work, please let me know and we can try another software or snail mail.

Thanks for your efforts in this regard.

Have you heard about this proposed cemetery yet? Is there anything else you or your colleagues would like to know or do?

Thank you,

Thomas R Wolforth

Cultural Resource Manager
Alaska Army National Guard and Department of Military and Veterans Affairs
POBox 5169, JBER, AK 99505
o 907.428.7184
c 907.350.8584
tom.wolforth@alaska.gov

From: Kayde Whiteside <kayde.whiteside@fnsb.gov>
Sent: Friday, February 7, 2025 3:20 PM
To: Wolforth, Tom R (MVA) <tom.wolforth@alaska.gov>
Cc: melissa.kellner <melissa.kellner@fnsb.gov>; Bowen, Verdie A (MVA) <verdie.bowen@alaska.gov>
Subject: RE: invitation to consult on a cultural resource investigation in the borough

Hello Tom,
I am staff to the joint City of Fairbanks and Fairbanks North Star Borough Historic Preservation Commission. I may receive any communications you may have for the commission – I know they will be happy to consult on the project.
It is possible that you may just be able to send over the report via email. If it doesn't work, we can explore other ways of sending the info – common methos for the Borough include Dropbox and Google Drive. Alternatively, we can receive paper mail at PO Box 71267, Fairbanks, AK 99707.

Let me know what works.

Thanks for reaching out about this project.

Kayde Whiteside
Long-Range Planner | Community Planning
kayde.whiteside@fnsb.gov | 907.459.1260

Take the Fairbanks Area Community Values Survey – WIN PRIZES!

https://arcg.is/GyabD

From: Kayde Whiteside
To: Wolforth, Tom R (MVA)
Cc: melissa.kellner
Subject: RE: DMVA invitation to consult on new state veterans cemetery in Salcha
Date: Monday, March 17, 2025 2:12:12 PM
Attachments: image001.png

Hello Tom,
Yes, the Commission voted 6-0 to concur with the determination of no historic properties affected. You may listen to the meeting here: Historic Preservation Commission Meeting • Fairbanks North Star Borough • CivicClerk the review of this item begins at 1:17:03.

No questions for the project at this time. I imagine they will be interested to follow this project as it progresses.

Thanks for checking in with us!

Kayde Whiteside
Long-Range Planner | Community Planning
kayde.whiteside@fnsb.gov | 907.459.1260

"It is best and easiest not to discredit others but to prepare oneself to be as good as possible." - *Socrates*

From: Wolforth, Tom R (MVA)
To: Bob Sattler
Subject: Invitation to consult on Section 106 undertaking for new state veterans cemetery in Salcha
Date: Tuesday, February 11, 2025 10:33:00 AM
Attachments: 202502_CRM_Sect106Consult_Salcha.pdf
AK-09-01 Fairbanks - NCA Grants 106 Delegation Letter.pdf
DMVA IAVC Salcha - Geotechnical Exploration Plan 2025-02.pdf

Greetings Bob Sattler,

This email includes a letter of invitation to the Tanana Chiefs Conference to consult on the proposed Dept of Military and Veterans Affairs (DMVA) state veterans cemetery in Salcha. There are three other files that go with it. Two of those are also included in this email. The third is the large one.

I am going to try using the ZendTo Alaska first to get that to you. That means I will upload that file to that software. It will notify you in an email and provide you a code to download. I think that you have seven days to grab it. If for some reason that does not work, please let me know and we can try another software or snail mail.

Thanks for your efforts in this regard.

Thank you,

Thomas R Wolforth

Cultural Resource Manager
Alaska Army National Guard and Department of Military and Veterans Affairs
POBox 5169, JBER, AK 99505
o 907.428.7184
c 907.350.8584
tom.wolforth@alaska.gov

From: Wolforth, Tom R (MVA)
To: evie.combs@healylake.org
Subject: Invitation to consult on Section 106 undertaking proposed veterans cemetery in Salcha
Date: Tuesday, March 4, 2025 2:25:00 PM
Attachments: 202502_CRM_Sect106Consult_Salcha.pdf
AK-09-01 Fairbanks - NCA Grants 106 Delegation Letter.pdf
DMVA IAVC Salcha - Geotechnical Exploration Plan 2025-02.pdf

Greetings Evelynn Combs,

I am the cultural resource manager for the Alaska Army National Guard and the Dept of Military and Veterans Affairs (DMVA). I reached out to the Tanana Chiefs Conference to consult on the proposed DMVA state veterans cemetery project in Salcha. Dougless Skinner there recommended that I reach out to the Healy Lake Tribe and provided me with your email address. I am grateful for their advice and am looking forward to sharing this with you.

This email includes a letter of invitation to the Healy Lake Tribe to consult on veterans cemetery project in Salcha. There are three other files that go with it. Two of those are also included in this email. The third is the large one.

I am going to try using the ZendTo Alaska first to get that to you. That means I will upload that file to that software. It will notify you in an email and provide you a code to download. I think that you have seven days to grab it. If for some reason that does not work, please let me know and we can try another software or snail mail. Please be sure to check the Spam file in case ZendTo goes there (which I think that it does sometime).

Thanks for your efforts in this regard.

Thank you,

Thomas R Wolforth

Cultural Resource Manager
Alaska Army National Guard and Department of Military and Veterans Affairs
POBox 5169, JBER, AK 99505
o 907.428.7184
c 907.350.8584
tom.wolforth@alaska.gov

From: Wolforth, Tom R (MVA) <tom.wolforth@alaska.gov>
Sent: Tuesday, April 29, 2025 9:54 AM
To: Evelynn Combs <evie.combs@healylake.org>
Cc: jerry_isaac@hotmail.com; Kristi McLean <KMcLean@rmconsult.com>
Subject: IAVC map and information on the website

Greetings Evie,

When we talked last week you asked about getting the latest plans for the IAVC (Interior Alaska Veterans Cemetery) in Salcha.

Thanks to colleagues working on the cemetery design, I am attaching that and a map that shows where that is relative to the Tanana River.

Please note that proposed plans are situated over the portion of the land that has already had trees removed (mostly). Those trees were removed decades ago by the people that used to live there. That land was used as hay fields, is my understanding, or maybe that part was just a nice lawn near their house.

This information and more is also available online, too, at: Interior Alaska Veterans Cemetery - PublicInput

This website is a good resource, and you can interact directly with the IAVC team with comments that they will respond to.

The proponent sent out a "scoping letter" to many stakeholders. Healy Lake Tribe and Tanacross Village were both included on that. Did you receive that letter, I hope?

I am including Jerry Isaac on this email to share information on the website. I am also including Kristi McLean on this email as she is on the design team and could answer questions directly about the project layout. She is also involved with the scoping letter.

Am looking forward to more discussion with you.

Thomas R Wolforth
Cultural Resource Manager
Alaska Army National Guard and Department of Military and Veterans Affairs
POBox 5169, JBER, AK 99505

From: Wolforth, Tom R (MVA) <tom.wolforth@alaska.gov>
Sent: Friday, April 4, 2025 3:02 PM
To: Evelynn Combs <evie.combs@healylake.org>; Bowen, Verdie A (MVA) <verdie.bowen@alaska.gov>
Cc: Slaikeu, Jeffrey A (MVA) <jeffrey.slaikeu@alaska.gov>; Bob Sattler <bob.sattler@tananachiefs.org>; Flournoy, Donald B (MVA) <donald.flournoy@alaska.gov>; Kristi McLean <KMcLean@rmconsult.com>; Don Porter <dporter@rmconsult.com>
Subject: Next steps in consultation for the proposed new veterans cemetery in Salcha

Greetings Evelynn Combs and Verdie Bowen,

Thank you both for spending time and energy during the National Historic Preservation Act Section 106 consultation for the proposed Interior Alaska Veterans Cemetery in Salcha. There is still work to be done and decisions to be made as part of this consultation. That process can now best be served by having Mr. Bowen and Ms. Combs spend some time together on this topic.

Before I go too much further, here is bit of an introduction that provides information on each's work and life, and on each's relationship to the Section 106 consultation process for this undertaking:

Verdie A. Bowen, Sr.
Director
State of Alaska, Office of Veterans Affairs
4600 Debarr Road, Suite 180
Anchorage, AK 99508
Toll Free: 888-248-3682
907.334.0874 (main)
907.334.0869 (fax)
e-mail: verdie.bowen@alaska.gov
Web page: veterans.alaska.gov
Serving Alaska One Veteran at a Time

Mr. Bowen is the principal proponent of the proposed Interior Alaska Veterans Cemetery (IAVC) in Salcha.

Evelynn Combs
Healy Lake Tribal Council
Secretary/Treasurer
Risk Management Program Coordinator (RMP)
Cultural Resource Manager (CRM)
Work Cell: 907-388-7763
Personal Cell: (907) 251-8797
Alt Email: eviecombs@hotmail.com

Ms. Combs is the representative of the consulting party that has expressed a desire to have a cultural monitor present during the undertaking.

Here is a quick review of the situation at hand.

The DMVA has shared plans for the IAVC with the Healy Lake Tribal Council and requested: information from the council on how that might impact the tribe and; input from them regarding knowledge of the area. Council members of the Healy Lake Tribal Council have met and reflected on that request, resulting in sharing knowledge and concerns with DMVA which include that having a cultural monitor at the IAVC would alleviate concerns.

Here is where the DMVA stands on the subject at the moment.

The DMVA has reflected on that input and appreciates the efforts and insights shared by the tribe. While the DMVA is sympathetic to the objectives of having a cultural monitor involved, DMVA is not sure exactly what cultural monitor entails for this project. Lacking a full understanding of all that entails, DMVA is not able to understand how much financially it will cost the DMVA to support the cultural monitoring. Financial costs are critical criteria in the decision-making and planning for the DMVA for this project, and these factor into the DMVA's decision on whether they are able to support having a cultural monitor involved with the project.

Recommendations for next steps.

It would be mutually beneficial for Mr. Bowen and Ms. Combs to meet (online or in

person as availability permits) to explore and elaborate on the ways cultural monitoring might be applied in the IAVC at Salcha project. That would include but not be limited to:

- Who conducts the monitoring? What skills and experience do they have?
- What activities are conducted by a cultural monitor?
- How much time might a cultural monitor spend a day, a week and over the duration of the project?
- Are there certain essential activities that a cultural monitor performs and others that are on a need-be or on-call basis?
- Identifying plans and expectations for the duration of the field work.
- What kinds of things might cultural monitoring do beyond the field work?
- What are the expectations for communications and coordination between project construction team and a cultural monitor during the work?
- How is this work contracted for?
- How much does this kind of work cost?
- Is there a deliverable, such as a report, associated with this work?

The goal of this exploration would be to establish a sort of scope of work that would be used to make an estimate of the financial cost of this endeavor. That would provide DMVA with information sufficient to decide how they prefer to proceed.

I am available to facilitate such a proposed meeting if that is what you prefer. That meeting could be as small at being between Mr. Bowen and Ms. Combs. Alternatively, it may include the entire Healy Lake Tribal Council council members. Members of the design and planning team might also be involved. It may be worthwhile to include the Alaska State Historic Preservation Office as well.

Please let me know how you would like to proceed. If you prefer to speak directly with one another without me or others, I certainly endorse that, too.

Thank you,

Thomas R Wolforth

Cultural Resource Manager
Alaska Army National Guard and Department of Military and Veterans Affairs
POBox 5169, JBER, AK 99505
o 907.428.7184
c 907.350.8584
tom.wolforth@alaska.gov

From:	Wolforth, Tom R (MVA)
To:	jerry_isaac@hotmail.com
Subject:	Information on the proposed veterans cemetery in Salcha
Date:	Tuesday, March 4, 2025 3:41:00 PM
Attachments:	DMVA IAVC Salcha - Geotechnical Exploration Plan 2025-02.pdf 202502_CRM_Sect106Consult_Salcha.pdf AK-09-01 Fairbanks - NCA Grants 106 Delegation Letter.pdf

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Greetings Administrator Jerry Isaac,

Thank you for taking my phone call today about the proposed new veterans cemetery in Salcha.

I am the cultural resource manager for the Department of Military and Veterans Affairs (DMVA). I reached out to the Tanana Chiefs Conference to consult on the proposed DMVA state veterans cemetery project in Salcha. Dougless Skinner there recommended that I reach out to the Tanacross Village. I am grateful for their advice and am looking forward to sharing this with you.

Thank you for your input regarding a cemetery on the bluff near Salcha and a person that may know more about that. I look forward to working with you and them to learn more about that. That is important information to know about so the proposed veterans cemetery does not create any adverse impacts to that and other cultural resources valuable to the Tanacross Village.

This email includes a letter of invitation to the Tanacross Village to consult on veterans cemetery project in Salcha. There are three other files that go with it. Two of those are also included in this email. The third is the large one.

I am going to try using the ZendTo Alaska first to get that to you. That means I will upload that file to that software. It will notify you in an email and provide you a code to download. I think that you have seven days to grab it. If for some reason that does not work, please let me know and we can try another software or snail mail. Please be sure to check the Spam file in case ZendTo goes there (which I think that it does sometime).

Thanks for your efforts in this regard.

Thank you,

Thomas R Wolforth

Cultural Resource Manager
Alaska Army National Guard and Department of Military and Veterans Affairs
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o 907.428.7184
c 907.350.8584
tom.wolforth@alaska.gov

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Military and Veterans' Affairs
Office of Veterans' Affairs

4600 Debarr Road, Suite 180
Anchorage, AK 99508
Main: 907.334.0874
Fax: 907.334.0869

Jerry Isaac
Tanacross Village Council
Tribal Administrator
jerry_isaac@hotmail.com

June 10, 2025

Re: Interior Alaska Veterans Cemetery
Section 106 Consultation

Dear Mr. Isaac,

The State of Alaska Department of Military and Veterans Affairs (DMVA), as delegated by the National Cemetery Administration (NCA) of the U.S. Department of Veterans Affairs (VA), would like to conclude our consultation undertaken in the fulfillment of responsibilities under Section 106 of the National Historic Preservation Act and its implementing regulations. The proposed project to build an Interior Alaska Veterans Cemetery is located on a parcel of land recently acquired by the State of Alaska. The property, 7229 De Halden Lane, is located in the Fairbanks North Star Borough (FNSB) in Sections 26 and 27, Range 4 East, Township 4 South, Fairbanks Meridian, USGS quad Big Delta C-6 (Figure 1).

This letter is being sent as a follow up to previous communication with the DMVA. We understand there is some concern regarding the potential for previously unidentified cultural resources in the area and that the tribe would like a cultural resource monitor to be present during construction. The DMVA appreciates this concern and has explored the possibility. Unfortunately, the project as currently funded, cannot provide a cultural resource monitor throughout project activities. We have developed an Inadvertent Discovery Plan (IDP) that the selected contractor will be required to follow during construction.

The IDP, so named because it details the inadvertent or unanticipated identification of previously unknown human remains and/or historic resources, outlines the additional requirements undertaken by the project to help ensure that any cultural resources material encountered during construction is identified and handled correctly. Some key components of the IDP include:

- Mandatory training for all employees on site during excavation activities. This training includes an overview of what cultural resources are, what types of cultural resources are likely to be uncovered during excavation, and why such resources are important.

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Military and Veterans' Affairs
Office of Veterans' Affairs

4600 Debarr Road, Suite 180
Anchorage, AK 99508
Main: 907.334.0874
Fax: 907.334.0869

- The protocol to be followed should an unanticipated discovery occur. This includes informing you, as the point of contact for the Tanacross Village Council, as well as the State Historic Preservation Office (SHPO) and other identified consulting parties that a discovery has been made.
- The requirement that work within 50 feet of the discovery will be halted until a qualified archaeologist has made an evaluation. Consultation with SHPO and consulting parties will occur if the evaluation determines that the discovery is a cultural resources artifact.

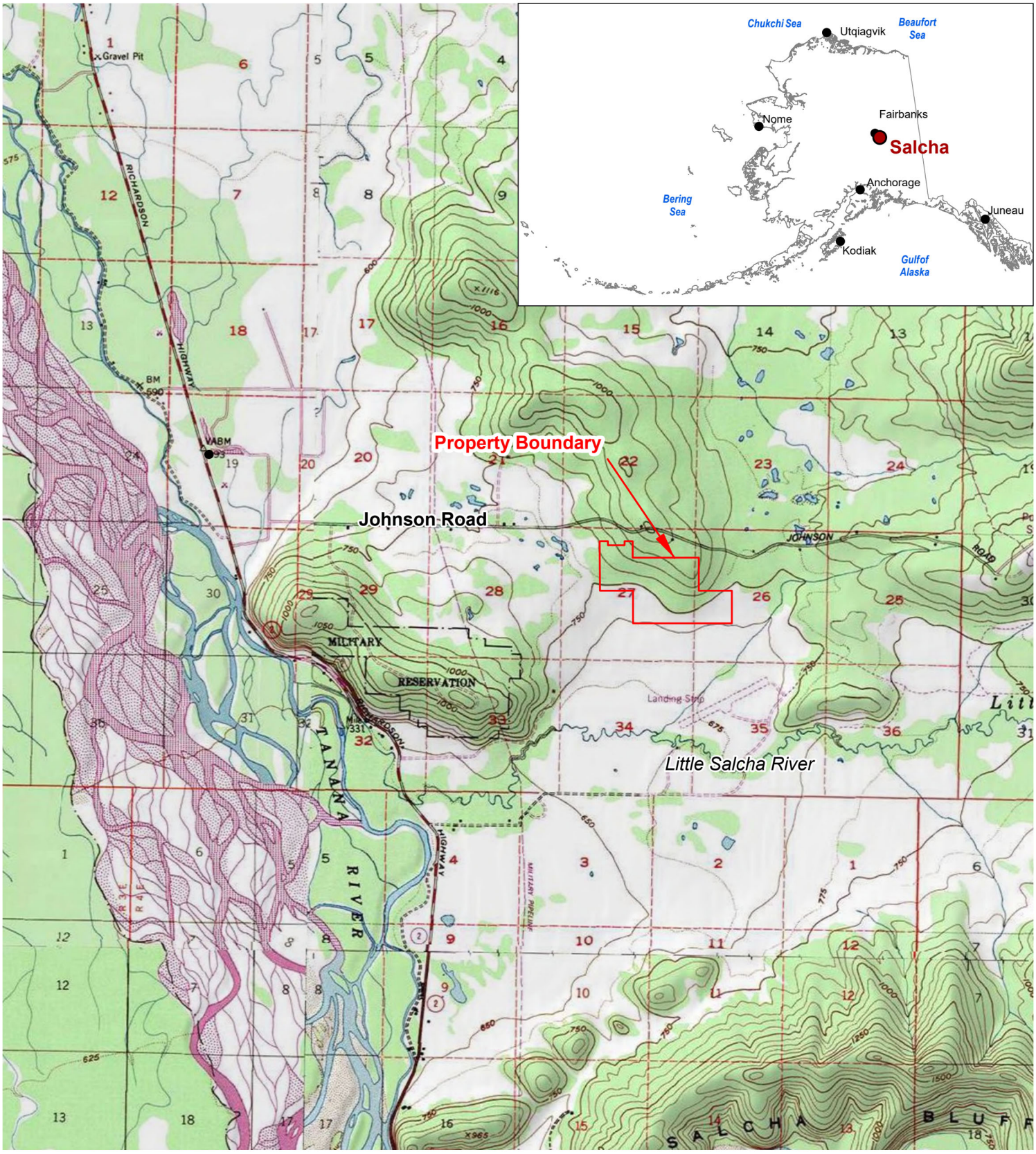
Our hope is that you will accept the creation of the IDP as a sincere attempt to mitigate concerns while allowing this project to move forward. Please let us know if you would like someone else to be listed as the point of contact should an inadvertent discovery occur. If you have any additional questions or concerns, feel free to reach out to me at 907-334-0874 or Verdie.bowen@alaska.gov.

Sincerely,

Forrest E. Powell III
Deputy Director
State of Alaska, Office of Veterans Affairs

Enclosures:
Figure 1: Location and Vicinity Map

CC: Lauren Staft, Project Manager, Statewide Public Facilities
Patrick Geary, DMVA
Tom Wolforth, DMVA
Donald Flournoy, DMVA
Jeffrey Slaikeu, DMVA
Forrest Powell, DMVA
Alyssa Murphy, DMVA
Donald Porter, R&M Consultants, Inc.
Kristi McLean, R&M Consultants, Inc.



ALL LOCATIONS ARE APPROXIMATE

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APPROXIMATE SCALE IN MILES

Notes:
Coordinate System: NAD 1983 StatePlane Alaska 3 FIPS 5003 Feet
Base map from ESRI World Imagery

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PREPARED BY: R&M CONSULTANTS, INC.	INTERIOR ALASKA VETERANS CEMETERY SALCHA, ALASKA Z8003300	PROJ.NO: 1869.03 DATE: MAY 2025
	LOCATION AND VICINITY MAP	REF: EA FIGURE: B-46 1

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Military and Veterans' Affairs
Office of Veterans' Affairs

4600 Debarr Road, Suite 180
Anchorage, AK 99508
Main: 907.334.0874
Fax: 907.334.0869

Bob Sattler
Tanana Chiefs Conference
Senior Archaeologist
bob.sattler@tananachiefs.org

June 10, 2025

Re: Interior Alaska Veterans Cemetery
Section 106 Consultation

Dear Mr. Sattler,

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Our hope is that you will accept the creation of the IDP as a sincere attempt to mitigate concerns while allowing this project to move forward. Please let us know if you would like someone else to be listed as the point of contact should an inadvertent discovery occur. If you have any additional questions or concerns, feel free to reach out to me at 907-334-0874 or Verdie.bowen@alaska.gov.

Sincerely,

Forrest E. Powell III
Deputy Director
State of Alaska, Office of Veterans Affairs

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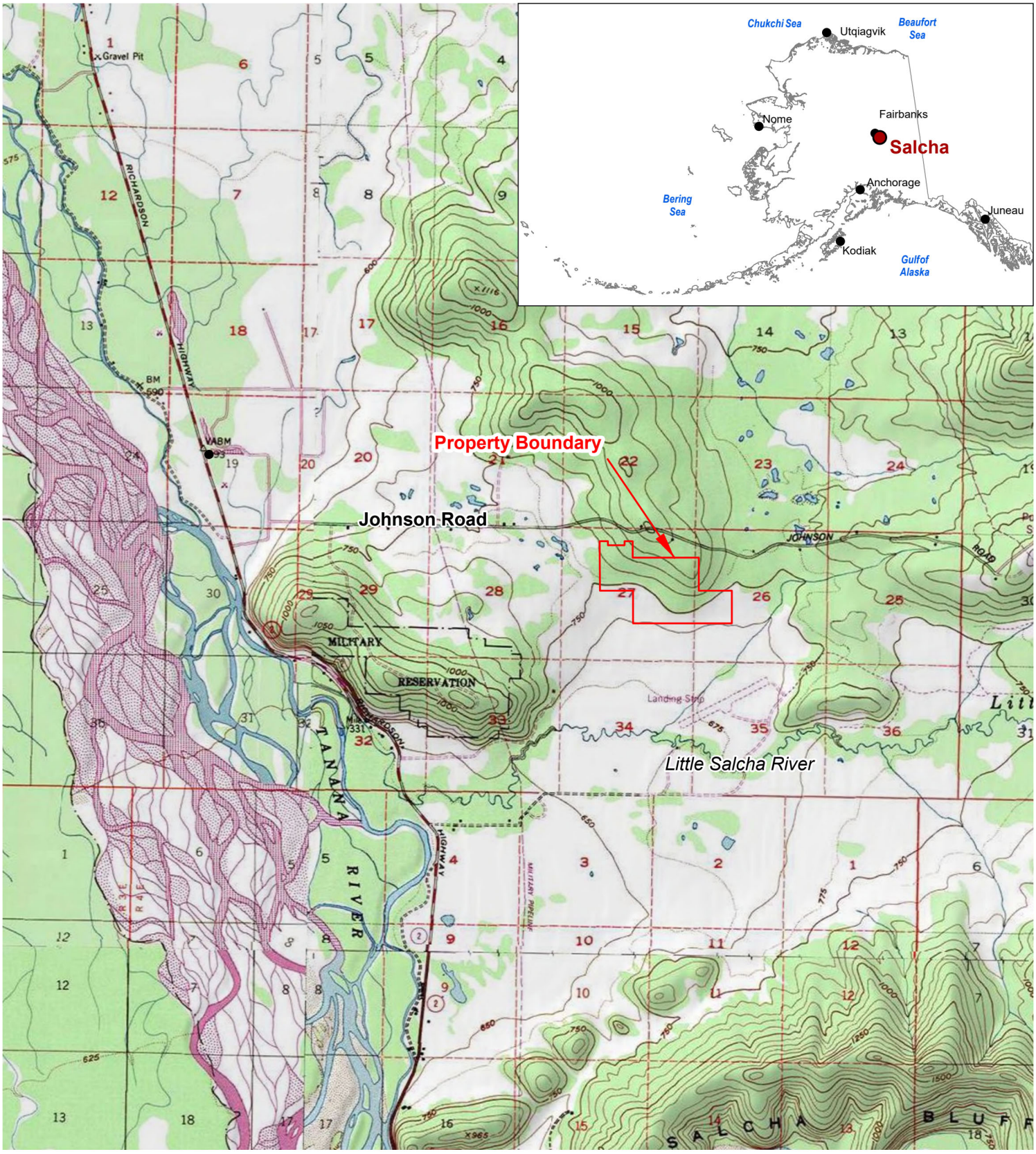
Donald Porter, R&M Consultants, Inc.
Kristi McLean, R&M Consultants, Inc.



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PREPARED BY: R&M CONSULTANTS, INC.	INTERIOR ALASKA VETERANS CEMETERY SALCHA, ALASKA Z8003300	PROJ.NO: 1869.03 DATE: MAY 2025
	LOCATION AND VICINITY MAP	REF: EA FIGURE: B-49 1

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Military and Veterans' Affairs
Office of Veterans' Affairs

4600 Debarr Road, Suite 180
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Main: 907.334.0874
Fax: 907.334.0869

Evelynn Combs
Healy Lake Tribal Council
Cultural Resource Manager
Evie.combs@healylake.org

June 10, 2025

Re: Interior Alaska Veterans Cemetery
Section 106 Consultation

Dear Ms. Combs,

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Sincerely,

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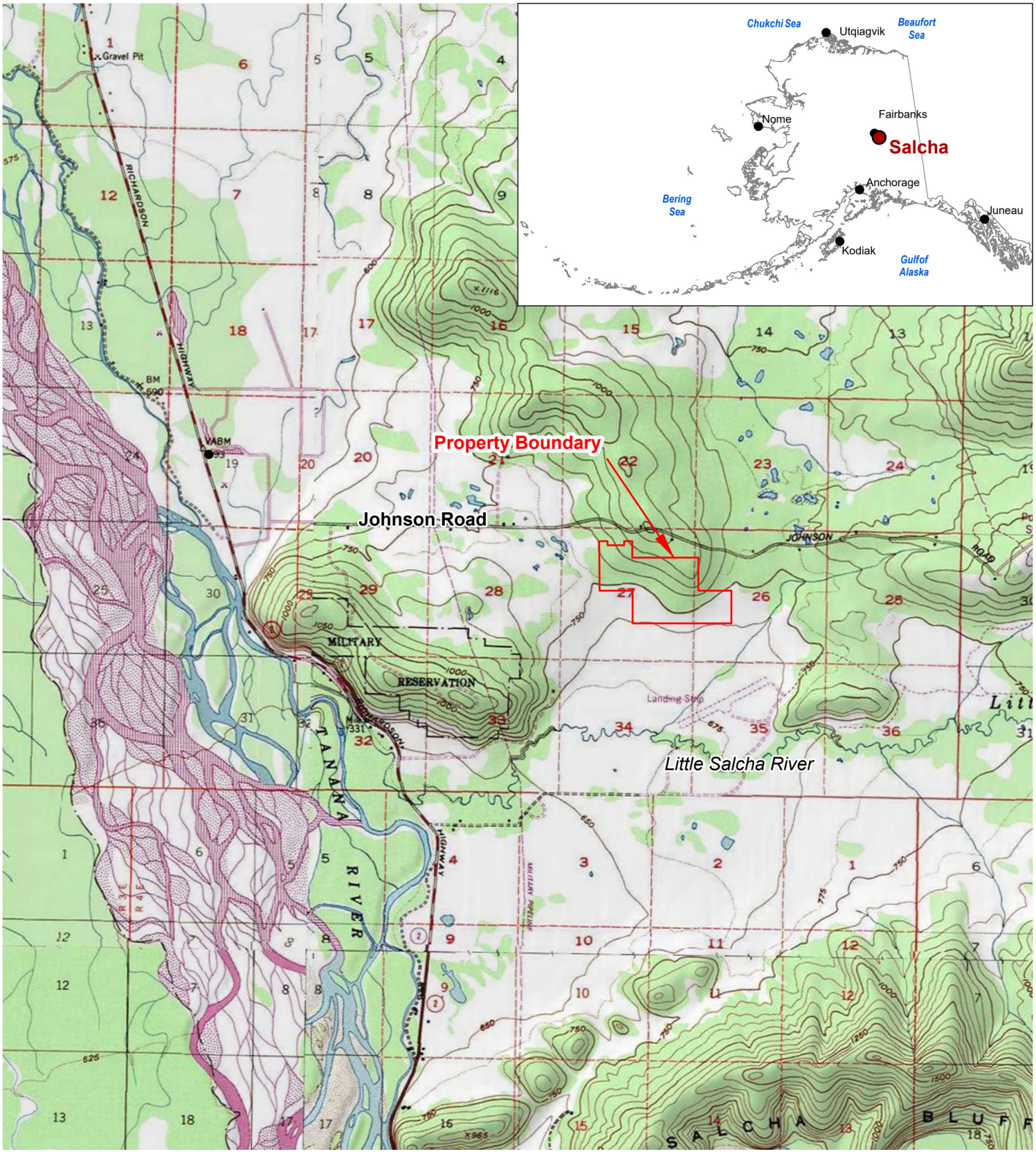
Kristi McLean, R&M Consultants, Inc.



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PREPARED BY: R&M CONSULTANTS, INC.	INTERIOR ALASKA VETERANS CEMETERY SALCHA, ALASKA Z8003300	PROJ.NO:	1869.03
		DATE:	MAY 2025
	LOCATION AND VICINITY MAP	REF:	EA
		FIGURE:	1

From: Evelynn Combs <evie.combs@healylake.org>
Sent: Monday, June 16, 2025 11:45 AM
To: Kristi McLean <KMcLean@rmconsult.com>
Cc: Staft, Lauren A (DOT) <lauren.staft@alaska.gov>; Geary, Patrick S (MVA) <patrick.geary@alaska.gov>; Wolforth, Tom R (MVA) <tom.wolforth@alaska.gov>; Flournoy, Donald B (MVA) <donald.flournoy@alaska.gov>; Slaikeu, Jeffrey A (MVA) <jeffrey.slaikeu@alaska.gov>; Powell, Forrest E (MVA) <forrest.powell@alaska.gov>; Murphy, Alyssa R (MVA) <alyssa.murphy@alaska.gov>; Don Porter <dporter@rmconsult.com>
Subject: Re: Interior Alaska Veterans Cemetery

Hi Kristi, thank you for the kind email! This plan is well thought out and meets Tribal concerns respectfully and realistically. Thank you for making it happen. When dates for mandatory training are picked out, could I be invited to observe? I have not seen what the modern training practices are, and would very much like to identify the archaeologists and practices that are being taught. This knowledge will help me in future Veterans and Armed Forces Consultations.

I'll keep my fingers crossed we have no discoveries, but if there are, I will be one of the first to volunteer for a field crew! Talk to you soon,

Evie

On Fri, Jun 13, 2025 at 2:58 PM Kristi McLean <KMcLean@rmconsult.com> wrote:

Good afternoon, Ms. Combs,

We appreciate your participation in the consultation process for the Interior Alaska Veterans Cemetery project. Please see the attached letter detailing steps forward. Please feel free to reach out if you have any questions or concerns as we value the Healy Lake Tribal Council's input. Thank you.

Respectfully,
Kristi

Kristi M. McLean, LEED AP *Group Manager – Environmental Services*

R&M CONSULTANTS, INC. | 9101 Vanguard Drive | Anchorage, Alaska 99507
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Innovating Today for Alaska's Tomorrow

--
Evelynn Combs
Healy Lake Tribal Council
Secretary/Treasurer
Risk Management Program Coordinator (RMP)
Cultural Resource Manager (CRM)
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Land Acknowledgments are a Verb
-G. Smith

Learn the traditional Alaska Native place names of where you live with the Dene Atlas

Appendix C – Supporting Materials

1. Cultural Resources Investigation
2. Wetland Delineation and Functional Assessment
3. Phase I Environmental Site Assessment
4. IPaC Report

TNSDS

true north sustainable development solutions

2024 FINAL REPORT FOR CULTURAL RESOURCE INVESTIGATIONS WITH RECOMMENDATIONS FOR ISSUING A FINDING PURSUANT TO SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT OF 1966 AND ITS IMPLEMENTING REGULATIONS 36CFR§800 FOR THE INTERIOR ALASKA VETERANS CEMETERY, LOCATED IN SALCHA, ALASKA

PREPARED FOR:

R&M Consultants, Inc.
Alaska Department of Military and Veterans Affairs and
Alaska Department of Transportation and Public Facilities, Northern Region

PREPARED BY:

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Joan Bayles Burgett, MA, RPA

Contains Sensitive Information – Not for Public Dissemination

APRIL 2025

EXECUTIVE SUMMARY

True North Sustainable Development Solutions, LLC, (TNSDS) has been contracted by R&M Consultants, Inc. (R&M) for cultural resource management support for the Section 106 compliance of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations found in Code 36 of the Code of Federal Regulations (CFR) §800 for the Interior Alaska Veterans Cemetery Project (project). R&M was contracted by the Alaska Department of Transportation and Public Facilities (DOT&PF) to develop a veterans' cemetery within a portion of property owned by the State of Alaska, located in Salcha, Alaska. The cemetery will serve Alaskan veterans and their families, friends, and loved ones living in the Interior of Alaska. The project is considered a federal undertaking pursuant to 36CFR§800.16(y) because it is subject to a federal grant and funding.

R&M contracted TNSDS to provide recommendations per the NHPA, which included proposing an area of potential effects (APE), carrying out the necessary level of effort for identifying historic properties, and assessing whether the undertaking would result in effects to historic properties pursuant to 36CFR§800. A cultural resources investigation consisting of both a desktop review of previously recorded cultural resources and previous cultural resources investigations, followed by a Phase I Archaeology Survey with limited subsurface testing and architectural survey within the entire APE, was determined to be the necessary level of effort for identifying historic properties for the project.

The results of this cultural resources investigation, along with recommendations for issuing an agency finding pursuant to 36CFR§800 are provided herein. The Phase I Archaeology Survey was conducted by TNSDS Secretary of Interior (SOI)-qualified Project Archaeologist Tiffany Ann Curtis, MA, and TNSDS SOI-qualified Project Archaeologist Justin Hays, MA, RPA, from June 3rd to June 12th, 2024. TNSDS Principal Historic Properties Consultant Robert Meinhardt, MA, was on-site and conducted survey with cultural resource technicians Mark Rusk, BA, Casey Somerville, BS, Sean Weir, BS, and a field technician. The survey was carried out by walking transects across the entire APE at ten-meter (m) intervals when possible. A total of nine 50cm x 50cm test units were excavated to various depths that will be expanded upon later in this report. The architectural survey was conducted alongside the archaeological survey on June 10th and 11th, 2024. Survey was conducted by TNSDS Cultural Resources Technician Mark Rusk, BA, and supervised by TNSDS SOI-qualified Project Architectural Historian Gianna Kersch, MA. Pedestrian survey documented the existing built environment, which was assessed by utilizing property records and aerial imagery to determine the history and age of the built resources in the APE. Based on the results of both the survey and testing, it has been determined that there are no cultural resources within the APE that constitute historic properties pursuant to 36CFR§800. As such, it is recommended that a finding of No Historic Properties Affected for the Interior Alaska Veterans Cemetery Project be issued, and the undertaking proceed without further review.

The locations of cultural resources are restricted information under the requirements of the Alaska Historical Preservation Act, Archaeological Resources Protection Act, and National Historic Preservation Act. The report was utilized to facilitate environmental, engineering, and cultural resource management for planning efforts only. The full report is available upon request, however, and is redacted for this submittal after the Executive Summary.

WETLAND DELINEATION AND FUNCTIONAL ASSESSMENT

INTERIOR ALASKA VETERANS CEMETERY

7229 DE HALDEN LANE, SALCHA, ALASKA

IRIS Program No. Z800330000

Federal Project No. TBD

Prepared By:

R&M Consultants, Inc.

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DOT&PF Statewide Public Facilities

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FINAL

12 March 2024

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ACRONYMS AND ABBREVIATIONS

AKWAM	Alaska Wetland Assessment Method
AWC	Anadromous Waters Catalog
CWA	Clean Water Act
DOT&PF	Alaska Department of Transportation and Public Facilities
FNSB	Fairbanks North Star Borough
IPaC	Information for Planning and Consultation
NHD	National Hydrography Dataset
NRCS	National Resource Conservation Service
NWI	National Wetlands Inventory
R&M	R&M Consultants, Inc
RPW	relatively permanent water
TNW	Traditional Navigable Waterway
U	Upland
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	Waters of the U.S.

1.0 INTRODUCTION

The Alaska Department of Transportation and Public Facilities (DOT&PF) retained R&M Consultants, Inc. (R&M) under Contract Agreement 02522044 to perform a wetland delineation for the proposed Interior Alaska Veterans Cemetery project located at 7229 De Halden Lane in Salcha, Alaska (IRIS Program No. Z800330000, Federal Project No. TBD).

1.1 PROJECT DESCRIPTION

The proposed project would develop a cemetery for Veterans of Alaska as well as a place for memorial services and periodic visitations by friends and family members within a portion of property owned by the State of Alaska. Project activities include construction of parking areas, pathways, installation of columbarium niches and space for in-ground cremains. Existing structures on the property may be moved and a new access route from the end of Westerlund Street would be constructed.

1.2 STUDY AREA

The study area includes the entirety of the property at 7229 De Halden Lane in Salcha, Alaska which is approximately 257.5 acres. The parcel is located in the Fairbanks North Star Borough (FNSB) in Sections 26 and 27, Range 4 East, Township 4 South, Fairbanks Meridian. **Figures 1 and 2** in **Appendix A** present location and vicinity and site maps for the property. The property has been used as a residential homestead since at least 1994 and consists of a cabin, workshop, barn, greenhouse, dog kennel, garden area, orchard, and two cleared agricultural fields (R&M 2022). The parcel is just south of Johnson Road and is surrounded by residential properties to the northeast and west, with largely undisturbed land directly to the south.

2.0 EXISTING DATA AND METHODOLOGY

The following section details the data and methods used for this wetland delineation and functional assessment.

2.1 EXISTING DATA

U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping is available for the project area (USFWS 2023b). Wetlands in the project area were photo interpreted using 1:30,000 scale imagery from 1997 (**Appendix B**). Natural Resources Conservation Service (NRCS) Soil Survey Mapping is also available for the project area. Soils surveys in the project area were mapped at 1:25,000 scale (**Appendix C**). The property boundaries were obtained from the FNSB tax parcel database. Aerial imagery gathered by the FNSB in 2020 covers the project area and is available at a resolution of four (4) and nine (9) inches. The National Hydrography Dataset (NHD) was accessed online to check for waterbodies within or adjacent to the project area (USGS 2023).

2.2 METHODOLOGY

2.2.1 DESKTOP DELINEATION

A preliminary desktop delineation was completed using ArcMap 10.8.2 to overlay NWI digital data and NRCS soil survey data with the FNSB property boundary and 4-inch resolution aerial imagery collected by the FNSB. No changes to existing wetland boundaries were introduced.

2.2.2 FIELD SURVEY

The wetland field survey included four wetland determination plots at locations representative of wetland and upland areas as indicated by the desktop delineation. Wetland determination plots were sampled following the U.S. Army Corps of Engineers (USACE) three parameter approach for defining wetlands defined in the *Corps of Engineers Wetland Delineation Manual* (USACE 1987) and the methodology described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Alaska Region* (Regional Supplement; USACE 2007). Data was collected and recorded on wetland data forms included in **Appendix D**.

2.2.3 WETLAND CLASSIFICATION AND MAPPING

Results of the field survey were used to update the wetland boundaries collected as part of the preliminary desktop delineation. Existing NWI wetland classification types were reviewed against data collected in the field.

2.2.4 FUNCTIONAL ASSESSMENT

Wetlands within the project area were assessed using the Alaska Wetland Assessment Method (AKWAM; DOT&PF 2010). Wetland assessment areas included all wetlands within the project area. Assessment areas were comprised of individual wetland classes as identified by NWI code. Each wetland type was treated as a separate functional class. No waterbodies are found within the project area therefore no waterbody assessment was performed. Wetland assessment data forms are included in **Appendix E**.

2.2.5 JURISDICTIONAL DETERMINATION

Wetlands within the project area were assessed to determine if they met the definition of Waters of the U.S. (WOTUS) and therefore subject to jurisdiction under Section 404 of the Clean Water Act (CWA). No water bodies are found within the project area therefore applicability of Section 10 of the Rivers and Harbors Act was not evaluated. The Revised Definition of Waters of the United States (2023 Rule) was published in the Federal Register on January 18, 2023 (88 FR 3004) and includes the relatively permanent water (RPW) standard and the significant nexus test. Twenty-seven states including Alaska are interpreting WOTUS consistent with the pre-2015 regulatory regime.

3.0 RESULTS AND DISCUSSION

The following section summarizes the results of the wetland delineation, functional assessment, and jurisdictional determination.

3.1 DESKTOP DELINEATION

The results of the desktop delineation are shown in **Figure 3** (**Appendix A**). The NWI shows that Freshwater Emergent (PEM1/SS1B) and Freshwater Forested/Shrub (PSS1/4B and PSS4/1B) wetlands occur within and adjacent to the project area, predominantly along the lower half of the project parcel (**Figure 3** in **Appendix A** and **Appendix B**). The NRCS Soil Survey shows that the project area is comprised mostly of hydric soils with a rating of 46 or higher (**Appendix C** and **Table 1**) with the exception of the northwest portion of the project area. An unnamed stream is located approximately 1,750 feet downslope of the southwest property corner. The stream flows southwest into the Little Salcha River which flows west to the Tanana River. The entire project area occurs on a slope ending near the Little Salcha River. The NWI shows wetlands occurring continuously along this slope.

Table 1. Hydric Rating by Soil Map Unit

Soil Map Unit Symbol	Soil Map Unit Name	Hydric Rating
31ST08	Steese-Gilmore complex, 12 to 20 percent slopes	0
31MN02	Minto silt loam, 3 to 7 percent slopes	5
31MN06	Minto-Chatanika complex, 3 to 7 percent slopes	46
31SA06	Saulich-Minto complex, 7 to 12 percent slopes	55
31CH04	Chatanika-Goldstream complex 0 to 5 percent slopes	97

3.2 FIELD SURVEY

R&M environmental specialist Erica Betts collected field data on September 19, 2023. This survey date fell within the growing season dates for Interior Highlands as specified in the Regional Supplement (USACE 2007) of between May 4 and October 2. Data collection forms were filled out in the field and then duplicated in digital form upon returning to the office. Georeferenced photos were added to the digital data forms and loaded into GIS to identify plot locations. A total of four field plots were evaluated. Four wetland delineation plots were evaluated for the three parameters required to define a wetland: hydrophytic vegetation, hydric soils, and hydrologic indicators. The locations of the plots are shown on **Figures 3 and 4** (**Appendix A**). All four plots agreed with the NWI designation for the wetland types found within the project area: Freshwater Emergent (PEM1/SS1B) and Freshwater Forested/Shrub (PSS1/4B and PSS4/1B).

The USACE Antecedent Precipitation Tool (USACE 2023) was used to determine antecedent moisture levels at the site. The results shown in **Figure 5** indicate the site was experiencing normal precipitation conditions after a dryer than normal summer season.

3.3 WETLAND CLASSIFICATION AND MAPPING

Palustrine Scrub-Shrub Needle-Leaved Evergreen/Broad-Leaved Deciduous Seasonally Saturated (PSS4/1B) wetlands cover 79.14 acres (31%) of the project area and consist of black spruce (*Picea mariana*) woodlands with dense bryophyte mats. The herb stratum is mostly absent and the underbrush consists largely of spruce saplings intermixed with some prickly rose (*Rosa acicularis*), and Labrador Tea (*Rhododendron groenlandicum*). This wetland type is documented by field plots 002 and 003. Palustrine Scrub-Shrub Broad-Leaved Deciduous/Needle-Leaved Evergreen Seasonally Saturated (PSS1/4B) wetlands cover 19.95 acres (8%) of the project area and consist of dwarf black spruce (*P. mariana*) and a denser understory of Labrador Tea (*R. groenlandicum*), blueberry (*Vaccinium vitis-idaea*), swamp birch (*Betula nana*), and fireweed (*Chamaenerion angustifolium*). The terrain is composed of tussocks and a high water table becoming surface water between tussocks. This wetland type is documented by field plot 004. The final wetland type found within the project area is Palustrine Emergent Persistent/Scrub-Shrub Broad-Leaved Deciduous Seasonally Saturated (PEM1/SS1B) which covers 8.16 acres (3%) of the project area. A field plot was not obtained for this wetland type but photos taken during the field survey show surface water, little to no tree stratum, and a dense herb stratum composed largely of *Calamagrostis canadensis* and *Carex aquatilisse*. Tamarack (*Larix larcina*) are found along the eastern portion of the project area within the upland areas as well as within the PSS4/1B and PSS1/4B wetlands. Changes in vegetation type were noted during the field survey and compared to aerial imagery to confirm wetland boundaries. The NWI mapping is based on imagery from 1997. The latest aerial imagery available from the FNSB for the project area is from 2020 and is much higher resolution. The field survey and updated aerial imagery resulted in minor updates to the wetland boundaries within the project area (**Figure 4, Appendix A**). **Table 2** summarizes the areal extent of each wetland type within the project area.

Table 2. Extent of Wetlands and Non-Wetlands in Project Area

NWI Description	NWI Code	Acres within Project Area	% of Project Area
Palustrine Emergent Persistent/Scrub-Shrub Broad-Leaved Deciduous Seasonally Saturated	PEM1/SS1B	8.16	3
Palustrine Scrub-Shrub Broad-Leaved Deciduous/Needle-Leaved Evergreen Seasonally Saturated	PSS1/4B	19.95	8
Palustrine Scrub-Shrub Needle-Leaved Evergreen/Broad-Leaved Deciduous Seasonally Saturated	PSS4/1B	79.14	31
Upland	U	150.21	58
Total		**257.46**	**100**

3.4 FUNCTIONAL ASSESSMENT

Given the size and extent of the wetland complex within and adjacent to the project area, assessment areas for the functional assessment were defined as the three wetland types found within the project area as identified by the NWI notations: PSS4/1B, PSS1/4B, and PEM1/SS1B (**Figure 3**). Assessment Area 1 is the PSS4/1B wetland area which occurs farthest upslope within the project area. Assessment Area 2 corresponds to the PSS1/4B wetland area which is intermixed with the PEM1/SS1B wetland area which comprises Assessment Area 3. A wetland assessment data form was completed for each functional class.

All three assessment areas (wetland types) were classified as Category 2 Wetlands as summarized below. All Wetland Assessment Data Forms are included in **Appendix E** and the results are tabulated in **Table 3**.

The USFWS Information for Planning and Consultation (IPaC) website (USFWS 2023a) identified no federally listed or candidate species or critical habitat within or adjacent to the project area so all three functional classes scored low for this function.

All three classes scored moderate for general wildlife support due to low to moderate levels of disturbance and a moderate likelihood of wildlife use. The PSS4/1B wetland borders the disturbed areas of the project area and was given a moderate disturbance rating while the PSS1/4B and PEM1/SS1B wetlands are surrounding by other wetlands and were given a low disturbance rating. Some ATV trails cross the wetlands, particularly in PSS4/1B where the ground surface is often drier. Trails through PSS1/4B and PEM1/SS1B are likely winter use only.

The Little Salcha River is an anadromous water body (Anadromous Water Code (AWC): 334-40-11000-2490-3325). Fish support was considered not applicable given the absence of anadromous water bodies across the project area. PSS4/1B and PSS1/4B do overlap the Unnamed Stream east of the project area but the distance and height from the Little Salcha River likely preclude any fish within reaches affected by the assessed wetlands.

All three functional classes showed evidence of surface water and ponding and therefore received a high rating for water storage. The dense vegetation found in all functional classes will help reduce water velocities. PSS4/1B and PSS1/4B wetlands contain woody vegetation better at slowing water while the PEM1/SS1B wetlands are on shallower slopes.

All three functional classes receive surface and subsurface water that flows down slope and therefore may receive sediment, nutrient, or toxicants from upslope sources. All three classes are densely vegetated and show evidence of ponding water and therefore have a high capacity to slow the flow of water as it flows down slope and allow sediment, nutrients, and toxicants to be removed.

PSS1/4B and PSS4/1B overlap the Unnamed Stream to the east of the project area and were given a moderate rating for sediment/shoreline stabilization due to the seasonal flow regime of the stream.

All three functional classes were ranked moderate, but with a high value of 0.8, for the production export/food chain support due to amount of vegetation, biological activity and duration of surface water found within each functional class.

Groundwater discharge/recharge was moderate for all three functional classes due to their location along a slope. Permafrost is possible in this region but the location of the project area on a south facing slope would likely prevent continuous permafrost.

PSS1/4B and PSS4/1B are both common wetland types within the Little Salcha River watershed (6th level hydrologic unit) but the assessment areas for both wetland types contain *Larix larcinia.* Flagstad et al. (2018) state that Tamarack wetlands, while widespread in interior Alaska, are a population of conservation concern due to population reductions caused by larch sawfly (*Pristiphora erichsonii*) infestations. Both functional classes were therefore given a Uniqueness rating of moderate.

PEM1/SS1B wetlands did not appear to contain Tamaracks but they do make up less than 10% of the wetland area within the Little Salcha River watershed and therefore considered rate in terms of estimated relative abundance.

The *FNSB Comprehensive Recreational Trails Plan* (FNSB 2023) identified seasonal trails extending from Johnson Road, east of the project area, down to the Little Salcha River and then along the Little Salcha River to the Richardson Highway. The field survey also noted trails leading across the project area from the end of De Halden Lane. The transfer of the site from private to public ownership, as well as the use of the property as a cemetery with open access to the public, has the potential for recreational and educational opportunities. For this reason, all three functional classes were given a high rating of 0.15 for this potential.

Table 3. Functional Class Scores

Function	Functional Class		
	PSS4/1B	PSS1/4B	PEM1/SS1B
Habitat for Federally Listed/Candidate Threatened & Endangered Species of Concern	L	L	L
General Wildlife Support	M	M	M
General Fish Support	NA	NA	NA
Water Storage	H	H	H
Sediment/Nutrient/Toxicant Removal	H	H	H
Sediment/Shoreline Stabilization	M	M	NA
Production Export/Food Chain Support	M	M	M
Groundwater Discharge/Recharge	M	M	M
Uniqueness	M	M	H
Recreation/Education Potential	H	H	H
Total Points	**5.05**	**5.35**	**4.85**
Percentage of Possible Points	**63%**	**67%**	**69%**

3.5 JURISDICTIONAL STATUS

The entire project area falls within the Little Salcha River watershed. The USACE does not list the Little Salcha River as a navigable water. The nearest Traditional Navigable Water (TNW) is the Tanana River. The Little Salcha River meets the definition of a RPW which flows into a TNW. A wetland complex comprised of PEM1/SS1B, PSS1/4B, and PSS4/1B wetlands extends from the project parcel to the Little Salcha River. Although there is uncertainty in the implementation of WOTUS in Alaska, the continuous surface water connection via wetlands to an RPW, the Little Salcha River, that flows to a TNW, the Tanana River which applies to wetlands within the project area, supports a determination that wetlands within the project area be considered jurisdictional.

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The Wetland Delineation report was utilized to facilitate environmental, engineering, and cultural resource management for planning efforts only. The full report is available upon request, however, and is redacted for this submittal after the References Section, excluding Appendices.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

7229 DE HALDEN LANE
SALCHA, ALASKA

PREPARED BY:

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REVISION 1
28 OCTOBER 2022

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Appendix F – Photograph Log ..... 14 Pages

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
AAC	Alaska Administrative Code
AAI	all appropriate inquiries
ADEC	Alaska Department of Environmental Conservation
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
COPC	contaminant of potential concern
DMVA	Department of Military and Veterans Affairs (Alaska)
DNR	Department of Natural Resources (Alaska)
DOT&PF	Department of Transportation and Public Facilities (Alaska)
EPA	U.S. Environmental Protection Agency
ERIS	Environmental Risk Information Services
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FNSB	Fairbanks North Star Borough
FUDS	Formerly Used Defense Sites
ID	identification
LLP	landowner liability protections
PCB	Polychlorinated Biphenyls
ppm	parts per million
QEP	qualified environmental professional
REC	recognized environmental condition
R&M	R&M Consultants, Inc.
RCRA	Resource Conservation Recovery Act
RCRIS	Resource Conservation Recovery Information System
SPILLS	Spill Prevention and Response Online Spills Database
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Society
UST	underground storage tank
VOC	volatile organic compounds
WRCC	Western Regional Climate Center

EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (ESA) was conducted under the supervision and responsible charge of Christopher Fell, CPG in general accordance with the procedures detailed in the American Society for Testing and Materials (ASTM) standard designation E1527-21, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." The site reconnaissance was conducted on 11 October 2022 by Erica Betts.

R&M Consultants, Inc. (R&M) has been contracted by the Alaska Department of Transportation and Public Facilities (DOT&PF) to perform a Phase I ESA for the property located 7229 De Halden Lane within Section 27, Township 4 South, Range 4 East of the Fairbanks Meridian in Salcha, Alaska. This Phase I ESA was performed in accordance with ASTM E1527-21.

SIGNIFICANT DATA GAPS

Data gaps are present from 1940 to 1944 and 1955 to 1969. These data gaps are not considered failures or significant as the Subject Property did not appear to have any major changes to property use during the data gaps.

RECORDS REVIEW SUMMARY

A total of four records were identified by ERIS Information, Inc. (ERIS) within a one-mile radius of the Subject Property. A total of three of these records were listed on the Spill Prevention and Response Online Spills (SPILLS) Database and one facility was listed on the Formerly Used Defense Sites (FUDS) database. Based on the presumed groundwater flow direction to north/northwest, all of these records are considered down or cross-gradient and are considered to have no effect on the Subject Property. The Subject Property was not listed in the ERIS record search.

SITE RECONNAISSANCE SUMMARY

The Subject Property consists of a cabin, workshop, barn, greenhouse, dog kennel, and two cleared agricultural fields. No recognized environmental conditions (REC) were identified for the Subject Property.

FINDINGS

This Phase I ESA identified no RECs for the Subject Property.

RECOMMENDATIONS

R&M does not recommend additional investigation at the Subject Property

The Phase I Environmental Site Assessment report was utilized to facilitate environmental, engineering, and cultural resource management for planning efforts only. The full report is available upon request, however, and is redacted for this submittal after the Executive Summary Section.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Fairbanks North Star County, Alaska

Local office

Northern Alaska Fish & Wildlife Field Office

(907) 456-0203
(907) 456-0208

MAILING ADDRESS

101 12th Avenue
Room 110
Fairbanks, AK 99701-6237

PHYSICAL ADDRESS

101 12th Avenue, Room 110
Fairbanks, AK 99701-6237

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

There are no listed species or critical habitats expected to occur at this location.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Please refer to Alaska's Bird Nesting Season for recommendations to minimize impacts to migratory birds, including eagles.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Mar 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

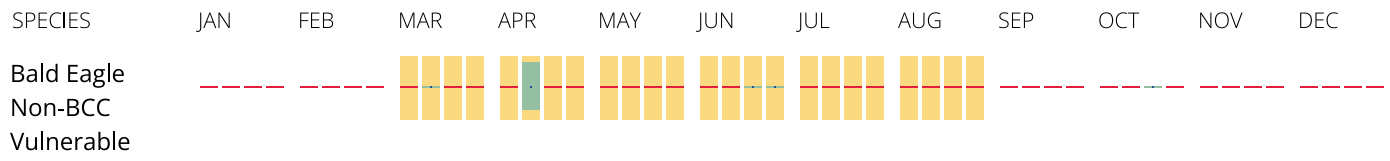
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

▪ probability of presence ▪ breeding season | survey effort – no data



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

There are migratory birds in your project area. Please refer to Alaska's Bird Nesting Season for recommendations to minimize impacts to migratory birds, including eagles.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds

- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Mar 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

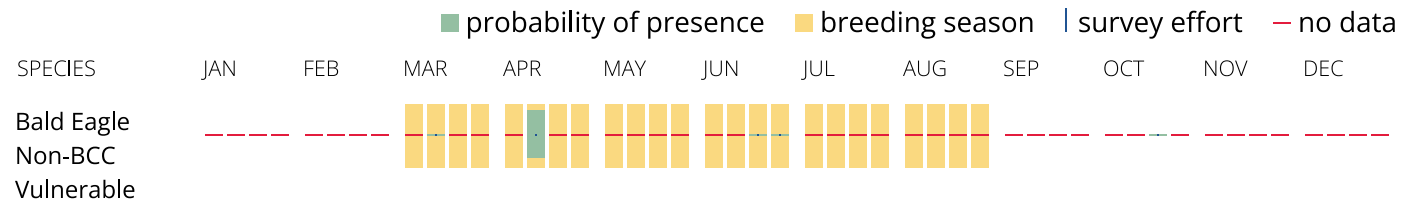
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1/SS1B
- PEM1C

PEM1/SS1C

FRESHWATER FORESTED/SHRUB WETLAND

PSS4/1B
PFO4B
PSS1/4B
PSS1/EM1B
PSS4B

FRESHWATER POND

PAB3H
PUBH

RIVERINE

R5UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.