



DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 6898
JBER, ALASKA 99506-0898
MAY 29 2018

Regulatory Division
POA-2018-123
APMA 2875

Mr. Edwin Epstein
9811 W. Charleston Blvd. #2-444
Las Vegas, NV 89117

Dear Mr. Epstein:

We have received your March 16, 2018 Application for Permits to Mine in Alaska (APMA 2875) for your IPOP gold dredging proposal. The project area is located within Sections 4, 5, and 6, T. 11 S., R. 28 W.; Sections 3, 10, 15-20. T. 11 S., R. 29 W.; Sections 24, 25, and 26, T. 11 S., R. 30 W., Kateel River Meridian, USGS Maps Solomon C-5 and C-6; at Latitude 64.5275°N., Longitude 164.5386° W.; in Safety Sound, near Nome, Alaska. Your project has been assigned file number POA-2018-123, Safety Sound, which should be referred to in all correspondence with us.

Section 404 of the Clean Water Act requires that a Department of the Army (DA) permit be obtained for the placement or discharge of dredged and/or fill material into waters of the United States (U.S.), including jurisdictional wetlands and other special aquatic sites (33 U.S.C. 1344). The Corps of Engineers (Corps) defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Special aquatic sites that may be present within your project area include eelgrass beds, seagrass beds, kelp beds, macro-algae, vegetated shallows, shellfish beds, and mudflats.

Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for structures or work in or affecting navigable waters of the U.S. (33 U.S.C. 403). Section 10 waters are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified by the Alaska District. Safety Sound is a Section 10 navigable water of the U.S.

Your proposed project will require a DA Individual Permit (IP). Any operation of your dredge in Safety Sound will require an Individual DA Permit, if there is an associated discharge of dredged and/or fill material into waters of the U.S., or if you propose to perform work in navigable waters of the U.S. A completed application form DA 4345, including supplemental materials, is required to prepare a Public Notice that will generate meaningful comments. You can find a copy of the DA permit application online at www.poa.usace.army.mil/Missions/Regulatory.

Preliminary activities associated with preparation of an Individual DA permit application, such as collecting core samples for exploration purposes, may be verified under a "Nationwide Permit (NWP) # 6 for Survey Activities". The "Nationwide Permit General Conditions" and "Regional Condition B", requiring coordination with state, federal, local and tribal governments, also apply to this phase of your project. A completed "Pre-Construction Notification" form (enclosed), including record of consultation for Endangered Species and Historic Properties is required. A delineation of special aquatic sites is not required for submittal of a NWP # 6 request, however, a delineation of special aquatic sites will be required prior to any operation of your dredge in Safety Sound. To receive verification of a NWP # 6 permit, please submit plans and a concise narrative of survey activities proposed, including core samples, bathymetry, grab samples, and a benthic delineation, describing methods, transects and samples for each activity you propose. Information regarding NWP # 6 is available online at: www.poa.usace.army.mil/Missions/Regulatory.

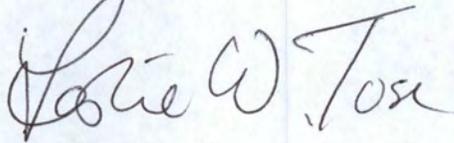
We have not received application materials for either the NWP # 6, Survey Activities, or the Individual Permit. For your information, a list of information required for submittal of the Individual Permit application is included on the enclosed checklist.

You are cautioned that any work performed below the mean high waterline or ordinary high waterline in waters of the U.S., or the discharge of dredged or fill material into adjacent wetlands, without a Department of the Army permit could subject you to enforcement action. There can be substantial penalties for conducting unauthorized work in waters of the U.S., including wetlands. Section 12 of the Rivers and Harbors Act provides penalties of not less than \$500, and not more than \$2,500, per day of violation or by imprisonment of up to one year, or both. Section 309 of the Clean Water Act provides penalties of up to \$53,484 per day and/or imprisonment for up to three (3) years for any person who knowingly violates Section 301 of the Clean Water Act.

Receipt of any other necessary permits does not obviate the requirement for obtaining a Department of the Army permit for the work described above prior to commencing work. Nothing in this letter shall be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations which may affect this work.

Please contact me via email at leslie.w.tose@usace.army.mil, by mail at the address above, by phone at (907) 753-5515, or toll free from within Alaska at (800) 478-2712, if you have questions. For additional information about our Regulatory Program, visit our web site at www.poa.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

A handwritten signature in black ink that reads "Leslie W. Tose". The signature is written in a cursive style with a large initial "L" and a distinct "Tose" at the end.

Leslie W. Tose
Project Manager

Enclosures

Information required for submittal of a Department of the Army (DA) Form 4345, Individual Permit Application, for POA-2018-123, IPOP Dredging Project

1.0. Figures and Exhibits:

1.1. Submit drawings, sketches, or plans sufficient for issuing a Public Notice.

Figures and exhibits should be scaled and show a north arrow on the plan view. For larger projects, where multiple figures are needed to show the entire site, each figure should be numbered and shown on an inset index with match lines. Where necessary, please provide a legend on the figure, rather than a separate page. Specifically, include the following items:

- a. **Provide plan and cross-sectional (elevation) views of project and impact areas that clearly show specific locations and dimensions of proposed activities as projected for the next five years.**
- b. **Provide a figure(s) clearly indicating the location and extent of pre-development waters of the U.S., including special aquatic sites, and proposed dredge/fill impacts.**

2.0. Description and Narratives:

2.2. Provide a clear, concise statement of purpose and need for the project, as well as a description of the proposed impacts to waters of the U.S., which will result from dredge and fill activities. Provide a description of the volume and composition of materials that you propose to discharge.

2.3. Provide a list of all adjacent property owners, including names and mailing addresses, for distribution of the Public Notice.

2.4. Provide a list of all other government authorizations obtained or requested for the work, including but not limited to required certifications relative to water quality, or marine sanctuaries.

2.5 Provide a list of tribes that may be affected by the proposed action.

During the pre-application meetings, the Corps learned that between four (4) and six (6) tribes may utilize the Safety Sound area for subsistence activities. Eligible tribes may request government to government consultation with the Corps, regarding potential impacts of the project to tribal resources, tribal rights, or Indian Lands.

2.6. The proposed impacts must also meet the 404(b)(1) guidelines of the Clean Water Act. For the issuance of the public notice, a Mitigation Statement concerning avoidance, minimization, and compensatory mitigation is necessary. However, the following detailed information will be needed to for full evaluation of the project and although not required at this time, it may expedite the permitting process if submitted at this time.

- a. Avoidance: Components of your proposed project have been portrayed in randomly available online videos, and include activities such as a reality TV show, a mercury or lead remediation program, and manufacture of gold jewelry. These components are considered to be non-water dependent, and do not have to be located in a water of the U.S. to achieve the basic project purpose of gold mining with a cutter head dredge. For the non-water dependent components of your proposed project, there is a presumption that

alternative upland sites exist which are available to the applicant. There is also a presumption that fill placed elsewhere, other than wetlands or other aquatic sites will have less adverse impact. The applicant must rebut these presumptions. Please provide a discussion of alternative sites and why Safety Sound was selected for your project.

- b. Minimization: After the least damaging alternative site is selected or after the applicant successfully rebuts the above avoidance presumptions, the project must be shown to be the least damaging practicable alternative that meets the basic project purpose. Minimization measures should include a summary of exploration results, which are considered integral to a normal and customary sequence of mining operations. Minimization would also include alternate site plans, best management practices and other actions which would reduce impacts to waters of the U.S.
- c. Compensatory Mitigation: You may be required to provide compensatory mitigation for resource losses which are specifically identifiable and reasonably likely to occur. A mitigation statement must include a proposal for Compensatory Mitigation, or an explanation as to why you believe compensatory mitigation is not necessary.
- d. A preliminary review for compliance with the Environmental Protection Agency's 404 (b)(1) guidelines indicates that the proposed discharge of dredged or fill material may not contain all appropriate and practicable steps to minimize potential impacts of the discharge on the aquatic ecosystem, and may not represent the least environmentally damaging practicable alternative. You must provide us information on the alternatives you considered for your proposed project. This information should include the availability of other sites and the use of other project designs which would avoid or minimize project impacts on the aquatic ecosystem.

The least environmentally damaging practicable alternative may include construction in uplands or reducing the size of the proposal to the minimum discharge necessary for the project. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. Remember, failure to provide this information by the public notice expiration date could result in closure of the file, a final decision without the requested information, and/or permit denial.

For more information about the Section 404(b)(1) guidelines, visit http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr230_05.html

3.0. Supplementary Materials

3.1. Provide a wetland delineation of the special aquatic sites that may be impacted, including eelgrass beds, seagrass beds, kelp beds, macro-algae, vegetated shallows, shellfish beds, and mudflats. Wetland delineations must be prepared in accordance with the 1987 Wetland Delineation Manual and September 2007 Regional Supplement to the Corps of Engineers Delineation Manual: Alaska Region (Version 2.0). Information concerning wetland delineations and jurisdictional data forms can be found at the following internet address: <http://www.poa.usace.army.mil/Missions/Regulatory.aspx>

3.2. Provide a summary of the exploration program that you conduct under NWP # 6, focusing on presence of an economically viable resource, a bathymetric profile of the proposed impact area, and results of your grab sample survey to determine composition and distribution of overburden.

3.3. Provide a discussion and maps of existing site features, and the tidal regime of the project site. Include any information that may illustrate any hydrological dynamics (both positive and/or negative) that may affect the project area.

3.4. Provide the names of federally listed endangered or threatened species that may be affected by the proposed work or utilize designated critical habitat that may be affected by the proposed work. Please include any work performed (i.e., transect type and coverage, survey date[s] and time[s]) to identify occurrence, or potential occurrence, of potentially affected species or critical habitat. Furthermore, any maps that depict this information can also be included.

3.5. State any historic properties listed in or eligible for listing in, the National Register of Historic Places and state which historic property may be affected by the proposed work. If necessary, please provide a vicinity map that indicates the location of the historic property in relation to the project site.

3.6. In order for the Corps to fully evaluate the regulatory status of the wetlands on the project site, a site inspection will be required. The site inspection will verify the location of special aquatic sites and hydrological connectivity (or lack of connectivity) to waterways in the area. During the site inspection, please provide aerial photographs of the project site.

4.0. You may forward digital files (via email) of the requested information to expedite processing.

**U.S. Army Corps of Engineers, Alaska District
PRECONSTRUCTION NOTIFICATION FORM**

May be used instead of Form ENG 4345 to request verification under a Nationwide Permit (NWP)

Applicant:	Phone:
Address:	Fax:
City, State, Zip:	Cell/Direct Line:
Point of Contact:	e-mail:

Agent:	Phone:
Address:	Fax:
City, State, Zip:	Cell/Direct Line:
Point of Contact:	e-mail:

Location of the Proposed Project Site:

Nearest Waterway:	
Section, Township, Range, and Meridian (if known):	
Latitude and Longitude (Decimal Degrees, NAD-83):	
Nearest City:	Subdivision:
Borough:	USGS Quad(s) (if known):
Driving Directions to Site:	

Project purpose:

<p>Which Nationwide Permit do you think would apply to your proposed project?</p> <p>Nationwide Permit # _____</p> <ul style="list-style-type: none"> For the following authorizations NWP 3, NWP 12, NWP 14, NWP 33, NWP 44, NWP 45, NWP 48, NWP 49, NWP 50, and NWP 54 please review the nationwide permit as they require additional information to be submitted with the application in order to be considered complete. To ensure your project meets the requirements for a NWP, read all of the NWP General Conditions and Regional Conditions, which can be found on our website at http://www.poa.usace.army.mil/Missions/Regulatory/Permits/Nationwide-Permits/

Have any permits been issued for this site or project in the past (if known)?
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The PCN must include:

- Drawings of the site and project plans (For more information on acceptable drawings and plans, please visit our website at <http://www.poa.usace.army.mil/Missions/Regulatory/Permits/> and click on "Guide to Drawings")
- Delineation of wetlands, other special aquatic sites (riffle and pool complexes, sanctuaries and refuges, mudflats, vegetated shallows, and/or coral reefs), and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. If you need guidance please contact the Corps for further information.

Description of the proposed project:

Provide surface area of impacts in wetlands or other waters of the U.S. or linear feet for streams and rivers.

Provide information on type(s) (i.e. sand, gravel, cobble, topsoil etc...) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type	Type	Type
Amount in Cubic Yards	Amount in Cubic Yards	Amount in Cubic Yards

Describe methods for rehabilitation of disturbed areas. If you intend to use other locally-obtained native materials, identify the source.

Do you intend to use any other authorizations for any part of the proposed project or any related activity, for example, a NWP, General Permit (GP), or Individual Permit (IP)?

YES or NO

If YES, specify what permit type (NWP, GP, IP) and for what aspect of the project:

You must satisfy the requirements in Nationwide Permit General Condition 23 (attached).

Describe how you will satisfy the requirement that you avoid and minimize adverse impacts to wetlands and other waters to the maximum extent practicable. Examples of avoidance measures include site selection, routes, design configurations, etc... Minimization measures include limiting fill discharges to the minimum amount/size necessary to achieve the project purpose.

Would your proposed project result in the loss of greater than 1/10 of an acre of wetlands?

YES or NO

If YES, describe your proposed compensatory mitigation to offset unavoidable impacts to waters of the U.S., or, alternatively, why compensatory mitigation is not appropriate or practicable for your project. Compensatory mitigation may involve the restoration, enhancement, establishment (creation), and/or the preservation of aquatic sites.

Information for the following section can be found at locations listed below:

U.S. Fish and Wildlife Service and the National Marine Fisheries Service or their world wide Web pages at <http://www.fws.gov> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/>

Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer

Information on the location of the USACE projects in Alaska are listed on the world wide web pages at <http://www.poa.usace.army.mil/About/Offices/Construction-Operations/Rivers-and-Harbors/> and at <http://www.poa.usace.army.mil/About/Offices/Construction-Operations/Erosion-and-Flood-Mitigation/>.

For a full list of Nationwide Permit General Conditions please visit our web page at <http://www.poa.usace.army.mil/Missions/Regulatory/Permits/Nationwide-Permits/>

Verification from the Corps must be received if your project is located in any of the areas listed below

Are there any listed species or designated critical habitat that might be affected or is in the vicinity of the project, or is the project located in designated critical habitat? Federal agencies must provide the appropriate documentation to demonstrate compliance with the agency's procedures for compliance with the ESA. Information on the location of threatened or endangered species and their critical habitat can be obtained directly from the offices of the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. (see General Condition 18 and 22)

If YES, list all species: YES or NO

Are there historic properties (listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties) that the proposed activity may have the potential to effect? Federal agencies must provide documentation demonstrating compliance with the Section 106 of the National Historic Preservation Act. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer. (see General Condition 20)

If YES, state which property or properties may be affected and/or attach a vicinity map indicating the location of the historic property or properties. YES or NO

Are there any U.S. Army Corps of Engineers (USACE) federally authorized Civil Works projects (i.e. 'Harbor, Navigation Channel, flood control, etc.') in the vicinity of your project?

If YES, state which USACE project is in the vicinity of your project. YES or NO

Jurisdictional Determination

The Corps has received new guidance (Regulatory Guidance Letter 16-01) which states that the Corps will only complete a jurisdictional determination (JD) form if the applicant requests it. In other words, if the applicant does not request a JD, we can proceed straight into our permit evaluation, without completing a JD form.

If you wish to obtain a JD there are two types you may request:

An Approved Jurisdictional Determination (AJD) is completed when we can state definitively that we do or do not have authority over the aquatic resource in question. Approved JDs often require a site visit during the growing season. An AJD is appealable and expires after five years.

A preliminary jurisdictional determination (PJD) is when the Corps determines that we may have authority over the aquatic resources in the project area. A PJD often doesn't require a site visit and is expedited. It is not appealable and does not expire. Applicants who want a JD may request a PJD because it is often more expedient than an AJD.

Please indicate which you prefer:

NO JD REQUESTED or AJD or PJD

Application is hereby made for a permit or permits to authorize the work described in this preconstruction notification form. I certify the information in this preconstruction notification form is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

NATIONWIDE PERMIT GENERAL CONDITION 23: MITIGATION

The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2)–(14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to

ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWP.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

Applicant Proposed Mitigation Statements

Definitions:

Enhancement: the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.

In-lieu fee program: a program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument. <https://ribits.usace.army.mil/>

Mitigation bank: a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument. <https://ribits.usace.army.mil/>

Permittee-responsible mitigation: an aquatic resource restoration, establishment, enhancement, and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility.

Practicable: available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Preservation: the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Restoration: the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.