CWA 401 Water Quality Certification Request

version 2.15

(Submission #: HQA-WWQ4-J0YYF, version 1)

Details

Site: Skagway River Levee Repair

Submission ID HQA-WWQ4-J0YYF

Form Input

Form Instructions

Form Instructions

Instructions for filling out the 401 Prefiling Meeting Request Form are located on the Alaska DEC website at the link below.
401 Prefiling Meeting Request Form Instructions

Agents: For Delegation of Authority to act on behalf of the applicant in processing the application, use the following form, have signed, and upload with application.

- Delegation of Authority - 401 Application

Contact Information (1 of 1)

Required Contacts

The following **Contact Roles are *REQUIRED***. Please select the appropriate role(s) for each contact and complete the contact details. Multiple role(s) may be assigned to each unique individual.

- **Applicant** (Responsible Party)
- **Billing Contact**

Contact Role(s)
Applicant
Billing Contact

Contact

Prefix
NONE PROVIDED

First Name
matthew.w.ferguson@usace.army.mil

Last Name
matthew.w.ferguson@usace.army.mil

Title
Biologist

Organization Name
US Army Corps of Engineers, Alaska District

Phone Type	Number	Extension
Business	9077532711	

Email
matthew.w.ferguson@usace.army.mil

Mailing Address

2204 Third St

JBER, AK 99506

[NO COUNTRY SPECIFIED]

Project / Facility Site Info

Identify the applicable federal license or permit

A copy of the federal permit or license application is required to be submitted with the request for the water quality certification. (18 AAC 15.130, 18 AAC 15.180)

Federal Agency
Army Corps of Engineers (USACE)

Permit License Number (ex. USACE: POA-XXXX-XXXX; FERC: FERC-xxxx-xxxx; EPA: AK#######)
ER-25-001

Project Name or Title
Skagway River Levee Repair

Primary Receiving Waterbody Name
Skagway River

Estimated Project Dates (+/- 30 days)

Project Estimated Start Date	Project Estimated End/Completion Date
10/01/2026	04/30/2027

Approximate date(s) when any Discharge(s) may commence (+/- 30 days)

Description	Discharge Estimated Start Date	Discharge Estimated End Date
Rock placement	10/01/2026	04/30/2027

Project Description (Nature of Activity, include all features)
Construct emergency repairs to the Skagway River levee in Skagway, AK. Excavate material for construction of the stability berm. Place armor rock and quarry run rock to restore slope and enhance scour protection.
The Repair in Place Alternative includes a construction length of approximately 6,500 LF which will reconstruct the riverward levee side slopes and toe with Class IV riprap for the entire length of the repairs. Approximately 40,000 cubic yards of armor stone and 5,000 cubic yards of quarry run rock would be required to repair the levee. Approximately 15,000 cubic yards of sand would be excavated to allow access to the levee toe. The excavated material would be used to construct sacrificial berms on the sandbars to temporarily divert floodwater away from the levee. Excavated material would be restored to the toe of the levee after levee repairs are completed. Based on the amount of Class III armor stone that was displaced during the flood of record, it was deemed critical to increase the armor stone size for stability and longevity of the structure. PL 84-99 authorizes using updated Engineering techniques for levee rehabilitation projects. Increases in armor stone size is authorized from updated scour analysis. This will entail reshaping the riverward slope to a 1.5H:1V side slope, restoring the riverward toe to its original design width, and adding a one stone thickness Class IV riprap armor layer over the existing levee. Due to scour and erosion of the existing slopes, Class II riprap will be used to reshape the existing structure with a 1.5H:1V side slope before the addition of Class IV riprap.

Project Purpose (Describe the reason(s) for discharge)
Repair Skagway River levee to restore flood risk management capabilities. The Skagway River Levee protects the Municipality of Skagway, Alaska from flooding by the Skagway River. Construction of the Skagway River Levee was authorized by the Rivers and Harbors Act of June 20, 1938. The act, as adopted, provided for a rock, brush, and earth training dike 6,700 feet long on the east bank of the Skagway River, and a rubble-mound breakwater 1,800 feet long across the tide flats as a prolongation of the training dike. The project authorization was subsequently modified by the Flood Control Act of July 24, 1946. This act, as adopted, provided for (1) restoration of the existing breakwater (1,800 ft) to the original project cross-section, construction of a 300-foot extension thereto, and the addition of two groins on the river side, (2) reconstruction and extension of the existing training dike (6,700 ft) adjacent to the city, and (3) reconstruction of the existing dike at the sanatorium. Public Law 99-662, November 17, 1986 deauthorized the modifications authorized in 1946, except for the 6,700 ft training dike and the 1,800 ft breakwater.
Airport expansion encapsulated all but a roughly 1,300-foot portion of the training dike in 2001, with side slopes of the runway being integrated into the project footprint. The airport modifications were submitted through the 408 Federal project modification process and approved by USACE. In 2007 the training dike was renamed the Skagway River Levee. The present-day Skagway River Levee extends from the river mouth upstream approximately 6,700 feet to the Klondike Highway (23rd Avenue) bridge, near the upstream end of the municipality. In the undamaged condition, the levee provides protection from overtopping up to the 1% annual exceedance probability (AEP) flood event.

Is any portion of the work already complete?
No

Description of current activity site conditions
The significant flood event occurred between 29 September 2022 and 04 October 2022 causing flood damage to the Skagway River Levee. The National Weather Service (NWS) stage gage at the Skagway River Bridge (SKGA2) exceeded flood stage on 01 October 2022. Flood stage occurs at 26.5 feet and the 2022 flood event reached a stage of 26.75 feet. The 2022 flood event was the flood of record for the NWS gage, but as no flow data or rating curve is available for the gage, and no datum conversion to NAVD88, the flood cannot be correlated to an AEP. The event was driven by a large precipitation event that lasted several days, originating from atmospheric river storm events.
During the flood, the Skagway River transported significant woody debris and sediment which dislodged slope armor along the toe and side slopes on several sections of the Skagway River Levee. Flood damages include severe loss of toe and slope armor. If the levee is not repaired and erosion continues, the airport runway would be damaged and would likely be inoperable, and property damage would occur at downstream inundated areas. The runway is critical infrastructure to the municipality of Skagway. It provides MedEvac capability for any injury or serious illness for both Skagway residents and Cruise Ship passengers as Skagway does not have Emergency Medical Care. The Dahl Memorial Medical Clinic only provides treatment for mild injuries and illnesses. Additionally, there is risk that an estimated life loss of 1 could occur if repairs are not made.

Relevant Site Data, Photographs that Represent Current Site Conditions, or other Relevant Documentation
Skagway River _2 (2).jpg - 03/06/2025 10:43 AM
Skagway River Photo Point _8 (1).jpg - 03/06/2025 10:44 AM
Skagway River Trap _5 (2).jpg - 03/06/2025 10:45 AM
Comment
NONE PROVIDED

Is this a linear project? (i.e., utility line, road, etc.)
Yes

Linear Feet
6,500

Project Address
[NO STREET ADDRESS SPECIFIED]
[NO CITY SPECIFIED], AK *[NO ZIP CODE SPECIFIED]*

Visit the link below to help with conversion between DMS and Latitude/Longitude
DSM - Lat/Long converter

Project Location
59.45961571205469,-135.31864194145936

Visit the following link if you need to convert the lat/long to get the **PLSS information**
Converter for Section, Township, and Range

PLSS Location (Public Land Survey System)

State Tax Parcel ID	Borough/Municipality	Meridian	Section	Township	Range
NONE PROVIDED	Municipality of Skagway	Copper River	11	28S	59E

Directions to Site
NONE PROVIDED

Federal Agency Contact (1 of 1)

Have you been working with anyone in the Federal Agency?
No

Dredge Material to be Discharged

Is dredging involved?
No

Tier Analysis

A tier analysis is comprised of a layered approach to determine the need for testing the dredge material to aid in generating physical, chemical, toxicity and bioaccumulation information, but not more information than is necessary to make factual determinations.
The tier analysis is a series of tiers (I – IV) or levels of intensity (and cost) of investigation. It is necessary to proceed through the tiers only until information is sufficient to make factual determinations, no further testing is required.

- **Tier I - Site Evaluation and History**. The initial tier (Tier I) uses readily available, existing information (including all previous testing). For certain dredge materials with readily apparent potential for environmental impact (or lack thereof), information collected in Tier I may be sufficient for making factual determinations.
- **Tier II - Chemical Testing** is concerned solely with sediment and water chemistry.
- **Tier III - Biological Testing (bioassay and/or bioaccumulation testing)** is concerned with well-defined, nationally accepte toxicity and bioaccumulation testing procedures.
- **Tier IV - Special Studies** allows for case-specific laboratory and field testing, and is intended to for use in unusual circumstances.

For more information regarding a Tier analysis, see below references

- **EPA Inland Testing Manual**
- **USACE Seattle District Civil Works DMMP User Manual**

Fill Material to be Discharged

Will Fill Material be Discharged?
Yes

For fill material, identify the material source
Assumed to be local quarry

Types of material being discharged and the amount of each type (cubic yards)

Type	Cubic Yards
Armor stone	40,000
Quarry run	5,000
Sand	15,000

Surface area in (acres or linear feet) of wetlands or other waters filled

Surface Area	Units
5.4	Acres

Discharge Location Information (1 of 1)

Identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters

Discharge Location ID (001, 002, 003, - increment by one)
001

NOTE: if you have a receiving water that is Wetlands, just enter the generic term "Wetlands". Do not enter "Wetlands of Tanana River", for example.

Please select 'Other' if your waterbody is not in the list below.
You can start typing the name of the waterbody to filter the list.

Receiving Waterbody / Wetlands Name
Skagway River

Discharge Location
59.4596,-135.3186

Other Pollutant Sources

Contaminated Site Information

Determine if your project is **within 1,500 feet** of a known Alaska DEC Contaminated Site. See the *Alaska DEC Contaminated Web Map* below. This will help you to identify if any potential pollutants/parameters of concern may be present on your project site., see DEC's website:

- Contaminated Sites Web Map
- Contaminated Sites Database Search website

Is the project within 1,500 feet of a known contaminated site?
Yes

Contaminated Sites

Hazard ID#	Contaminated Site Name	Contaminant Type	Latitude	Longitude	In soil or groundwater?	CS Staff Contact
27079	Temsco Helicopters Employee Housing Skagway	Diesel	59.4659	-135.3012	Soil	Dawn Wilburn
26623	Residence - 1410 Alaska Street	Petroleum	59.4623	-135.3095	Soil	Alena Voigt
27720	Skagway Block 15 Lots 11 & 12	Petroleum	59.4578	-135.3195	Soil	Sarah Durand

Describe the identified contaminated site(s) or groundwater plume within 1,500 feet
27079-On September 29, 2018 a release of diesel fuel was reported in the vicinity of three aboveground heating oil tanks at the Temsco Helicopters Employee Housing units in Skagway. It was later determined that an undetermined amount of diesel had been released to the ground due to a cracked coupling on one of the buried copper fuel lines connected to the three heating oil tanks. PVC pipe around the fuel line acted as a conduit and channeled the fuel to both ends of the pipe. Excavation and sampling was conducted in November, 2018. Approximately 45 cubic yards of contaminated soil were removed. Diesel range organics remain in soil above DEC cleanup levels.

26623-On September 7, 2016, petroleum-impacted soil was encountered during maintenance on a buried waterline in the right-of-way adjacent to the residential property at 1410 Alaska Street. The source of the contamination was unknown. Diesel range organics, gasoline range organics, 1,2,4-trimethylbenzene, 1,1,2,2-tetrachloroethane, 1-methylnaphthalene, and 2-methylnaphthalene were confirmed in subsurface soil above DEC cleanup levels. Excavated soil from the property was segregated and stored per 18 AAC 87.724. There are several drinking water wells within ~200 to 300 feet of the contamination. 1,2,4-trimethylbenzene was detected at 39 mg/kg which is above the migration to groundwater cleanup level of 23 mg/kg. 1,1,2,2-tetrachloroethane was detected at 0.73 mg/kg which exceeds the migration to groundwater cleanup level of 0.017 mg/kg. DRO is present up to 8,490 mg/kg, GRO at 780, and PAHs including naphthalene are above ADEC cleanup levels.

27720-Lots 11 and 12 have historically been used by the Municipality of Skagway for vehicle parking, heavy equipment storage and repair, equipment and material storage, drum storage, as well as the historic operation of a asphalt/tar batch plant. During a contamination assessment, test pits were dug to a depth of 6 feet below ground surface. No ground water was encountered at any of the test pits. Results from the assessment revealed diesel-range organics, benzene, and arsenic exceed migration to groundwater cleanup levels, with the highest contaminant concentrations found on Lot 12.

Parameters of Concern that may be present in discharge

Parameter(s) of Concern

Identify the parameters of concern that may be present in your discharge from the dredge and/or fill material.

Note, **TURBIDITY** and **SEDIMENT** are routine parameters associated with dredge and/or fill activities.

Consider if other parameters may be present from past activities in the area such as contamianted site data, impaired waters or other relevant water quality data, or other parameters of concern identified during the application process.

Parameter(s)
Turbidity

If known, describe respective concentrations, persistence, and potential impacts to the receiving water and data on parameters that may alter the effects of the discharge to the receiving water
Presumed impacts of sediment on Skagway River from the discharge of armor stone and quarry run rock de minimus due to the high apparent concentration of suspended sediment already in the River.

Impaired Waters

An ***impaired waterbody*** are those listed as a **Category 4 [304(b)] or Category 5 [303(d)]** in the current EPA approved *Alaska's Integrated Water Quality Monitoring and Assessment Report.*

For the most recently *Approved Integrated Water Quality Monitoring And Assessment Report (Integrated Report)*, see DEC's website:

- **Integrated Water Quality Monitoring And Assessment Report** https://dec.alaska.gov/water/water-quality/integrated-report

Does a discharge of any parameter identified above occur to an impaired waterbody?
No

If determined necessary and requested by the Department, submit sufficient and credible baseline water quality information for the receiving water which meets the requirements of 18 AAC 70.016(a)(6)(A-C).

Avoidance & Minimization BMPs and Mitigation Measures

Describe how impacts are being avoided and minimized on the project site. Include best management practices (BMPs) for sediment and erosion controls that will be implemented to minimize environmental impacts, and any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge.

Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge
Use a grizzly or similar equipment to remove fines from rock prior to placement.

Avoidance Measures
Work would be conducted during the winter when water levels are naturally low.

Minimization Measures
Construction would occur during the winter when water levels are low to minimize impacts to aquatic resources

Mitigation Measures
No mitigation proposed because this is a maintenance project and the additional toe width is minor within the context of the river channel.

Social / Economic Importance

Social or Economic Importance

(18 AAC 70.016(c)(5): Provide information that demonstrates the accommodation of important social or economic development. The applicant shall complete either a social OR economic importance analysis (or both) for each affected community in the area where the receiving water for the proposed discharge is located.

Social Importance Analysis
Infrastructure improvements
Public health or safety improvements

Economic Importance Analysis
Employment, job availability, and salary impacts
Tax base impacts

Describe Social and/or Economic Importance of the project
The expected yearly damages prevented by the levee are $6.19 million

Description of Social or Economic Importance, if needed
NONE PROVIDED
Comment
NONE PROVIDED

List of Other Permits or Certificates

*Would include but is not restricted to zoning, building, and flood plain permits.

Include a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received.

Agency	Type of Approval*	Identification Number	Date Applied	Date Approved	Date Denied
NONE PROVIDED	*NONE PROVIDED*	*NONE PROVIDED*	*NONE PROVIDED*	*NONE PROVIDED*	*NONE PROVIDED*

Other Agency or Local Contacts (1 of 1)

Contact Role
OTHER_REG_CNTCT

Other Agency and or Local Contacts

First Name	Last Name
matthew.w.ferguson@usace.army.mil	matthew.w.ferguson@usace.army.mil

Title
Biologist

Organization Name
US Army Corps of Engineers, Alaska District

Phone Type	Number	Extension
Business	9077532711	

Email
matthew.w.ferguson@usace.army.mil

Attachments

Copy of Federal Application (USACE, EPA, or FERC, etc.)

Skagway River Levee PIR 2023_Final_3.15.24.pdf - 03/06/2025 11:01 AM
Skagway Levee Repair 404(b)(1)CheckList.pdf - 03/06/2025 11:03 AM

Comment
No 404 permit required because this is a USACE Civil Works project. I have attached the Project Information Report and 404b1 assessment.

Figures and/or Drawings/Plan Sets. To include a map or diagram of the proposed activity site, including the proposed activity boundaries in relation to local streets, roads, and highways.

Skagway Levee Repair project area map.pdf - 03/06/2025 10:33 AM

Comment
NONE PROVIDED

Document Attachments
NONE PROVIDED

Comment
NONE PROVIDED

Delegation of Authority for Submission of Application
NONE PROVIDED

Comment
NONE PROVIDED

As per 18 AAC 15.030 signing of applications, all permit or approval applications must be signed as follows:
1) in the case of corporations, by a principal executive officer of at least the level of vice president or his duly authorized representative, if the representative is responsible for the overall management of the project or operation;
2) in the case of a partnership, by a general partner;
3) in the case of a sole proprietorship, by the proprietor; and
4) in the case of a municipal, state, federal or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Agreements and Signature(s)

As per 18 AAC 15.030 signing of applications, all permit or approval applications must be signed as follows:
1) in the case of corporations, by a principal executive officer of at least the level of vice president or his duly authorized representative, if the representative is responsible for the overall management of the project or operation;
2) in the case of a partnership, by a general partner;
3) in the case of a sole proprietorship, by the proprietor; and
4) in the case of a municipal, state, federal or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Signed By matthew.w.ferguson@usace.army.mil matthew.w.ferguson@usace.army.mil on 03/06/2025 at 11:07 AM