

OK 2005.01  
Permits



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, ALASKA  
JUNEAU REGULATORY FIELD OFFICE  
8800 GLACIER HIGHWAY, SUITE 106  
JUNEAU, ALASKA 99801-8079

RECEIVED

JAN 31 2007

PND Engineers Inc.  
Juneau Office

January 30 2007

Regulatory Branch  
POA-2007-289-D

Mr. Dick Somerville  
PND Engineers, Incorporated  
9360 Glacier Highway, Suite 100  
Juneau, Alaska 99801-7012

Dear Mr. Somerville:

This is in response to your January 23, 2007, application for a Department of the Army (DA) permit to conduct environmental and geotechnical soil sampling within Douglas Harbor to collect hand samples, diver samples and drill boring samples of subsurface materials. It has been assigned file number POA-2007-289-D, which should be referred to in all future correspondence with this office. The proposed project is located in the SE¼, NW ¼ of Section 36, T. 41 S., R. 67 E., Copper River Meridian; Latitude 58.273° N., Longitude 134.384° W., Juneau B-2 Alaska Quadrangle; below the High Tide Line of Gastineau Channel in Douglas Harbor, Juneau, Alaska.

A DA permit authorization is necessary because your project would involve work in navigable waters, and waters of the United States, including wetlands, under our regulatory jurisdiction.

Based upon the information and plans you provided, we hereby verify that the work described above, which would be performed in accordance with the enclosed plan (sheets 1-2), dated January 23, 2007, is authorized by Nationwide Permit (NWP) No. 6, Survey Activities. NWP No. 6 and its associated Regional and General Conditions can be accessed at our website at [www.poa.usace.army.mil/reg](http://www.poa.usace.army.mil/reg), and for your convenience a paper copy is enclosed. Regional Conditions B, D, N and O apply to your project. You must comply with all terms and conditions associated with NWP No. 6.

Further, please note General Condition 14 requires that you submit a signed certification to us once any work and required mitigation are completed. Enclosure 2 is the form for you to complete and return to us.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2007. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked,

you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

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.

You may contact me at the letterhead address, at (907) 790-4490, or by FAX at (907) 790-4499, if you have any questions about the terms and conditions of NWPs No. 6. For additional information about our Regulatory Program, visit our web site at [www.poa.usace.army.mil/reg](http://www.poa.usace.army.mil/reg).

Sincerely,



Garth Zimbelman  
Regulatory Specialist

Enclosures

POA-~~2000-425~~  
2007-284

RECEIVED

JAN 23 2007

CENPA - CO - R - E - JFC  
Alaska District Corps of Engineers



ENGINEERS, INC.

January 23, 2007

062065.01

Mr. John Leeds  
Army Corp of Engineers  
Juneau Regulatory Branch  
8800 Glacier Highway, Suite 106 B  
Juneau, Alaska 99801

Subject: Old Douglas Harbor Renovation

Dear Mr. Leeds:

PND Engineers, Inc. (PND) is under contract with the City and Borough of Juneau to provide engineering and environmental permitting services on their Old Douglas Harbor Renovation project. The site is located at the southwestern shore of Gastineau Channel, immediately adjacent to the Treadwell Ice Arena (58° 16' 30" N, 134° 23' 8" W, Section 23, Township 41 South, Range 67 East of the Copper River, Juneau B2 Quadrangle). The site is accessible from Egan Drive.

PND would like to apply for a Nationwide Permit 6 to conduct environmental and geotechnical sampling within Douglas Harbor. The site investigation is scheduled to begin on February 19, 2007. Sampling will include hand samples, diver samples and drilling boreholes utilizing a drilling rig. Boreholes would be located as shown on the attached site plan and would be advanced to a maximum depth of 50 feet below existing mudline. All of the boreholes are located below the high tide line (HTL) of 20.8' Mean Lower Low Water (MLLW). All samples will be removed from the site for further analysis and testing.

Thank you in advance for your attention to this matter. Should you have any questions or comments concerning this matter, please do not hesitate to reach me at 907-586-2093.

Sincerely,  
PND Engineers, Inc. Juneau Office

Dick Somerville, P.E.  
Vice President

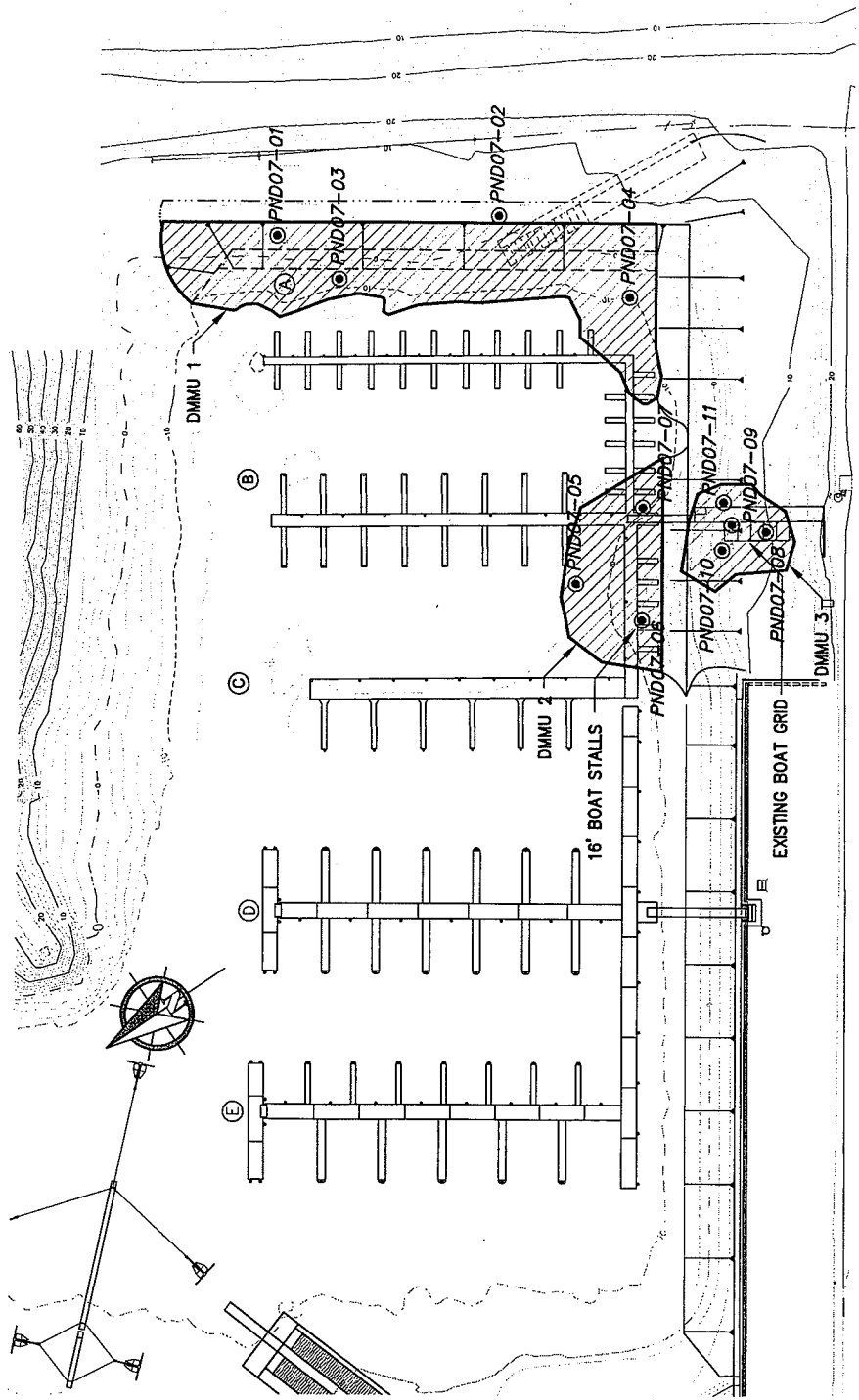
Cc: Christine Linden, CBJ Port Engineer

Enclosures

PND Incorporated  
Douglas Harbor  
01/23/07

POA-2007-289-D  
Sheet 1 of 2

SAMPLE TABLE	
SAMPLE NO.	METHOD
⊙ PND07-01	DRILL
⊙ PND07-02	DRILL
⊙ PND07-03	DIVER
⊙ PND07-04	DIVER
⊙ PND07-05	DIVER
⊙ PND07-06	DIVER
⊙ PND07-07	DIVER
⊙ PND07-08	HAND SAMPLER
⊙ PND07-09	HAND SAMPLER
⊙ PND07-10	HAND SAMPLER
⊙ PND07-11	DRILL



**PURPOSE:**

TO RENOVATE AN EXISTING HARBOR IN ORDER TO INCREASE MOORAGE CAPACITY AND IMPROVE PUBLIC SAFETY.

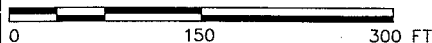
**DATUM:**

MLLW = 0.0 FT

HTL = 20.8'  
MHW = 15.4'  
MLLW = 0.0'

**SAMPLING LOCATION PLAN**

SCALE IN FEET



APPLICANT ADDRESS:  
CITY AND BOROUGH OF JUNEAU  
155 S. SEWARD STREET  
JUNEAU, AK 99801

PND#: 062065.01

**OLD DOUGLAS HARBOR RENOVATION**

IN: GASTINEAU CHANNEL  
NEAR: JUNEAU  
AT: DOUGLAS HARBOR

APPLICATION BY: CITY AND BOROUGH OF JUNEAU

DATE: 01/23/07

SHEET 1 OF 1

Enclosure 2



US Army Corps of Engineers  
Alaska District

Permit Number: POA-2007-289-D

Name of Permittee: PND Engineers, Incorporated

Date of Issuance: January 30, 2007

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers  
8800 Glacier Highway  
Suite 106  
Juneau, Alaska 99801-8079

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

## NATIONWIDE PERMIT NUMBER 6 ENCLOSURE 1

Department of the Army Nationwide Permit (NWP) number 6 was issued pursuant to the January 15, 2002, Federal Register: Issuance of Nationwide Permits; Notice (67 FR 2020-2095) and the February 13, 2002, Federal Register: Issuance of Nationwide Permits; Notice; Correction (67 FR 6692-2295), which authorizes:

6. Survey Activities. Survey activities including core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, soil survey, sampling, and historic resources surveys. Discharges and structures associated with the recovery of historic resources are not authorized by this NWP. Drilling and the discharge of excavated material from test wells for oil and gas exploration is not authorized by this NWP; the plugging of such wells is authorized. Fill placed for roads, pads and other similar activities is not authorized by this NWP. The NWP does not authorize any permanent structures. The discharge of drilling mud and cuttings may require a permit under Section 402 of the Clean Water Act. (Sections 10 and 404)

### REGIONAL CONDITION A

The following geographic areas and waters of the U.S. are excluded from coverage by the indicated NWPs. However, these NWPs may be used in these areas when informal (e.g., telephone) coordination with Federal and State agencies (i.e., EPA, FWS, NMFS, ADEC, ADFG, ADGC, and ADNR) and the affected coastal district(s) confirms that there is no opposition to use of the NWP(s) for the proposed project. If no such consensus can be reached or if the Corps is unable to contact all of the above-referenced agencies then the NWP cannot be used.

1. The Municipality of Anchorage (NWPs 3<sup>1</sup>, 6, 12<sup>2</sup>, 14, 18, 19, 23, 27, 29, 31, 33, 39, 40, 41, 42, 43, and 44).
2. Areas within and designated as "high value" wetlands in the Homer Wetlands Study Report: Final version [February 1989] (NWPs 3<sup>1</sup>, 12<sup>2</sup>, 14, 18, 19, 23, 27, 29, 31, 39, 41, 42, 43, and 44).
3. Areas designated as "A" or "B" wetlands in the Juneau Wetlands Management Plan. (NWPs 3<sup>1</sup>, 12<sup>2</sup>, 14, 18, 19, 23, 27, 29, 31, 39, 40, 41, 42, 43, and 44).
4. Areas under Corps of Engineers jurisdiction that lie within the plan boundaries of the Kenai River Comprehensive Management Plan [KRCMP] (NWPs 3<sup>1</sup>, 12<sup>2</sup>, 14, 18, 19, 23, 27, 29, 31, 39, 40, 41, 42, 43, and 44).
5. The Matanuska-Susitna Borough (NWP 12<sup>2</sup>).
6. Areas in the Northwest Arctic Borough designated as one of the following: Designated Important Resource Areas and Sensitive Use Areas in the district Coastal Management Program. (NWPs 3<sup>1</sup>, 12<sup>2</sup>, 13, 14, 18, 19, 23, 27, 29, 31, 39, 40, 41, 42, 43, and 44).
7. Designated Areas Meriting Special Attention (AMSA) identified in Coastal Zone Management Plans (NWPs 3<sup>1</sup>, 12<sup>2</sup>, 14, 18, 19, 23, 27, 29, 31, 39, 40, 41, 42, 43, and 44).
8. Waters documented as supporting anadromous fish, and other jurisdictional areas within 100 feet (measured from Ordinary High Water) of such waters (NWPs 3<sup>1</sup>, 12<sup>2</sup>, 13, 14, 18, 19, 27, 29, 31, 39, 40, 41, 42, 43, and 44). Note: For projects under NWP 12 and 14 this exclusion does not apply to perpendicular crossings.
9. Areas which support eelgrass beds (6, 12, 14, 15, 18, 19, 23, and 35).
10. Waters that are listed on Alaska's current Clean Water Act Section 303(d) List of Impaired Water bodies and other jurisdictional areas within 100 feet (measured from Ordinary High Water) of such waters (12, 13, 14, 18, 19, 29, and 39). List of impaired water bodies located at <http://www.state.ak.us/local/akpages/ENV.CONSERV/dwaq/tmdl/98onepage.htm>

<sup>1</sup>For NWP 3, the exclusions apply only to two activities: a) scheduled maintenance of pipelines where the total area of waters of the U.S. disturbed by the work exceeds 1,000 square feet; and, b) discharges associated with the restoration of upland areas damaged by floods or similar events.

bearing weight of 5 pounds per square inch or less or must work off of mats or foundation pads to reduce the impacts of access to the work site.

For work occurring when the ground is frozen, there must be 18 inches of frost in the ground and a minimum of 6 inches of compacted snow cover, or 12 inches of frost in the ground and 12 inches of compacted snow cover, standard equipment may be used; however, mats or foundation pads must be readily available in the event that the driving surface fails.

#### **REGIONAL CONDITION B**

In fresh or marine waters, no pentachlorophenol preservatives may be used on wooden structures. In fresh waters, no creosote may be used on wooden structures. In fresh and marine waters, any preservative on wooden structures must be applied by pressure injection using a method that prevents leaching (such as those approved by the Western Wood Preserves Institute).

This Regional Condition applies to all NWP's which include wooden structures.

#### **REGIONAL CONDITION C**

Prospective permittees must notify the District Engineer in accordance with the "notification" requirements described in General Condition 13 for the following NWP's:

1. All activities authorized by NWP's 6\*, 7, 17, 19, 21, 23, 27, 29, 31, 32, 33, 35, 36, 37, 38, and 44; and,
2. Projects which exceed the thresholds or are of the type specified in the NWP language, 3, 5, 12, 13\*\*, 14, 18, 39, 40, 41, 42, and 43.

In addition to the Federal agencies and State Historic Preservation Office, the Corps District Office shall send this PCN to Alaska Division of Governmental Coordination or, if the proposed project is located outside the coastal zone, to the appropriate state agencies, including the Departments of Environmental Conservation, Fish and Game, and Natural Resources.

\*NWP 6 - no PCN required for simple borings.

\*\*NWP 13 - A PCN is required for all projects (independent of thresholds) located in anadromous and resident fish streams.

Note: NWP's 1, 2, 4, 8, 9, 10, 11, 15, 16, 20, 22, 24, 25, 28, 30, and 34 do not require a PCN for any activity.

#### **REGIONAL CONDITION D**

Project limits of authorized sites shall be clearly identified in the field (e.g., staking, flagging, silt fencing, use of buoys, existing footprint for maintenance activities, etc.) prior to clearing and construction to ensure avoidance of impacts to waters of the U.S. (including wetlands) beyond project footprints.

This Regional Condition applies to all NWP's except 1, 9, 10, 11, 22, and 24. For NWP 4 this condition applies to all activities except harvesting devices (e.g., crab pots, etc.).

#### **REGIONAL CONDITION E**

A plan employing the techniques listed below shall be implemented to avoid or minimize disturbance to wetlands, stream banks, riparian areas, and beach fringes and/or to re-establish vegetation in such areas when disturbance cannot be avoided. Areas disturbed during project construction must be revegetated as soon as possible, preferably in the same growing season as the disturbance. Erosion protection shall be provided and remain in place until the soil is permanently stabilized. Any sedimentation of the above areas or adjacent water bodies caused by a project authorized by a NWP shall be considered a violation of the NWP.

*of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes, or other documentation provided to the Alaska District during the PCN.*

This Regional Condition applies to NWP's with a PCN requirement.

#### **REGIONAL CONDITION N**

NWP activities must assure that suspended sediment and turbidity do not affect waters beyond the immediate work area. Silt fences, silt curtains, or other diversion or containment structures shall be installed\* to contain sediment and turbidity at the work site (a) parallel to and within 10 feet of the toe of any fill, or soil exposed within 25 feet of a standing or flowing waterbody, if the fill site has a downslope or surface connection to the waterbody; and, (b) adjacent to any fill placed or soil exposed within a standing or flowing waterbody. All silt fences, curtains, and other structures must be installed properly and maintained in a functioning manner for the life of the construction period where fill material and exposed soils might cause transport of sediment or turbidity beyond the immediate construction site.

\*If the Alaska District Corps determines that a sediment or turbidity control measure is not necessary, or must deviate from the above specifications, then the Corps shall describe the changes in the preconstruction notification.

This Regional Condition applies to NWP's which may impact water quality due to sedimentation and/or runoff.

#### **REGIONAL CONDITION O**

Mitigation required by special condition must be completed before or concurrent with project construction, if practicable. Where project mitigation involves the use of a mitigation bank or fee-in-lieu, payment must be made to the bank or fee-in-lieu program before commencing construction of the permitted activity, if practicable. (Fee amount will be determined at time of payment).

This Regional Condition applies to all NWP's.



**11. Endangered Species.** (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the USFWS or NMFS, the District Engineer may add species-specific regional endangered species conditions to the NWPs.

(b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/r9endspp/endspp.html> and <http://www.nfms.noaa.gov/1protres/overviewles.html> respectively.

**12. Historic Properties.** No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

**13. Notification.** This general condition requires the applicant to provide notification (except for NWPs # 1, 2, 4, 8-11, 15, 16, 20, 22, 24, 25, 28, 30, and 34) to the District Engineer, including project-specific information, before DA authorization can be granted. The District Engineer reviews that information and solicits input from federal, state, and local resource agencies before making a permit decision. Once authorization has been granted, there are no further requirements of this general condition; therefore, the text of this condition has been removed. A copy of the full text will be provided upon request (visit our web site at: [www.poa.usace.army.mil/reg](http://www.poa.usace.army.mil/reg)).

**14. Compliance Certification.** Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include: (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and, (c) The signature of the permittee certifying the completion of the work and mitigation.

**15. Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the U.S. authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g., if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the U.S. for the total project cannot exceed 1/3-acre).

**16. Water Supply Intakes.** No activity, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

**21. Management of Water Flows.** To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

**22. Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the U.S., or discharges of dredged or fill material.

**23. Waterfowl Breeding Areas.** Activities, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

**24. Removal of Temporary Fills.** Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

**25. Designated Critical Resource Waters.** Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the U.S. are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the U.S. may be authorized by the above NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

## ADVISORY INFORMATION FOR ALL NATIONWIDE PERMIT ACTIVITIES

### ***A Department of Fish and Game Permit is required for:***

- ❖ Work in designated anadromous fish streams or other fish-bearing waters.
- ❖ Placement of cross-channel structures, drainage structures, or diversions in streams that contain either anadromous or resident fish.
- ❖ Work in legislatively designated state game refuges, sanctuaries, or critical habitat areas.

### ***A Department of Natural Resources Permit is required for:***

- ❖ Any activity that is located on state land, state tide or submerged land, or shoreland.

### ***A Kenai Peninsula Borough Permit is required for:***

- ❖ Projects occurring within the 50-foot Habitat Protection Area established by Kenai Peninsula Borough Code, Section 21.18.040. No building, construction, filling, excavation, major clearing of vegetation, commercial recreation uses, or activity which results in significant erosion or damage to riparian habitat, or results or increases ground or water pollution can be conducted except when specifically allowed under KPB 21.18.070. Information and permit applications are available from the Kenai River Center at (907) 260-4882.

### ***Department of Environmental Conservation Advisory:***

- ❖ All activities authorized by NWP's must meet the Alaska Water Quality Standards (18 AAC 70). These standards establish strict limits on the amount of sediment and turbidity that may be introduced into fresh and marine waters, including wetlands. In concert with NWP General Condition #3, which requires appropriate soil erosion and sedimentation controls to be used and maintained in effective operating condition during construction, and requires all exposed soil and other fills to be permanently stabilized at the earliest practicable date, the policy of the Alaska Department of Environmental Conservation is as follows.

Silt and sediment from excavation and fill activities may not enter wetlands or waterbodies outside the project footprint. Where practicable, fill material must be free from fine material that is subject to erosion and suspension. Site preparation, excavation, fill placement, and construction activities must be conducted to prevent, minimize, and contain the erosion and suspension of fine material that could be carried off-site by surface runoff. If suspended material is evident in standing or flowing water outside the project footprint, appropriate control and containment measures must be applied. These measures may include slope stabilization, revegetation, filter fabric fences, straw bales, other effective filters or barriers, fiber matting, settling ponds, drainage control, trenches and water bars, waterproof covers over material piles and exposed soils, avoiding work during heavy precipitation, and other appropriate measures. Disturbed ground and exposed soil not covered with fill, structures, or appurtenances must be stabilized and revegetated in an appropriate and timely manner to minimize erosion and sedimentation, so that a durable vegetative cover is established and maintained.

### ***Matanuska-Susitna Coastal District Advisory:***

- ❖ Within the 75-foot shoreline setback, all areas not occupied by allowed development must minimize disturbance of natural vegetation.

### ***Federal Emergency Management Act (FEMA) Advisory:***

- ❖ Many areas of the state are covered by FEMA approved floodplain regulations, local land-use plans and regulations, and other ordinances and regulations related to development. These restrictions must be adhered to in the development of a residence on a fill permitted by a NWP.