GUIDELINES FOR NATIONWIDE PERMIT (NWP) 27
AQUATIC HABITAT RESTORATION, ESTABLISHMENT, & ENHANCEMENT ACTIVITIES

US ARMY CORPS OF ENGINEERS, ALBUQUERQUE DISTRICT

Introduction

The U.S. Army Corps of Engineers (Corps) Regulatory Program is dedicated to improving consistency, efficiency and effectiveness of the delivery of its mission. This includes ensuring that all of its regulations, policies, guidance, and permitting instruments, such as the NWPs, are crafted in a manner that enables the public to receive decisions from the Corps with as little regulatory burden as necessary, while still ensuring compliance with all applicable laws.

NWPs authorize activities that are similar in nature and cause only minimal adverse environmental impacts to aquatic resources separately or on a cumulative basis. The Corps has the authority to issue, reissue, modify, revoke, or suspend NWPs at any time.

NWP 27 Background

Scope

NWP 27 verifies activities in waters of the United States associated with the restoration, enhancement, and establishment of wetlands and riparian areas and the restoration and enhancement of streams and other open waters, provided those activities result in net increases in aquatic resource functions and services. Regional conditions may apply within Albuquerque District boundaries in Colorado, New Mexico and Texas. A full summary of the NWP 27 terms and conditions is available at http://www.spa.usace.army.mil/reg/nationwides-new/nationwide%20permits.asp.

NWP 27 Checklist for Applicants

The following sections discuss what specific information should be included with requests for authorizing project proposals involving a discharge of dredged or fill material under NWP 27. Also refer to the checklist form for information required for a complete pre-construction notification (PCN) submittal, which can be found at the Albuquerque District's website at: https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/NWP/PCN%20Checklist_12-Mar-19.pdf?ver=2019-10-17-194919-540.

Purpose

The project purpose should contain the overall goal of the project along with providing several supporting objectives. For example, an overall restoration goal might be to improve fish habitat. Several supporting objectives might include the following: improve water temperature by

planting riparian trees and shrubs along the banks, construct an instream structure to create structural and hydraulic diversity within a uniform channel, work with landowners to fence cattle from grazing in riparian areas to promote stream stability. The project purpose should contain measurable details to ensure that the objectives are clearly measurable, and that the project results in net increases in aquatic resource functions and services and resembles an ecological reference.

Existing Conditions

A description of the project site's existing conditions is required to identify the net increase in aquatic resource functions and services from the baseline conditions. Include current conditions such as channel form and dimensions (e.g., typical channel cross-sections and longitudinal profile data), watershed size, floodplain condition and function, existing wetland and riparian areas, habitat types, stream substrate, bed load and flow regime. This discussion should also include a description of known impacts that may have contributed to a degraded condition at the project site (e.g., excessive use by livestock, artificial structures or channelization, road drainage, etc.). Length of channel prescribed for project activities and the area of potential impact within the ordinary high-water mark and/or wetland boundary should also be included. Geo-referenced photographs of existing conditions are required to gauge level of success for restoration efforts.

Reference and Supporting Data

To receive verification under NWP 27, the aquatic habitat restoration, enhancement, or establishment activity must be planned, designed, and implemented so that it results in aquatic habitat that resembles an ecological reference. An ecological reference may be based on the characteristics of an intact aquatic habitat or riparian area of the same type that exists in the region. An ecological reference may be based on a conceptual model developed from regional ecological knowledge of the target aquatic habitat type or riparian area. The preconstruction notification must provide evidence that the proposed work resembles an ecological reference or conceptual model. This includes identifying the reference wetland or stream reach used to design the project or identifying how the conceptual model will improve the aquatic resource and mimic a system that naturally occurs.

Reference sites and supporting data should typically be derived from a relatively undisturbed reach of the same waterway or desired wetland type within the same watershed and ecoregion as the proposed project site. In some instances, historical supporting data, including personal accounts and aerial photos, are used for developing purpose and objectives of restoration. For stream restoration projects, the submittal should clarify if design dimensions are based on reference reach or calculated based on stream and watershed parameters (or a hybrid approach). In either case, the approach should be described in enough detail for the reviewer to understand the basis for the proposed design. Supporting data for wetland restoration projects should include, but is not limited to, soil types, source of hydrology, topographic or habitat surveys, current and historical photos. All background information used to prescribe restoration efforts with definable goals at the project site should be included.

Monitoring Plan

Per Regional Condition 10 for activities authorized under NWP 27 within the state of New Mexico, a monitoring plan shall be submitted to the Albuquerque District for review and

approval prior to commencing the authorized work and should be included with the PCN. In Colorado and Texas, to ensure the project results in minimal adverse effects to the aquatic resource, monitoring requirements may be added as special conditions to the permit verification, on a case-by-case basis. The monitoring plan should include a description of parameters to be monitored to determine if the project is on a trajectory to meet the project objectives, and if adaptive management is needed.

The level of required monitoring should be commensurate with the scale of the proposed restoration project, as well as the potential for risk to the functions and stability of the aquatic environment. Extensive landscape manipulation or reliance on engineered structures will require a more robust monitoring scheme (e.g., for stream restoration projects, the U.S. Forest Service Stream Team assessment protocols or Rosgen level 2 monitoring procedures may be required).

Monitoring Report

Monitoring reports are documents intended to provide the Corps with information to determine if a project site is meeting the purpose and goals of the restoration efforts. An annual monitoring report shall be provided to the Corps each year, generally for not less than five years. Remedial and/or adaptive management recommendations to correct deficiencies in project outcomes will be based on information gathered during site inspections and should be included in the monitoring reports.

The annual monitoring report should follow the outline contained in Regulatory Guidance Letter (RGL) 08-03, and at a minimum include the following information:

- A narrative that provides a concise overview of site conditions and functions, with photographic documentation of the baseline conditions (first year only).

- A discussion of peak flows, with focus on spring and monsoon seasons, and the installed structures' response to high flows. This discussion should be cumulative from year to year to enable the reader to obtain an overall understanding of the structures' efficacy since installation.

- Photographs of not less than 3 locations adjacent to structures installed to determine both the efficacy of the structure as well as the encouragement of riparian/wetland vegetation growth. The same locations shall be photographed annually and displayed in the monitoring report. Differences shall be prominently noted, both in the report text and annotated in the photo captions. Submitted photos should be formatted to print on a standard 8 ½” x 11” piece of paper, dated, and clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.

- Discussion of any unusual events that might have impacted or may impact the structures or the stream or wetland in the future, such as upstream landslides, unusually large snowpack, large-scale erosion event, drought etc.

- Dates of any recent corrective or maintenance activities conducted since the previous report submission, and specific recommendations for any additional corrective or remedial actions.

If the monitoring report is associated with a compensatory mitigation site, then it must satisfy the requirements contained within the South Pacific Division's Mitigation and Monitoring Guidelines, which can be found at the following link: https://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf.

The original monitoring period may be extended upon a determination that performance standards have not been met or will not be met (e.g., high mortality rate of vegetation plantings). Monitoring requirements may also be revised or extended in cases where adaptive management or remediation is required.

Fisheries Enhancement Projects

Per Colorado Regional Condition 7, agency coordination with Colorado Parks and Wildlife is required for projects involving fisheries enhancement in perennial streams. Upon receipt of a complete PCN, the Corps will decide whether the project involves fisheries enhancement activities, regardless of whether the PCN explicitly identifies "fisheries enhancement" as the project purpose, and initiate Agency Coordination with CPW in accordance with the procedures set forth under GC 32(d). Pre-application consultation with CPW, preferably on-site, is highly recommended for projects involving fisheries enhancement, and providing documentation of pre-application consultation with CPW and their response may satisfy the coordination requirements of this permit resulting in quicker processing times. Please visit CPW's website to determine the appropriate office for coordination: https://cpw.state.co.us/. To assist in Agency Coordination with CPW for project involving fisheries enhancement, drawings must also include the following:

(1) Plan view of all work clearly identifying types and locations of structures/impacts, along with dimensions, and approximate extents of aquatic resources within the project area, including wetlands and riffle and pool complexes. To aid in visual understanding, this plan can be overlaid on a recent aerial image of the project site. The plan should also include information such as the existing and proposed bank slopes, width/depth ratio of the channel, and sinuosity.

(2) Cross-sectional and longitudinal profile views to scale of the existing stream channel and the proposed channel modifications, including dimensions (length, width and height of the structures or work).

As-Built Drawings

Per Colorado Regional Condition 7, for projects requiring a PCN with a design-build or fisheries enhancement component, the permittee shall submit a complete set of as-built drawings to the Corps within 90 days following the completion of work.

Resources and Notes

Projects applicants should also consider state conservation and environmental standards. Additional information is available at: https://www.env.nm.gov/surface-water-quality/.

Additional conservation recommendations from the State of New Mexico can be found at: http://www.wildlife.state.nm.us/conservation/habitat-handbook/.

Additional information regarding invasive species controls Colorado can be found at: https://cnhp.colostate.edu/ourwork/invasive-species/

Information on Colorado's Habitat Partnership Program can be found at: https://cpw.state.co.us/aboutus/Pages/HabitatPartnershipProgram.aspx.

The USDA Natural Resource Conservation Service has developed numerous resources pertaining to wetland restoration which can be found at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/water/wetlands/restore/?cid=nrcs143_010912.

Only native vegetation may be planted in projects authorized under NWP 27.

NWP 27 does not authorize: stream channelization; the conversion of a stream or natural wetlands to other aquatic habitat types or uplands, except for the relocation of non-tidal waters on the project site provided the relocation results in a net increases in aquatic resource functions and services.

Compensatory mitigation is not required for activities authorized by NWP 27 since these activities must result in net increases in aquatic resource functions and services.

Many federally-listed species are residents or migratory users of wetlands and riparian areas. Because of this, activities authorized by NWP 27 could adversely affect federally listed as endangered or threatened species or designated critical habitat. Applications for NWP 27 should include an assessment regarding how the project is likely to affect federally listed species. To obtain a species list please visit the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPAC) website at https://ecos.fws.gov/ipac/.