBHLT from TCF once the mitigation plan has been approved.

The financial assurances were calculated based on the relatively low costs to monitor and manage the properties for preservations in this area. BBHLT will likely monitor the Kaleak property during flights to monitor other BBHLT owned properties and easements in the area, which will further reduce the costs specific to monitoring the Kaleak property.

13. CREDIT RELEASE SCHEDULE (*33 CFR Section 332.8(o)(8)*):

With approval of the mitigation plan by the district engineer, and with support from the IRT, the amount of 95.98 palustrine credits and 6.27 riverine credits will be released to TCF for the Southwest Service Area.

Subject to this mitigation plan and functional assessment, the monitoring reports during the monitoring period will result in no additional release of credits. If significant impacts to the property are identified during this period that may reduce the quantity and/or quality of aquatic resources, then the district engineer, in consultation with the IRT, may determine that a reduction of released credits is warranted.

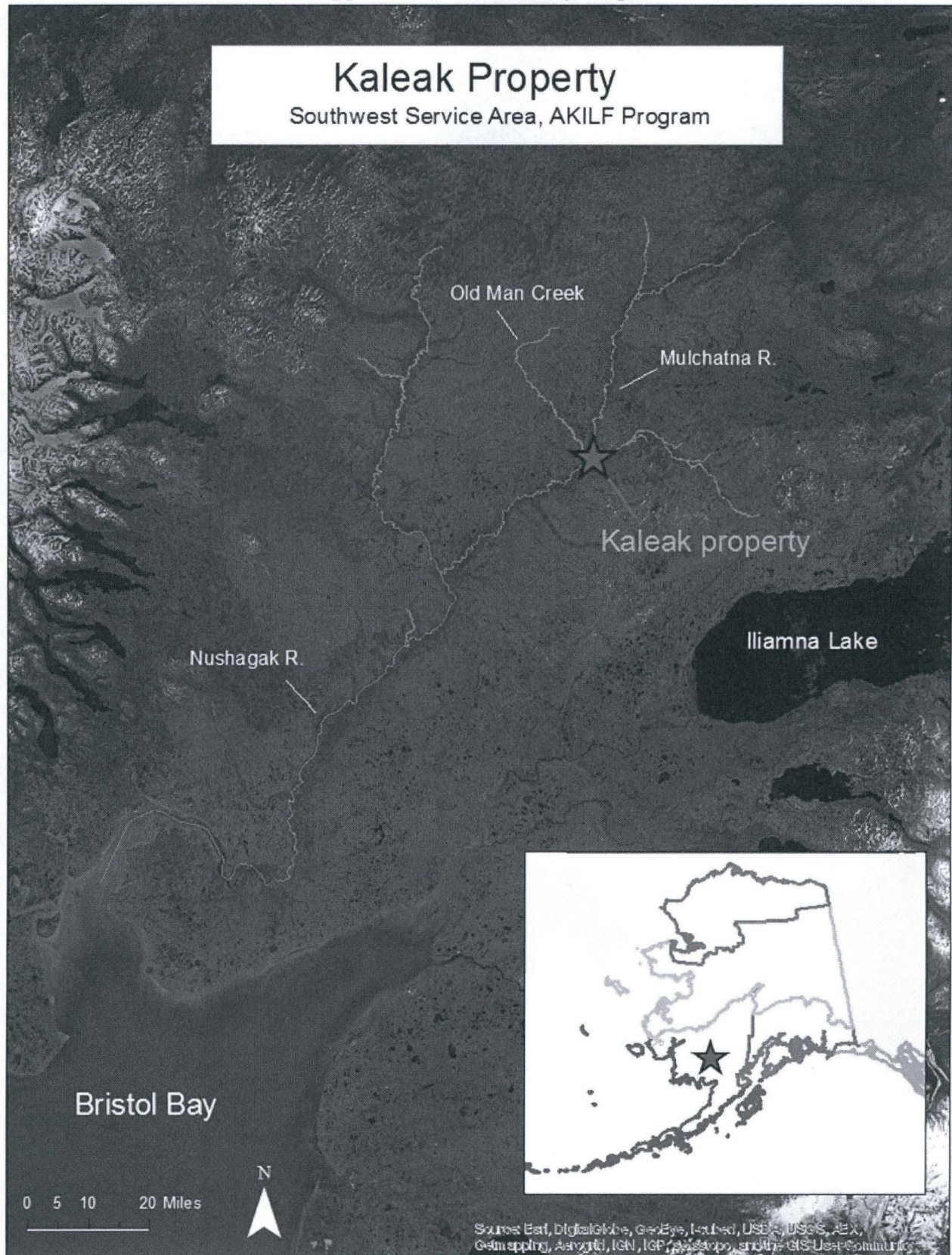
TCF may choose to collect field data from the Kaleak property in the future to assess the remaining uplands not assigned to wetland categories in the functional assessment conducted by HDR. In this case, TCF will produce an additional functional assessment and mitigation plan, from which TCF, in consultation with the IRT, may generate and release additional credits.

SIGNATURE FOR APPROVAL

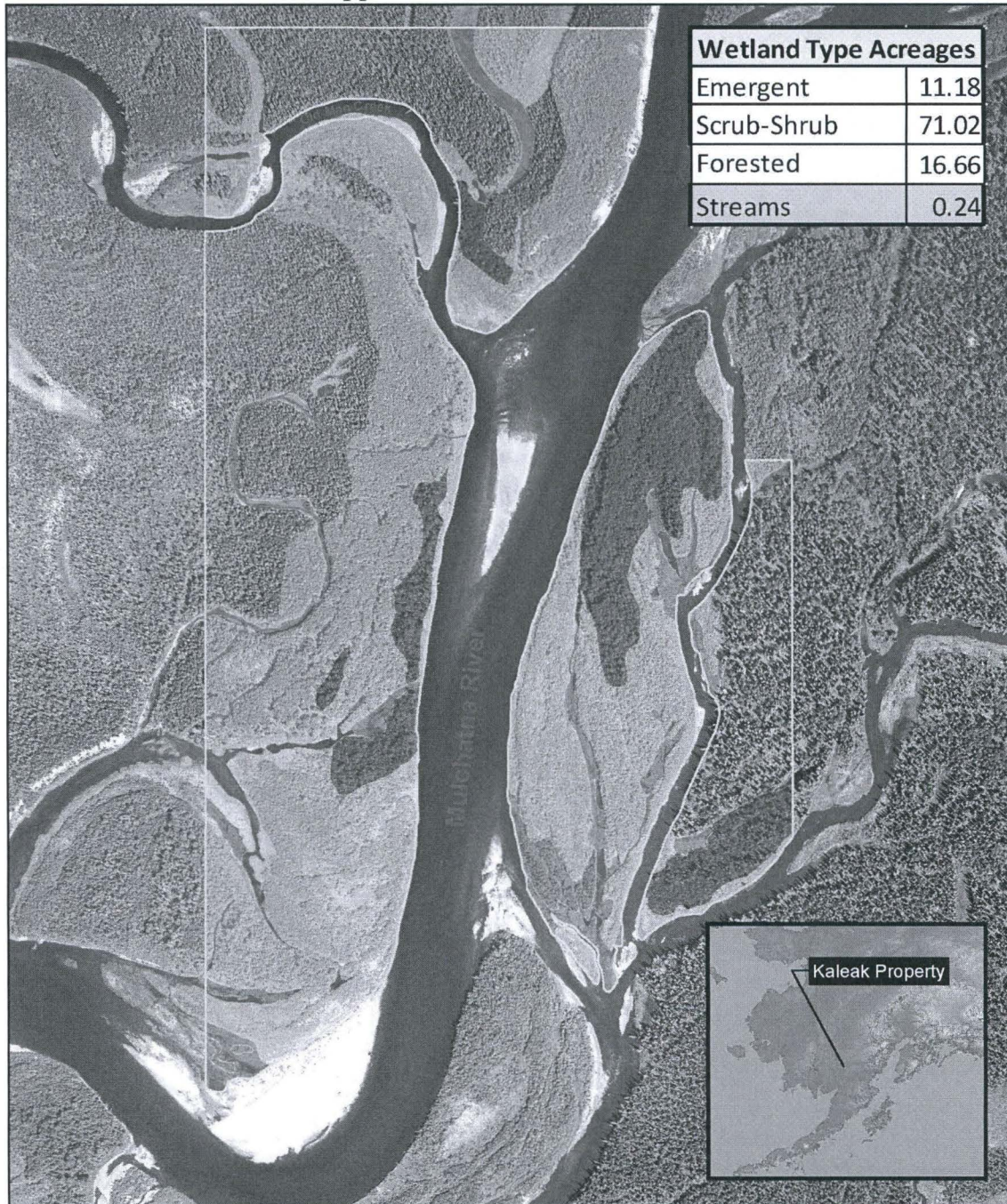
Army Corps of Engineers, Alaska

Date

Appendix A - Bristol Bay Map



Appendix B - Wetland Delineation



Legend

Wetland Types

- Emergent Wetlands
- Scrub-Shrub Wetlands
- Forested Wetlands
- Streams
- Mapping Boundaries

0 250 500
Feet



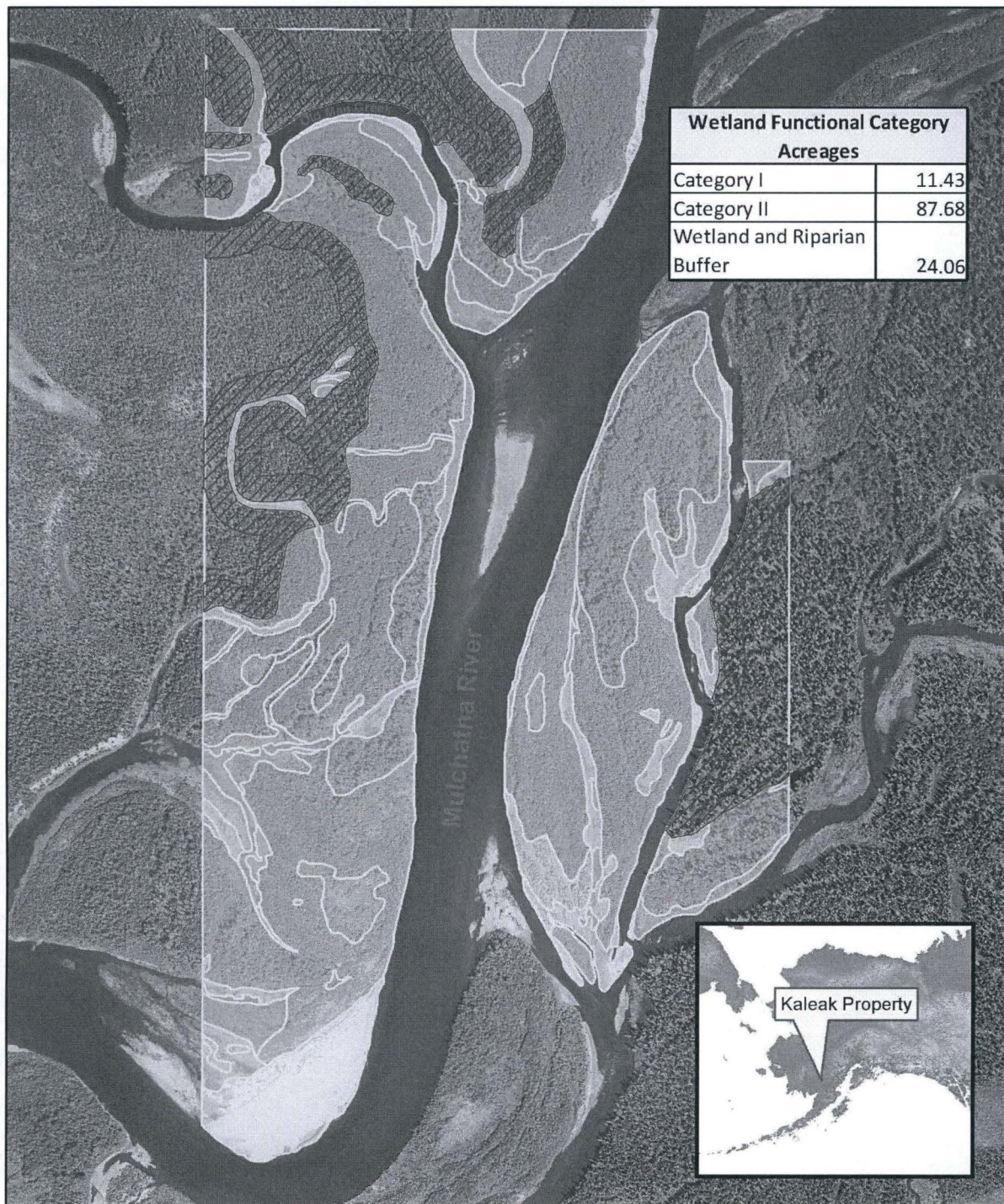
THE CONSERVATION FUND
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**Kaleak Functional Assessment
Wetland Mapping
Figure 1**

Delineation

and

Appendix C - Wetland and Buffer Functions Map



Legend

- Category I Wetlands/Waters
- Category II Wetlands/Waters
- Wetland and Riparian Buffers
- Mapping Boundaries
- Streams

0 250 500 Feet



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**Kaleak Functional Assessment
Wetland Functional Categories
Figure 2**