Arizona Department of Transportation
Clean Water Act Guidance Manual

Submitted to:

Arizona Department of Transportation
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FOREWORD

This manual provides an overview of Sections 401, 402, and 404 of the Clean Water Act, as they apply to Arizona Department of Transportation activities.

Compliance with Sections 404 and 401 is necessary for Arizona Department of Transportation (ADOT) activities that involve the discharge of dredged or fill material into waters of the United States. Compliance with Section 402 includes compliance with the Construction General Permit (either federal or state, depending on land ownership) and compliance with ADOT's Municipal Separate Storm Sewer System (MS4) Permit.

Compliance with Section 402 as it relates to roadway projects is discussed more generally in this manual, with the primary focus being on Sections 404 and 401 of the Clean Water Act. The manual also provides general guidance on the preparation of jurisdictional delineations, Nationwide Permit and Regional General Permit 96 Pre-Construction Notification submittals, and Individual Permit applications. The intended audience includes all ADOT design/construction/maintenance and environmental planning staff, consultants, ADOT Districts, and others as applicable.

Applicable regulations, guidance documents, forms, and checklists are cited and/or included in this manual, with document dates, print dates, and sources identified in the References section as appropriate. Although this manual will be periodically updated by the ADOT Environmental Planning to address regulatory and guidance modifications, as well as changes in ADOT policy, it is the responsibility of the user to identify and comply with current standards.

This Manual was developed with consideration that ADOT has been assigned the Federal Highway Administration's (FHWA) responsibilities under 23 U.S.C 326 for the State Assumption of Responsibility for Categorical Exclusions, also referred to as CE Assignment, and under 23 U.S.C 327 for the Surface Transportation Project Delivery Program, also referred to as NEPA Assignment. The environmental review, consultation, and other actions required by Section 401 and 404 are being carried out by ADOT pursuant to 23 U.S.C. 326 and 327 and Memorandums of Understanding executed by FHWA and ADOT.

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ABBREVIATIONS, ACRONYMS, AND DEFINITIONS OF TERMS

ADEQ – Arizona Department of Environmental Quality

ADOT – Arizona Department of Transportation

CE Assignment – ADOT assumes FHWA's NEPA responsibilities for Categorical Exclusions (23 U.S. Code § 326).

C&S – Contracts and Specifications Section

CFR – Code of Federal Regulations

CGP (Construction General Permit) – Permit to discharge stormwater from construction activities. On non-tribal lands in Arizona, this permit is issued by ADEQ. On tribal lands in Arizona, this permit is issued by the EPA.

Corps – US Army Corps of Engineers

CWA (Clean Water Act) – Establishes the basic structure for regulating discharges of pollutants into the waters of the United States. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

Decision document – This refers specifically to the Corps Decision Document which demonstrates compliance with the Section 404(b)(1) guidelines, as well as NEPA and other applicable federal laws and policies. As part of the NEPA review process, the document is constituted by the Corps' environmental assessment, NEPA/404 Memorandum of Agreement compliance, review and compliance determination, alternatives analysis, mitigation plan, statement of findings public interest review, and a finding of no significant impact.

Dredged materials – Material that is excavated or dredged from waters of the United States.

Discharge of dredged material – Any addition of dredged material into the waters of the United States.

Discharge of fill material – The addition of fill material into waters of the United States.

EPA – Environmental Protection Agency

EP (Environmental Planning) – Oversees the preparation of environmental documents for all highway construction projects and maintenance actions. These documents ensure that all relevant environmental factors are appropriately addressed and mitigated, in accordance with state and federal laws, including the National Environmental Policy Act.

ESA – Endangered Species Act of 1973

FHWA – Federal Highway Administration

Fill materials – Any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a waterbody.

HPT – Historic Preservation Team (of EP)

Impaired Waters – Surface waters that do not meet surface water quality standards and therefore receive special consideration. Impaired waters are listed in section 303(d) of CWA Section 401, which in Arizona, is maintained by ADEQ.

IP (Individual Permit) – Intended to authorize activities with greater than minimal adverse environmental impacts. Individual permits are needed for an activity that will result in the discharge of dredged or fill material into waters of the United States, but does not qualify for any Nationwide Permit.

JD (Jurisdictional Delineation) – The process through which the boundaries and other physical characteristics of a potential water of the United States are evaluated for the activity area.

Jurisdictional determination – Used to describe the resulting report, ultimately submitted by ADOT EP to the Corps for their consideration and approval.

LEDPA – Least environmentally damaging practicable alternative

LPA – Local Public Agency

MOA – Memorandum of Agreement

MOU – Memorandum of Understanding

MS4 (Municipal Separate Storm Sewer System) - ADOT is a permitted MS4, a conveyance (or system of conveyances) that is designed and used for collecting and conveying untreated stormwater.

NEPA – National Environmental Policy Act

NEPA Assignment – ADOT assumes FHWA's responsibilities for all NEPA (CEs, Environmental Assessments, and Environmental Impact Statements) [23 U.S. Code § 327]

NHPA – National Historic Preservation Act

NWP (Nationwide permit) – Intended to authorize activities with minimal adverse environmental impacts and are designed to regulate such activities with little, if any, delay or paperwork. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether an activity may qualify for a nationwide permit. Waters of the US temporarily filled, flooded, or drained, but restored to pre-construction contours and elevations after construction are not included in the measurement of loss of waters of the United States.

Non-tribal lands – Requires ADEQ to issue 401 certification.

OAW (Outstanding Arizona Waters) – Surface waters in Arizona classified by ADEQ as outstanding due to their exceptional water quality.

OHWM (Ordinary High Water Mark) – A line on the bank or shore established by the fluctuations of water and indicated by the following physical characteristics: a clear, natural line

imposed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; and the presence of litter and debris.

PCN (Pre-Construction Notice) – Notification to the Corps based on specific conditions as identified in each Nationwide permit, General Conditions, and Regional Conditions.

Preliminary JD (Preliminary Jurisdiction Determination) - Preliminary JDs are non-binding, written indications that there may be waters of the United States, including wetlands, on a parcel or indications of the approximate location(s) of waters of the United States or wetlands on a parcel. Preliminary JDs are advisory in nature and may not be appealed.

Permanent losses of waters of the United States – Waters of the US that are permanently adversely affected by filling, flooding, excavation of native soils/vegetation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a water body, or change the use of a water body.

Qualified Professional – Individual performing an initial evaluation of a site for the presence/absence of potential waters of the United States under Section 404 of the CWA. A qualified professional must have the ability to recognize water features on aerial and topographic mapping. The qualified professional includes the ADOT Environmental Planner.

RGP 96 (Regional General Permit NO. 96) – In February 2016, the RGP No. 96 was issued by the Corps. This RGP 96 applies to Arizona statewide Waters of the US, occurring within ADOT Rights-of-way or easement (including temporary construction easements) through non-tribal lands and LPA projects federally funded by FHWA that are bid and administered by ADOT.

RGL – Regulatory Guidance Letter

Routine Maintenance - Routine maintenance is simply maintenance of a structure to return it to a functioning as-built condition.

River – A large natural stream of water emptying into an ocean, lake, or other body of water and usually fed along its course by converging tributaries.

Section 10 of the Rivers and Harbors Appropriation Act of 1899 - Section 10 requires that regulated activities conducted below the Ordinary High Water elevation of navigable waters of the United States be approved/permitted by the U.S. Army Corps of Engineers. Regulated activities include the placement/removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway.

Section 401 of CWA – Requires that the State provide certification that any activity authorized under Section 404 is in compliance with effluent limits, the state's water quality standards, and any other appropriate requirements of state law. Section 401 is administered by ADEQ in Arizona on non-tribal lands. On tribal lands, Section 401 is administered by EPA or the tribe.

Section 402 of the CWA – Regulates the discharge of pollutants in stormwater through permits. Permits include municipal, industrial, and construction and may be issued by ADEQ, EPA, or the tribe.

Section 404 of CWA – Regulates the discharge of dredged or fill material into waters of the United States. Section 404 is regulated by the Army Corps of Engineers.

Section 408- Section 14 of the Rivers and Harbors Act, which is codified at 33 USC 408 (Section 408), provides that Corps may grant permission for temporary or permanent alterations to a Civil Works project upon a determination that the alteration proposed will not be injurious to the public interest and will not impair the usefulness of the Civil Works project.

Special Aquatic Site - Geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted functions and values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. The following have been identified as special aquatic sites: sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes.

Small wash – Wash that is typically low volume and has infrequent or short duration flow. Small washes are generally considered non-jurisdictional under CWA Section 404.

T&E – Threatened and endangered

Temporary losses of waters of the United States – Short term losses typically attributes to project activity discharges that will be mitigated such that preconstruction conditions, including contours and elevations, and/or uses are restored.

Tribal lands – Lands within a federally recognized tribe which require EPA to issue a 401 certification except where EPA has delegated 401 certification authority.

USGS – United States Geological Survey

Wash – The dry bed of a stream common in the arid western US.

Waters of the US (Waters of the United States) – Denotes the Corps' jurisdictional limits under CWA Section 404 as outlined in Title 33 Code of Federal Regulations Chapter II, Part 328. Navigable waters, interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds are considered "Waters of the US."

Wetlands – Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

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INTRODUCTION

A. Manual Content, Format, and Update Process

1. Manual Content

A Section 404 Permit requires a Section 401 Water Certification

This manual provides some context and references for compliance with Section 402 of the Clean Water Act (CWA), but primarily focuses on CWA Section 404/401 process as it relates to Arizona Department of Transportation (ADOT) activities. As such, the manual discusses some documentation components and coordination guidelines desired by ADOT, in an effort to implement CWA regulations as they apply to the agency. Therefore, it is essential that ADOT activity proponents follow specific Section 404/401 guidelines and related standards established by ADOT.

2. Manual Format

The manual describes Section 402 in the Overview, and then describes the Section 404 and 401 processes as a series of six consecutive steps in more detail in the rest of the manual. At each step, users are prompted to evaluate their activity to determine regulatory applicability and compliance requirements. Many regulatory excerpts, guidance documents, and forms are included as Appendices to this manual and also found on ADOT Environmental Planning (EP) website (https://www.azdot.gov/business/environmental-planning).

Online sources for the following documents are identified in this manual. Due to their size, hard copies of these documents are not included in the manual.

- ADOT Stormwater Management Plan
- 1987 Corps of Engineers Wetlands Delineation Manual
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (Corps 2008a)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (Corps 2010a)
- Corps and EPA Final Rule: Compensatory Mitigation for Losses of Aquatic Resources (Corps 2008b)

3. Manual Update Process

ADOT will periodically update this manual to ensure consistency with regulatory and guidance modifications and ADOT policy changes. However, it is the responsibility of the user to identify and comply with current standards.

B. Overview of this Manual

The federal CWA requires a permit for all construction and maintenance activities that impact jurisdictional waters of the United States (Waters of the US) through

Arizona Department of Environmental Quality (ADEQ) issues Section 401 certification on non-tribal lands and US Environmental Protection Agency (EPA) or the tribe issues Section 401 certification on tribal lands.

the discharge of dredge or fill materials. The permit is issued by the US Army Corps of Engineers (Corps).

Section 404 of the CWA regulates the discharge of dredged or fill material into Waters of the US. Section 404 is regulated by the Corps; the EPA reviews regulated fill activities in conjunction with the Corps.

Section 401 of the CWA allows for state certification of the federal Section 404 permitted activity. The Section 401 certification is necessary for all activities that may result in a discharge to Waters of the US and ensures that an activity will not violate applicable water quality standards.

ADOT activities that involve the discharge of dredged or fill material into Waters of the US require compliance with Sections 404 and 401. This manual was developed to provide general guidance on the preparation of jurisdictional delineation (JD) submittals, Nationwide Permit (NWP) preconstruction notification (PCN) submittals, application for Individual Permit (IP), the Regional General Permit (RGP) 96 notification and application process, and the associated decision processes. There are six basic steps to ADOT's CWA Section 404/401 process.

The following table and flow chart provide a brief overview of the 404 permit application, approval and compliance process. They also identify key terms and documentation pertaining to each step. This process is covered in detail in Steps 1 through 6 of this manual.

Table 1. Overview of the Necessary Steps to Complete the Section 401/404 Process

Step 1 (Page Step 1-1)	**Initial review of surface waters within the boundaries of the activity** • Identify types of drainages typically excluded from Corps' 404 jurisdiction • Project scheduling
Step 2 (Page Step 2-1)	**Will the activity involve the discharge of dredged or fill material into surface waters?** **Have you confirmed the activity will not discharge into Waters of the US?**
Step 3M (Maintenance Activities) (Page Step 3M-1)	**Is a JD of Waters of the US within the activity area necessary?** • If the activity will impact less than 1/10 acre of potential Waters of the US and does not involve work in a wetland, a JD may not be needed. • If there are potential biological or cultural impacts, a JD may be necessary. Please refer to Step 3M-1. Key components: aerial photograph and/or as-builts or activity design plans
Step 3C (Construction Design/Planning) (Page Step 3C-1)	**Are Waters of the US present within the boundaries of the activity?** • Is a JD necessary? • Complete a JD • Submitting the RGP 96 Concurrence Notification, if applicable (further discussed in Section 5) Key components: aerial photograph, topographic map, ground photographs, text and/or table describing activity area conditions, wetland field equipment (soil auger, shovel, etc.), *Corps Jurisdictional Delineation Form*

Table 1. Overview of the Necessary Steps to Complete the Section 401/404 Process

Step 4 (Page Step 4-1)	**Would the impact on Waters of the US be a temporary disturbance or a permanent loss? Would there be discharges to Waters of the US from the activity?** **What quantity of impacts (permanent and temporary) on Waters of the US will result from the activity and will the impacts be mitigated?** • Most commonly quantified in surface area/acreage, cubic yards, or linear feet **What mitigation measures would be feasible and prudent?** • Mitigation includes avoidance and minimization of impacts, and may include compensation when impacts can't be avoided. **What are the Mitigation Needs?**
Step 5 (Page Step 5-1)	**Can the activity be authorized under the RGP 96, a NWP, or is an IP necessary?** **NWP** **What type of permit is needed?** • Commonly used NWPs for regulated ADOT activities • Select from current NWPs **Is PCN necessary?** • No – Complete the Checklist for Section 404 NWP Limits and Conditions Compliance and PCN Decision Process • Yes – key components: topographic map, ENG Form 4345, plan sheets depicting impacts, General Conditions Compliance, Work Order (for maintenance activities), and mitigation plan if applicable. *Additional guidance can be found on the ADOT Environmental Planning website.* **RGP 96** • Authorized activities and levels of notification required **Types of Notification:** • Concurrence Notification • Full PCN **IP** • Components of the IP Package Topographic map, ENG Form 4345, plan sheets depicting impacts, Section 404(b)(1) draft decision document, mitigation plan (if applicable), copy of Section 401 Individual Certification application **What are the Mitigation Requirements?** • In-Lieu Fee Mitigation • Off-site and On-site Mitigation

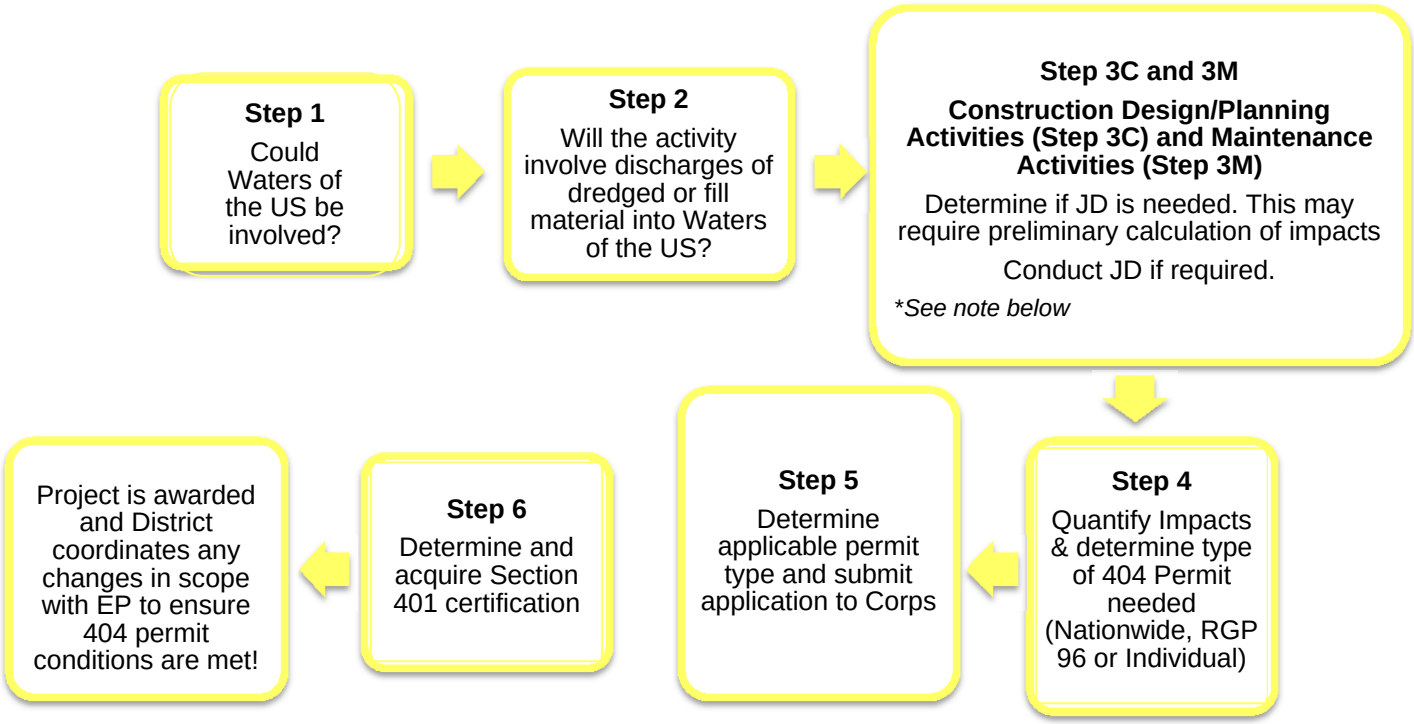
Table 1. Overview of the Necessary Steps to Complete the Section 401/404 Process

Step 6 (Page Step 6-1)	**Determine the certification under Section 401?** • Conditionally certified • Individual certification o Key components: vary depending on agency/tribe oversight o Application to the EPA o Application to Authorized Indian Reservation o Application to ADEQ (non-tribal lands)

This Manual was developed with consideration that ADOT has been assigned the Federal Highway Administration's (FHWA) responsibilities pursuant of the Surface Transportation Project Delivery Program (23 U.S.C. § 326 and 327), also referred to as Categorical Exclusion (CE) and NEPA Assignment, respectively. The environmental review, consultation, and other actions required by the following water resources and wetlands regulations are being carried out by ADOT pursuant to both the 23 U.S.C. § 326 and 327 Memorandums of Understanding (MOUs) executed by FHWA and ADOT.

- Clean Water Act (33 U.S.C. §§ 1251-1377)
- Safe Drinking Water Act (42 U.S.C. §§ 300f-300j-6)
- River and Harbors Act of 1899 (33 U.S.C. § 403)
- Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1287)
- Emergency Wetlands Resources Act (16 U.S.C. §§ 3921, 3931)
- Flood Disaster Protection Act (42 U.S.C. 4001-4128)
- FHWA wetland and natural habitat mitigation regulations (23 CFR part 777)

Flow Chart I-1: Overview



* Note: If RGP 96 is acceptable, submit RGP 96 Concurrence Notification and JD concurrently

Important things to Remember!

- If determined in Step 1 or 2 that there is no activity in Waters of the US, consult with EP to document this on the Water Resources Checklist and add the checklist to the project file. You are done! The Water Resources Checklist should be completed by the Environmental Planner (Planner) and approved by the Wetland Biologist.
- After Step 3, if you determine a RGP 96 is acceptable and comply with the identified thresholds, submit the RGP 96 Concurrence Notification. The RGP 96 can be submitted concurrently with the PJD; however, the PJD can be submitted before if necessary.
- If unsure about decisions for Steps 3 and 4, consult your Planner or Wetland Biologist.
- After Step 5, the Permit Application is reviewed by EP and the District. The District signs the application and EP sends application to the Corps.
- EP submits the Impact Sheets, Approval Authorization letter from the Corps and ADEQ, and the Permit to Contracts and Specifications Section (C&S) for inclusion in Bid Package Special Provisions.;

C. Quick Facts

1. Regulation and Administration

The 1972 Federal Water Pollution Control Act was amended and became commonly known as the CWA in 1977. The CWA "…established the basic structure for regulating discharges of pollutants into the waters of the United States" (EPA 2013). The objective of the CWA "…is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S. Code 1251-1387).

Section 404 of the CWA regulates the discharge of fill material into Waters of the US.

Section 401 allows certification that any activity authorized under Section 404 is in compliance with effluent limits, the state's water quality standards, and any other appropriate requirements of state law. Section 402 establishes the National Pollutant Discharge Elimination System, which requires a permit to discharge stormwater from certain activities. This manual provides general guidance and references for construction activities and ADOT's MS4. As a permitted MS4, ADOT is required to comply with an ADOT-specific permit, issued by ADEQ, which requires development and use of a Stormwater Management Plan (SWMP). This includes implementation of minimum control measures (as listed in the current permit and SWMP) to reduce discharges of pollutants to the maximum extent practicable, and annual reporting to ADEQ.

The Corps administers the day-to-day CWA Section 404 program, develops policy and guidance, and enforces Section 404 provisions. The EPA develops and interprets environmental criteria used in evaluating Section 404 permit applications, identifies activities that are exempt from Section 404 regulation, and assists the Corps in enforcing Section 404 provisions (EPA 2013).

In Arizona, the CWA Sections 401 water quality certification program and 402 National Pollutant Discharge Elimination System (or Arizona Pollutant Discharge Elimination System as it is known on non-tribal lands in AZ) is administered by the ADEQ, certain federally recognized tribes, or EPA, depending on the type and location of the activity.

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the Corps, for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, rechannelization, or any other modification of a navigable Water of the US, and applies to all structures, from the smallest floating dock to the largest commercial undertaking.

Application for a permit/letter of permission for work regulated under Section 404 (CWA) and Section 10 (Rivers and Harbors Act) can be made by completing and submitting one application form. An application for a Department of Army Permit will serve as an application for both Section 404 and Section 10 Permits. Use Engineer Form 4345 (which can be found here), Routine permit applications take about 60 days to process. More complicated/controversial applications may take considerably longer. Information submitted with the application includes descriptions of the proposed project's purpose, reasons for the proposed discharge of dredged/fill material, type and amount of material being discharged, surface areas of wetlands/waters filled, and the names and addresses of adjacent property owners. Three types of illustrations must also be submitted with the application: vicinity map, plan view, and a typical cross section map. Several nationwide permits authorize work under both Section 404 and Section 10. However, not all nationwide permits grant approval under both Section 10 and Section 404. A letter of approval from the Corps may be required for work within navigable Waters of the US or dredging and filling within Waters of the US when this work is not covered under an existing nationwide or regional/general Corps Permit.

Section 408 authorizes the Secretary of the Army to grant permission for the permanent or temporary alteration or use of the Corps civil works project. The authorization is given based on the recommendation of the Chief of Engineers. To acquire the Section 408 permit, a determination that the requested alteration is "not injurious to the public interest" and will not "affect the Corps project's ability to meet its authorized purpose" must be made. This means that Corps has the authority to review, evaluate, and approve all alterations that impact federally authorized civil works projects to make sure they are not harmful to the public and still meet the project's intended purposes mandated by congressional authorization. This requirement was established in Section 14 of the Rivers and Harbors Act of 1899, which has since been amended several times and is codified at 33 USC 408 (Section 408). See Appendix G for more information regarding Section 408.

2. Examples of Regulated Arizona Department of Transportation Activities

Common ADOT activities that require a Section 402 Construction General Permit include activities that meet the definition of a construction activity (as defined by the permit) and are not eligible for a waiver or the maintenance exemption. Examples and consideration of these activities for permitting are listed in the Construction General Permit Information Sheet in Appendix G. ADOT's MS4 permit list minimum control measures that have to be implemented as part of managing ADOT's system. Specific ADOT activities are listed in the MS4 permit and Stormwater Management Plan as applicable.

Common ADOT activities that require Section 404 and Section 401 compliance, if conducted within Waters of the US, include but are not limited to:

Construction activities:

- Culvert extensions and installations
- New bridge construction
- Bridge scour countermeasures and bridge pier construction
- Roadway and utility crossings
- Geotechnical borings

Maintenance activities:

- Channel bank protection
- Wash realignment and channelization
- Removal of sediment buildup from culverts (hydrovacuuming)

Most common dredged (excavated) materials from ADOT activities:

- Sand, soil, and gravel

Most common fill materials from ADOT activities:

- Soil, concrete and asphalt, riprap, and steel

3. Examples of Key Terms

Waters of the US commonly found in Arizona include but are not limited to:

- Washes
- Rivers and streams
- Natural ponds
- Wetlands
- Certain canals

4. Roles and Responsibilities and Coordination Guidelines

For compliance with Section 402 Construction General Permit, estimation of the project activity acreage and activity criteria is conducted during the development process, typically by ADOT Roadside Development Section, following guidance set by ADOT Water Resources (see Appendix G1) and in coordination with the Environmental Planner and the rest of the project team. The ADOT District and Contractor submit the paperwork to obtain CGP coverage and comply with the permit as outlined in ADOT's 104.09 Specifications. ADOT provides additional guidance for erosion and sediment controls through the Erosion and Pollution Control Manual. Compliance with Section 402 ADOT MS4 Permit is described in ADOT's Stormwater Management Plan and its supporting guidance. The MS4 program is managed through ADOT Water Resources.

Coordination for all ADOT Activities requiring a Section 404 permit and/or Section 401 certification must comply with the ADOT Environmental Communication Policy.

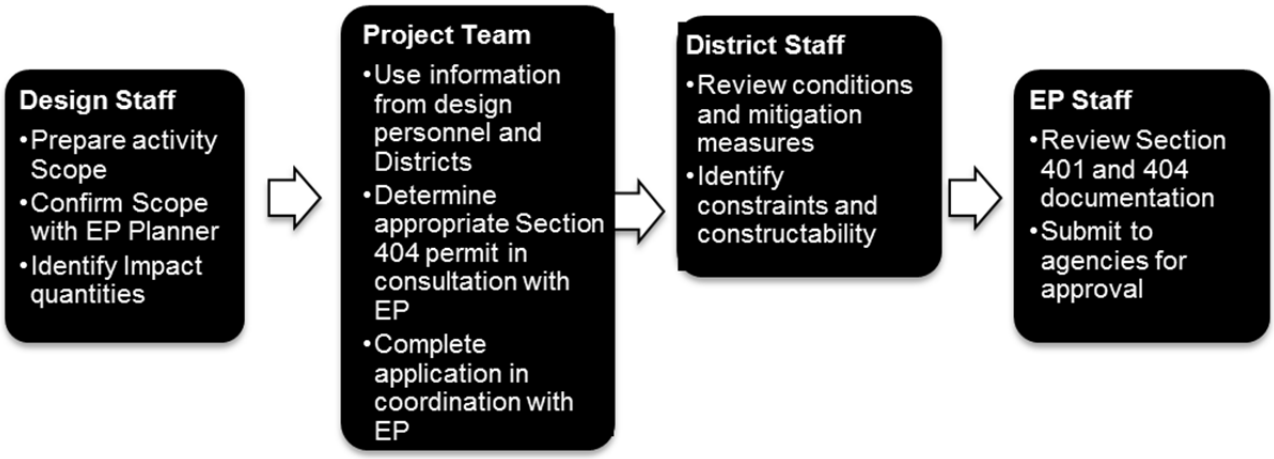
Close coordination between Environmental Planners and design personnel for construction design/planning activities, or between Districts, EP, and maintenance personnel for maintenance activities, ensures Section

404 and Section 401 calculations and documentation are accurate. Typically, design personnel provide important activity scope and impact information to EP for inclusion in the Section 404 and Section 401 documentation. Maintenance personnel work with their District to evaluate activity scope and impact information, with coordination with EP through a Work Order process. For maintenance projects, the District typically prepares Section 404 and Section 401 documentation and sends to EP for their review. The District provides all necessary information in order to ensure which permit is most applicable for the project. Once the information is received by EP, the Wetland Biologist evaluates the information and submits documentation to the Corps if necessary

Design personnel and District staff must be given the opportunity to review all Section 404 or Section 401 conditions and mitigation measures applicable to an activity in order to identify construction constraints as early as possible. Conditions and mitigation measures are ultimately included in the environmental clearance and project specifications.

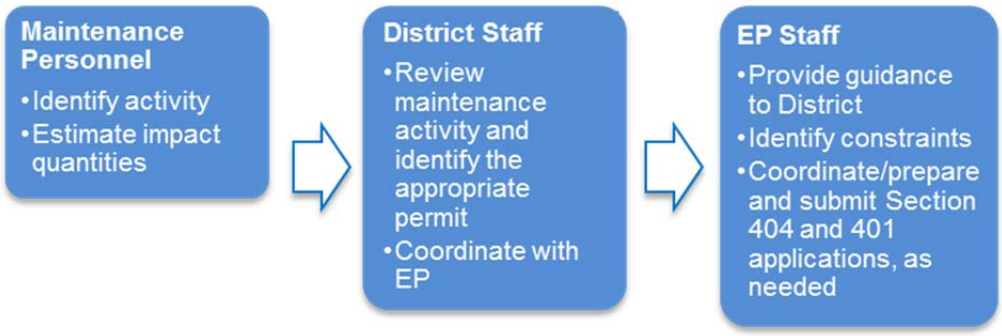
Communication with the Corps regarding Section 404 permitting should begin immediately after the project kick-off meeting!

Flow Chart I-2: Construction Activities – Coordination Process



Throughout this manual, the following color codes apply:
Black color indicates information related to Construction/Design Planning activities.
Blue color indicates information related to Maintenance activities.
Yellow color indicates general information (e.g., ADOT or Corps-related).

Flow Chart I-3: Maintenance Activities – Coordination Process



5. Contact Information (As of April 2018)

Internal ADOT communication must comply with the ADOT Environmental Communication Policy and the ADOT Memorandum of Agreement (MOA) with the Corps. Refer to ADOT Environmental Planning website for submittal information. (https://www.azdot.gov/docs/default-source/planning/public-involvement-plan888dce78c8006c57b531ff0000a35efc.pdf?sfvrsn=2)

STEP 1. INITIAL REVIEW OF SURFACE WATERS WITHIN THE BOUNDARIES OF THE ACTIVITY

The first step of the Section 404 compliance process is to perform an initial evaluation of the activity area for the presence/absence of potential Waters of the US. A qualified professional will perform this initial evaluation which includes completion of the Water Resources Checklist (provided in Appendix H). Examples of when the Water Resources Checklist should be used would be for projects which involve drainage or erosion repairs. EP is available to review the results of the initial review to determine follow-up actions.

A. Definitions and Examples of Waters of the US

In general, Waters of the US is a term used to denote the Corps' jurisdictional limits under CWA Section 404. The full definition of the term is provided in Title 33 Code of Federal Regulations (CFR) Chapter II, Part 328—Definition of Waters of the US (available online: http://www.nap.usace.army.mil/Portals/39/docs/regulatory/regs/33cfr328.pdf).

Categories of Waters of the US:
- Territorial seas
- Tidal waters
- Non-tidal waters

Waters of the US may be categorized as tribal waters (occurring on tribal lands), unique waters (a.k.a. Outstanding Arizona Water [OAW] [classification designated by ADEQ]), impaired waters or other waters (all non-tribal and non-unique waters). Waters of the US can also include lakes (wet or dry, including playa lakes), special aquatic sites (including wetlands), mud and sandflats, sloughs, and wet meadows. Because wetlands are typically the special aquatic site potentially impacted by ADOT activities, the term "wetlands" is referenced throughout this manual.

Arizona Waters of the US (tribal, unique and other) include:
- Washes
- Rivers and streams
- Natural ponds
- Wetlands
- Certain canals

In Arizona, the Colorado River is a Water of the US and is considered a navigable water. Projects involving navigable waters, such as the Colorado River, are also protected under Section 10 of the Rivers and Harbors Act. Under Section 10, the Corps regulates any work in, over, or under navigable Waters of the US. ADOT EP must be contacted for guidance on any projects involving the Colorado River.

EP must be contacted for guidance on any projects involving the Colorado River.

Features Generally Considered Non-jurisdictional

Surface waters generally considered non-jurisdictional under CWA Section 404 include:

- Swales and erosional features such as gullies and small washes that typically are low volume and have infrequent or short duration flow
- Ditches (including roadside ditches) excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water

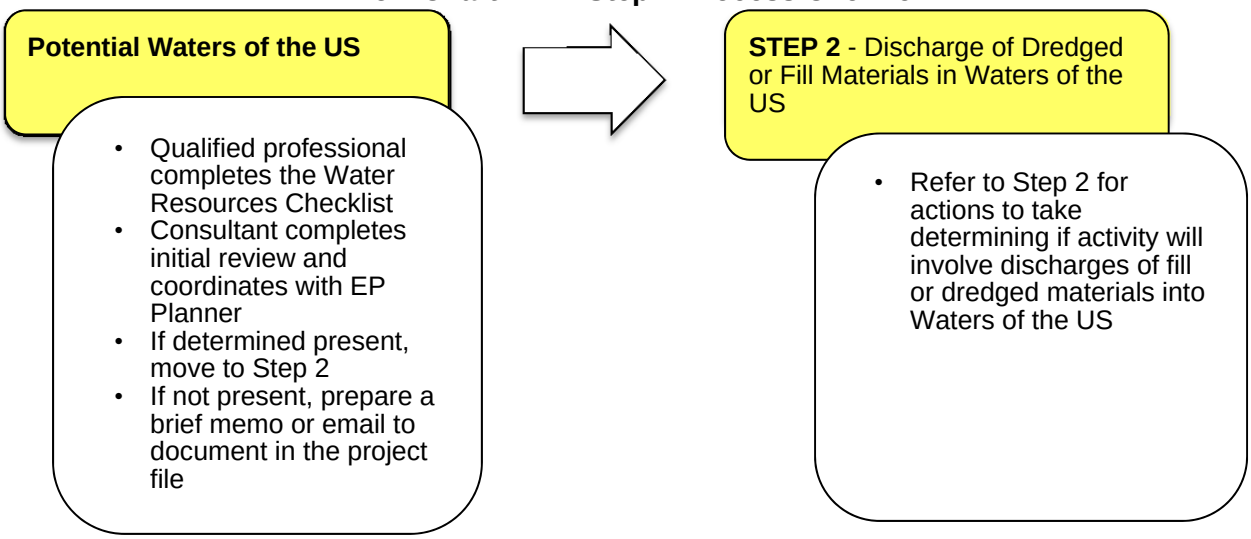
The Corps and EPA have provided additional guidance on how they will identify jurisdictional Waters of the US protected by Section 404 – *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States, December 2008* (EPA and Corps 2008) (available online: https://www.epa.gov/sites/production/files)

B. Initial Review of Activity Area

An initial review of the activity area must be performed by a qualified professional to determine the presence or absence of potential Waters of the US. This initial review should include the use of aerial imagery and topographic mapping of the activity area if a site visit is not performed. If the aerial imagery is not sufficient, then a site visit with ground photographs may be needed. The review will evaluate what type of, if any, surface waters occur within the area (e.g., streams, roadside ditches, potential wetlands). It is essential the review is performed soon after the project kick-off meeting when the project area boundaries and scope is clearly defined. Not only will the initial review identify anticipated Waters of the US within and adjacent to the project area, the review will also identify the anticipated Section 404 permit and whether mitigation should be anticipated.

Key Decisions for Step 1:

Flow Chart 1-1: Step 1 Process Overview



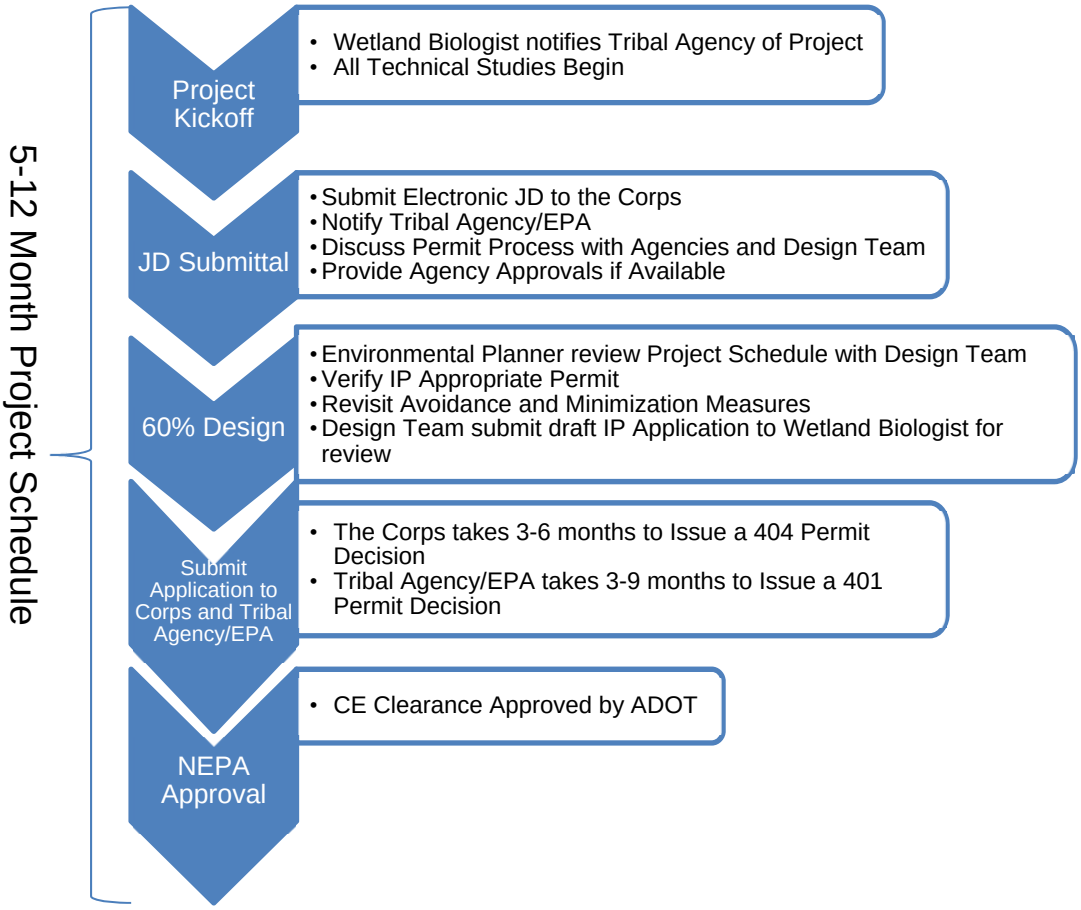
C. Project Scheduling

As you will see in the following Steps described in this manual, there are variables associated with each project that will affect the type of Section 404 permit and Section 401 certification required for the project. The timeframe to acquire the different types of Section 404 permits and certain Section 401 certifications can vary dramatically. Some of the variables that affect the type of permit and acquisition timeframe include the type of Waters of the US impacted; the amount of Waters of the US impacts; agency coordination; impacts to tribal lands and or T&E species; the presence of cultural resources; and the type of mitigation required.

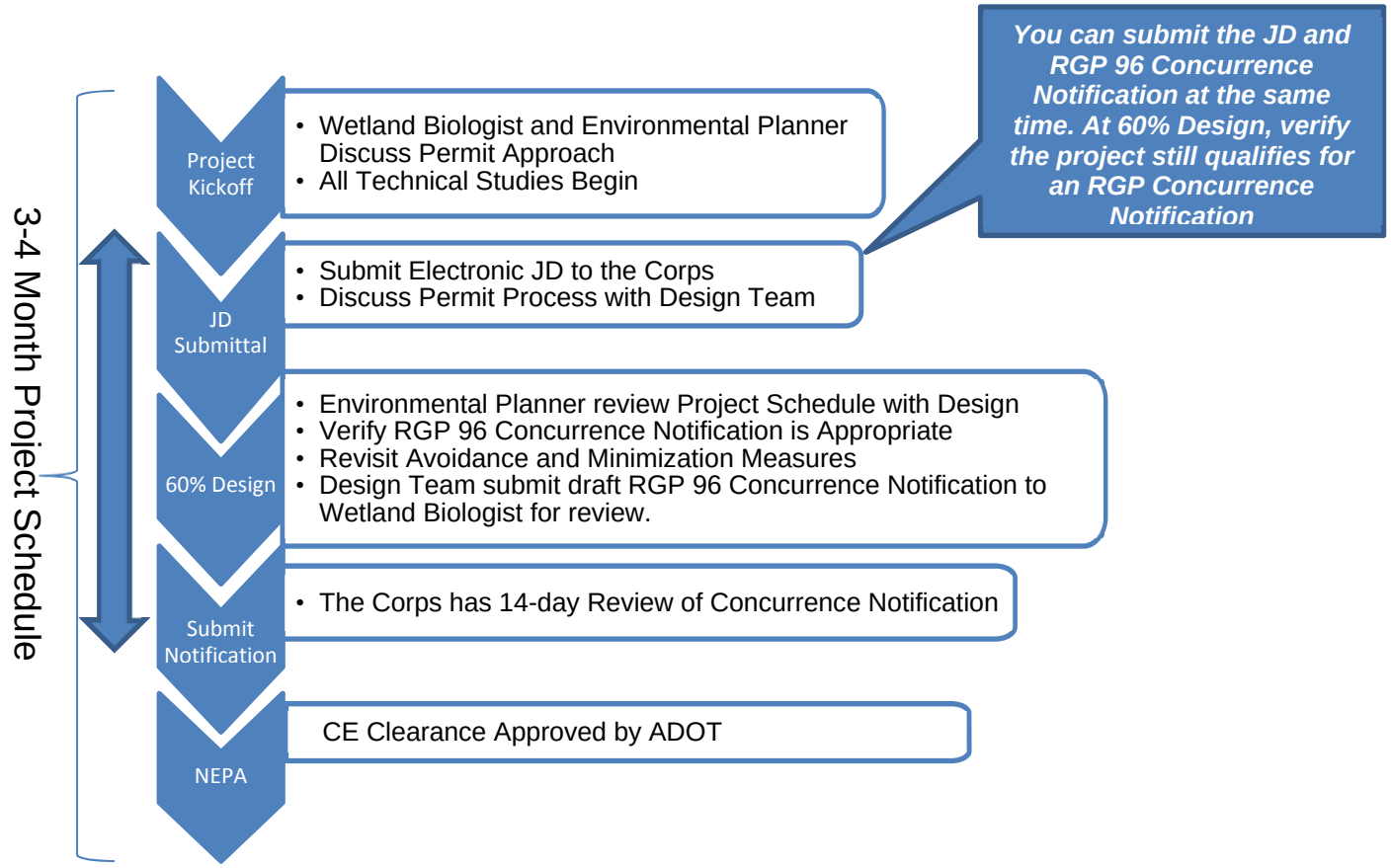
The rule of thumb is to submit the Section 404 Permit Application around 60% design. This will give you adequate time before the project goes to advertisement. But acquisition of the NWP, IP, or RGP can vary depending of the impacts associated with the Project. The notification process varies for the NWP and RGP (see Step 5) and the IP submittal and review process can take up to 6-9 months or more if sufficient information is not provided. The key is to be familiar with the permit application process and plan ahead.

Also, the timeframe for acquisition of the Section 401 certification can vary. If the project involves tribal land and consultation with the Tribal Agency/EPA, it can take up to 12 months to get the Section 401 certification approved. Be aware of Section 408, as well. If you can identify the Section 408 resource early on, it benefits ADOT in planning for the application process. Although the Corps indicates 120 days for the process, there are exceptions to this and the process may take much longer. Again, it is important to plan accordingly. The sooner you can ensure the design will not change in the areas of Waters of the US and/or Corps Civil Works project, the sooner you can apply for the appropriate permit! The following is an example of how the timeframe for acquisition of the IP for a project on Tribal land can differentiate from a reporting RGP 96 for a project contained within ADOT ROW not on tribal land:

Project on Tribal Land Requiring Individual Permit



Project on Non-Tribal Land RGP 96 Concurrence Notification



Additional Assistance Documents for Step 1:

- Title 33 CFR Chapter II, Part 328—Definition of Waters of the United States. *Available online*: http://www.nap.usace.army.mil/Portals/39/docs/regulatory/regs/33cfr328.pdf.
- Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States, December 2008 (EPA and Corps 2008). *Available online:* https://www.epa.gov/sites/production/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf

STEP 2. WILL THE ACTIVITY INVOLVE THE DISCHARGE OF DREDGED OR FILL MATERIAL INTO WATERS OF THE US?

The second step is to determine whether the activity will involve the discharge of dredged or fill material into potential Waters of the US, as addressed in 33 CFR 323 – *Permits for Discharges of Dredged or Fill Materials into Waters of the United States* (available online: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr323_main_02.tpl).

A. Definitions and Examples

As defined in 33 CFR 323, within the context of Section 404:

- Dredged material is defined as "…material that is excavated or dredged from waters of the United States"
- Discharge of dredged material is defined as "…any addition of dredged material into the waters of the United States"
- Fill material is defined as "…any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of…[a] waterbody"
- Discharge of fill material is defined as "…the addition of fill material into waters of the United States"

> Common dredged (excavated) materials resulting from ADOT activities are:
> - Sand, soil, and gravel
>
> Common fill material discharged into Waters of the US from ADOT activities include:
> - Soil, concrete and pavement, riprap, steel, and gravel

B. Regulated Activities

ADOT activities that commonly result in the discharge of dredged and/or fill material into Waters of the US include but are not limited to:

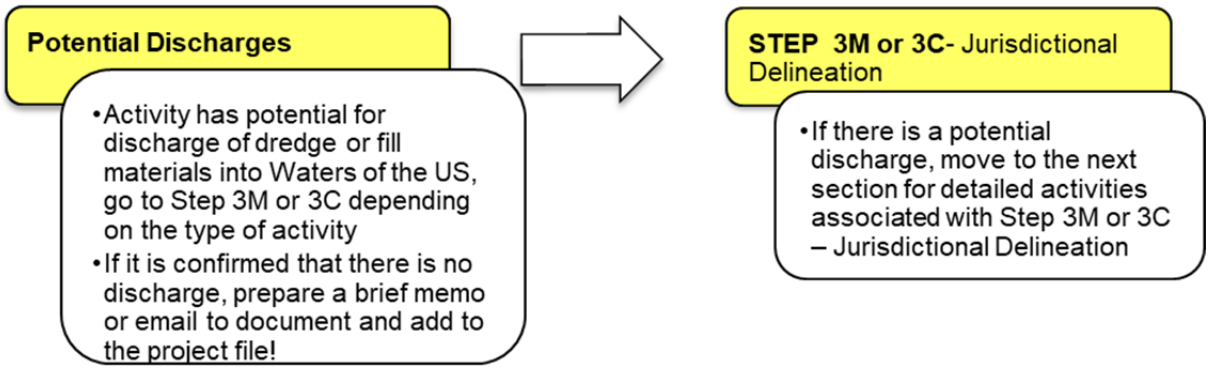
- *Construction Activities*
  - Culvert extensions and installations
  - Bridge scour countermeasures
  - Roadway and utility crossings
  - Geotechnical borings
- *Maintenance Activities*
  - Channel bank protection
  - Erosion repair
  - The removal of sediment buildup from culverts (activity must have discharge of material [i.e. hydrovacuuming])

It is important to note that activity components such as access routes, staging areas, and stockpile areas may result in discharges to Waters of the US. These areas should be identified during the design process if possible. 33 CFR 323 provides additional description of specific activities regulated under Section 404, as well as activities that are exempt from regulation.

> Activity components such as access routes, staging areas, and stockpile areas should be evaluated for 404 impacts.

Key Decisions for Step 2:

Flow Chart 2-1: Step 2 Process Overview



Please note that Step 3 has been divided into two sub-sections. One sub-section (Step 3M) is dedicated for maintenance activies and the other sub-section (Step 3C) addresses construction activities. Please choose the appropriate sub-section based on the type of activity associated with your project.

Additional Assistance Documents for Step 2:

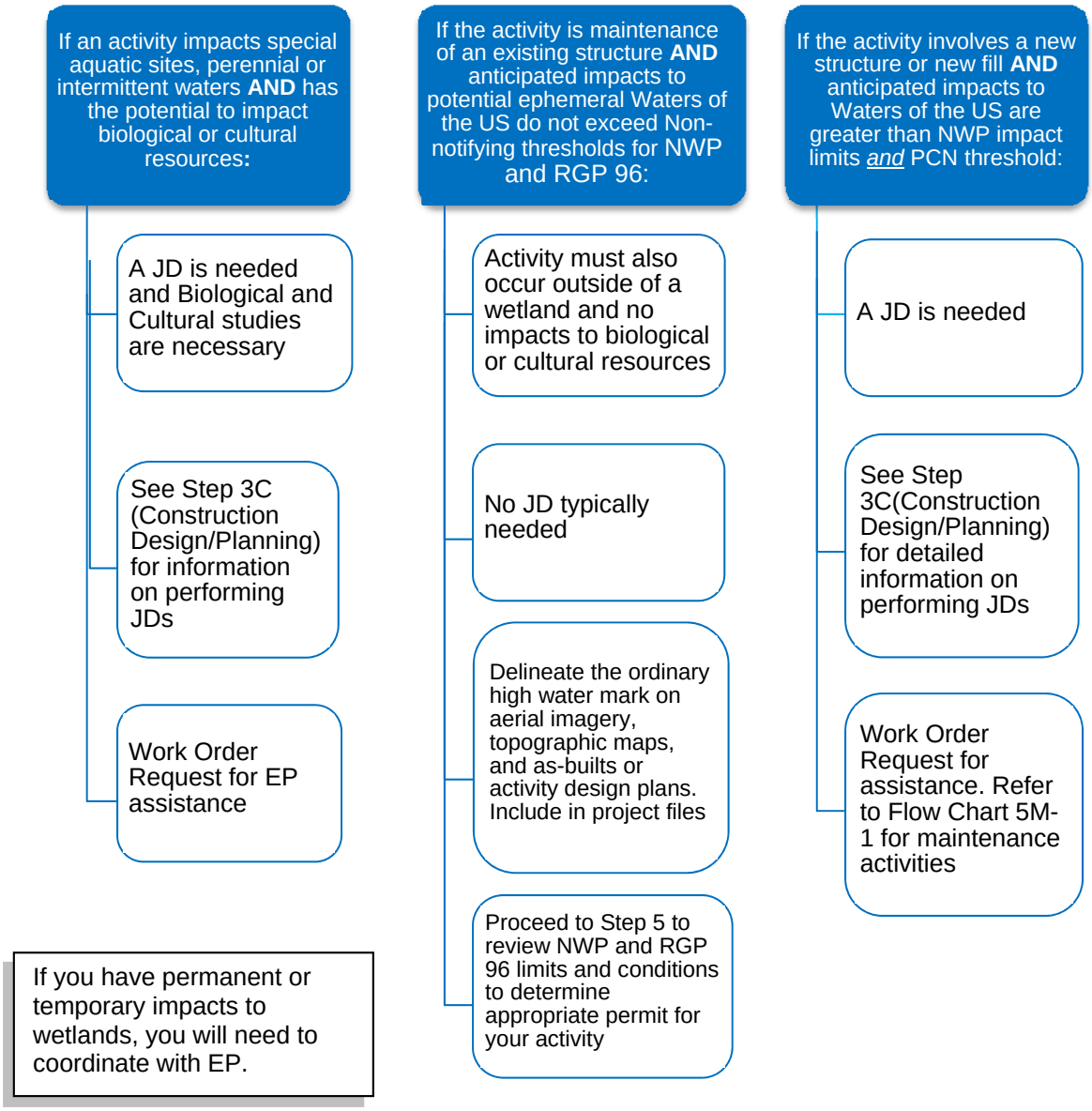
- 33 CFR 323 – Permits for Discharges of Dredged or Fill Materials into Waters of the United States. *Available online:* http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr323_main_02.tpl

STEP 3M (MAINTENANCE ACTIVITIES) - IS A JURISDICTIONAL DELINEATION OF WATERS OF THE US WITHIN THE ACTIVITY AREA NECESSARY?

Prior to this step, an initial area review has been performed and it has been determined that a surface water potentially considered jurisdictional under Section 404 occurs within the activity area (Step 1). In addition, the activity is expected to result in discharges of dredged or fill materials (Step 2).

Now the activity and anticipated impacts must be evaluated to determine if a JD is necessary. Many ADOT maintenance activities can be performed within the conditions of Section 404, RGP 96 or NWPs that do not require notification to the Corps, in which case jurisdiction is often assumed and a JD may not be necessary.

Flow Chart 3M-1: Is a Jurisdictional Delineation Required?



If the activity is maintenance of an existing structure and anticipated impacts to Waters of the US are less than the impact limits for a NWP (typically under a 1/10 acre, but not always) or meet the conditions of the NWP for maintenance, instead of a JD, the ordinary high water mark (OHWM) of all washes must be identified and depicted on aerial imagery and activity design plans or as-built drawings, if available. If not available, a hand drawn line of the OHWM on a Google map (or similar) will suffice and should be included in the project files. Several photographs representative of the activity area should be taken as well to document the current activity area conditions. Topographic maps may also be helpful in evaluating the activity area and confirming field observations.

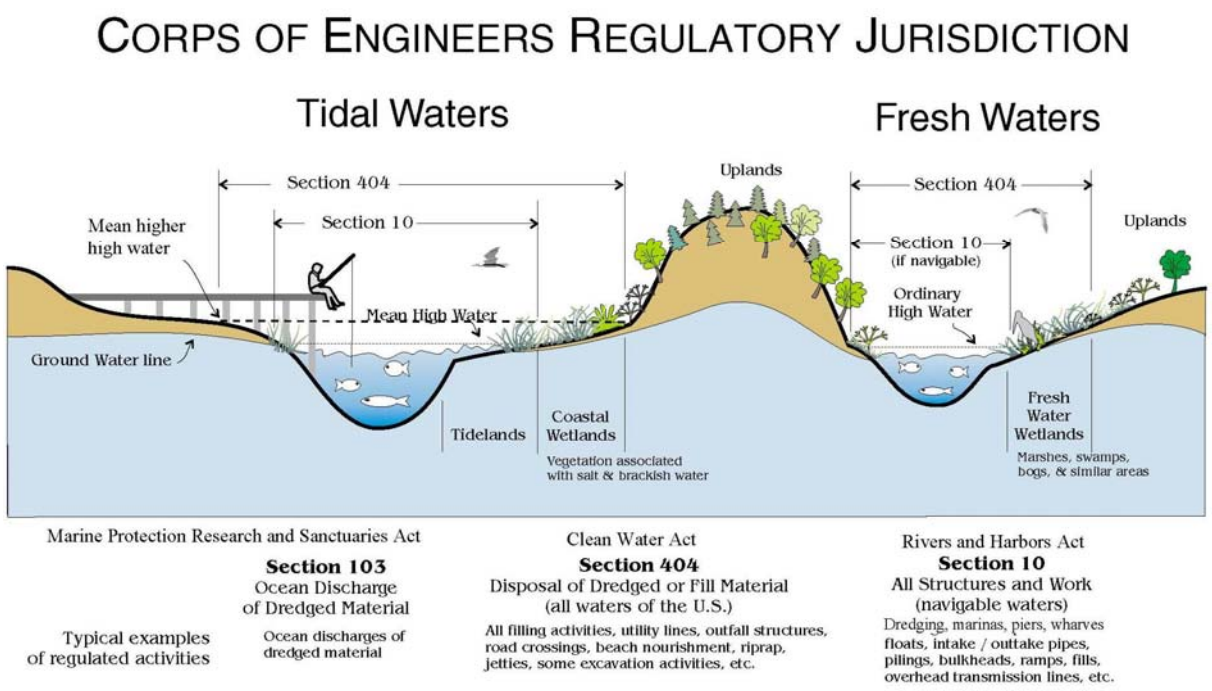
Please refer to Step 3C (Construction Design/ Planning) for a definition of OHWM

ADOT maintenance activities typically resulting in impacts to Waters of the US within NWP or RGP 96 limits:

- Repair of existing culverts
- Removal of debris from existing culverts
- Replacement of storm-damaged culverts or water intake structure
- Temporary cofferdams or culverts to perform maintenance activities

Once the OHWM has been evaluated and indicated on pertinent documentation, Step 4 provides detailed information on how to quantify impacts to Waters of the US as a result of the activity and is needed to ensure the activity is covered by the appropriate Section 404 permit. After quantifying impacts, proceed to Step 5 to review permitted activities and permit conditions to ensure the appropriate Section 404 permit is selected for the activity. If uncertain, please contact your District for assistance. If District staff is unavailable, please consult EP.

Activities that will result in the use of a NWP or RGP 96 that requires PCN will typically require a JD to be performed. Refer to Step 5 for the Notification process.

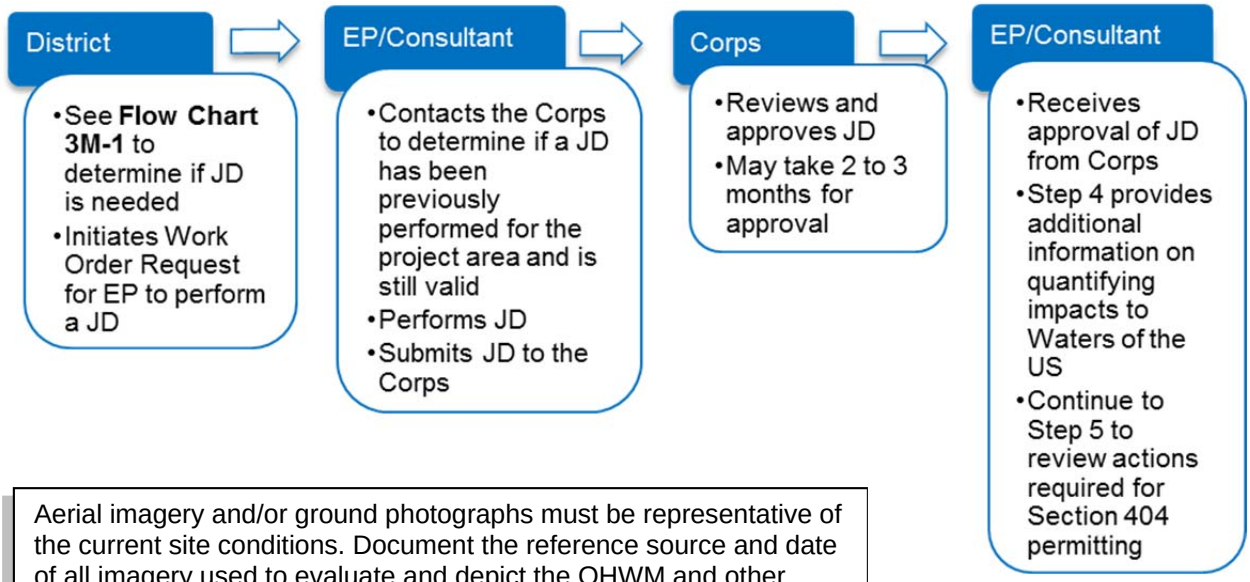


Source: http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/CorpsPermit/LimitsofJurisdiction.aspx

For larger activity areas or more complex maintenance activities, a JD will likely be needed to determine potential Waters of the US within the activity area boundaries. A JD is the process through which the boundaries and other physical characteristics of a potential Water of the US are evaluated for the activity area.

Please refer to Step 3C (Construction Design/Planning) for a complete description of the process to perform a JD.

Flow Chart 3M-2: Jurisdictional Delineation Process for Maintenance Activities



Aerial imagery and/or ground photographs must be representative of the current site conditions. Document the reference source and date of all imagery used to evaluate and depict the OHWM and other physical characteristics of the activity area.

Key Documents for Step 3M (Maintenance Activities):

- 33 CFR 328 – Definitions of Waters of United States. *Available online:* http://www.nap.usace.army.mil/Portals/39/docs/regulatory/regs/33cfr328.pdf
- RGL 05-05 – Ordinary High Water Mark (OHWM) Identification. *Available online:* https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll9/id/1253

Additional Assistance Documents for Step 3M (Maintenance Activities):

- Step 3C (Construction Design/Planning).

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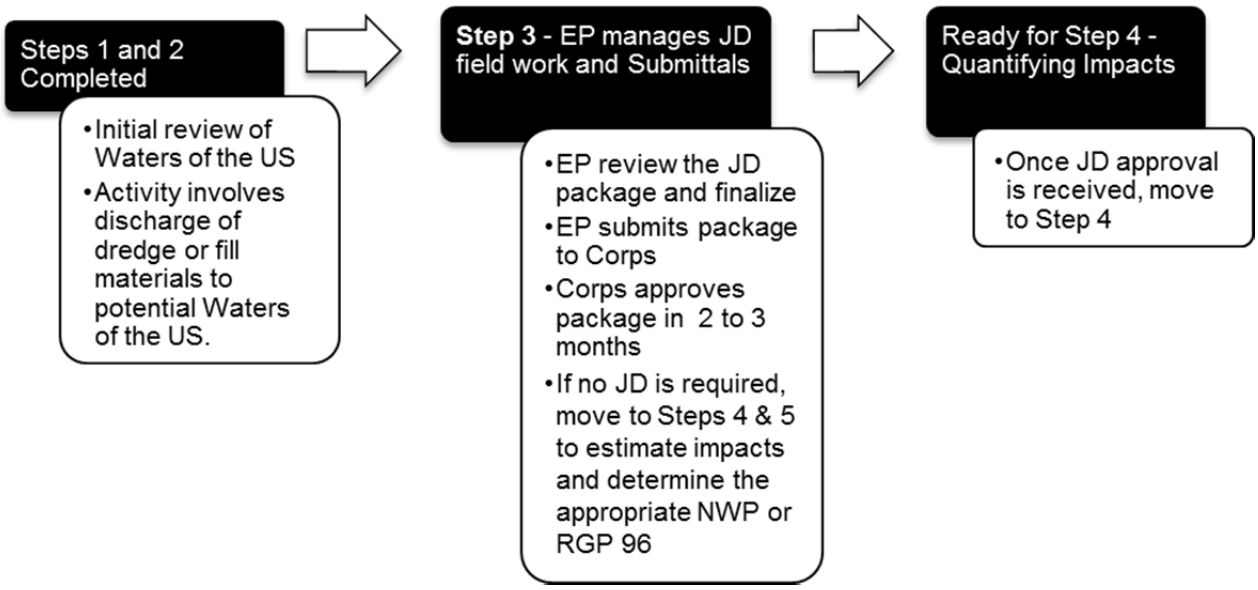
STEP 3C (CONSTRUCTION DESIGN/PLANNING) - ARE WATERS OF THE US PRESENT WITHIN THE BOUNDARIES OF THE ACTIVITY?

Prior to this step, an initial activity area review has been performed and it has been determined that a surface water potentially considered jurisdictional under CWA Section 404 occurs within the activity area (Step 1). In addition, the activity will or most likely will result in discharges of dredged or fill materials to surface waters (Step 2).

Now the activity area must be evaluated for the presence or absence of Waters of the US through completion of a JD. General features of waterbodies that are typically considered Waters of the US were discussed in Step 1. Before moving forward with a JD, coordinate with EP to identify whether a JD has already been performed for the activity area in question and is still valid.

If the activity would result in less than the indicated impact thresholds in the RGP or less than indicated thresholds for the specific NWP when stated; and would not result in impacts to biological or cultural resources, delineate the OHWM without a JD submittal to the Corps. Document the work and include in project file and proceed to Step 5.

Flow Chart 3C-1: Is a Jurisdictional Delineation Required?



A. Jurisdictional Delineation

A jurisdictional delineation (JD) is the process through which the boundaries and other physical characteristics of a potential Water of the US are evaluated for the activity area. The term jurisdictional determination is used to describe the resulting report, ultimately submitted by ADOT EP to the Corps for their consideration and approval.

It is important to note that specific regulatory requirements apply to wetlands; therefore, jurisdictional delineations of potential Waters of the US must clearly differentiate between non-wetland water features and wetlands.

1. Non-Wetland Water Features

An OHWM represents the Corps' jurisdictional limit in a non-wetland water feature. The Corps defines the OHWM at 33 CFR 328.3(e) as a line on the bank or shore established by the fluctuations of water and indicated by the following physical characteristics (refer to Page 3M-2 for illustration of OHWM):

- A clear, natural line imposed on the bank
- Shelving
- Changes in the character of soil
- Destruction of terrestrial vegetation
- The presence of litter and debris

The Corps has developed *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (Corps 2008c) and *RGL 05-05 – Ordinary High Water Mark Identification* (Corps 2005) to further assist in determining the OHWM in the Arid West, including Arizona, and is available online, provided in the Key Documents for Step 3C and Step 3M, below.

The presence or absence of the following features must also be evaluated when conducting a JD of a non-wetland water feature:

- Sediment deposits
- Water stains
- Exposed roots
- Width and depth (cross-sectional area) of the OHWM

Please refer to the *Jurisdictional Determination Forms and Checklists* in Appendix A for data forms and checklists.

Wetlands are defined by the Corps as: "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Corps 1987).

2. Wetlands

The Corps' jurisdictional limit of a wetland is considered to be the wetland boundary, defined as "the point on the ground at which a shift from wetlands to non-wetlands or aquatic habitats occurs. These boundaries usually follow contours" (Corps 1987). The *Corps of Engineers Wetlands Delineation Manual* (1987) provides guidance in evaluating the jurisdictional limits of wetlands and is available online at: https://el.erdc.dren.mil/elpubs/pdf/wlman87.pdf

JDs of wetlands must be prepared in accordance with the 1987 Corps manual and the appropriate Regional Supplement. If a situation occurs in which guidance in the Regional Supplement conflicts with that of the 1987 Manual, the 1987 Manual guidance supersedes. The Regional Supplements are found here:
https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/
The ADOT Environmental Planning website provides a template for jurisdictional delineations containing wetlands areas:
https://www.azdot.gov/business/environmental-planning/water-resources/section-404-401-procedures

B. Jurisdictional Determinations Submittals

ADOT has developed "paperless" (i.e. electronic) jurisdictional determination submittal guidance (Appendix F) and a submittal checklist (Appendix A-8) for preliminary and approved jurisdictional determinations in order to facilitate the Corps Regulatory Division's review and processing of jurisdictional determinations. Appendix F provides a detailed step-by-step guidance in preparing and submitting electronic JDs. Since the KMZ file is a key component of the electronic JD, we have listed data layers that should be included in the KMZ file. Please refer to Appendix F for more detailed information. The Corps provides guidelines for the processing of jurisdictional determinations and describes the differences between preliminary and approved jurisdictional determinations in *Regulatory Guidance Letter (RGL) 16-01 – Jurisdictional Determinations* (Corps 2016).

All electronic JD submittals should include:
- Cover letter from ADOT to the Corps
- Preliminary JD Form and previous JD documentation (as applicable)
- Corps' Water Data Sheet

Data layers to be added to the KMZ file include, but are not limited to:

- Annotation such as "Begin Project" and "End Project" callouts; milepost icons and labels; roadway labels; watercourse labels; and other labels to clarify features on the aerial basemap (e.g., dirt road, berm, swale, sheetflow, driveway, etc).
- Contours (that conform to the Corps' current mapping standards)
- Latitude/Longitude Control points (for the final submittal of the JD)
- USGS topographic quadrangle
- Boundary of Area Surveyed
- 100-year floodplain or floodways
- Photopoints
- OHWM
- Waters
- Wetlands (as applicable)
- Wetland Plant Communities (as applicable)
- NWI data (as applicable)
- Permanent impacts (for PCN or IP)
- Temporary impacts (for PCN or IP)
- Design line-work (for PCN or IP)

It is important to identify the source and date of all documentation and references used to prepare a jurisdictional determination, including aerial photographs, ground photographs, and applicable mapping. In addition, the Corps and ADOT have developed labels to be used on preliminary and approved jurisdictional determination aerial photographs for all ADOT activities and are provided in the *JD Forms and Checklists* and the *Section 404 Paperless Submittal Procedures* Appendices.

Aerial imagery and ground photographs must be representative of the current activity area conditions

Note: It is recommended that the JD and RGP Concurrence Notification be submitted concurrently. Please see **Step 5** for more details.

Key Documents for Step 3C and Step 3M:

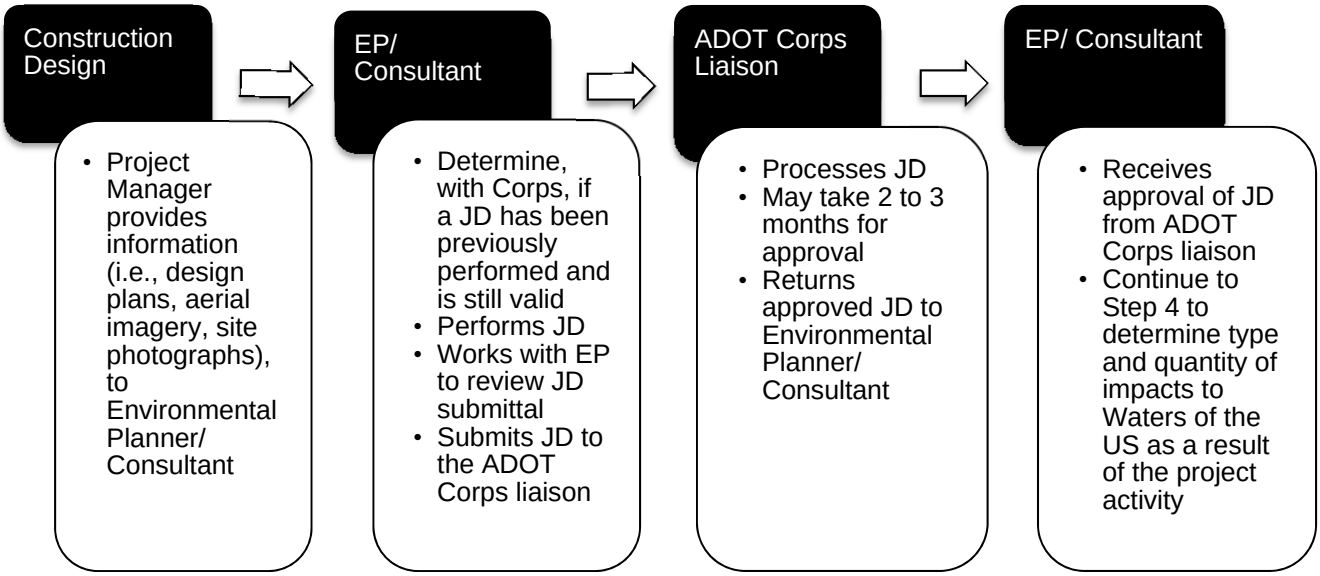
- 33 CFR 328 – Definitions of Waters of United States. *Available online:* http://www.nap.usace.army.mil/Portals/39/docs/regulatory/regs/33cfr328.pdf
- A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States. *Available online:* https://www.spl.usace.army.mil/Portals/17/docs/regulatory/JD/FinalOHWMManual_2008.pdf

- RGL 05-05 – Ordinary High Water Mark (OHWM) Identification. *Available online:* https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll9/id/1253

Jurisdictional Determination Forms and Checklist (Appendix A)

- Preliminary Jurisdictional Delineation Submittal Guidance (EP 2013)
- Approved Jurisdictional Delineation Submittal Guidance (EP 2013)
- Checklist for Submitting a Section 404 Jurisdictional Delineation (EP 2013)
- Table 1 – Jurisdictional Determination Physical Characteristics & Other Information (EP 2013)
- Corps Preliminary Jurisdictional Determination Form
- Corps Approved Jurisdictional Determination Form
- Corps labels for Jurisdictional Determinations
- ADOT Cover Letter

Flow Chart 3C-2: Jurisdictional Delineations for Construction Design/Planning Activities



Additional Assistance Documents for Step 3C (Construction Design/Planning):

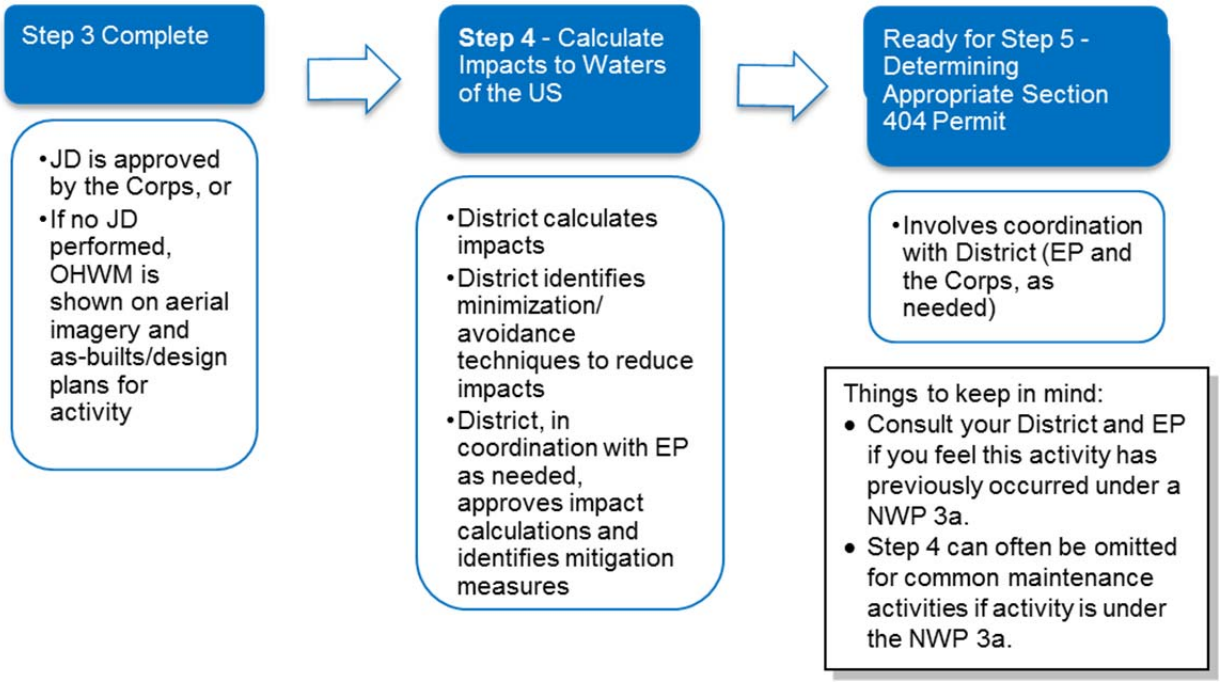
- Regulatory Guidance Letter (RGL 16-01) Jurisdictional Determinations (Corps 20016). *Available online:*
  - http://www.azdot.gov/docs/default-source/planning/acoe-guidelines-for-preliminary-jurisdictional-determinations.pdf?sfvrsn=2
- Final Summary Report: *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (Corps 2001). Available online:
  - http://www.azdot.gov/docs/default-source/environmental-planning-library/jd_guidelines_for_jd_arid_southwest.pdf?sfvrsn=2
- A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Corps 2008c). Available online:

    - https://www.spl.usace.army.mil/Portals/17/docs/regulatory/JD/FinalOHWMManual_2008.pdf
- 1987 Corps of Engineers Wetlands Delineation Manual. Available online:
    - https://el.erdc.dren.mil/elpubs/pdf/wlman87.pdf
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0; Corps 2008a). Available online:
    - https://usace.contentdm.oclc.org/utils/getfile/collection/p266001coll1/id/7627
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0; Corps 2010a). Available online:
    - https://usace.contentdm.oclc.org/utils/getfile/collection/p266001coll1/id/7646
- National Wetlands Plants List. Available online:
    - http://wetland-plants.usace.army.mil/nwpl_static/index.html

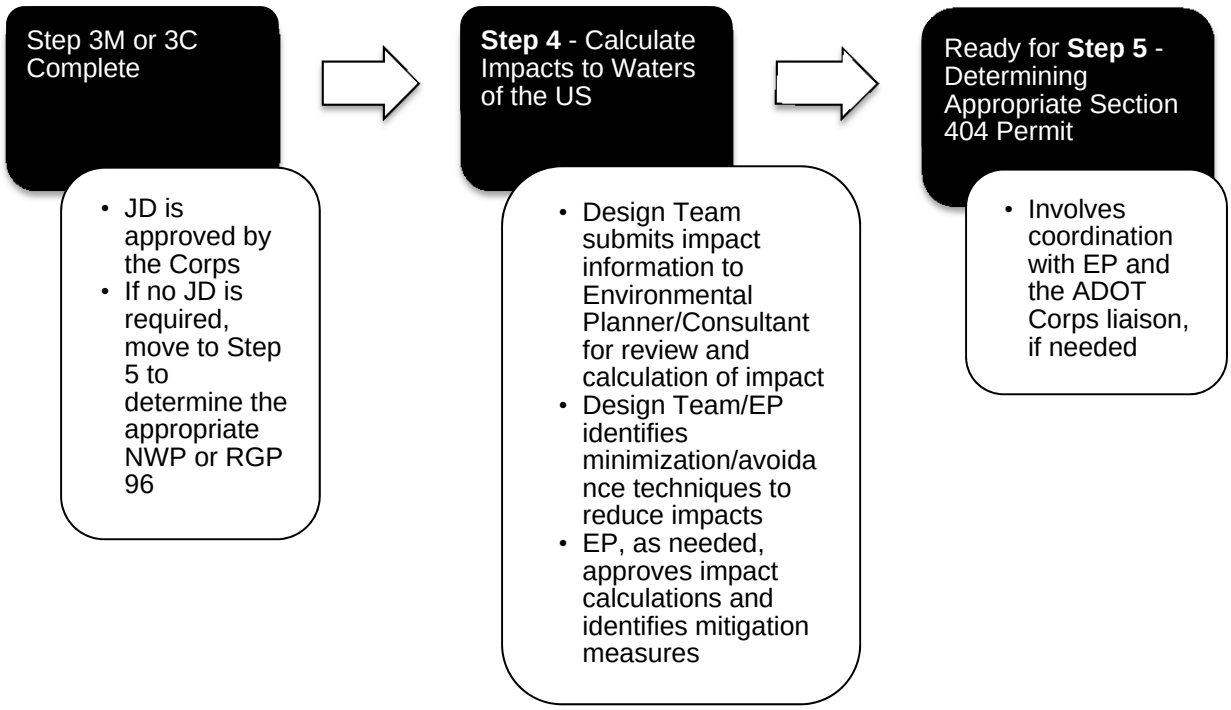
STEP 4: WHAT TYPE AND QUANTITY OF IMPACTS ON WATERS OF THE US WILL RESULT FROM THE ACTIVITY AND HOW WILL IMPACTS BE MITIGATED?

In the fourth step the activity proponent (e.g. EP, environmental consultant, design team, District) will identify the anticipated type (permanent or temporary) and quantity of impacts on Waters of the US resulting from the construction/planning or maintenance activity, and evaluate how to avoid or minimize those impacts.

Flow Chart 4M-1: Step 4 for Maintenance Activities



Flow Chart 4C-1: Step 4 for Construction Design/Planning Projects



A. Definitions and Examples

Permanent losses of Waters of the US may result from:

- Placement of concrete to extend a culvert
- Channelization of a wash to reduce roadway flooding
- Placement of pavement to construct an at-grade roadway crossing
- Placement of riprap
- Moving material within a channel (for example, utilization of a backhoe to move material within a channel) for maintenance purposes
- Placement of bridge piers

In general, anticipated project activity impacts on Waters of the US can be categorized as permanent (long-term) losses or temporary (short-term) disturbances. The Corps defines the permanent loss of Waters of the US as "Waters of the US that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody" (Corps 2017a).

Temporary disturbances of Waters of the US are typically attributes to project activity discharges that will be mitigated such that pre-construction conditions, including contours and elevations, and/or uses are restored.

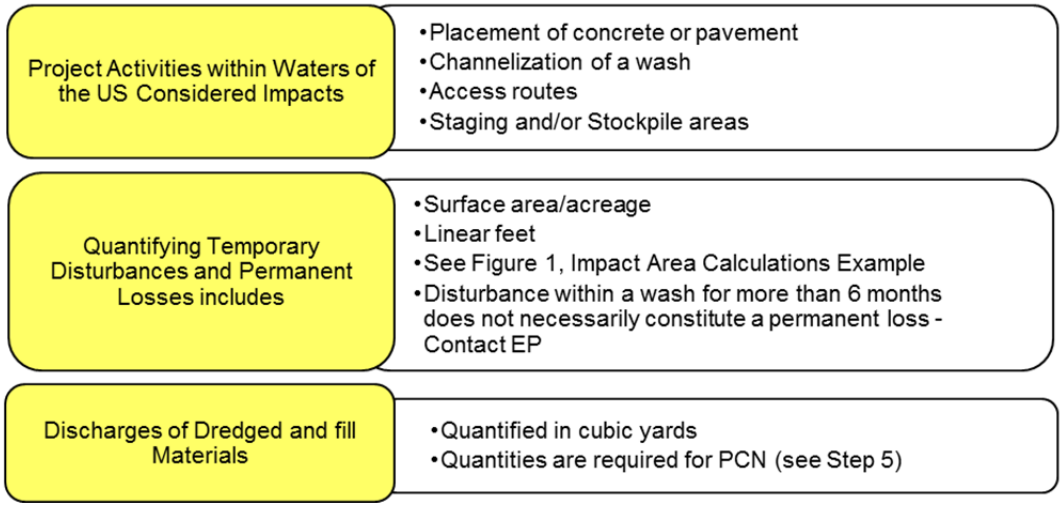
Temporary disturbances of Waters of the US may result from:

- Temporary stream diversion to accommodate construction or maintenance activities
- Installation and removal of a temporary culvert as part of a construction detour
- Construction of a temporary construction access road

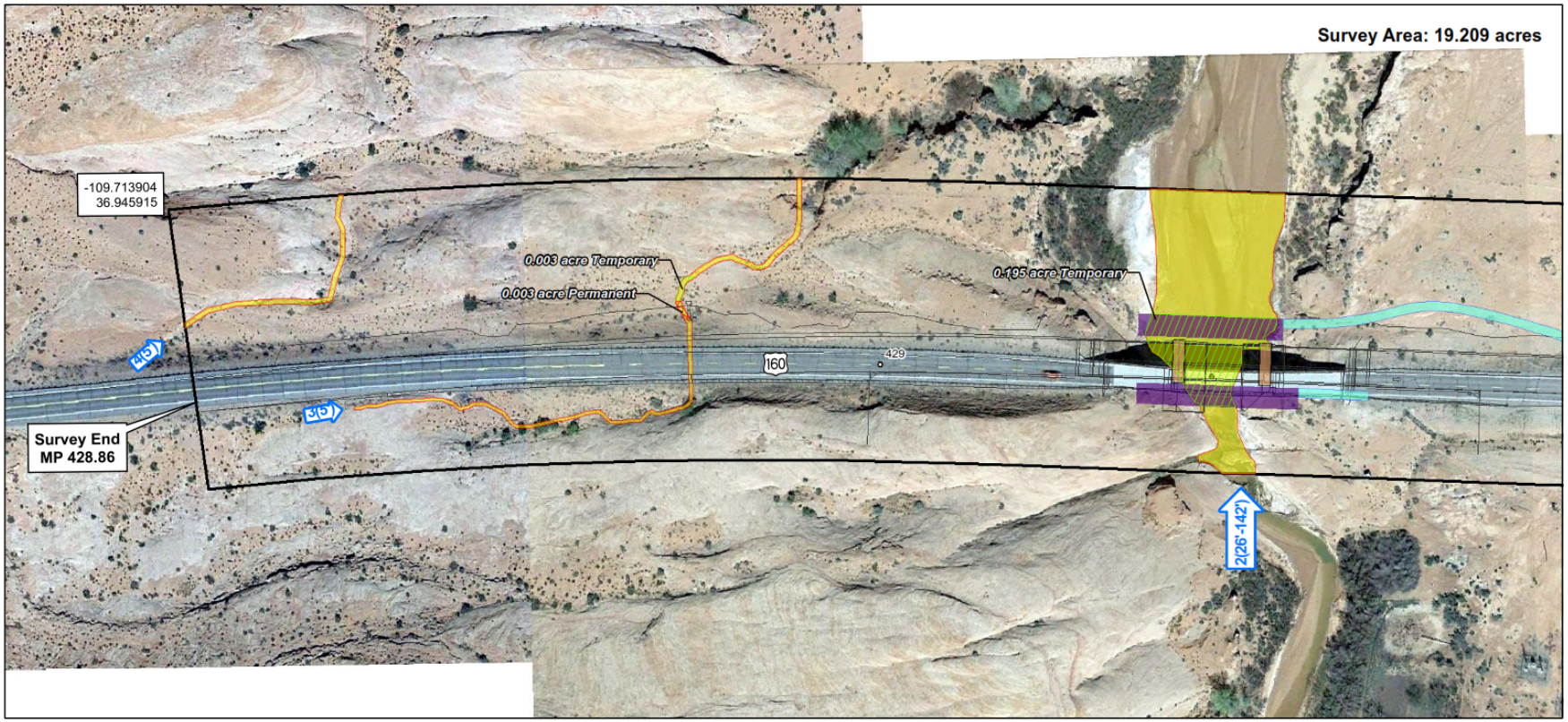
B. Methodology – Quantifying Impacts

The type and quantity of anticipated project activity impacts on Waters of the US are identified through review of design plans (Construction Design/Planning) or maintenance activity plans or as-builts (Maintenance). If maintenance activity plans or as-builts are unavailable for the activity, activity impacts must be documented in detail in coordination with the District and EP. Close coordination between the Design Team and EP /Consultant (Construction Design/Planning) or between the Maintenance Team, District, and EP (Maintenance) is needed to ensure accurate and realistic quantification of impacts.

Project Activities – Quantifying Permanent and Temporary Impacts and Discharges



Impacts Calculation Example Figure



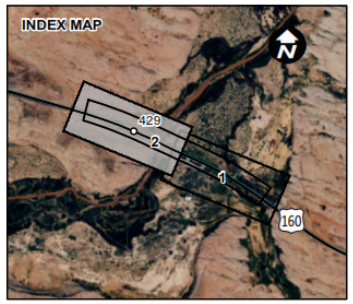
Sources: ADOT ATIS (2013), Google Earth Imagery (Dated 04/05/2015).

IMPACTS TO WATERS OF THE US
BR 160-B(204)A
160 AP 249 H8490 01C
Chinle Wash Bridge STR #746
Print Date: February 8, 2017

Page 2 of 2

Feet
0 50 100

Waters of the US
Ordinary High Water Mark
60% Design Plans
Temporary Bridge Crossing
Temporary Access Road
Coffer dam/Diversion Structure (as needed)
Permanent Impact
Temporary Impact
Watercourse Number (Average Width of OHWM) Arrow Indicates Flow Direction



C. Mitigation Measures

Mitigation measures are intended to ensure that adverse project activity effects to the aquatic environment are avoided or minimal. They can be implemented prior to, during, and/or following construction, depending on the measure.

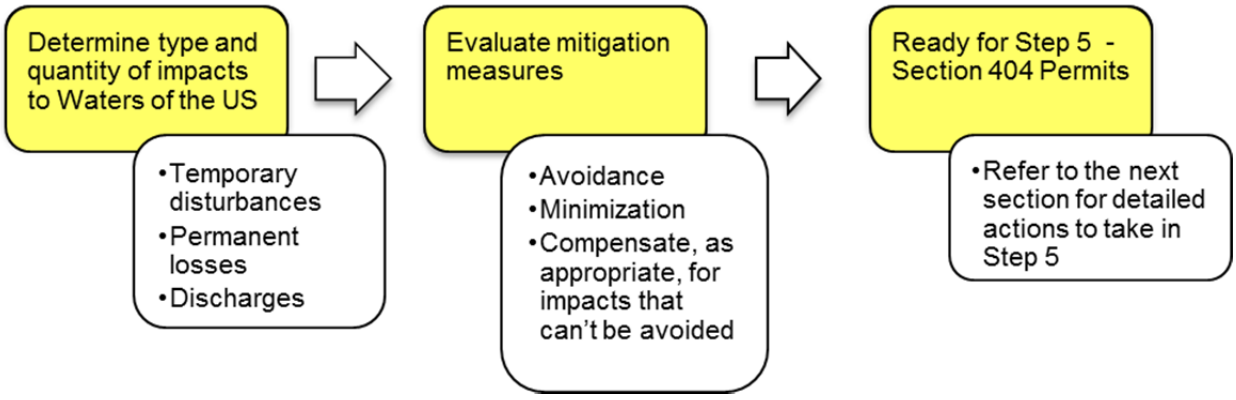
Mitigation measures are actions taken in sequence to avoid, minimize, or compensate for permanent losses or temporary disturbances of Waters of the US.

Example mitigation measures:
- Avoid – siting the activity away from Waters of the US
- Minimize – reducing the size of the activity
- Compensate – In-Lieu fee payment

Identifying mitigation measures and quantifying impacts:
- Construction Design/Planning - Typically the Environmental Planner/ Consultant works with the Design Team.
- Maintenance activities - Typically the District works with EP through a Work Order Request.

The following are project specific examples of mitigation measures:
- Avoidance – Keeping roadway bank stabilization and equipment out of Waters of the US
- Minimize – Modify slope stabilization measures to reduce impacts to Waters of the US
- Compensation – Paying $10,000 in in-lieu fee compensation for impacts to wetland from culvert extension

Flow Chart 4-1: Key Decision for Step 4



D. Identifying Mitigation Needs

For all projects permitted under a notifying NWP, notifying RGP 96, or IP, mitigation to Waters of the US can be expected. The preferable mitigation approach by ADOT and the Corps is the payment of funds to the In-Lieu Fee Mitigation Program in Arizona. Consult with the Corps to validate the active site locations as they are constantly changing. The size of the mitigation payment to the bank is usually directly correlated to the amount of and quality of the Waters of the US impacted, including wetlands. One of the tools used by the Corps to assess the quality is a "function and values" assessment. This assessment is completed at the time of the permit submittal; however, it can be determined if the project is within a site during the Jurisdictional Determination step of the Section 404 permit process. If the project falls outside the watershed

of one of the Program's sites, state permittee-responsible mitigation (can be on or off-site) would be the next viable mitigation option. Permittee-responsible mitigation can be a challenging process in regards to Corps approval, design, construction, and perpetual ownership. Please consult EP immediately if you determine their may be mitigation required for the permitted impacts. They will help guide you through the mitigation process. It is important to determine if mitigation will be necessary and how it will be addressed early. You will need to provide a summary of planned mitigation when submitting the required application. Below is a list of the 12 items that must be included in the mitigation plan for permittee-responsible mitigation per 33 CFR 332.4(c):

1. Objectives
2. Site selection
3. Site protection instruments
4. Baseline ecological information
5. Explanation of how the compensatory mitigation will provided the required compensation for unavoidable impacts
6. Mitigation work plan (including water availability, control of invasive species, elevations and slopes, soil management, and erosion control)
7. A maintenance plan
8. Performance standards based on ecological development of the site
9. Monitoring requirements of no less than 5 years
10. Long-term management plan (including financing mechanisms and party identification)
11. Adaptive management plan (unforeseen changes in site)
12. Financial assurances, and other information requested by the district engineer

For more details and specifics regarding fulfillment of the above mentioned 12 items required for a permittee-responsible mitigation plan, defer to the Corps website, http://www.nab.usace.army.mil/Portals/63/docs/Regulatory/Mitigation/Mitigation_Plan_Requirements.pdf?ver=2016-12-02-160627-633 .

Key Documents for Step 4:

- Construction Design/Planning activities:
    - Design plans
    - JD approved by the Corps
- Maintenance activities:
    - Maintenance activity plans or as-builts
    - Delineated ordinary high water mark when jurisdiction is assumed
    - JD (if one was performed for larger or more complex maintenance activities)

Additional Assistance Documents for Step 4:

- Pre-Construction Notification – Nationwide/Individual Permit Submittal Guidance (*404 Permit and PCN Templates, Checklists, and Instructions*, Appendix B)

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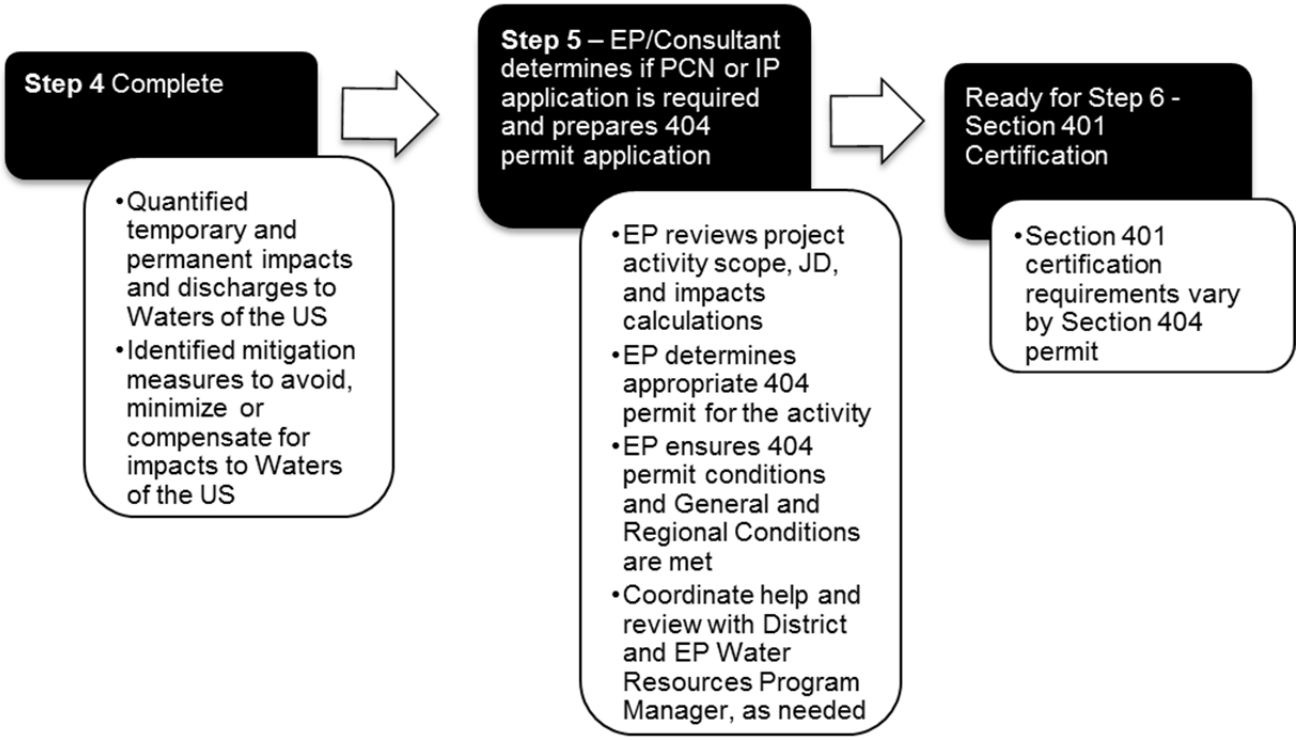
STEP 5 : WHAT TYPE OF SECTION 404 PERMIT IS NECESSARY FOR THE ACTIVITY?

The fifth step is to identify the type of Section 404 permit needed for the activity, determine if a notification or permit application is needed, and prepare the necessary documentation as identified. The three types of Section 404 permits are the NWP, RGP 96, and IP. The NWP is intended to authorize activities with minimal impacts to Waters of the US and are designed to regulate such activities with little, if any, delay or paperwork. The RGP 96 applies to Arizona statewide Waters of the US occurring through non-tribal lands in ADOT right-of-way (ROW) or easement and Local Public Agency (LPA) projects federally funded by FHWA that are bid and administered by ADOT. IPs are intended to authorize activities with greater than minimal impacts to Waters of the US. IPs are necessary if an activity and/or associated impacts does not qualify for any NWP or RGP 96.

Construction Design/Planning Activities Permit Determination Process

Construction design/planning activities can require a number of different types of Section 404 permits and documentation, depending on the scope of the activity. The following flow chart identifies the process and responsible parties involved with determining the correct Section 404 permit and documentation for ADOT construction design/planning activities.

Flow Chart 5C-1: Step 5 for Construction Design/Planning Activities.



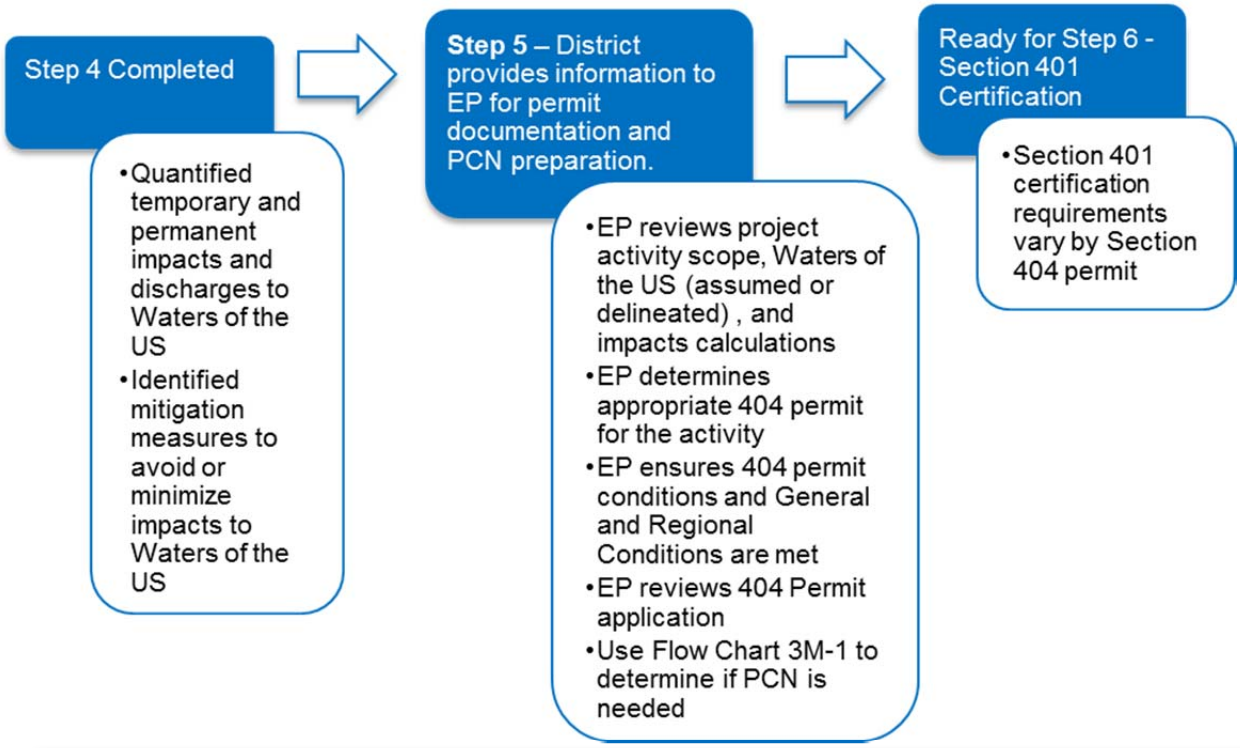
Things to remember for construction design/planning activities before proceeding through Step 5:

- Has the Corps approved the JD?
- Are the impacts temporary and/or permanent discharges into Waters of the US?
- Have the impacts to Waters of the US been quantified?

Maintenance Activities Permit Determination Process

Maintenance activities typically occur under NWPs 3a and 14 and the RGP 96, depending on the scope of the activity. The following flow chart identifies the standard process and responsible parties involved with determining the correct Section 404 permit and documentation for ADOT maintenance activities.

Flow Chart 5M-1: Step 5 for Maintenance Activities



Things to Remember for Maintenance Activities:

- Are the impacts to Waters of the US temporary, permanent and/or discharges?
- Have the impacts to Waters of the US been quantified?
- For the majority of ADOT maintenance activities, RGP 96, NWP 3a or 14 is used.
- A decision chart for commonly used NWPs is provided later in this section.
- Coordinate with the District, and EP as needed, to ensure that a given NWP or RGP 96 is acceptable.

A. Nationwide Permits

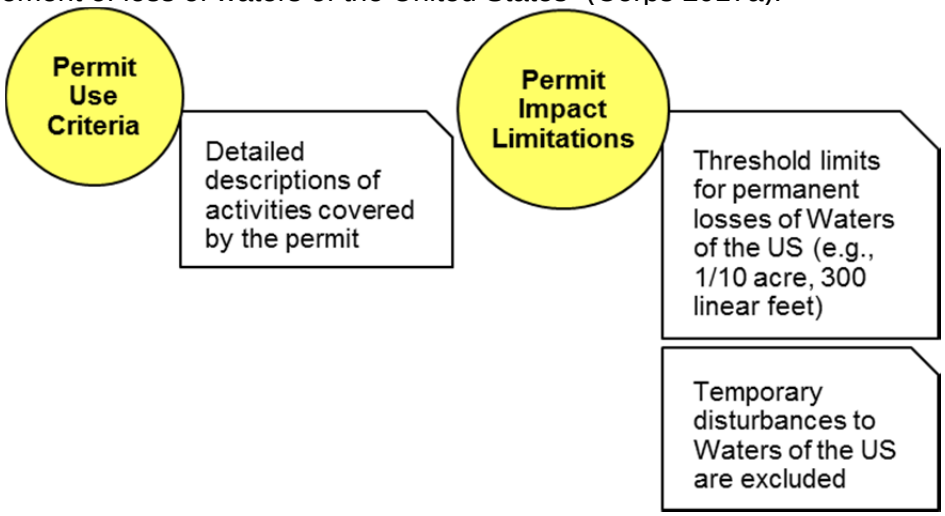
The Corps has developed and periodically updates (approximately every five years) a set of NWPs intended to authorize activities with minimal adverse environmental impacts and are designed to regulate such activities with little, if any, delay or paperwork. As of March 2017, a total of 52 NWPs are available for use (Corps 2017a). Each NWP is classified by a permit number and a type of activity within Waters of the US (Corps 2017a and 2017b). An activity may qualify for one or more NWPs. In some cases, as activity can be covered without notifying the Corps, provided the decision is included in the project files.

NWPs and the RGP 96 are intended to authorize activities with minimal adverse environmental impacts!

1. Nationwide Permit Use Criteria and Impact Limitations

The Corps has established use criteria and impact limitations for each NWP.

> "The acreage of loss of Waters of the US is a threshold measurement of the impact to jurisdictional waters for determining whether an activity may qualify for a [NWP];… Waters of the US temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction are not included in the measurement of loss of waters of the United States" (Corps 2017a).



Maintenance Activities:

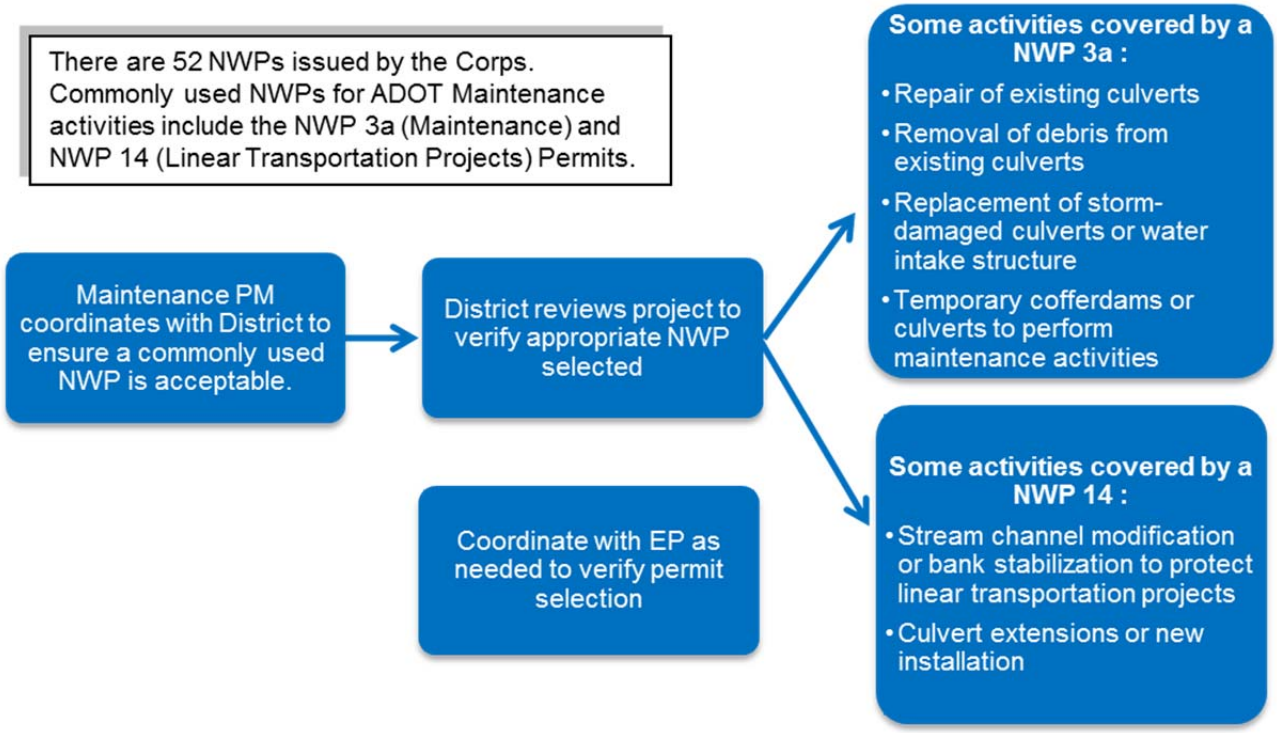
- Common ADOT maintenance activities in Waters of the US often qualify for either NWP 3 or 14.
- Please see Flow Chart 5M-2 on the following page for a list of common maintenance activities under each of these two permits.
- The District should coordinate with EP for assistance through a Work Order Request.

Construction Design/Planning Activities:

- Common activities may be regulated under NWP 14 or may require the use of a different NWP.
- Coordinate with the EP / Consultant for help in determining the appropriate permit for the activity.

It is important to evaluate the activity against all use criteria, impact limitations, permit application requirements, and conditions associated with a given NWP to confirm applicability. Temporary disturbances of Waters of the US are provided to the Corps in permit applications (if a PCN, RGP 96 notification or IP is required), but are not factored into NWP or RGP 96 impact limitations.

Flow Chart 5M-2: Nationwide Permits for Common ADOT Maintenance Activities



2. Conditions

Nationwide Permit General Conditions

The Corps has developed and periodically updates (approximately every five years) a set of NWP General Conditions, including General Conditions 18, 20, and 21 (refer to chart of page Step 5-5). As of March 2017, a total of **32 General Conditions** are in effect (Corps 2017b).

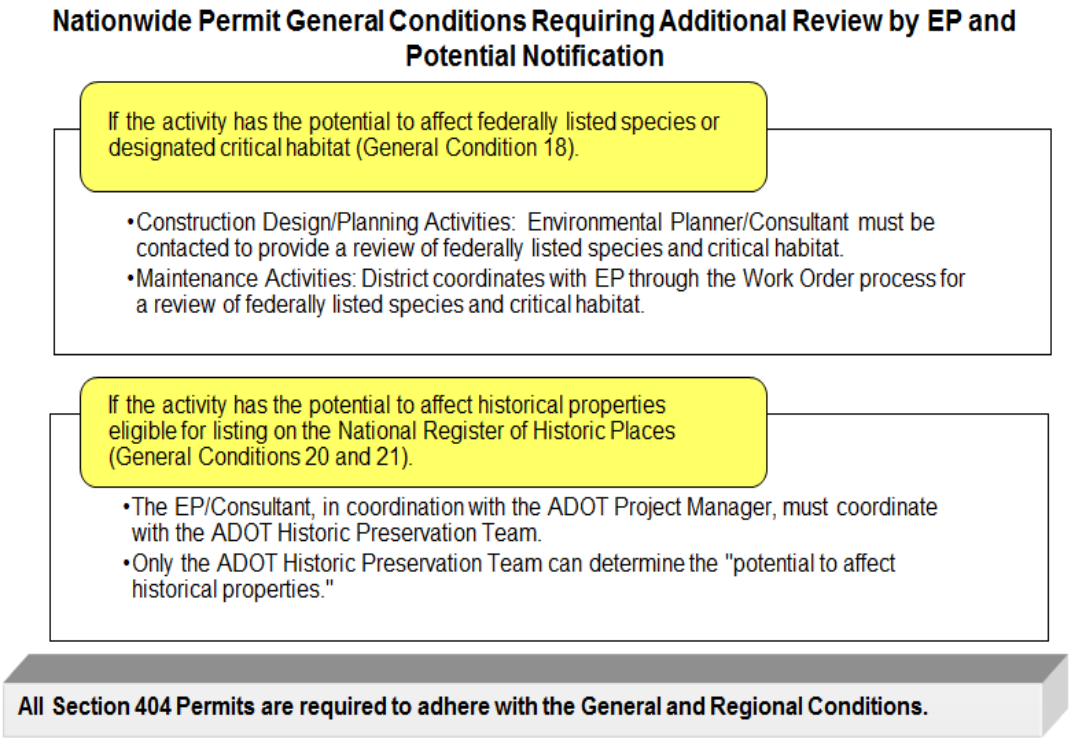
Nationwide Permit Regional Conditions

Like the NWP general conditions, the Corps periodically reviews and develops a set of NWP Regional Conditions. As of March 2017, seven of the regional conditions in effect apply to activities in Arizona (Corps 2017c).

Section 401 Certification Requirements

As detailed in Step 6, Section 401 certification requirements vary by NWP. Each NWP specifies Section 401 certification status (certified, conditional, or individual) based on the types of Waters of the US (tribal, unique, impaired, or other) to be impacted by an activity. The RGP 96 is conditionally certified. The conditions can be found at the end of the RGP 96.

For a given NWP, activities must be evaluated for compliance with ALL applicable NWP General and Regional conditions and Section 401 certification requirements.



3. Notification Requirements

All activities resulting in discharge of dredged or fill material into Waters of the US require compliance with Section 404 and Section 401 of CWA. However, some activities that qualify for a NWP do not require PCN to the Corps based on the permit conditions.

PCN requirements are indicated by specific conditions as identified in each NWP, General Conditions, and Regional Conditions.

For example, the specific limits for NWP 14 – Linear Transportation Projects require notification to the Corps if:

- The discharge of dredged or fill material causes the permanent loss of greater than 1/10 acre of Waters of the US.
- The activity would involve the discharge of dredged or fill material in special aquatic site, including wetlands.
- The activity would involve the discharge of dredged or fill material into a perennial wash.

In Arizona, Regional Conditions require notification for all activities that would discharge to a perennial watercourse or waterbody.

An IP is typically required for activities that result in impacts to a special aquatic site (e.g., wetlands).

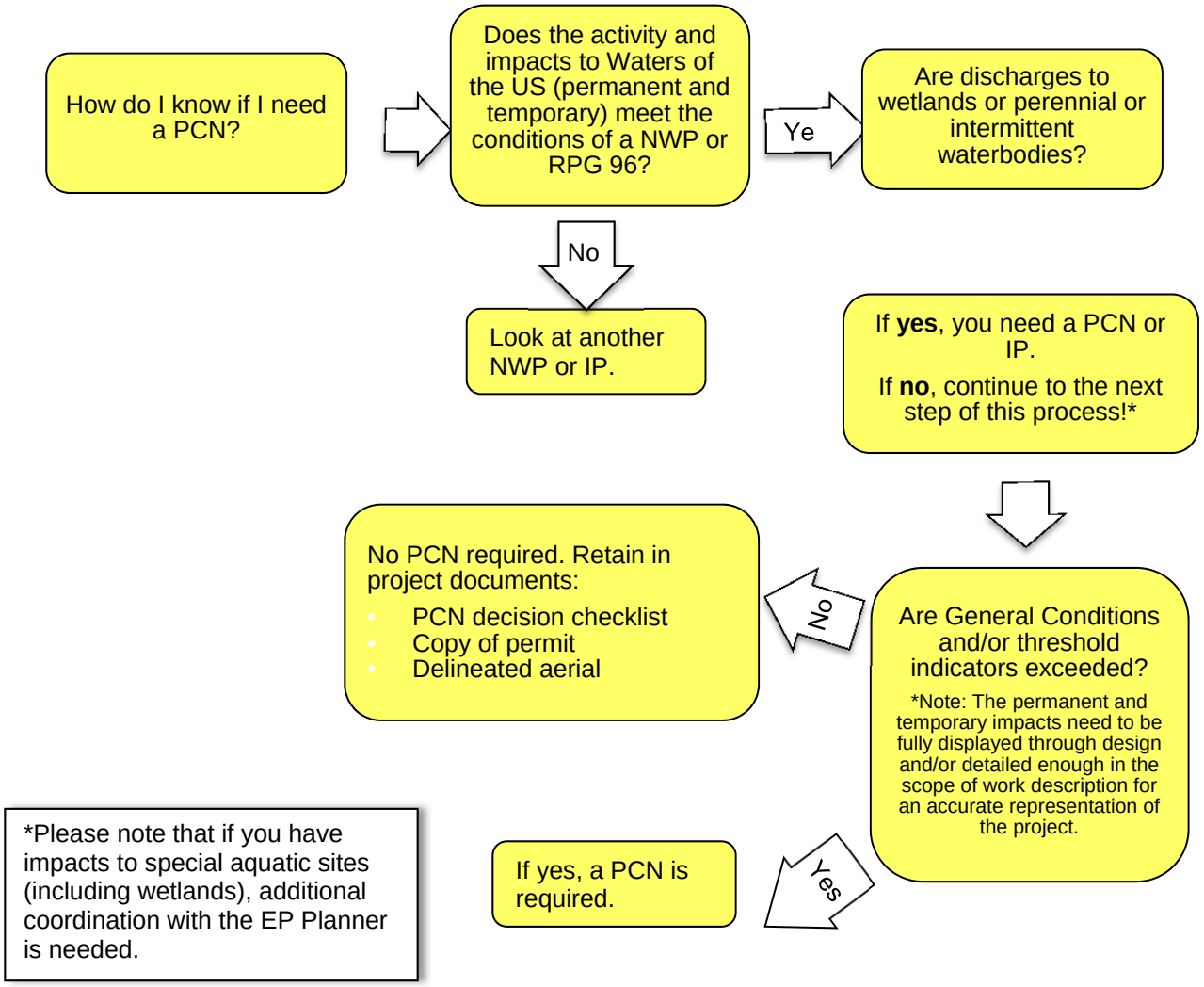
Another example would be the permit conditions for “NWP 3a – Maintenance” do not require notification to the Corps. However, the activity must be checked for compliance with all General and Regional Conditions because some General and Regional Conditions require PCN.

If PCN is required, a NWP PCN submittal is prepared in accordance with General Condition #32 and Regional Condition #3 (see *2017 Nationwide Permits, General Conditions, District Engineer’s Decision, Further Information,* and Definitions [Corps 2017b, 2017c]).

4. ADOT Internal Documentation Process for Compliance with Permit Limits, Conditions, and PCN Decision

ADOT has developed a *Checklist for Section 404 Nationwide Permit Limits, Conditions Compliance, and Pre-Construction Notification Decision Process* to document the decision process undertaken to determine whether a given activity complies with certain General and Regional Conditions and if it will require PCN. This checklist must be completed and included in project files and is provided in the *404 Permit and Pre-Construction Notification Templates, Checklists, and Instructions* in Appendix B.

Flow Chart 5-1: ADOT Permit Limits and Conditions Compliance and PCN Decision Documentation



If the activity does not require a PCN:

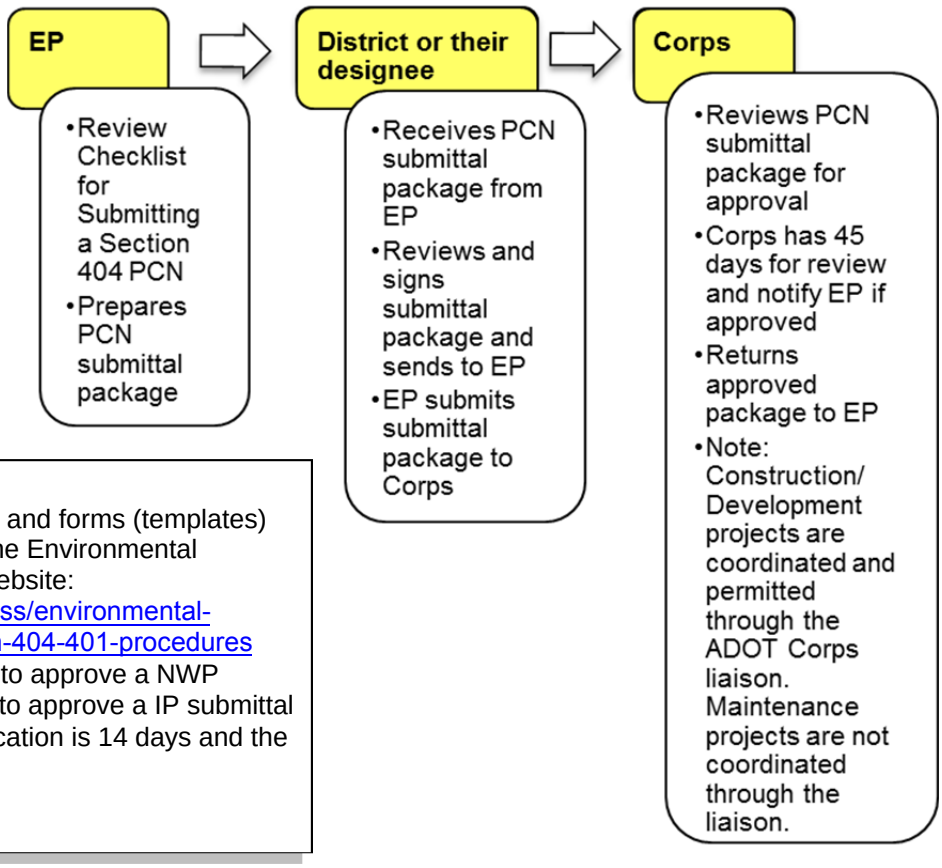
- You must complete a *Checklist for Section 404 Nationwide Permit Limits and Conditions Compliance and Pre-Construction Notification Decision Process* and include in project files.
- You must continue to Step 6 to evaluate for Section 401 certification compliance.
- Following completion of Step 6, the completed and approved *Checklist for Section 404 NWP Notification Decision Process* should be attached to a copy of the selected NWP and final JD (or delineated ordinary high water mark if jurisdiction was assumed).
    - This becomes the complete Section 404 Permit Package.

If the activity does require a PCN, you must continue reading for the requirements of a PCN submittal.

5. Components of a Nationwide Permit Pre-construction Notification Submittal

If an activity requires Corps Notification, a PCN must be submitted to the Corps. EP has provided *Pre-Construction Notification – Nationwide Permit/Individual Permit Submittal Guidance* and a *Checklist for Submitting a Section 404 Pre-Construction Notification* that provides a complete list of all components that must be included in PCN submittals for ADOT activities. These documents were developed in accordance with NWP General Condition 32, Regional Condition 3, and in coordination with the Corps. They are provided in the *404 Permit and Pre-Construction Notification Templates, Checklists, and Instructions* in Appendix B.

Flow Chart 5-2: Pre-Construction Notification Process



Things you should know!

- For detailed procedures and forms (templates) for submittals, refer to the Environmental Planning Section 404 website: https://azdot.gov/business/environmental-planning/biology/section-404-401-procedures
- The Corps has 45 days to approve a NWP submittal and 120 days to approve a IP submittal
- RGP concurrence notification is 14 days and the PCN is 45 days

As noted on the checklist, key components of a PCN submittal include (Refer to the *Checklist for Submitting a Section 404 Notification* in the *404 Permit and Pre-Construction Notification Templates, Checklists, and Instructions* Appendix for the complete list of all necessary PCN submittal components):

- Application for Department of the Army Permit (ENG Form 4345 [Corps 2017d; provided in *Nationwide Permits* Appendix)
- Table 1 – Wash Summary (EP; provided in *Jurisdictional Delineation Forms and Checklists* Appendix)
- General Conditions compliance

Table 1 – Wash Summary is coded to identify information to be included in NWP and RGP 96 PCN submittals, IP applications, and information necessary for jurisdictional delineations. The activity proponent should modify Table 1 as appropriate when preparing a PCN submittal.

A completed *Checklist for Submitting a Section 404 Pre-Construction Notification* must be provided to EP with the PCN submittal.

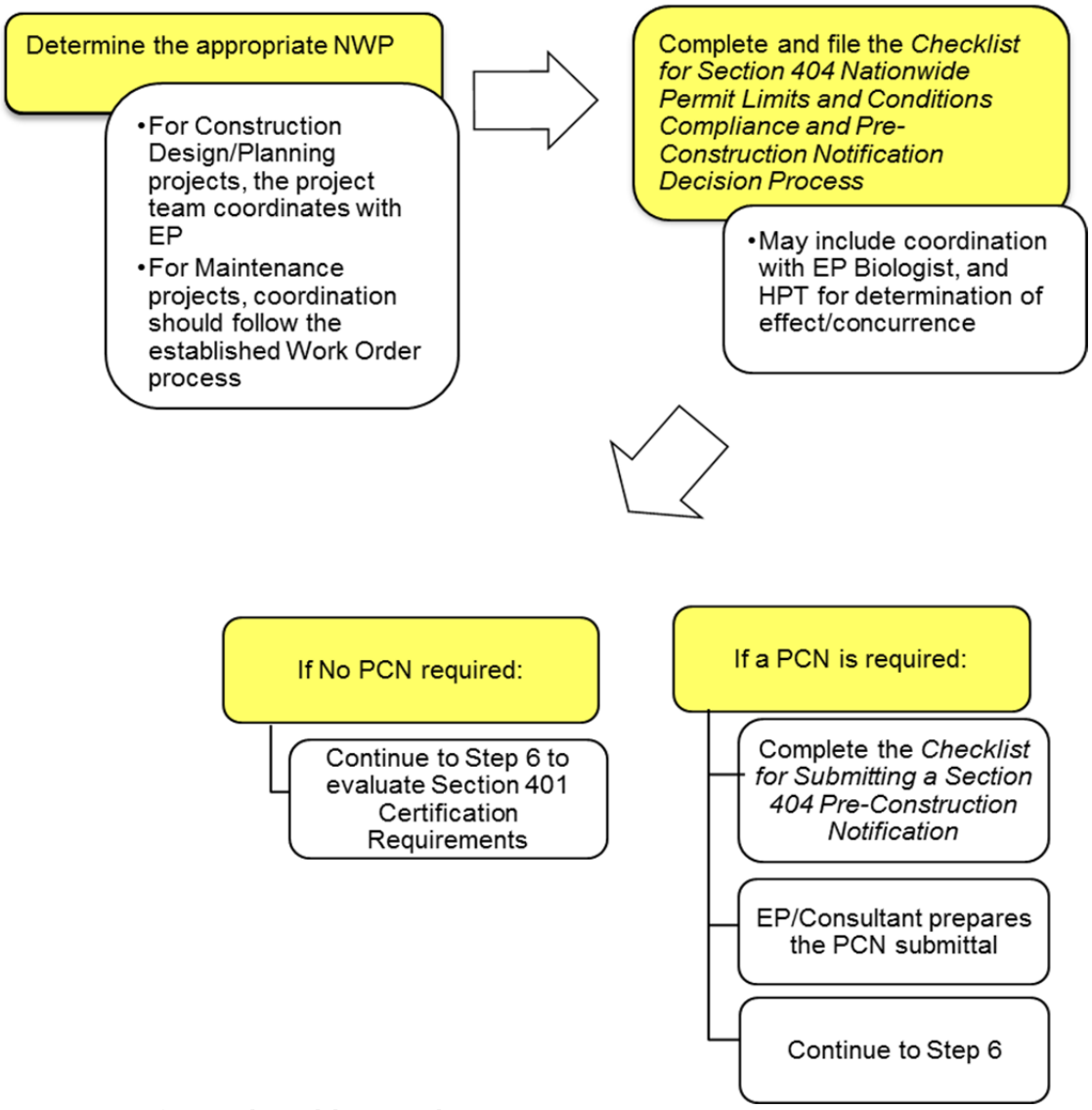
Step-by-step instructions developed by the Corps for completing ENG Form 4345 (Corps 2017d) are provided in the *404 Permit and Pre-Construction Notification Templates, Checklists, and Instructions* Appendix.

All mitigation measures and conditions (Block 23 of ENG Form 4345) applicable to an activity must be reviewed by Design personnel and District staff and will be included in the environmental clearance and/or project specifications, as appropriate.

It is important to note that Block 25 of ENG Form 4345, pertaining to addresses of adjoining property owners and lessees, is not required for NWP PCN submittals; this information is only required for IP applications. For NWP PCN submittals, this block should state “not applicable.”

Note: For maintenance activities, the District coordinates with EP through the Maintenance Work Order form!

Flow Chart 5-3: Key Actions for Nationwide Permits



Key Documents for Nationwide Permits:

Special Public Notice – Nationwide Permits for Arizona (Corps 2017). Available online: http://www.spl.usace.army.mil/Portals/17/docs/regulatory/Permit_Process/SPN_AZ_NWP(withAppendix).pdf

Nationwide Permits (Appendix C):

- A Summary of 2017 Nationwide Permits (Corps 2017b)

404 Permit and PCN Templates, Checklists, and Instructions (Appendix B):

- Checklist for Section 404 Nationwide Permit Limits and Conditions Compliance and Pre-Construction Notification (PCN) Decision Process (Corps 2017)
- Checklist for Submitting a Section 404 PCN (EP)
- Pre-Construction Notification – NWP/IP Submittal Guidance (EP)
- PCN/ IP Cover Letter Template (EP)
- Application for Department of the Army Permit ENG Form 4345 (Corps 2017d)
- Instructions for Preparing a Department of the Army Permit Application (Corps 2017e)

B. Regional General Permit 96

In February 2016, the RGP 96 was issued by the Corps. This RGP 96 applies to Arizona statewide Waters of the US, occurring through non-tribal lands within ADOT right-of-way (ROW) or easement (including temporary construction easements) and Local Public Agency projects federally funded by FHWA that are bid and administered by ADOT. The following is a list of authorized activities and levels of notification required.

Authorized Activities	**Non Notification**	**Concurrence Notification**	**Full Pre-Construction Notification**
Maintain Structure – Existing structures/facilities/fill repair or replacement	The following activities do not have acreage threshold requirements for the different levels of notification. Refer to the levels of notification below to determine which level the following activities would fall within based on impacts associated with perennial, special aquatic sites, Endangered Species Act (ESA) or National Historic Preservation Act (NHPA).		
Geotechnical Activities – Maximum bore hole 3 feet in diameter			
Erosion Repair - Removed accumulated sediment for erosion repair – place within 100 linear feet of structure			
Emergency Activity - Increases the allowable time to 3 years to commence or be under contract to commence emergency maintenance activities or repair of uplands damaged by discrete events			
*Re-Establish Design Flow Carrying Capacities:	Less than 0.10 acre disturbance to each Waters	between 0.10 and 0.50 acre disturbance to each Waters and if removal occurs less than annually due to public safety	> 0.50 acre up to 1 acre disturbance to each Waters and if removal occurs less than annually due to public safety.
*Bed Stabilization - Limited stream bed stabilization in existing, constructed drainage channels	less than 0.10 acre disturbance to each Waters	between 0.10 and 0.50 acre disturbance to each Waters	> 0.50 acre up to 1 acre disturbance to each Waters
*Bank Stabilization – Bank	Equal to and less than 1,000 linear feet total	greater than 1,000 up to 2,000 linear feet	greater than 2,000 linear feet up to 3,000

Authorized Activities	Non Notification	Concurrence Notification	Full Pre-Construction Notification
Stabilization of existing stabilized slopes - Permeable Bank Stabilization Methods	impact and up to an average of 2 cubic yards of material per running foot below the ordinary high water mark (OHWM)	total impact and up to 2 cubic yards of material per running foot below the OHWM	linear feet total impact or greater than 2 cubic yards of material per running foot below the OHWM
*Bank Stabilization – Bank Stabilization of existing stabilized slopes - Impermeable Bank Stabilization Methods	Equal to and less than 600 linear feet total impact and up to an average of 2 cubic yards of material per running foot below the OHWM	greater than600 and up to 1200 linear feet total impact and up to 2 cubic yards of material per running foot below the OHWM	greater than 1200 linear feet up to 2400 linear feet total impact or greater than 2 cubic yards of material per running foot below the OHWM
*Routine Linear Transportation Projects	less than 0.10 acre permanent impact to each Waters	between 0.10 acre and 0.50 acre permanent impact to each Waters	between 0.50 acre and 1 acre permanent impact to each Waters

*These activities may require notifications due to impacts associated with ESA, NHPA or impacts to perennial waters or special aquatic sites

There are two types of Notifications for the RGP 96. The level of Notification and subsequent Corps review is dependent on a variety of factors. The following is a brief explanation of the Notifications and the factors that affect them. Please refer to the RGP 96 Information Sheet for more details.

Concurrence Notification

This is required if the project permanent impacts are between 0.10 acre and 0.50 acre to each ephemeral or intermittent Waters of the US or exceeds the thresholds noted above; all permanent impacts to perennial waters up to 0.10 acre also require this notification. Furthermore, this notification is required for any non-notifying project which may affect any threatened or endangered species, modify any designated critical habitat of a threatened or endangered species, or which may affect historic properties listed (or eligible for listing) in the National Register of Historic Places. The project **will not qualify** for this notification if it impacts special aquatic sites, including wetlands.

To obtain this Notification, you must complete the RGP 96 Notification Form (it can be found ***here***). Once the Form is submitted to the ADOT/Corps there is a 14-day review period. For state-funded projects not subject to NEPA Assignment, this review period may be extended if the Corps must undertake extensive consultation involving Section 7 of the ESA and/or

Section 106 of the NHPA. During this period, the Corps determines if the project may affect T&E species or adversely modifies T&E critical habitat. The Corps may require more information or require a full Pre-Construction Notification (PCN). Also during the review, if the Corps determines the proposed activity may affect historic properties listed, or eligible for listing, in the NHRP, the Corps will notify the applicant to request additional information. **Work can commence once the review period is complete, and ADOT has filed the completed documentation with the Corps**.

Full Pre-Construction Notification (PCN)
This is required when there is between 0.50 acre and 1.0 acre permanent impact to each Waters of the US. This Notification allows up to 0.025 acre of permanent or temporary impact per crossing of special aquatic sites, such as wetlands, and permanent impacts to perennial Waters of the US greater than 0.10 acre. The PCN requirements are similar to the PCN requirements under the Corps Nationwide program. Once the PCN is submitted, the Corps anticipates a 45-day review period. For state-funded projects not subject to NEPA Assignment, this review period may be extended if the Corps must undertake extensive consultation involving Section 7 of the ESA and/or Section 106 of the NHPA. **Work can commence once the review period is complete, and ADOT has filed the completed documentation with the Corps**.

C. Individual Permits

If an activity will result in the discharge of dredged or fill material into Waters of the US, but does not qualify for any NWP or RGP 96 (i.e., would not comply with one or more criteria/limitations or conditions), an IP application shall be prepared. IPs are intended to authorize activities with greater than minimal adverse environmental impacts.

All IPs require completion of a permit application.

IPs for ADOT activities must also follow tasks and guidelines set forth by following the NEPA/ 404 MOA and Section 404(b)(1) Guidelines. These tasks and guidelines in part define the components of an IP application for ADOT activities.

1. Federal Highway Administration Funded Transportation Activities

Any transportation activity that will use Federal Highway Administration (FHWA) funding (in whole or part) and requires notification will include coordination with the Corps during the development process. This pertains to both concurrence and pre-construction notifications as well as individual permit applications. For individual permit applications ADOT will work with the Corps, including having a pre-application meeting to determine the appropriate alternatives and justification for the least environmentally damaging practicable alternative (LEDPA) for the impacted jurisdictional area.

2. Section 404(b)(1) Guidelines

The Section 404(b)(1) *Guidelines for Specification of Disposal Sites for Dredged or Fill Material* (40 CFR 230; Corps 2010b) were developed by the Corps and EPA to assist in implementation of the CWA, and state that

> "…dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probably impacts of other activities affecting the ecosystems of concern" (40 CFR 230).

The Section 404(b)(1) guidelines (provided in the Appendix B) outline the Corps review standards for IP applications, above and beyond NWP review standards.

3. Components of an Individual Permit Application

Components Common to Nationwide Preconstruction Notification Submittals and Individual Permit Applications:

IP applications for ADOT activities must include all pertinent components identified in the EP *Pre-Construction Notification – NWP/IP Submittal Guidance*. The NWP/IP Submittal Guidance is provided in the *404 Permit and PCN Templates, Checklists, and Instructions*, Appendix B.

Additional Individual Permit Application Components – Corps Draft Decision Document:

Before approving an IP application, the Corps must demonstrate that the activity will comply with all provisions of the Section 404(b)(1) guidelines, as well as NEPA and other applicable federal laws and policies. To demonstrate compliance with the Section 404(b)(1) guidelines, as well as NEPA and other applicable federal laws and policies, a Decision Document specific to the project is prepared by the Corps as part of the IP application. The Decision Document constitutes the following:

- Corps Environmental Assessment
  - Prepared to meet NEPA requirements and demonstrate compliance with other applicable federal regulations.
- Review and Compliance Determination
  - Demonstrates compliance with all provisions of the Section 404(b)(1) guidelines.
- Alternatives Analysis
  - Describes the activity sites and designs considered during the planning process, and explains why the activity area and design is the least environmentally damaging and practicable means of satisfying the purpose of the activity.
- Mitigation Plan (as applicable)
  - Describes all mitigation measures to avoid or minimize impacts to Waters of the US.
- Statement of Findings
  - Summarizes compliance with other applicable federal regulations and results of public notice and comment process.
- Public Interest Review
  - Demonstrates that the activity is not contrary to the public interest. It addresses the public and private need for the activity, anticipated impacts on public and private uses of the activity area, etc.
- Finding of No Significant Impact
  - Demonstrates that an Environmental Impact Statement is not necessary for the activity.

The Corps cannot authorize an activity if a practicable alternative would result in less adverse impacts on the aquatic ecosystem, provided that the alternative would not result in other significant adverse environmental consequences.

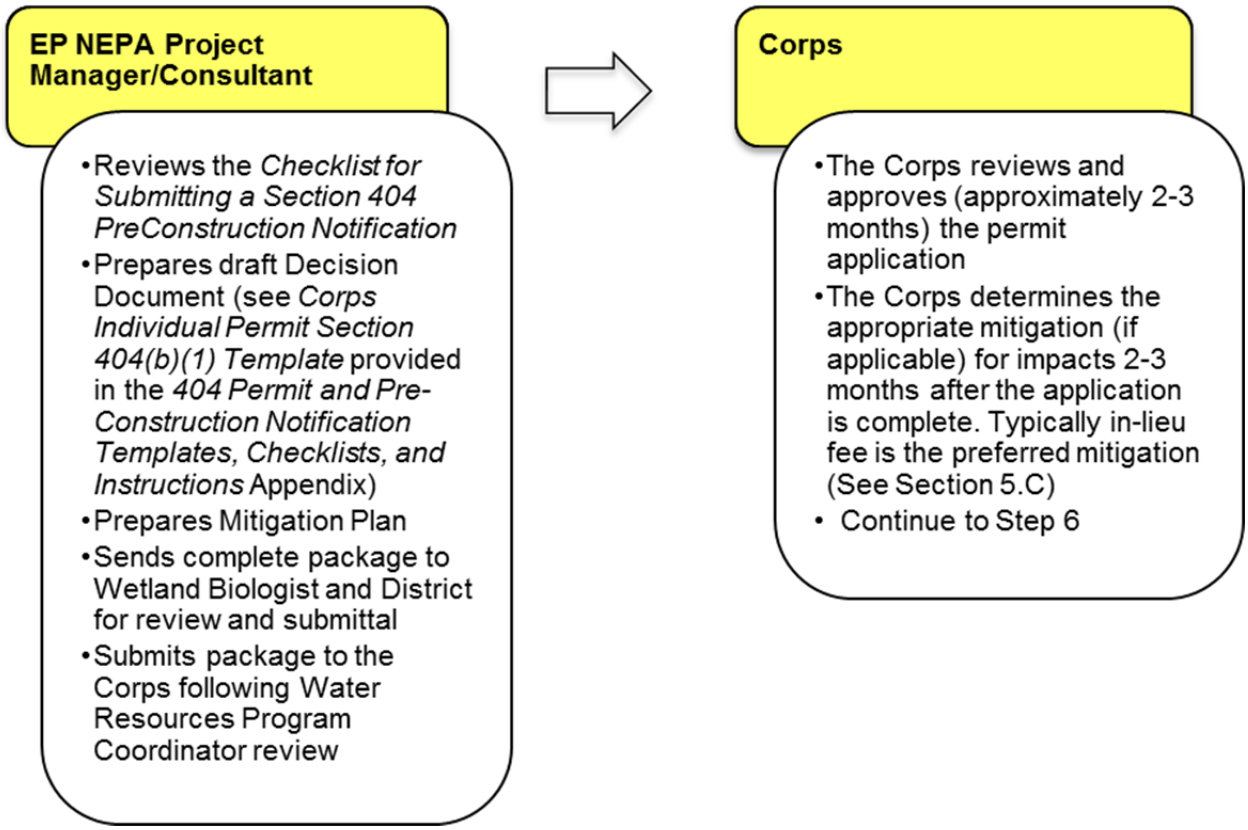
For most ADOT activities, a draft Decision Document is prepared by the ADOT EP Environmental Planner/Consultant using the Corps' preferred format (*IP Section 404(b)(1) Template* [EP], provided in the *404*

All mitigation measures and conditions applicable to an activity must be reviewed by Design personnel and District staff and will be included in the environmental clearance and/or project specifications as appropriate.

Permit and Pre-Construction Notification Templates, Checklists, and Instructions Appendix) and encompasses the components listed above. The document is revised and finalized by the Corps. During review, the Corps will provide input on proposed mitigation measures, which may include compensatory (in-lieu fees; see **Step 5.C.** for additional information on in-lieu fee mitigation) or permittee-responsible mitigation.

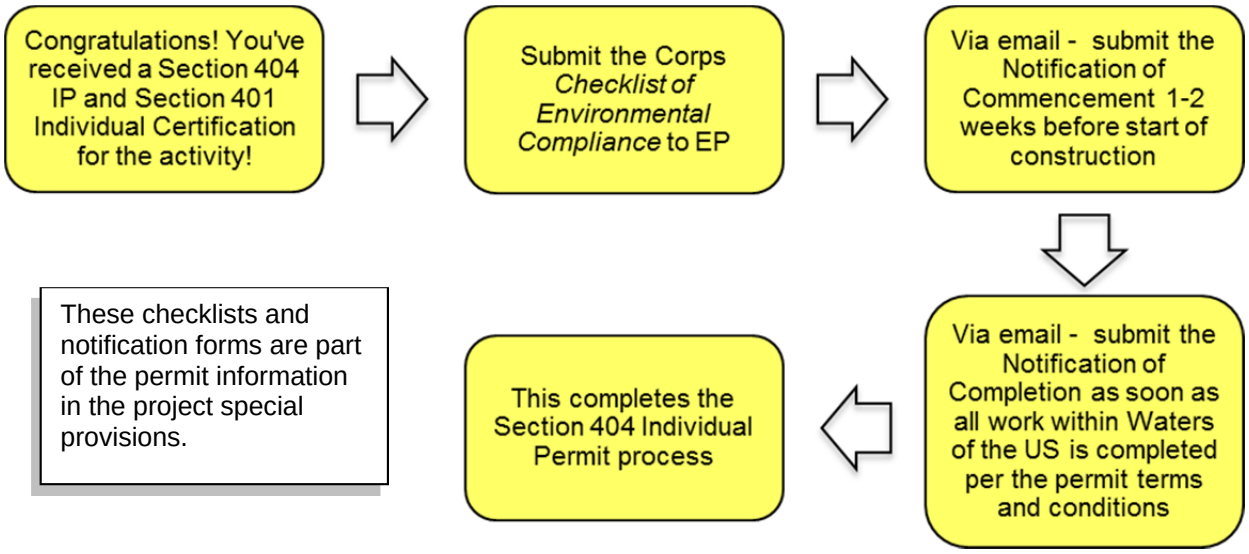
A completed *Checklist for Submitting a Section 404 Pre-Construction Notification* must be provided to EP with the IP application (see *404 Permit and PCN Templates, Checklists, and Instructions* Appendix). EP staff use the checklist when reviewing IP applications. The IP application is ultimately forwarded by EP to the Corps for their consideration and approval.

Flow Chart 5-4: Individual Permit Submittal Process



After you have gone through the Section 404 process, the following actions remain to ensure use of the Section 404 IP in compliance with Corps regulations:

Flow Chart 5-5: Steps to take after receiving the Individual Permit and Section 401 Individual Certification



Key Documents for Individual Permits:

404 Permit and PCN Templates, Checklists, and Instructions (Appendix B)

- Pre-Construction Notification – NWP/IP Submittal Guidance (EP 2013).
- Checklist for Submitting a Section 404 Pre-Construction Notification (EP 2013)
- Corps Individual Permit Section 404(b)(1) Template (EP 2013)
- Pre-Construction Notification/ Individual Permit Cover Letter Template (EP 2013)

Additional Assistance Documents for Individual Permits:

Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230; Corps 2010b). Available online: https://www.epa.gov/sites/production/files/2015-03/documents/cwa_section404b1_guidelines_40cfr230_july2010.pdf

D. Mitigation

As discussed in Step 4, mitigation for impacts to Waters of the US can be expected for projects requiring a notifying NWP, notifying RGP 96, or IP. In-Lieu Mitigation payment is the preferred approach; however, is not always a viable option if the project falls outside the watershed of one of the In-Lieu Fee Mitigation Program's sites. In these cases, permittee-responsible mitigation (either onsite or offsite, it's up to the Corps) is the next best option, although it comes with many challenges. As stated, it is important to consult the EP early on to determine the best approach to mitigation for permitted impacts. Both of these options are discussed in detail below.

1. In-Lieu Fee Mitigation

In-lieu fee mitigation is the preferred method for ADOT activities requiring compensatory mitigation. In-lieu fee mitigation is a type of compensatory mitigation in which the permittee provides funds to an in-lieu fee sponsor for off-site compensation.

For project activities that will be authorized under Section 404, compensatory mitigation is not considered until all appropriate and practicable steps have been taken to first avoid and then minimize adverse impacts to the aquatic ecosystem (Corps 2008b, EPA 1990). Compensatory

mitigation is essential for all activities in which the impacts to the aquatic resources have been avoided and minimized to the maximum extent practicable, but would still result in unavoidable adverse effects (Corps 2013).

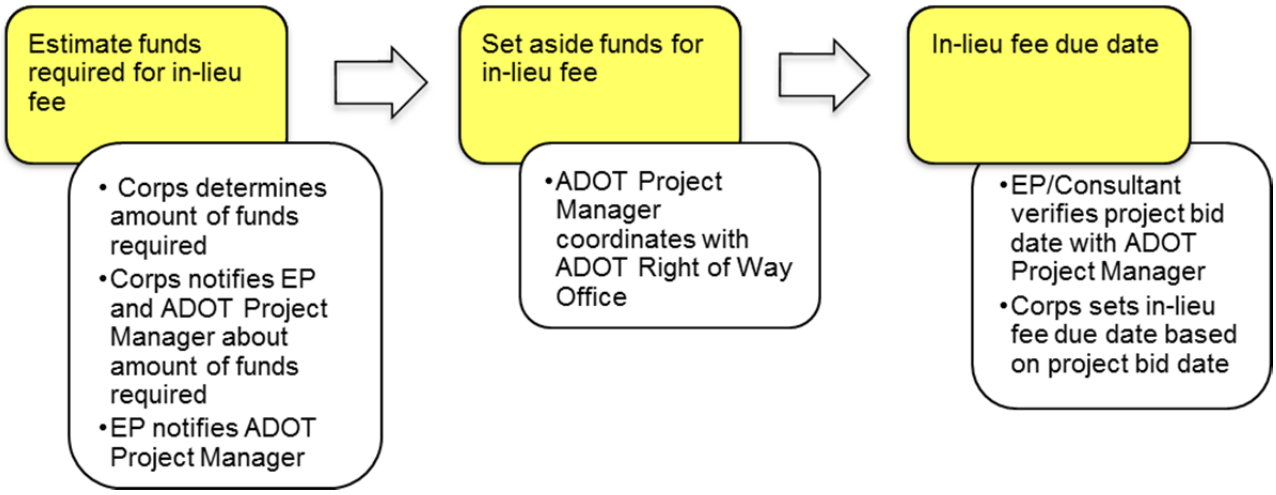
The Corps has developed numerous guidance documents on identification of applicable and practicable mitigation measures as well as information on compensatory mitigation process for federal aid highway projects. Online links to these documents are provided at the end of this section.

In-lieu fee mitigation can be used for permitted impacts under a NWP, RGP or IP

The Corps has the discretion to approve or reject the mitigation measures identified by an activity proponent, and can identify additional activity-specific mitigation measures that must be implemented in order for a permit to be valid. After approval by the Corps, mitigation measures identified for the activity are included in the environmental clearance for the project specifications.

ADOT has a process by which in-lieu fees are set aside for activities requiring them. This process was developed to assist the ADOT Project Managers manage budget for in-lieu fees for activities and to facilitate coordination between the ADOT groups involved in the in-lieu fee process.

Flow Chart 5-6: ADOT In-Lieu Fee Fund Process



2. Permittee-Responsible Mitigation

Where proposed impacts are not located within the service area of an approved In-lieu Fee Program site or if this mitigation option would not provide appropriate mitigation for the proposed impacts, LPA/ADOT permittee-responsible mitigation is the only option.

This mitigation approach includes the restoration, establishment, enhancement, or preservation of Waters of the US, including wetlands, undertaken by ADOT/LPA to compensate for project impacts. ADOT/LPA performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation. ADOT/LPA-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed. The following is general guidance for the permittee-responsible mitigation plan:

- The plan must clearly identify responsible parties oversee implementation, performance, and management.

- Implementation should be in advance or concurrent with project activities resulting in the impact.

- Sufficient financial assurance will need to be demonstrated to ensure success of the site. The total amount is determined by the district engineer. Considerations of size, complexity, likelihood of success, and other factors are considered.
  Per 33 CFR 332.4(c),the mitigation plan must include:

  1. Objectives
  2. Site selection
  3. Site protection instruments
  4. Baseline ecological information
  5. Explanation of how the compensatory mitigation will provided the required compensation for unavoidable impacts
  6. Mitigation work plan (including water availability, control of invasive species, elevations and slopes, soil management, and erosion control)
  7. A maintenance plan
  8. Performance standards based on ecological development of the site
  9. Monitoring requirements of no less than 5 years
  10. Long-term management plan (including financing mechanisms and party identification)
  11. Adaptive management plan (unforeseen changes in site)
  12. Financial assurances, and other information requested by the district engineer

- The Long-term management plan is designed to ensure the site will be maintained and protected once the necessary mitigation activities are completed and determined to be successful (after the minimum 5 year monitoring period). At this point, the site should be self-sustaining, but will still require invasive species management and fire management. A source of funding will also need to be identified along with the party responsible for continued management. These activities shall remain in perpetuity.

- For additional guidelines please visit:
  http://www.sac.usace.army.mil/Portals/43/docs/regulatory/Guidelines_for_Preparing_a_Compensatory_Mitigation_Planf.pdf

Remember throughout the mitigation process, consult with the Corps. ADOT would have to work with the Corps to identify a suitable area within the Watershed or project boundaries. Ultimately the Corps decides! The district engineer will use a watershed approach to establish compensatory mitigation requirements in permits to the extent appropriate and practicable. Where a watershed plan is available, the district engineer will determine whether the plan is appropriate for use in the watershed approach for compensatory mitigation. The Corps will also determine the compensation ratio on a project-to-project basis.

Additional Assistance Documents for Mitigation:

- Compensatory Mitigation for Losses of Aquatic Resources. Available online:
  - https://www.swg.usace.army.mil/Portals/26/docs/regulatory/permit%20packet/33cfr332.pdf

- Model Compensatory Mitigation Plan Checklist for Aquatic Resource Impacts. Available online:
  - https://www.epa.gov/sites/production/files/2015-08/documents/wetlands_model_mitigation_checklist.pdf
- Guidelines for Preparing a Compensatory Mitigation Plan. Available online:
  - http://www.sac.usace.army.mil/Portals/43/docs/regulatory/Guidelines_for_Preparing_a_Compensatory_Mitigation_Planf.pdf
- Compensatory Mitigation for Losses of Aquatic Resources, Final Rule (Corps 2008b). Available online:
  - https://www.epa.gov/sites/production/files/2015-03/documents/2008_04_10_wetlands_wetlands_mitigation_final_rule_4_10_08.pdf
- Incorporating the National Research Council's Mitigation Guidelines Into the Clean Water Act Section 404 Program. Available online:
  - https://www.epa.gov/sites/production/files/2015-08/documents/weltands_nas_404_program_0.pdf
- RGL 08-03 Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Restoration, Establishment, and/or Enhancement of Aquatic Resources (Corps 2008e). Available online:
  - https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll9/id/1241
- Federal Guidance on the Use of the TEA-21 Preference for Mitigation Banking to fulfill Mitigation Requirements under Section 404 of the Clean Water Act (EPA, Corps, and FHWA 2003). Available online:
  - https://www.epa.gov/sites/production/files/2015-08/documents/tea-21_guidance.pdf
- Federal Guidance on the Use of In-Lieu-Fee Arrangements for Compensatory Mitigation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Available online:
  - https://www.fws.gov/habitatconservation/Corps%20In-lieu-fee%20guidance.pdf

STEP 6: WHAT TYPE OF SECTION 401 CERTIFICATION IS ESSENTIAL FOR THE ACTIVITY?

The sixth step is to identify the type of Section 401 water quality certification necessary for the activity, and prepare a certification application if needed. Section 401 certification requirements vary by NWP and this information is needed for NWP PCN, and IP applications (Step 5). Section 404 permits (Nationwide, RGP 96 or Individual) will not be issued by the Corps without a Section 401 certification.

A. Definitions

Section 401 of CWA states that

> "Any applicant for a [f]ederal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into…[Waters of the US], shall provide the licensing or permitting agency a certification from the [s]tate in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the…waters [of the US] at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title" (pertaining to effluent standards [33 U.S. Code 1341])

Section 401 jurisdiction is primarily determined by the geographic location of activities:

- Tribal Lands – EPA is responsible for issuing 401 certification except where EPA has delegated 401 certification authority[1]
- Non-Tribal Lands – ADEQ is the lead agency responsible for issuing 401 certification on lands that are not part of a federally recognized Indian Reservation

As part of Section 401 certification, discharges to several types of surface waters are considered.

- 303(d)-listed Impaired Waters – surface waters that do not meet surface water quality standards and therefore receive special consideration. The current 303(d) list of Impaired Waters is available on the ADEQ website (ADEQ 2016): (http://static.azdeq.gov/wqd/wqa/appendixc_303d.pdf)
- Outstanding Arizona Waters (OAWs) – surface waters classified as outstanding due to their exceptional water quality. *Note: these were formerly referred to as "Unique Waters.".* The current list of OAW is also available on the ADEQ website (ADEQ 2013): (http://static.azdeq.gov/wqd/stormwater/oaw.pdf)

B. Certification for Activities that Qualify for a Section 404 Nationwide Permit

There are two types of Section 401 certifications: conditional and individual. As discussed in earlier sections, Section 401 certification requirements vary by NWP. Refer to the *ADEQ Clean Water Act 401 Certification for Nationwide Permits* at http://www.azdeq.gov/why-do-i-need-state-water-quality-certification-cwa-section-401

[1] To date, the Navajo Nation, Hualapai Tribe, Paiute-Shoshone of the Bishop Community, Big Pine Paiute-Shoshone Tribe, Twenty-Nine Palms Band of Mission Indians, Hoopa Valley Tribe, Hopi Tribe, Pyramid Lake Paiute Tribe, Dry Creek Rancheria of Pomo Indians, Pala Band of Mission Indians, Cortina Band of Wintun Indians, Walker River Paiute Tribe, and White Mountain Apache Tribe. by EPA over Section 401 compliance for Waters of the US within its Reservation boundaries.

Certification requirements example: NWP 14, Linear Transportation Projects, carries the following Section 401 certification requirements in Arizona:

- 303(d) Impaired Waters — Individual Certification
- OAWs — Individual Certification
- Lakes — Individual Certification
- Other Waters — Conditional Certification

1. Conditional Certification

Conditionally certified projects do not require notification or submittal of a Section 401 application. Activity impacts may be conditionally certified under pre-determined limits established by CWA Section 404 NWPs and RGP 96.

Continuing with the NWP 14 example, if a linear transportation activity was located on non-tribal land, activities were located in an ephemeral stream ("other waters") that was not listed as either a 303(d) Impaired Water or an OAW, and the activity met all NWP 14 limits, conditions, and applicable General and Regional conditions, the activity would be Conditionally Certified under Section 401. No certification application would be necessary, but the activity proponent would be needed to comply with the 30 Section 401 General Conditions (defined and enforced by ADEQ), applicable to the activity scope, in order for the Conditional Certification to be valid.

The Section 401 General Conditions are listed in *ADEQ Clean Water Act 401 Certification for Nationwide Permits (provided in 401 Forms and Guidance* Appendix D) and at the end of the Special Public Notice – Nationwide Permits for Arizona. Available online: https://www.spl.usace.army.mil/Portals/17/docs/regulatory/Permit_Process/SPN_AZ_NWP

2. Individual Certification

If the Section 401 General Conditions cannot be met, an Individual Certification would be necessary.

An Individual 401 Certification is required if an activity has the potential to impact any designated OAW or 303(d) Impaired Water.

Continuing with the example of NWP 14, if the linear transportation activity would impact a Section 303(d) water or Unique Arizona Water, a Section 401 Individual Certification would be needed for the activity.

- On tribal lands (other than White Mountain Apache, Hopi, Hualapai Reservations, or Navajo Nation) an Individual Certification is obtained through application to EPA (application components defined in later sections) and activity-specific Section 401 conditions are defined and enforced by EPA. If you have a project on White Mountain Apache, Hopi, Hualapai Reservations, or Navajo Nation, contact EP to obtain the correct information to acquire the Section 401 Certification. Coordination with EPA on tribal lands can take up to 9 to 12 months.
- On non-tribal lands—an Individual Certification is obtained through application to ADEQ (application components defined in later sections) and activity-specific Section 401 conditions are defined and enforced by ADEQ. Plan for 60 days to coordinate with ADEQ for Section 401 approval.

C. Section 401 Certification for Activities that Require a Section 404 Individual Permit

A Section 401 Individual Certification is necessary for all activities that require a Section 404 IP from the Corps. As with activities that qualify for NWPs, a Section 401 Individual Certification for Section 404 IP activities on tribal lands (other than those that have been granted authority by EPA over Section 401 compliance) is obtained through application to EPA, and activity-specific conditions are defined and enforced by EPA. A Section 401 Individual Certification for Section

404 IP activities on non-tribal lands is obtained through application to ADEQ, and activity-specific conditions are defined and enforced by ADEQ.

D. Components of a Section 401 Individual Certification Application

1. Individual Certification Application to the Environmental Protection Agency

EPA has not developed a standard Individual Certification application format. However, all applications must include the components identified by EPA (1999; see *EPA facsimile listing required components of an Individual Certification application to EPA* in *401 Forms and Guidance* Appendix). Typically, an Individual Certification application to EPA is prepared as a stand-alone document paraphrasing and/or attaching the data provided in the NWP or RGP 96 PCN or Section 404 IP application.

For a non-notifying NWP, an Individual 401 Certification is still required for projects on Tribal land.

2. Individual Certification Application to authorized Indian Reservations

The activity proponent must contact the appropriate tribe to confirm the vital application components. Typically, a Section 401 Individual Certification application to a Tribe is prepared as a stand-alone document paraphrasing and/or attaching the data provided in the NWP or RGP 96 notification or Section 404 IP application.

3. Individual Certification Application to the Arizona Department of Environmental Quality

ADEQ requires the following documents to be considered a complete Individual 401 Certification application:

- ADEQ Application for Certification under CWA Section 401 (ADEQ 2017; provided in *401 Forms and Guidance* Appendix)
- A US Geological Survey (USGS) topographic map or other contour map of activity area
- A map delineating the ordinary high water mark of Waters of the US to be affected by the activity to be certified
- A copy of the application for the federal NWP or IP
- A description of the measures to be applied to the activities in order to control the discharge of pollutants into Waters of the US to:
    - Minimize potential pollution of surface waters
    - Demonstrate compliance with state surface water quality standards

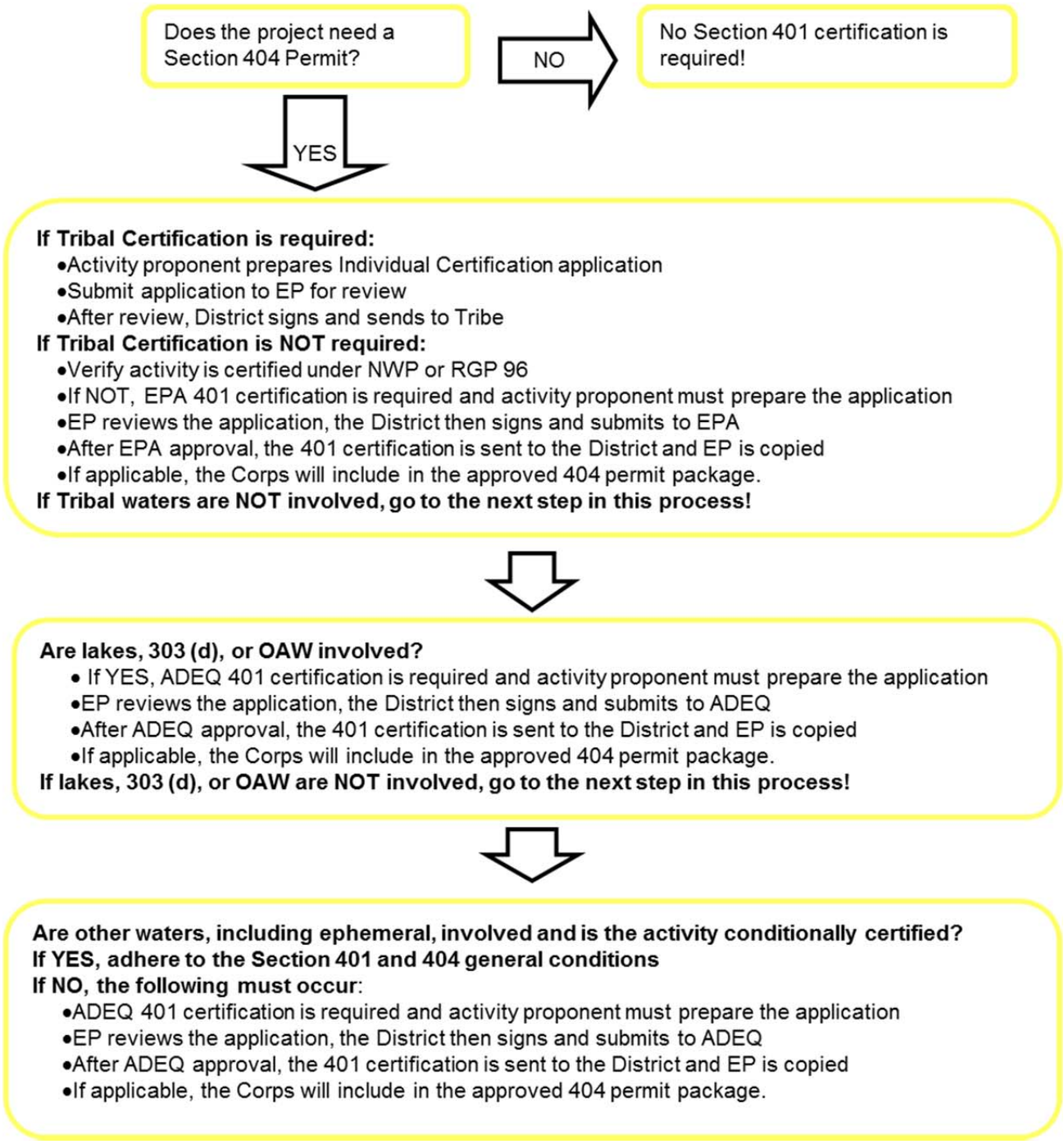
Typically, the ADEQ Section 401 Application form paraphrases and/or attaches the data provided in a Section 404 NWP or IP application and the activity-specific conditions and mitigation measures included in a NWP PCN or Section 404 IP application, as well as specifications from the ADOT Standard Specifications for Road and Bridge Construction.

Section 401 Individual Certification applications are ultimately forwarded by EP to the EPA, ADEQ, or Tribe for their consideration and approval. Approval is typically in the form of an approval letter.

A copy of the EPA, ADEQ, or Tribal (as appropriate) Section 401 Individual Certification approval letter must be forwarded to the Corps. The Corps will not approve a Section 404 permit until Section 401 certification has been received.

Refer to Flow Chart 6-1 of this section for the key decisions associated with the Section 401 Certification.

Flow Chart 6-1: Key Decisions to Determine Section 401 Certification



Remember!
For an IP, submit Individual 401 Certification application to ADEQ after the 404 permit public notice has posted.

Key Documents for Step 6:
401 Forms and Guidance in Appendix D*:*

- ADEQ Application for Certification under the Clean Water Action Section 401 (ADEQ 2017)
- EPA Clean Water Act 401 Handbook (EPA 2010)

Additional Assistance Documents for Step 6:

- Certification Requirements under Section 401 of the Clean Water Act (33 U.S. Code 1341; available online: http://www.gpo.gov/fdsys/granule/USCODE-2000-title33/USCODE-2000-title33-chap26-subchapIV-sec1341/content-detail.html)
- Section 303(d) Impaired Waters. (ADEQ, 2016); (available online: http://static.azdeq.gov/wqd/wqa/appendixc_303d.pdf)
- Outstanding Arizona Waters (OAWs). (ADEQ, 2013); (available online: http://static.azdeq.gov/wqd/stormwater/oaw.pdf)
- ADEQ Clean Water Act 401 Certification for Nationwide Permits (ADEQ 2012) (available online: http://www.azdeq.gov/why-do-i-need-state-water-quality-certification-cwa-section-401

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LIST OF APPENDICES

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APPENDIX A

JD Forms and Checklists

(Please go to the Environmental Planning website for all fill able versions of the forms:
https://www.azdot.gov/business/environmental-planning/biology/section-404-401-procedures

A1

PRELIMINARY JURISDICTIONAL DELINEATION SUBMITTAL GUIDANCE (INCLUDES TABLES 1&2) (EP)

Preliminary Jurisdictional Delineation Submittal Guidance

U.S. Army Corps of Engineers ~ Arizona Branch

To facilitate the Regulatory Division's review and processing of your requests please observe the following guidelines. Corps guidelines for the processing of JD's are described in Regulatory Guidance Letter (RGL 08-02).

Submit only information which will assist in the evaluation for the JD. Concise and organized information is much easier to review. If your submittal lacks any of the requested information listed below, it may be returned to you for additional information. If deviating from the recommended submittal items please coordinate with the Corps regulator prior to submittal.

Before beginning, please note:

- Only one (1) complete document is required for submittal.
- For the hard copy, double side as many documents as appropriate. For example, cover letter, all map graphics (topo, floodplain, location), site photos, JD form, and tables. JD aerials are the only sheets that should not be double sided.
- All Jurisdictional Delineation (JD) requests will be considered to be for a Preliminary JD (PJD), unless otherwise specifically requested as an Approved "Rapanos" Jurisdictional Delineation.
- Do not "bind" information or reports submitted to the Corps (binder clips are preferred).
- Cultural resource reports or biological reports should not be submitted for the JD submittal. These reports are required for permits.
- The only item which requires duplicates is the aerial photograph: 1 copy of proposed delineation and 1 copy of aerials if less than 5 washes are present.

The following items are required for JD processing:

1. Cover letter
   - Include a short description of the project area and scope of work.
   - Include latitude and longitude in decimal degrees form (i.e. 32.123456N and -110.123456W) of the midpoint of the project area, the datum should be referenced, (i.e. NAD 83). Include, Township, and Range, Section (1/4 section) if applicable, of project area (e.g. T4N, R3E, Sec. 4, (NE1/4)).
   - Refer to sample cover letter.

2. State, vicinity, and floodplain maps

3. USGS quadrangle map
   - Survey area must be outlined in thick black line and clearly labeled.
   - An 8"1/2 x 11" section showing the project area is sufficient. (Do not send the entire quad map).
   - Multiple maps can be used if needed.
   - USGS quadrangle name and date should be referenced.

4. Table 1. JD Physical Characteristics
   - Must include jurisdictional and non-jurisdictional washes.

5. Preliminary JD form
   - Must contain signature of the EPG planner.
   - Must include electronic excel file of Corps water data sheet for JD with 5 or more washes.

6. OHWM in the Arid West form and documentation
   - Must include if following the OHWM in the Arid West Field Guide from 2008.

7. Aerial photo
   - Must be taken within last two years, be no smaller than 1"=200' scale, and be legible (full color images and 11" x 17" minimum are preferred). If recent aerial photographs are unattainable, please coordinate with the EPG planner to obtain an aerial from ADOT Photogrammetry as early as possible.
   - Do not make the aerial photo "transparent".
   - Do not overlay the proposed project on the aerial.
   - For survey area with 5 washes or less, submit one aerial with proposed delineation and one without delineated area. All other graphical information should be the same on both aerials (e.g. labeled roads, etc).
   - For survey area with more than 5 washes, submit one aerial set with proposed delineation. Once approved by the Corps, the un-delineated set of aerials can be submitted.
   - Provide a title block to include ADOT project info, "N" arrow, scale (bar and text), and date of photo (date photo taken, not date aerial produced), Name and year of USGS map that corresponds to aerial. If multiple maps, include a Map KEY for the whole project area here or on a separate sheet.
   - Provide a clear map legend to include wash width, wash name, flow direction arrow, photo point number/direction, and survey area/OHWM/waters (may be placed here if not illustrated on Corps label).
   - Label features such as roads, trails, etc that appear to be potential waters.
   - If wash meanders in and out of the survey area, illustrate delineation continuously.
   - The survey area should be outlined in black, the OHWM indicated in red, and the waters of the U.S. (dry washes) in transparent yellow. Use a transparent green for wetlands and transparent blue for open water (e.g. Salt River, Colorado River).

8. Color photographs
   - Must be high quality and clear.
   - Must be recent and taken at ground level.
   - Clearly key locations into the aerial to indicate location and direction. Do not place any text or graphics over the delineated portion of the wash except what is described below.
   - Provide sufficient photos (generally 4 photos/wash) to accurately represent the characteristics of the site features. Please use a rod or other items for scale in the photos and note the size of the item.

9. Delineations of wetlands (if applicable)
   - Consult the EPG planner first before proceeding.
   - Submit a detailed wetland delineation report with the most current arid or mountain region delineation sheets. Also include methods of how the boundary was established and transects were selected.
   - Include location of sample plot for soil and vegetation sampling on the aerial.

10. Current drainage report (if available)

- Include project plan view showing 10-year, 5-year and 2-year event surface area.
- Include HEC analysis indicating 100-year Q for all washes, one to two foot contour intervals overlaid onto aerial at the same scale.

11. A compact disk (CD) of the JD

- Must contain all of the information submitted with the hard copy so that the Corps can transfer it into their database.
- Be sure to separate 81/2 x 11 and 11 x 17 into two files.
- Submittals can also be uploaded to ADOT EPG FTP site at www.adotenvironmental.com (file size should be less than 40MB).

12. A bibliography sheet

- Include if referencing other information.

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APPROVED JURISDICTIONAL DELINEATION SUBMITTAL GUIDANCE (INCLUDES TABLES 1&2) (EP)

Approved Jurisdictional Delineation Submittal Guidance

U.S. Army Corps of Engineers ~ Arizona Branch

To facilitate the Regulatory Division's review and processing of your requests please observe the following guidelines. Corps guidelines for the processing of JD's are described in Section IV of the U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook dated, 5.30.2007.

Submit only information which will assist in the evaluation for the JD. Concise and organized information is much easier to review. If your submittal lacks any of the requested information listed below, it may be returned to you for additional information. If deviating from the recommended submittal items please coordinate with the Corps regulator prior to submittal.

Before beginning, please note:

- Only one (1) complete document is required for submittal.
- For the hard copy, double side as many documents as appropriate. For example, cover letter, all map graphics (topo, floodplain, location), site photos, JD form, and tables. JD aerials are the only sheets that should not be double sided.
- All Jurisdictional Delineation (JD) requests will be considered to be for a Preliminary JD (PJD), unless otherwise specifically requested as an Approved "Rapanos" Jurisdictional Delineation.
- Do not "bind" information or reports submitted to the Corps (binder clips are preferred).
- Cultural resource reports or biological reports should not be submitted for the JD submittal. These reports are required for permits.
- The only item which requires duplicates is the aerial photograph.

The following items are required for JD processing:

1. Cover letter
   - Include a short description of the project area and scope of work.
   - Include latitude and longitude in decimal degrees form (i.e. 32.123456N and -110.123456W) of the midpoint of the project area, the datum should be referenced, (i.e. NAD 83). Include, Township, and Range, Section (1/4 section) if applicable, of project area (e.g. T4N, R3E, Sec. 4, (NE1/4).
   - Refer to sample cover letter.

2. State, vicinity, and floodplain maps

3. USGS quadrangle map
   - Survey area must be outlined in thick black line and clearly labeled.
   - An 8"1/2 x 11" section showing the project area is sufficient. (Do not send the entire quad map).
   - Multiple maps can be used if needed.
   - USGS quadrangle name and date should be referenced.

4. Table 1. JD Physical Characteristics
   - Must include jurisdictional and non-jurisdictional washes.

5. Approved JD form
   - Must include appropriate documentation describing whether a wash has a significant nexus or not.
   - Include a detailed description in Section C and any backup data such as HEC or USGS gauge data.
   - GRAPHIC: Include a watershed map depicting the watershed of the wash outlined on a topo map. Include acreage of area.

6. OHWM in the Arid West form and documentation
   - Must include if following the OHWM in the Arid Field Guide from 2008.

7. Aerial photo
   - Must be taken within last two years, be no smaller than 1"=200' scale, and be legible (full color images and 11" x 17" minimum are preferred). If recent aerial photographs are unattainable, please coordinate with the EPG planner to obtain an aerial from ADOT Photogrammetry as early as possible.
   - Do not make the aerial photo "transparent".
   - Do not overlay the proposed project on the aerial.
   - For survey area with 5 washes or less, submit one aerial with proposed delineation and one without delineated area. All other graphical information should be the same on both aerials.
   - For survey area with more than 5 washes, submit one aerial set with proposed delineation. Once approved by the Corps, the un-delineated set of aerials can be submitted.
   - Provide a title block to include ADOT project info, "N" arrow, scale (bar and text), and date of photo (date photo taken, not date aerial produced), Name and year of USGS map that corresponds to aerial. If multiple maps, include a Map KEY for the whole project area here or on a separate sheet.
   - Provide a clear map legend to include wash width, wash name, flow direction arrow, photo point number/direction, and survey area/OHWM/waters (may be placed here if not illustrated on Corps label).
   - Label features such as roads, trails, etc. that appear to be potential waters.
   - If wash meanders in and out of the survey area, illustrate delineation continuously.
   - The survey area should be outlined in black, the OHWM indicated in red, and the waters of the U.S. (dry washes) in transparent yellow. Use a transparent green for wetlands and transparent blue for open water (Salt River, Colorado River).

8. Color photographs
   - Must be high quality and clear.
   - Must be recent and taken at ground level.
   - Clearly key locations into the aerial to indicate location and direction. Do not place any text or graphics over the delineated portion of the wash except what is described below.
   - Provide sufficient photos (generally 4 photos/wash) to accurately represent the characteristics of the site features. Please use a rod or other items for scale in the photos and note the size of the item.

9. Delineations of wetlands (if applicable)
   - Consult the EPG planner first before proceeding.
   - Submit a detailed wetland delineation report with the most current arid or mountain region delineation sheets. Also include methods of how the boundary was established and transects were selected.
   - Include location of sample plot for soil and vegetation sampling on the aerial.

10. Current drainage report (if available)

- Include project plan view showing 10-year, 5-year and 2-year event surface area.
- Include HEC analysis indicating 100-year Q for all washes, one to two foot contour intervals overlaid onto aerial at the same scale.

11. A compact disk (CD) of the JD

- Must contain all of the information submitted with the hard copy so that the Corps can transfer it into their database.
- Be sure to separate 81/2 x 11 and 11 x 17 into two files.
- Submittals can also be uploaded to ADOT EPG FTP site at www.adotenvironmental.com (file size should be less than 40MB).

12. A bibliography sheet

- Include if referencing other information.

A3

CORPS PRELIMINARY JURISDICTION FORM

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD:

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: County/parish/borough: City:

Center coordinates of site (lat/long in degree decimal format):

Lat.: Long.:

Universal Transverse Mercator:

Name of nearest waterbody:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

☐ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: _____.

☐ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report. Rationale: _____.

☐ Data sheets prepared by the Corps: _____.

☐ Corps navigable waters' study: _____.

☐ U.S. Geological Survey Hydrologic Atlas: _____.
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name: _____.

☐ Natural Resources Conservation Service Soil Survey. Citation: _____.

☐ National wetlands inventory map(s). Cite name: _____.

☐ State/local wetland inventory map(s): _____.

☐ FEMA/FIRM maps: _____.

☐ 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)

☐ Photographs: ☐ Aerial (Name & Date): _____.
or ☐ Other (Name & Date): _____.

☐ Previous determination(s). File no. and date of response letter: _____.

☐ Other information (please specify): _____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

_____ Signature and date of Regulatory staff member completing PJD

_____ Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

A4

CORPS APPROVED JURISDICTION FORM

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: County/parish/borough: City:
Center coordinates of site (lat/long in degree decimal format): Lat. ° **Pick List**, Long. ° **Pick List**.
Universal Transverse Mercator:
Name of nearest waterbody:

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows:
Name of watershed or Hydrologic Unit Code (HUC):

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Pick List** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Pick List** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): [1]

☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: **Pick List**

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):[3]

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: .

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

---

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☐ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

A5

CORPS LABELS

** * * * P R E L I M I N A R Y (RGL 16-01)* * * **

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District

Application No. SPL -2015-625-KAT

Boundary of area surveyed for jurisdictional waters of the United States

Approximate Ordinary High Water Mark

Potential Waters of the United States

Potential Wetlands (If legend is blank no wetlands occur with survey area.)

Scale: See scale bar Photograph Date: Oct 15, 2015

Site Visit by Corps(Y/N) Date:

Determination Issued:

Corps Project Manager: Sheet 1 of 3

** * * * P R E L I M I N A R Y (RGL 16-01)* * * **

SECTION 404 JURISDICTIONAL DELINEATION

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Corps Project Manager: Sheet 1 of 3

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U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL -_______-_________-_________
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jurisdictional waters of the United States
------Ordinary High Water Mark

------Waters of the United States

------Wetlands (If legend is blank no
wetlands occur with survey area.)
________Scale _______________Date of Photograph
______ Site Visit by Corps(Y/N) Date:_____________
_________________Date Delineation issued by Corps
_________________________Corps Project Manager
Sheet _____ of _____

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------Ordinary High Water Mark

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________Scale _______________Date of Photograph
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------Waters of the United States

------Wetlands (If legend is blank no
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______ Site Visit by Corps(Y/N) Date:_____________
_________________Date Delineation issued by Corps
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U.S. Army Corps of Engineers, Los Angeles District
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------Waters of the United States

------Wetlands (If legend is blank no
wetlands occur with survey area.)
________Scale _______________Date of Photograph
______ Site Visit by Corps(Y/N) Date:_____________
_________________Date Delineation issued by Corps
_________________________Corps Project Manager
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U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL -_______-_________-_________
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------Ordinary High Water Mark

------Waters of the United States

------Wetlands (If legend is blank no
wetlands occur with survey area.)
________Scale _______________Date of Photograph
______ Site Visit by Corps(Y/N) Date:_____________
_________________Date Delineation issued by Corps
_________________________Corps Project Manager
Sheet _____ of _____

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TABLE 1 - JD PHYSICAL CHARACTERISTICS

Table 1. J.D. Physical Characteristics & Other Information
Project Name and No.
Date

		YES / NO												YES/NO
Wash No. or Name	**MP**	**Vegetation Difference Between Wash & Upland**	**Change in Soil Characteristics**	**Waterline Mark on Bank**	**Water Stains**	**Shelving or Cut Banks**	**Exposed Roots**	**Sediments Deposits**	**Presence of Litter or Debris**	**Wash Width (ft)**	**Wash Depth (ft or in)**	**Ground Photo Numbers**	**Existing Drainage Structure Type**	**WOUS**
wash sample													text	

A7

ADOT COVER LETTER

(Place letter on current ADOT letterhead)

Ms. Sallie Diebolt, Chief
Arizona Branch, Regulatory Division
US Army Corps of Engineers
3636 North Central Avenue, Suite 900
Phoenix, AZ 85012

Attention: Jesse Rice

Re: Approved/Preliminary Jurisdictional Determination
040 AP 316 H6924 01C
Dead River EB Structure No. 565, Scour Repair

Dear Ms. McGuire:

*IMPORTANT: As of December 2016, you must also submit "Appendix 1- Request for Corps Jurisdictional Determination." Alternatively, you can provide the information required by the form, including the access authorization statement, in your cover letter.

Provide brief project description including: type of project (scour protection, drainage improvement, widening, etc.), location such as highway, milepost, geographic reference point, Township, Range, Section, LAT/LONG NAD83, and USGS maps reference. See example below
The Arizona Department of Transportation (ADOT) is planning to install concrete scour protection at the Eastbound (EB) Dead River bridge Structure No. 565 on Interstate 40 (I-40) from milepost (MP) 315.87 to MP 316.17 located approximately 30 miles northeast of Holbrook, Apache County, Arizona (Figures 1 and 2). The project occurs within and adjacent to an ADOT easement through undeveloped New Lands under the jurisdiction of the Navajo Nation. The cadastral location for the project area is SE ¼ of Section 32, Township 20N, Range 25E (Gila and Salt River Baseline and Meridian). The Dead River EB bridge crosses the Dead Wash at UTM 618010mE, 3883003mN, NAD 83, Zone 12N.

Provide any other pertinent information that is not documented in any of the attached documents
A ground survey to identify waters of the US in the project area was completed on October 25, 2007 by consultant name, firm's name. The aerial photograph used during the ground survey was taken on an unknown date in 2005. Although the aerial photograph is more than 2 years old, it still accurately depicts waters of the US. Within the survey area, approximately 2.42 acres of the Dead Wash is proposed as waters of the US.

This letter serves as a request for review and issue of the preliminary jurisdictional delineation. Included for your review are the following items:

- Preliminary Jurisdictional Determination Form
- State Location (Figure 1) and Project Vicinity (Figure 2) Maps
- Topographic and Floodplain Map (Figure 3)
- Drainage Area Map (Figure 4)
- Proposed Jurisdictional Delineation with Photo Points (Figure 5)
- Ground Photos
- JD Tables with Physical Characteristics and Other Information

If you have any questions or require additional information, please feel free to call me at 602.712.8633. Thank you for your assistance.

Sincerely,

EPG Planner
Environmental Planner
ADOT Environmental Planning Group

A8

CHECKLIST FOR SUBMITTING A SECTION 404 JURISDICTIONAL DELINEATION (EP)

Checklist for Submitting a Section 404 Jurisdictional Delineation (JD)

Instructions: The Consultant and the ADOT EPG planner will check the appropriate box to verify that the JD package meets Corps' requirements. If any of the items are not complete, the EPG planner will return the JD package to the consultant for correction. Refer to ADOT's www.adotenvironmental.com for current Section 404 information/templates.

Consultant	EPG Planner	QC Checklist Items
☐	☐	Signed cover letter from EPG Planner.
☐	☐	Project location maps, including USGS map and FEMA floodplain map.
☐	☐	Table 1: JD Physical Characteristics and Other Information
☐	☐	Aerial photographs of high resolution and medium to high contrast, taken within the last two years, show overlapping adjacent properties, be 11" x 17" minimum size, have a scale of 1"= 100' or 1" = 200', and include index map.
☐	☐	Delineated aerials per the Corps current drawing standards.
☐	☐	Un-delineated aerials containing same information as delineated aerials except for proposed jurisdictional areas.
☐	☐	Ground photographs that clearly illustrate whether or not a drainageway is jurisdictional.
☐	☐	Correct JD form with signature of planner (*additional graphics per guidance that accompany an approved JD form*).
☐	☐	Electronic copy of all documents that are scanned as separate files (*and grouped as reports, plans, etc.*) and to correct scaled size, and stored via FTP or CD. Hard copy submittal is double sided as appropriate.
		Additional items (if appropriate):
☐	☐	Wetlands documentation per current Corps guidance.
☐	☐	Correct form and documentation if following the current OHWM Field Guide from August 2008
☐	☐	Current drainage report (*if available*), Project Plan view showing 10-year, 5-year and 2-year event surface area, HEC analysis indicating 100-year Q for all washes, one to two foot contour intervals overlaid onto aerial at the same scale.
☐	☐	Documentation that substantiates conditions have not changed for reapproving an expired JD (*that was approved by the Corps*).

_____

Consultant signature and date

_____

ADOT EPG Planner signature and date

APPENDIX B

404 PERMIT AND PCN TEMPLATES, CHECKLISTS, AND INSTRUCTIONS

(For all fill able versions of the forms, please go to the https://www.azdot.gov/business/environmental-planning/water-resources/section-404-401-procedures)

B1

CHECKLIST FOR SECTION 404 NATIONWIDE PERMIT LIMITS AND CONDITIONS COMPLIANCE AND PRE-CONSTRUCTION NOTIFICATION DECISION PROCESS

U.S. Army Corps of Engineers
South Pacific Division

Nationwide Permit Pre-Construction Notification (PCN)

This form integrates requirements of the U.S. Army Corps of Engineers (Corps) Nationwide Permit Program within the South Pacific Division (SPD). Boxes 1-10 must be completed to include all information required by General Condition 32. Box 11 (or other sufficient information to show compliance with all General Conditions) must be completed for activities in Arizona, California, Nevada, and Utah, and is recommended for activities in Colorado and New Mexico. If additional space is needed, please provide as a separate attachment. Please refer to the *Instructions for the South Pacific Division Nationwide Permit Pre-Construction Notification (PCN)* (Instructions) for instructions for completing the PCN, as well as additional information on the attachments and tables included with this PCN that may be used.

0. To be filled by the Corps

Application Number:	**Date Received:**	**Date Complete:**

1. Prospective Permittee and Agent Name and Addresses (see Instructions)

a. Prospective Permittee

First - _____ Middle - _____ Last - _____

Company - _____ Email Address - _____

Address - _____ City - _____ State - _____ Zip - _____

Phone (Residence/Mobile) - _____ Phone (Business) - _____

b. Agent (if applicable)

First - _____ Middle - _____ Last - _____

Company - _____ Email Address - _____

Address - _____ City - _____ State - _____ Zip - _____

Phone (Residence/Mobile) - _____ Phone (Business) - _____

c. Statement of Authorization: I hereby authorize _____, to act in my behalf as my agent for the proposed activity. (Optional, see instructions)

_____ _____

Signature of Applicant Date

2. Name and Location of the Proposed Activity (see Instructions)

☐ The proposed work would involve multiple-single and complete projects. See attachment for the information required in Boxes 2 through 10, and 11, if applicable.

a. Project Name or Title:	**b. County, State:**

c. Name of Waterbody:

d. Coordinates:

☐ Unknown (please provide other location descriptions below)

Latitude - Longitude -

e. Other Location Description (optional, see instructions):

f. Driving Directions to the site (optional, see instructions):

3. Specific NWP(s) you want to use to authorize the proposed activity (see Instructions)

4. Description of the Proposed Activity (see Instructions)

a. Complete description of the Proposed Activity:

b. Purpose of the Proposed Activity:

c. Direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands and other waters of the U.S. expected to result from the NWP(s) activity:

d. Description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity:

e. Any other NWP(s), Regional/Programmatic General Permit(s) or Individual Permit(s) used or intended to be used to authorize any part of the proposed activity or any related activity:

f. Have sketches been provided containing sufficient detail to provide an illustrative description of the proposed activity?

☐ Yes, Attached ☐ No

☐ N/A; The activity is located in the Los Angeles District boundaries of Arizona and California, See Attachment 1

☐ N/A, The activity is located in the San Francisco District boundaries of California, See Attachment 2

☐ N/A, The activity is located in the Sacramento District boundaries of California, Nevada, or Utah, See Attachment 3

5. Aquatic Resource Delineation (see Instructions)

a. Has a delineation of aquatic resources been conducted in accordance with the current method required by the Corps? ☐ Yes ☐ No

If yes, please attach a copy of the delineation

Note: If no, your PCN is not complete. In accordance with General Condition 32, you may request the Corps delineate the special aquatic sites and other waters on the project site, but there may be a delay. In addition, the PCN will not be considered complete until the delineation has either been submitted to or completed by the Corps, as appropriate.

b. If a delineation has been submitted, would you like the Corps to conduct a jurisdictional determination (preliminary or approved)? ☐ Yes ☐ No

If yes, please complete, sign and return the attached *Appendix 1 – Request for Corps Jurisdictional Determination (JD)* sheet or provide a separate attachment with the information identified in Appendix 1.

6. Compensatory Mitigation (see Instructions)

a. Will the proposed activity result in the loss of greater than 1/10-acre of wetlands? ☐ Yes ☐ No

If yes, describe how you propose to compensate for the loss of each type of wetland:

Note: for the loss of less than 1/10 acre of wetlands, or if no compensatory mitigation is proposed, the Corps may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

b. Will the proposed activity result in the loss of streams or other open waters of the U.S.? ☐ Yes ☐ No

If yes, provide a description of any proposed compensatory mitigation for the loss of each type of stream or other open water:

Note: if no compensatory mitigation is proposed, the Corps may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in no more than minimal adverse environmental effects.

7. Endangered Species Act (ESA) Compliance (see Instructions)

a. For non-Federal permittees (if Federal permittee, check N/A and skip to 7(d))**:** ☐ N/A

(1) Is there any Federally-listed endangered or threatened species or critical habitat that might be affected or is in the vicinity of the activity? ☐ Yes ☐ No

(2) Is the activity located in designated critical habitat for Federally-listed endangered or threatened species? ☐ Yes ☐ No

If yes to either (1) or (2), include the name(s) of those endangered or threatened species that might be affected by the proposed activity or might utilize the designated critical habitat that might be affected by the proposed activity:

1. 2.

3. 4.

5. 6.

If no to both (1) and (2), proceed to Box 8.

Note: If yes to either (1) or (2), note per General Condition 18(c), you shall not begin work on the activity until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is authorized.

b. Has information sufficient to initiate consultation with the U.S. Fish and Wildlife Service/National Marine Fisheries Service for compliance with Section 7 of the ESA been prepared? ☐ Yes ☐ No

If yes, please attach a copy of the information.

c. Additional information you wish to provide regarding compliance with the ESA, if applicable:

d. For Federal permittees, you must provide documentation demonstrating compliance with ESA as a separate attachment.

8. Historic Properties (see Instructions)

a. For non-Federal permittees (if Federal permittee, check N/A and skip to 7(d))**:** ☐ N/A

(1) Is there a known historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places that the NWP may have the potential to affect? ☐ Yes ☐ No

If yes to (1), state which historic property may have the potential to be affected by the proposed activity:

1. 2.

3. 4.

5. 6.

OR

☐ A vicinity map indicating the location of the historic property is enclosed

(2) If no to (1), describe the potential for the proposed work to affect a previously unidentified historic property:

Note: If yes to (1), note per General Condition 20(c), you shall not begin the activity until notified by the Corps that the activity has no potential to cause effects or that consultation under Section 106 of the National Historic Preservation Act (NHPA) has been completed.

b. Has information sufficient to initiate consultation with the State Historic Preservation Officer/Tribal Preservation Officer for compliance with Section 106 of the National Historic Preservation Act (NHPA) been prepared?

☐ Yes ☐ No

If yes, please attach a copy of the information.

c. Additional information you wish to provide regarding compliance with the NHPA, if applicable:

d. For Federal permittees, you must provide documentation demonstrating compliance with NHPA in a separate attachment.

9. National Wild and Scenic Rivers (see Instructions)

a. Will the proposed activity(s) occur in a component of the National Wild and Scenic River System or a river officially designated by Congress as a "Study River" for possible inclusion in the system while the river is in an official study status?

☐ Yes, in a component of a National Wild and Scenic River System; ☐ Yes, in a "study" river ☐ No

If yes, identify the Wild and Scenic River or the "study river"

Note: per General Condition 16(b), you shall not begin the NWP activity until notified by the Corps that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status. If you have received written notification from the Federal agency, please attach the correspondence.

10. Section 408 Permissions (see Instructions)

a. Will the NWP also require permissions from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a Corps federally authorized Civil Works project? ☐ Yes ☐ No

If yes, have you received Section 408 permission to alter, occupy, or use the Corps project? ☐ Yes ☐ No

If yes, please attach the Section 408 permission

If yes, note per General Condition 31, an activity that requires Section 408 permission is not authorized by NWP until the Corps issues the Section 408 permission to alter, occupy, or use the Corps project, and the Corps issues a written NWP verification.

11. Compliance with NWP General Conditions (see Instructions)		
Check	**General Condition**	**Rationale for Compliance with General Condition**
☐	1. Navigation	
☐	2. Aquatic Life Movements	
☐	3. Spawning Areas	
☐	4. Migratory Bird Breeding Areas	
☐	5. Shellfish Beds	
☐	6. Suitable Material	

☐	7. Water Supply Intakes	
☐	8. Adverse Effects from Impoundments	
☐	9. Management of Water Flows	
☐	10. Fills Within 100-Year Floodplains	
☐	11. Equipment	
☐	12. Soil Erosion and Sediment Controls	

☐	13. Removal of Temporary Fills	
☐	14. Proper Maintenance	
☐	15. Single and Complete Project	
☐	16. Wild and Scenic Rivers	
☐	17. Tribal Rights	
☐	18. Endangered Species	See Box 7 above.
☐	19. Migratory Bird and Bald and Golden Eagle Permits	

☐	20. Historic Properties	See Box 8 above.
☐	21. Discovery of Previously Unknown Remains and Artifacts	
☐	22. Designated Critical Resource Waters	
☐	23. Mitigation	See Boxes 4(d) and 6 above.
☐	24. Safety of Impoundment Structures	
☐	25. Water Quality, including status of Section 401 Water Quality Certification	
☐	26. Coastal Zone Management, including status of CZM Consistency Certification from the State of California (for projects in or affecting the Coastal Zone)	

☐	27. Regional and Case-by-Case Conditions	
☐	28. Use of Multiple Nationwide Permits	
☐	29. Transfer of Nationwide Permit Verifications	
☐	30. Compliance Certification	
☐	31. Activities Affecting Structures or Works Built by the United States	See Box 10 above.
☐	32. Pre-Construction Notification	

U.S. Army Corps of Engineers

Los Angeles District

Attachment 1: Additional PCN Requirements for Los Angeles District Boundaries of Arizona and California

This attachment contains additional information required to be submitted with the PCN for proposed activities within the Los Angeles District Boundaries of Arizona and California. You must submit the completed attachment, or other attachment containing the required information, for a complete PCN per Los Angles District Regional Condition 3. For multiple single and complete projects, provide the information identified below for each single and complete project. If additional space is needed, provide as an attachment to the form, and please reference each section accordingly.

1. Form of PCN (Regional Condition 3)

Have you submitted a completed South Pacific Division PCN Checklist or an application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional Conditions?

☐ Yes, see attached ☐ No

Note: If you check no, your PCN will be considered incomplete.

2. Avoidance and Minimization (Regional Condition 3(a))

Written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S.:

3. Drawings (Regional Condition 3(b))

The following drawings are enclosed:

☐ Plan-View drawing clearly depicting the location, size and dimensions of the proposed activity, as well as the location of delineated waters of the U.S. on the site

☐ Cross-Section view drawings clearly depicting the location, size and dimensions of the proposed activity, as well as the location of delineated waters of the U.S. on the Site

The plan-view and cross-section view drawings contain the following

Title block: ☐ Yes ☐ No

Legend and scale: ☐ Yes ☐ No

Amount (in cubic yards) of fill in Corps jurisdiction (including permanent and temporary fills/structures): ☐ Yes ☐ No

Area (in acres) of fill in Corps jurisdiction (including permanent and temporary fill structures): ☐ Yes ☐ No

The ordinary high water mark (non-tidal waters) or mean high water mark and high tide line (tidal waters) shown in feet based on National Geodetic Vertical Datum (NGVD) or other appropriate reference elevation: ☐ Yes ☐ No

Do all drawings follow the South Pacific Division February 2016, *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*, or most recent update?
(see http://www.spd.usace.army.mil/Missions/Regulatory/PublicNoticesandReferences.aspx) ☐ Yes ☐ No

If no, describe why this requirement is proposed to be waived):

4. Photographs (Regional Condition 3(c))

Have you enclosed numbered and dated pre-project color photographs showing a representative sample of waters proposed to be impacted on the site, and all waters of the U.S. proposed to be avoided on and immediately adjacent to the project site?

☐ Yes ☐ No ☐ N/A (describe why):

Is the compass angle and position of each photograph identified on the plan-view drawing(s) identified in Box 3?

☐ Yes ☐ No ☐ N/A (describe why):

5. Delineation of Aquatic Resource (Regional Condition 3(d))

Have you enclosed a delineation of aquatic resources completed in accordance with the Los Angeles District's Minimum Standards for Acceptance of Aquatic Resources Delineation Reports?
(see http://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/)

☐ Yes ☐ No ☐ N/A

If no, describe why this requirement is proposed to be waived:

6. Essential Fish Habitat (EFH) (Regional Condition 4(b).

☐ **N/A. The proposed activity will not occur in areas designated as EFH** (skip to Box 7)

☐ **The proposed activity will occur in areas designated as EFH and an EFH assessment and extent of proposed impacts to EFH is enclosed.**

7. Waiver of linear foot limitations (Regional Condition 9)

(for NWPs 13, 21, 29, 39, 40, 42, 43, 44, 51, 52, and 54)

☐ **The proposed activity would not require a waiver of the linear foot or other applicable limitations for NWPs 13, 21, 29, 39, 40, 42, 43, 44, 51, 52, or 54.**

a. A narrative description of the stream (including known information on: volume and duration of flow; the approximate length, width, and depth of the waterbody and characteristics observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line or scour marks); a description of the adjacent vegetation community and a statement regarding the wetland status of the adjacent areas (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information)**:**

b. Analysis of the proposed impacts to the waterbody, in accordance with General Condition 32 and Regional Condition B(1):

c. Measures taken to avoid and minimize losses to waters of the U.S., including other methods of constructing the proposed activity(s):

d. A compensatory mitigation plan describing how the unavoidable losses are proposed to be offset, in accordance with 33 CFR 332:

Compliance with Los Angeles District Regional Conditions for Arizona and California

This checklist is intended to assist prospective permittees with documenting compliance with all Los Angeles District Regional Conditions, as required by Regional Condition 3. This checklist does not include the full text of each regional condition. Please refer to the *Los Angeles District Final Regional Conditions for the 2017 NWPs* (http://www.spl.usace.army.mil/Missions/Regulatory/Permit-Process/) when completing this checklist.

Please check the box to indicate you have read and have/will comply with the Regional Condition and provide a rationale on how you have/will comply with the Regional Condition.

Check	Regional Condition	Rationale for Compliance
☐	**1. Linear Transportation Crossings.** For activities in waters of the U.S. that are suitable habitat for Federally-listed fish species, including designated critical habitat, permittee shall design new or substantially reconstructed linear transportation crossings to ensure passage of all life stages and/or spawning of fish is not hindered. Permittee shall employ bridge designs that span the stream or river, or designs that use a bottomless arch culvert with a natural stream bed, unless determined to be impracticable by the Corps.	
☐	**2. Loss* of wetlands, mudflats, vegetated shallows, or riffle and pool complexes:** NWPs 3, 7, 12-15, 17-19, 21, 23, 25, 29, 35, 36, 39-46, 48-54 cannot be used to authorize structures, work, and/or the discharge of dredged or fill material that would result in the "loss" of wetlands, mudflats, vegetated shallows, or riffle and pool complexes. The definition of "loss" is the same as the definition of "loss of waters of the United States" used for the NWP program. This Regional Condition applies only within the State of Arizona and within the Mojave and Sonoran (Colorado) desert regions of California. The desert regions in California are limited to four USGS Hydrologic Unit Code (HUC) accounting units (Lower Colorado -150301, Northern Mojave-180902, Southern Mojave-181001, and Salton Sea-181002)	
☐	**3. Additional PCN Requirements:**	See Boxes 1-5

Check	Regional Condition	Rationale for Compliance
☐	**4. <u>Submission of PCN:</u>** A PCN must be submitted for: ☐ All perennial waterbodies and special aquatic sites throughout the Los Angeles District and intermittent waters within the State of Arizona for any regulated activity that would result in a loss* of waters of the U.S. ☐ Areas designated as EFH that would result in an adverse effect to EFH. ☐ All watersheds in the Santa Monica Mountains in Los Angeles and Ventura Counties. ☐ The Santa Clara River watershed in Los Angeles and Ventura counties ☐ The Murrieta and Temecula Creek watersheds in Riverside County, California, for any activity that would result in a loss* of waters of the U.S. ☐ All waterbodies designated by the Arizona Department of Water Quality (DWQ) as Outstanding Arizona Waters (OAWs), within 1600 meters (or 1 mile) upstream and/or 800 meters (1/2 mile) downstream of a designated OAW, and on tributaries to OAWs within 1600 meters of the OAW. ☐ All waterbodies designated by the Arizona DWQ as 303(d)-impaired surface waters, within 1600 feet (or 1 mile) upstream and/or 800 meters (1/2 mile) downstream of a designated impaired surface water, and on tributaries to impaired waters within 1600 meters of the impaired water.	
☐	**5. <u>Vernal Pools:</u>** Individual permits shall be required for all discharges of fill material in jurisdictional vernal pools, with the exception that discharges for the purpose of restoration, enhancement, management or scientific study of vernal pools may be authorized under NWPs 5, 6, and 27 with the submission of a PCN in accordance with General Condition 32 and Regional Condition 3.	
☐	**6. <u>Murrieta Creek and Temecula Creek watersheds in Riverside County:</u>** The use of NWPs 29, 39, 42, and 43, and NWP 14 combined with any of those NWPs shall be restricted. The loss* of waters of the U.S. (as defined by the NWPs) cannot exceed 0.25 acre.	
☐	**7. <u>Bank Stabilization and Grade Control Structures:</u>** Individual permits shall be required in San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County for bank stabilization projects and in Gaviota Creek, Mission Creek, and Carpinteria Creek in Santa Barbara County for bank stabilization projects and grade control structures.	

Check	Regional Condition	Rationale for Compliance
☐	**8. <u>Revoked NWPs:</u>** NWPs 3, 7, 12, 13, 14, 16, 17, 18, 19, 21, 25, 27, 29, 31, 33, 39, 40, 41, 42, 43, 44, 46, 49, and 50 are revoked in the San Diego Creek Watershed and San Juan Creek/Western Mateo Creek Watersheds in Orange County, California, in association with the respective Special Area Management Plans.	
☐	**9. <u>Waiver of linear foot limit for NWPs 13, 21, 29, 39, 40, 42, 43, 44, 50, 51, 52, and 54:</u>** Request for waiver must contain: ☐ Narrative description of the stream; ☐ Analysis of the proposed impacts to the waterbody; ☐ Measures taken to avoid and minimize losses to waters of the U.S. ☐ Compensatory mitigation plan describing how the unavoidable losses are proposed to be offset.	See Box 7
☐	**10. <u>Compensatory Mitigation:</u>** Permittee must complete the construction of compensatory mitigation before or concurrent with construction of authorized activity and submit proof of purchase of mitigation bank or in-lieu fee program credits prior to commencement of construction of the authorized activity	

*Loss of waters of the U.S.: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the acres or linear feet of stream bed that is filled or excavated as a result of the regulated activity. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to preconstruction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

B2

PRE-CONSTRUCTION NOTIFICATION – NATIONWIDE/INDIVIDUAL PERMIT SUBMITTAL GUIDANCE

Pre-Construction Notification – NWP/IP Submittal Guidance

U.S. Army Corps of Engineers ~ Arizona Branch

To facilitate the Regulatory Division's review and processing of your requests please observe the following guidelines. Corps guidelines for the processing of Department of the Army Permits are described in 33 CFR Part 325 and in 40 CFR Part 230.

Submit only information which will assist in the evaluation for the PCN. Concise and organized information is much easier to review. If your submittal lacks any of the requested information listed below, it may be returned to you for additional information.

Before beginning, please note:

- Only one (1) complete document is required for submittal.
- For the hard copy, double side as many documents as appropriate. For example, cover letter, all map graphics (topo, floodplain, location), site photos, JD form, and tables. JD aerials are the only sheets that should not be double sided.
- Do not "bind" information or reports submitted to the Corps. Binder clips are preferred.
- Cultural resource reports and biological reports (BR or BE) are required for all PCN submittals (double-sided copies). If the Corps is the lead federal agency additional documentation may be required for consultation. Biological reports must be current or within 6 months; if more than 6 months old, please coordinate with ADOT biologist for an update (email update will suffice).
- Do not duplicate information in the submittal package.

Minimum information required for processing:

1. Cover letter (*see EPG website at www.adotenvironmental.com for template*)

2. Current Eng Form 4345
- Application MUST be signed by District Engineer and EPG planner.
- Fill out each block completely per the instructions.

3. Preliminary/Approved JD Aerial /Impact Sheets
- Include prelim/approved JD aerial clearly illustrating both temporary and permanent impacts of the proposed project.
- Include relevant construction plan sheets and details to scale.
- All of these documents must be to a standard engineering scale and have required mapping information. This includes a legend, appropriate label, and the requirements from the Corps Final Map and Drawing Standards for the Los Angeles District Regulatory Division, dated September 21, 2009.

4. Floodplain map
- Do not need to duplicate state, vicinity, and floodplain maps if the PCN is for a project related to a previously accepted approved JD or PJD.

5. General and Regional Conditions
- Document describing how the project is in compliance with all 28 General Conditions including Regional Conditions (General Condition 23).
- Include all supporting documentation for General Condition 17 and 18.

6. Copy of 401 Individual Certification, if applicable

7. Include a CD containing the following items:
- All information submitted with the hard copy so that the Corps may transfer it into their database.
- Be sure to separate 8-1/2 x 11 and 11 x 17 into two files. Biology and Cultural documentation should be separate files.
- Submittals can also be uploaded to ADOT EPG FTP site at www.adotenvironmental.com (file size should be less than 40MB).

8. A bibliography sheet
- Include if referencing other information.

Additional items for IP submittal:

9. 404(b)(1) document
- Include completed applicable sections.
- Submit double sided hard copy and electronic Word version.

10. Mitigation Plan

11. Electronic versions of aerials, plans and details for Public Notice

12. Labels for all adjacent landowners

13. Any comment(s) the Corps provides on a submittal needs to be addressed within 30 days from receipt

B3

PRE-CONSTRUCTION NOTIFICATION / INDIVIDUAL PERMIT COVER LETTER TEMPLATE

Ms. Sallie McGuire, Chief
Arizona Section Regulatory Branch
US Army Corps of Engineers
3636 North Central Avenue, Suite 900
Phoenix, AZ 85012

Attention: Kathleen Tucker

Re: [Purpose of the package, JD, PCN, etc.]
Preconstruction Notification Nationwide Permit NWP 14 and NWP 33
040 AP 316 H6924 01C
Dead River EB Structure No. 565, Scour Repair
USACE File No.: if available

Dear Ms. McGuire:

Provide brief project description including: type of project (scour protection, drainage improvement, widening, etc.), location such as highway, milepost, geographic reference point, Township, Range, Section, LAT/LONG NAD83, and USGS maps reference.
The Arizona Department of Transportation (ADOT) is planning to install concrete scour protection at the Eastbound (EB) Dead River bridge Structure No. 565 on Interstate 40 (I-40) from milepost (MP) 315.87 to MP 316.17 located approximately 30 miles northeast of Holbrook, Apache County, Arizona (Figures 1 and 2). The project occurs within and adjacent to an ADOT easement through undeveloped New Lands under the jurisdiction of the Navajo Nation. The cadastral location for the project area is SE ¼ of Section 32, Township 20N, Range 25E (Gila and Salt River Baseline and Meridian). The Dead River EB bridge crosses the Dead Wash at UTM 618010mE, 3883003mN, NAD 83, Zone 12N.

Provide any other pertinent information that is not documented in any attached document and a brief summary of the impacts
The Preliminary jurisdictional delineation for this project was approved on July 16, 2008 (Corp File No. if available). The project will result in xx acres of permanent impact to Waters of the US due to the installation of the concrete floor and xx acres of temporary impact due to temporary construction access.

This letter serves as a request for review and approval of the PCN package for this project. Included for your review are the following items:

- Engineer Form 4345
- State Location (Figure 1) and Project Vicinity (Figure 2) Maps
- Topographic and Floodplain Map (Figure 3)
- Impacts to Waters of the US (Figure 4)
- Profile Sheets, and Access Plan Sheets
- Documentation of Compliance with NWP General and Regional Conditions
- Biological Evaluation
- Cultural Concurrence

If you have any questions or require additional information, please feel free to call me at 602.712.8633. Thank you for your assistance.

Sincerely,

EPG Planner Name
Environmental Planner
ADOT Environmental Planning Group

B4

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT (ENG FORM 4345)

U.S. ARMY CORPS OF ENGINEERS

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved –
OMB No. 0710-0003
Expires: 31-AUGUST-2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME: First – Middle - Last– Company – Arizona Department of Transportation (ADOT) E-mail Address –	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) First – Middle - Last– Company – ADOT
6. APPLICANT'S ADDRESS. Address – 2 City – State – Arizona Zip – Country– USA	9. AGENT'S ADDRESS Address – 1 City – State – Arizona Zip – Country – USA
7. APPLICANT'S PHONE NOs. W/AREA CODE. a. Residence- NA b. Business- c. Fax	10. AGENT'S PHONE NOs. W/AREA CODE a. Residence- NA b. Business- c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____

APPLICANT'S SIGNATURE D ATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

13. NAME OF WATERBODY, IF KNOWN (if applicable),	14. PROJECT STREET ADDRESS (if applicable) Address - NA
15. LOCATION OF PROJECT: Decimal degrees NAD 83, center coordinates are approximately Latitude: °N Longitude: °W	City - State – Zip -

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)
State Tax Parcel I – Municipality –
Section – Township – Range -

17. DIRECTIONS TO THE SITE:

18. Nature of Activity (Description of project, include all features)

General description of project in a few sentences.

Brief description of natural features such as biotic community, riparian vegetation, ephemeral sandy or cobbled, perennial, vegetation within the OHWM.

		EXISTING	PROPOSED			
Wash No. or Name	Sta No.	Drainage Structure Type height by width by length (ft)	Existing Structure Changes/New Structure INCLUDE DETAIL #	Drainage Structure Type height by width by length (ft)	Riprap/ Concrete Outlet Protection Length by depth	Riprap/ Concrete Inlet Protection Length by depth
		2-barrel RCBC 10 x 5 x 62	Remove headwall right; Extend RCBC 78' right	2 barrel RCBC 10x5x140		
		2-barrel RCBC 10 x 5 x 62	Replace with 4 barrel CBC 10x5x70	4 barrel CBC 10x5x70		

Describe any permanent loss that is not included in the table.

Discuss temporary impacts to include access, dewatering, and temporary construction. EXAMPLE Construction vehicles and equipment may be required to temporarily enter and turn around within all of the project washes for construction of the drainage extensions. No fill material or dewatering efforts are anticipated to be required for construction access purposes. Due to the flat topography in the region, substantial grading is not anticipated to be required for construction access purposes. If there is a unique situation for a particular wash discuss here. EXAMPLE Cottonwood wash would require a cofferdam for dewatering or construction of a low flow channel or placement of fill for equipment access. Include discussion of vegetation impacts within OHWM and riparian or xero-riparian zone.

19. Project Purpose (Describe the reason or purpose of the project, see Instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

EXAMPLE Reinforcing steel, concrete and/or dirt fill would be discharged into 18 drainages to extend 16 drainage structures to accommodate the new roadway width due to the construction of the passing lanes. Do Not include amounts as they will be shown in block 21.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type: Reinforcing Steel
Amount in Pounds:

Type: Concrete
Amount in Cubic Yards:

Type: Dirt Fill
Amount in Cubic Yards:

Table 1. Summary of Material Discharged into Waters of the US.

Drainage Name	Approximate MP	Drainage Excavation (cy)	Metal Pipe (ft)	Reinforcing Steel (lbs)	Concrete (cy)	Dirt Fill (cy)
Fourmile Draw (8)	**365.31**	**694**	**0**	**36685**	**289**	**534**
Totals						

Comment [I1]: Please expand blocks to add additional information. Please do not create a separate document/addendum.

Comment [I2]: Include all proposed changes to include dimensions.

Comment [I3]: These numbers are the ultimate size of new structure

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions) Acres Or Liner Feet

Table 2. Summary of Impacts to Waters of the US.

Drainage Name	Amount of Waters (ac)	Permanent Impacts (ac)	Temporary Impacts (ac)
Fourmile Draw (8)	0.140	0.045	0.064
Totals (Acre)			

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Provide a brief description of how impacts to waters of the United States are being avoided and minimized on the project site due to design or construction methods. Make statements specific to project and not generic statements. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

24. Is Any Portion of the Work Already Complete? Yes ___ No X IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Address — NA

City — State — Zip —

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

This is specific to certification such as Individual 401 from ADEQ, EPA, or tribes.

Agency	Type Approval	Identification Number	Date Applied	Date Approved	Date Denied

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application 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

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

B5

INSTRUCTIONS FOR PREPARING DEPARTMENT OF THE ARMY PERMIT (ENG FORM 4345) APPLICATION

Instructions for Preparing a
Department of the Army Permit Application

Blocks 1 through 4. To be completed by Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the E-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by applicant, if an agent is to be employed.

Block 12. Proposed Project Name or Title. Please provide name identifying the proposed project, e.g., Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

Block 13. Name of Waterbody. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Project Street Address. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15. Location of Proposed Project. Enter the latitude and longitude of where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality that the site is located in.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known

Block 18. Nature of Activity. Describe the overall activity or project. Give appropriate dimensions of structures such as wing walls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 18.

Block 19. Proposed Project Purpose. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20. Reasons for Discharge. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards. Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22. Surface Areas of Wetlands or Other Waters Filled. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Description of Avoidance, Minimization, and Compensation. Provide a brief explanation describing how impacts to waters of the United States are being avoided and minimized on the project site. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

Block 24. Is Any Portion of the Work Already Complete? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identity the authorization, if possible.

Block 25. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

Block 26. Information about Approvals or Denials by Other Agencies. You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 27. Signature of Applicant or Agent. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

B6

CORPS INDIVIDUAL PERMIT SECTION 404(B)(1) TEMPLATE

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
3636 NORTH CENTRAL AVENUE SUITE 900
PHOENIX, AZ 85012-1939

CESPL-RG-A
APPLICATION: SPL-20XX-00XXX *(DA Permit Number)*

Comment [JR1]: Fill out all applicable sections, deleting all highlighted/italicized guidance text and comments.

Please submit this document to the Corps as a Word document to allow for comments/revisions.

MEMORANDUM FOR RECORD

This document constitutes the Environmental Assessment, 404(b)(1) Guidelines Evaluation, Public Interest Review, and Statement of Findings for *Project Name* Project SPL-20*XX*-00*XXX*

1.0 Proposed Project

A complete permit application was received on *Date*

1.1 Applicant name and address:
District Engineer's Name (Whoever is the applicant)
Arizona Department of Transportation, Southwest District
Address
City, AZ 86336

1.2 Project Name:

1.3 Proposed Project Location:
Closest Waterway:
City:
County:
State: Arizona
Include latitude and longitude in decimal degrees; waterway; nearest city, county. For linear projects, indicate where the project starts and ends. Provide any other geographic clues (e.g., nearest road and site boundaries, address).

1.4. Project Purpose:

1.4.1 Basic Project Purpose: The Basic Project Purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent. The basic project purpose for the proposed project is to construct *DESCRIBE*.

1.4.2 Overall Project Purpose: The Overall Project Purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to construct *DESCRIBE*.

1.4.3 Water Dependency Determination: The project is not water dependent *EXPLAIN*. Because the project proposes to impact special aquatic sites, the applicant must rebut the presumption that there is not a less environmentally damaging alternative.

Comment [JR2]: ADOT Projects will never be water dependent

1.4.4 Project Purpose and Need under the National Environmental Policy Act (NEPA):

1.5 Proposed Project Description: *Describe the proposed project as currently being proposed, including all modifications since the circulation of the PN. Also include the specific action that requires a DA permit. Provide all of the project details needed to make a fully informed decision.*

1.6 Avoidance and Minimization Information: *Provide general information (1-2 sentences) on how the project avoided and minimized impacts to waters of the U.S. You may say that avoidance is not possible if that truly is the case, but every project should have a discussion on minimization features.*

1.7 Compensatory Mitigation: *Should contain a brief description of the proposed mitigation, including the form of mitigation (creation, restoration, enhancement, preservation, etc.) and a description of the proposed community, (palustrine emergent, palustrine scrub shrub, etc)*

1.8 Existing Site Conditions: *Should include a description of the environment in the project area and immediate vicinity – types of wetlands, open water areas, arroyos, streams or rivers, uplands. Include a statement which clearly establishes a connection to navigable water. Describe soils, vegetation, hydrology. A general statement of function, values, and perceived quality of the aquatic resources should also be included here. Include a description of any previous impacts, man-made or otherwise. You may also want to include a brief discussion of developed conditions in the area. Based on your knowledge of the area and the information you receive during the evaluation process, outline the resources that may be at risk due to the proposed activity, especially endangered species and historic properties. (Note: not all of the resources/issues flagged here may end up being subject to Corps jurisdiction. The purpose of identifying resources here is to "flag" them for additional attention during the review and decision-making processes.) These potentially affected resources should be referenced and discussed in more depth in appropriate sections of the document.*

Biological Resources:

Essential Fish Habitat:

Cultural Resources:

Air Quality:

Noise:

Traffic:

Water Quality:

2.0 Authority

☐ Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403).
☐ Section 404 of the Clean Water Act (33 U.S.C. §1344).
☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

3.0 Scope of Analysis

3.1 NEPA: *[Write an explanation of rationale in each section, as appropriate]*

3.1.1 Factors.

3.1.1.1 Whether or not the regulated activity comprises "merely a link" in a corridor type project: *Explain*
3.1.1.2 Whether there are aspects of the upland facility in the immediate vicinity of the regulated activity, which affect the location and configuration of the regulated activity: *Explain*
3.1.1.3 The extent to which the entire project will be within the Corps jurisdiction: *Explain*
3.1.1.4 The extent of cumulative Federal control and responsibility: *Explain*

3.1.2 Determined Scope:
☐ Only within the footprint of the regulated activity within the delineated water.
☐ Over entire property. *Explain.*

3.2 National Historic Preservation Act (NHPA) "permit area":

3.2.1 Tests: The term permit area as used in 33 C.F.R. 325 Appendix C "means those areas comprising the waters of the United States that will be directly affected by the proposed work or structures and uplands directly affected as a result of authorizing the work or structures." Activities outside the waters of the United States ☐are/☐are not included because all of the following tests ☐are/☐are not satisfied: Such activity ☐would/☐would not occur but for the authorization of the work or structures within the waters of the United States; Such activity ☐ is/☐is not integrally related to the work or structures to be authorized within waters of the United States (or, conversely, the work or structures to be authorized must be essential to the completeness of the overall project or program); and Such

activity ☐is/☐is not directly associated(first order impact) with the work or structures to be authorized. *Explain*.

3.2.2 Determined scope. *Describe*.

3.3 ESA "Action Area":

3.3.1 Action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

3.3.2 Determined scope. *Describe*

3.4 Public Notice Comments ☐ NA

3.4.1 Commenters and issues identified (Appendix C).

Name	Issue	Corps Response

Comment [JR3]: If formatting in the table becomes problematic, you may delete it and use a different format.

3.4.2 Issues identified by the Corps. *Describe*.

3.4.3 The public also provided comments at ☐public hearing, ☐public meeting, and/or ☐ NA.

3.4.4 Commenters and issues raised at the hearing. *Describe*.

3.4.5 Site was visited by the Corps to obtain information in addition to delineating jurisdiction. *Include dates and synopsis of information gathered if site was visited.*

3.4.6 Issues identified by the Corps. Similar issues identified by other agencies:

3.4.7 Issues/comments forwarded to the applicant.

3.4.8 Applicant replied/provided views.

3.4.9 The following comments are not discussed further in this document as they are outside the Corps purview.

4.0 Alternatives (33 C.F.R. 320.4(b)(4), 40 C.F.R. 230.10):

4.1 Basic and Overall Project Purpose (as stated by applicant and independent definition

by Corps) and NEPA Purpose and Need.
☐ Same as in Paragraph 1.
☐ Revised:

4.2 Water Dependency Determination.
☐ Same as in Paragraph 1.
☐ Revised:

4.3 Applicant Preferred Alternative Site and Site Configuration.
☐ Same as Project Description in Paragraph 1.
☐ Revised:

Criteria.

Issue	Measurement and/or constraint
Overall Project Purpose and NEPA Purpose and Need	
Cost	
Technology	
Logistics	
Environmental	

Comment [JR4]: Again, if the table is problematic you may delete it and use another format.

4.4 Off-site Locations and Configuration(s) for Each.

Off-site locations and configurations

Description	Comparison to criteria
Alternative	Overall Project Purpose and NEPA Purpose and Need: Cost: Technology: Logistics: Environmental: (Impacts within Corps Jurisdiction)
Alternative	Overall Project Purpose and NEPA Purpose and Need: Cost: Technology: Logistics: Environmental: (Impacts within Corps Jurisdiction)

(☐ NA) Site selected for further analysis and why.

4.5 On-site Configurations.

Description	Comparison to criteria
Alternative	Overall Project Purpose and NEPA Purpose and Need:

	Cost: Technology: Logistics: Environmental: (Impacts within Corps Jurisdiction)
Alternative	Overall Project Purpose and NEPA Purpose and Need: Cost: Technology: Logistics: Environmental: (Impacts within Corps Jurisdiction)

4.6 Other Alternatives Not Requiring a Permit, Including No Action.

Description	Comparison to criteria
No Federal Action Alternative	Overall Project Purpose and NEPA Purpose and Need: Cost: Technology: Logistics: Environmental: (Impacts within Corps Jurisdiction)
No Project Alternative	Overall Project Purpose and NEPA Purpose and Need: Cost: Technology: Logistics: Environmental: (Impacts within Corps Jurisdiction)

Table: Corps Alternatives Analysis

Alternative Name	Criteria 1: Overall Project Purpose and NEPA Purpose and Need	Criteria 2: Cost	Criteria 3: Technology	Criteria 4: Logistics	Criteria 5: Environmental	Practicable/Reasonable* ? (Y/N)

*Per the 404(b)(1) guidelines under 40 C.F.R. 230, this alternatives analysis based practicability on an alternative's capability "of being done after taking into consideration cost, exiting technology, and logistics in light of overall project purposes."

4.7 Alternatives Not Practicable or Reasonable: *Describe/explain*
4.8 Alternatives Carried Forward for Further Analysis: *Describe/explain*

5.0 Environmental Consequences: This section contains a discussion of the possible effects of the proposed project and alternatives for the specific environmental issue (resource) areas

identified by the Corps. Potential direct, indirect (secondary), permanent, and temporary impacts are evaluated in this section.

Physical/Chemical Characteristics.

5.1 Substrate:

Take a look at the wetland delineation, soil survey information, and topographic maps. Describe the site baseline of soils and topography and explain how the project will affect the soils and topography of the site. Are there impacts to substrate associated with wetlands and other waters of the U.S.?

For example: "Currently the site consists of grasslands, seasonal wetlands, and a shallow creek channel on a slightly undulating landscape underlain generally by intact native soils and hardpan. With mass grading of the site, paving for roads and foundations, and the reconfiguration of the creek channel, the substrate would be adversely and permanently affected by the project." "The project will stabilize soils along the levee system against movement during flood events. Additional soil will be added to raise and strengthen the levee. Clay and cement material will be used to form semi-impermeable barriers along some reaches of the setback levee." "The applicant proposes to mass grade the entire 78-acre site. The existing substrate of the waters on the project site would be completely filled."

5.2 Current patterns and water circulation (and fluctuation):

Currents: a general tendency, movement, or course in a hydrologic system
Circulation: ability to move without being impeded in a hydrologic system
Drainage patterns: the path or direction water flows on the site

Describe the site baseline when it comes to overland water flow, water in drainages, etc. Then describe how the project will affect hydrology. You may ask yourself questions like these: Will the project cause water to stagnate? Will velocities increase? Will the project add more water to the drainage system? Are there impervious surfaces and stormwater systems that will modify or eliminate overland flow patterns? How will runoff be handled? How is the project designed to minimize impacts to currents, circulation, or drainage patterns?

For example: "The upland and wetlands on the project site generally drains from the north and south into the creek that runs through the middle of the site. The creek enters the site through a culvert under Smith Road on the east side and flows off the site through a culvert under Wesson Road in the northwest part of the site. Water flows in the creek from east to west. The project would adversely affect overland flows in the upland and wetland areas by increasing the amount of impervious surfaces and negating the natural percolation of waters into the soil. This would increase the velocities of storm water leaving the site and entering the detention basins and subsequently the creek. Higher velocity waters suspend greater amounts

of pollutants and sediments that without proper time to settle or percolate through a wetland or upland buffer would reach the creek."

5.3 Suspended Particulates/Turbidity:

Suspended particulates: soil particles or other compounds suspended in a solution of water
Turbidity: not clear or transparent because of stirred-up sediment or the like

What are the current conditions in the watershed? You may need to consider cumulative increases in turbidity due to development. Describe how the project will affect turbidity in the local watershed during and after construction. A short description of best management practices (BMPs) should be provided to explain how particulates entering the watershed will be minimized. If a detention basin or other settling area is proposed as a part of the project, the benefits of reducing the sediment load in waters discharged off the site should be discussed. Other contaminants that may enter the watershed as a result of the project should be addressed in the next section on water quality.

For example: "The construction activities on the project site would temporarily increase suspended particulates in Fortune Creek. The CWA 401 Water Quality Certification issued by the Regional Water Quality Control Board sets forth best management practices that the applicant must follow in order to reduce and eliminate the chances of particulates entering the Fortune Creek watershed. In the long-term however, it is expected that some particulates will enter the Fortune Creek watershed from the project area from flows off impervious surfaces or fine particulates not captured in the onsite storm water detention facility." "As required by project mitigation measures adopted as part of the CEQA process, the applicant has committed to implement protective measures consistent with NPDES requirements, including preparing and implementing a SWPPP that specifies BMPs to control waste discharges of construction-related contaminants and that specifies appropriate hazardous materials handling, storage, and spill response practices."

5.4 Normal Water Level Fluctuations: See Paragraph 5.2.

Normal water fluctuations: daily, seasonal, and annual flood fluctuations in water level.

Biological and physical components of such a system are either attuned to or characterized by these periodic water fluctuations. Describe whether and how the proposed project will alter the normal water-level fluctuation pattern of an area. Will the project result in prolonged periods of inundation, exaggerated extremes of high and low water, or a static, non-fluctuating water level? Will water level fluctuations alter erosion or sedimentation rates, aggravate water temperature extremes, or upset the nutrient and dissolved oxygen balance of the aquatic ecosystem? Will modifications alter or destroy communities or populations of aquatic

animals and vegetation, induce populations of nuisance organisms, modify habitat, reduce food supplies, restrict movement of aquatic fauna, destroy spawning areas, or change adjacent, upstream and downstream areas?

5.5 Flood Hazards & Floodplain Values:

Flood control: the act or technique of controlling water flow with dams, dikes, artificial channels, levees, etc., to minimize the occurrence of floods

What flood control functions does the site currently provide? Determine if the project will affect the likelihood of flooding, affect a structure that controls flooding, and/or if the project is proposed to be built in a hazardous area. Issues related to the effect of global warming on flooding in your project area can be addressed in this section or under a separate public interest review factor. Are there alternative designs that would not adversely affect flood control capabilities in the area? For residential developments, is this a safe alternative to build? What project design strategies are incorporated in the project to minimize flood risk?

For example: "Onsite wetlands and grasslands currently attenuate flood flows by buffering velocities and detaining water. These upland grass areas and wetlands would be filled as a part of the proposed project and any flood control functions they have would be lost. Presently, a little over half of the site is within the 100-year floodplain. Detention basins will also be constructed on the site to handle storm water flows before they reach the creek. Increased impervious surfaces on the site will increase the amount of flows from the development that reach the creek. It is expected that the Water Creek channel improvements and detention basins will adequately mitigate this effect onsite and downstream." "Presently, the site likely provides some flood attenuation functions for storm flows associated with Imperial Creek, other natural drainage and urban runoff. Such functions would be affected by build-out of the site. With the construction of the detention ponds and other flood attenuation facilities in the area, impacts on flood control functions with implementation of the project are anticipated to be minimal."

5.6 Storm, Wave, and Erosion Buffers:

Buffer: a space, structure, and/or object used to cushion, shield, or protect an area in order to lessen an adverse effect from environmental stressors and/or events
Erosion: the process by which the surface of the earth is worn away by the action of water, glaciers, winds, waves, etc.

Note- This public interest review factor generally refers to projects located on or near the coast, bays, and other large waterways (i.e. rivers and lakes) that would experience storm and wave action.

Describe existing buffers from storms and waves in the area. Describe how the project will affect these buffers and what impact that will have on the project and

other uses and activities in the area. Are there design strategies to minimize the affect on buffers?

For example: "The proposed project would increase floodway capacity for storm events, increase levee freeboard against wave overtopping, and install rock slope protection to minimize levee erosion." "Storm water would be discharged into a pipe conveyance system and regulated through detention basins before it left the site. There is a larger 100-foot buffer proposed along each side of Robot Creek that would provide some erosion buffering of water from the developed areas not captured in the storm water system before it reaches the creek. Storm water outfalls will be placed such that they discharge in the proposed floodway and do not erode the banks."

5.7 Erosion and Accretion Patterns:

Erosion: the process by which the surface of the earth is worn away by the action of water, glaciers, winds, waves, etc.
Accretion: slow addition to land by deposition of water-borne sediment

How will the project affect the flow of water onsite and in the watershed? Will the project increase velocities in rivers, creeks and other channels causing issues with erosion? If the project fills wetlands that normally reduce flow velocities, how will it affect erosion? If the project involves a structure or some other obstruction being placed in or on a stream or body of water, will accretion around the object change? Describe any other affects on erosion and accretion upstream and downstream. Are there ways to prevent or lessen the effect of erosion and accretion by modifying project design or providing mitigation?

For example: "Increased flows in Humus Creek caused by the fill of wetlands on the project site and addition of storm water into the system which would otherwise percolate into the ground may cause increased erosion downstream. This effect is being mitigated by the drainage improvements proposed by the county along Humus Creek. The drainage improvements will likely be able to adequately accommodate higher flows generated from the development." "The applicant has stated that for the proposed project that the existing level of flows from the project site will be comparable to the site in an undeveloped state. However, because of the increased amount of impervious surfaces that the actual volume and velocity of run-off from the project site will probably increase. This would change the erosion and accretion patterns of the creek downstream from the project. The project offers no mitigation for this change.

5.8 Water Quality, Including Salinity Gradients:

Temperature: a measure of warmth or coldness of an object or substance
Salinity: a measure of the concentration of chemical salts in water, including sodium, potassium, and magnesium

What are the current water quality conditions on the site and in the watershed? What contaminants are likely to enter the waters on the site and watershed from projects in the area? What contaminants may enter the water on the site and watershed from the project you are evaluating during and after construction? Will the project affect the water quality of an impaired waterway? What are the cumulative and long-term impacts to water quality on the site? What mitigation measures and best management practices are going to reduce or mitigate for water quality impacts?

For example: "Water quality on the site has been negatively affected in recent years by adjacent uses, including runoff from roads, a nearby golf course, and residential development to the south. The site presently provides storage and infiltration of urban runoff in the form of wetlands. With construction of the project, water quality functions would be lost with the removal of these wetlands with and adverse effect to water quality. The project may also contribute to the cumulative degradation of water quality in the heavily impacted Fire Creek watershed due to site runoff from impervious surfaces like roads and parking lots and fertilizers from landscaped areas. The applicant has obtained a CWA Section 401 Water Quality Certification and NPDES permit from the Regional Water Quality Control Board. However, the 401 Certification may not provide long-term requirements sufficient that water quality in Fire Creek would not be adversely impacted due to the proximity of the proposed development."

5.9 Aquifer Recharge:

Aquifer: an underground bed or layer of earth, gravel, or porous stone that yields water
Recharge: to refresh or restore

Determine if the project will impact aquifer recharge areas such as sumps or may affect tributaries to these recharge areas. How substantial or significant is the impact? Is mitigation required?

For example: "The site contributes minimally to aquifer recharge. The loss of wetlands with project implementation will negate any aquifer recharge function, if any. The impact on aquifer recharge is expected to be minimal on the site."
"Presently, due to landscape position, geology and local climate, the project site likely contributes minimal aquifer recharge. There are however several areas on the site, including wetlands and ponds which allow water to infiltrate and recharge ground water. Maintaining the wetlands and open creek would allow these recharge functions to continue."

5.10 Baseflow:

Baseflow: average low-flow volume in a stream that is supported by groundwater inflow, not surface waters (U.S. Geological Survey, Science in Your Watershed,

General Introduction and Hydrologic Definitions, http://water.usgs.gov/wsc/glossary.html)

Describe how base flows in an affected channel would change. Will the channel receive less groundwater or subsurface flows once the project is constructed? Can the channel handle the changes as a result of the project? How will impacts to baseflow be mitigated?

For example: "The base flow of Lily Creek would increase due to increased loads of water from impervious surfaces of the proposed development. Given the size and scope of the drainage improvements proposed as a part of the project, it is expected that the channel will need to accommodate larger flows than what typically occurs in the creek."

5.11 Mixing zone, in light of the depth of water at the disposal site; current velocity, direction and variability at the disposal site; degree of turbulence; water column stratification discharge vessel speed and direction; rate of discharges per unit of time; and any other relevant factors affecting rates and patterns of mixing: [*Only For projects involving the discharge of dredged material*]

Biological Characteristics.

5.12 Special Aquatic Sites (wetlands, mud flats, vegetated shallows, riffle and pool complexes, coral reefs, sanctuaries, and refuges):

Wetlands: wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions
Mudflats: broad flat areas along the sea coast and in coastal rivers to the head of tidal
influence and in inland lakes, ponds, and riverine systems
Coral reefs: consist of a skeletal deposit, usually of calcareous or silicaceous materials,
produced by the vital activities of anthozoan polyps or other invertebrate organisms present in growing portions of the reef
Pool and riffle areas: steep gradient sections of streams are sometimes characterized by riffle and pool complexes. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a steaming flow, a smooth surface, and a finer substrate. Riffle and pool complexes are particularly valuable habitat for fish and wildlife
Vegetated shallows: permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass and eelgrass

in estuarine or marine systems as well as a number of freshwater species in rivers and lakes
Sanctuaries and refuges: areas designated under State and Federal laws or local ordinances

For example: "The site contains the following special aquatic sites: 10.2 acres of emergent marsh, 3 acres of seasonal pond, 9.2 acres of seasonal wetlands and 4.4 acres of willow scrub." "The on-site restoration will provide a mosaic of habitats, including seasonal and emergent marsh, mixed riparian forest, Valley oak woodland, annual grassland, and shaded riverine aquatic habitat." "The vernal pools and other wetlands on the site are the densest and most valuable of the wetlands in the specific plan area. Wetlands on the project site are adjacent to Millhouse Creek and contiguous to a preserve area. The U.S. Fish and Wildlife Service characterized the wetlands as important habitat for wildlife species, as well as storm water retention, filtration and infiltration into shallow, subsurface aquifers. Such high value seasonal wetlands and vernal pools provide habitat for a number of threatened and endangered plant and animal species. The U.S. Environmental Protection Agency also recognized the wetlands on the site as 'Aquatic Resources of National Importance'."

5.13 Fish, Crustaceans, Mollusks, and Other Aquatic Organisms in the Food Web:

Habitat: the area or natural environment in which an organism or population normally lives. A habitat is made up of physical factors such as soil, moisture, range of temperature, and availability of light as well as biotic factors such as the availability of food and the presence of predators

What organisms occupy the waters on your site? Are the wetlands suitable habitat for aquatic snails, insect larvae, flatworms, branchiopods, amphibians, fish, and/or reptiles? Are they suitable habitat for those species at certain life stages and not at others? If there is a river, creek, lake, impoundment, spring, and/or emergent marsh on the site, do they sustain fish populations? Is there a riparian area to provide shaded habitat for fish? How does the applicant plan to mitigate for these impacts?

For example: "Survey results showed that Green Creek is habitat for amphibians, including Pacific tree frogs and bull frogs. These results show that habitat associated with Green Creek supports aquatic invertebrates because they are the food source of the observed amphibians. The springs on the site and water quality functions of the Green Creek corridor help to support downstream fisheries. The U.S. Fish and Wildlife Service have declared that this wetland corridor and pond are potential habitat for California red-legged frog." " The open water areas of the river provide habitat for mammal species like river otter and muskrats that use these areas for foraging and cover." "Central valley spring-run Chinook salmon and steelhead may occur in the project area. Project implementation could result in the temporary displacement of individuals from construction activities, potential mortality resulting

from the contamination of spills of toxic substances, the introduction of contaminated borrow material, and temporary losses of shaded riverine aquatic habitat."

5.14 Wildlife Values: See Paragraph 5.13 and 5.15.

Wildlife: wild animals and vegetation, especially animals living in a natural, undomesticated state
Breeding habitat: area to mate, birth, rear, train, and/or bring up
Cover: something that provides shelter like vegetation, covering the surface of the ground, darkness, or other elements of the environment that screens, conceals, or disguises
Food and forage habitat: a place that provides food items for nourishment
Travel/dispersal: areas wildlife uses to go from one place to another

What animals currently use the site for breeding, cover, food, and travel? If you are looking at agricultural areas, consider the presence rodents, other mammals, birds of prey, and reptiles that may use these areas for forage. In some instances like rice fields, snakes may use the flooded fields for breeding. Projects can also impact hosts for some animals. For instance, a project may impact the blue elderberry, the host plant for the valley elderberry longhorn beetle. How will impacts to wildlife habitat be mitigated?

For example: "Construction of the project would require the partial filling or disturbance of features that contain potential habitat for giant garter snake and western pond turtle and the removal of elderberry shrubs. Mitigation for project impacts to giant garter snake will occur through the purchase of credits and a Wildlands, Inc. mitigation bank. Mitigation for impacts to the beetle will occur through a combination of onsite plantings and possible offsite transplanting of the host plant, the blue elderberry." "Agricultural lands provide foraging habitat for many species in the project area, including bird species and small rodents, coyote, raccoon, and gopher snakes. Forage value varies seasonally and annually depending on the crop cycle and vegetative cover present. The site is considered to be 'Farmland of Statewide Importance' by the State of California. To mitigate for building on the site, the applicant purchased an equivalently sized site of farmland designated as 'Farmland of Statewide Importance' within the county for preservation in perpetuity."

5.15 Threatened and Endangered Species:

Endangered species: a species at risk of extinction because of human activity, changes in climate, changes in predator-prey ratios, etc. and is officially designated as such by a governmental agency such as the U.S. Fish and Wildlife Service
Threatened species: a species likely, in the near future, to become an endangered species within all or much of its range and is officially designated as such by a governmental agency such as the U.S. Fish and Wildlife Service

Does the site provide suitable habitat for federally listed threatened and endangered species? If so, provide a short description of the species and what habitat they would occupy on the site. Is the site within critical habitat for a species? This information can be summarized from biological opinions, letters of concurrence, and information provided by the applicant. If a biological opinion was issued, what conservation measures (mitigation measures) are proposed to minimize or eliminate the projects impact to the species? If a letter of concurrence was issued, why was the site not considered to have suitable habitat or the project determined to have no effect on a species? Was a jeopardy opinion likely when the project's initial design was reviewed by the USFWS or NMFS? If so, what project design or site location changes were made to avoid and minimize effects to the species?

For example: "Potential habitat for valley elderberry longhorn beetle and giant garter snake would be affected by the construction of the project. Although the species were not observed during surveys, the seasonal wetlands and pools in the project area provide suitable habitat for vernal pool branchiopods including vernal pool tadpole shrimp and vernal pool fairy shrimp. The U.S. Fish and Wildlife Service has required as a part of the project conservation measures that the applicant purchase vernal pool mitigation bank credits in a 2:1 ratio for creation to loss and preservation credits in a 1:1 ratio. The applicant is also required to purchase 0.5 acres of aquatic habitat for giant garter snake at a Service approved bank. To mitigate for effects to elderberry shrubs and VELB, the applicant is also required to transplant shrubs on the site to an offsite elderberry preserve and plant an additional 50 shrubs in the preserve."

5.16 Biological Availability of Possible Contaminants in Dredged or Fill Material, considering hydrography in relation to known or anticipated sources of contaminants; results of previous testing of material from the vicinity of the project; known significant sources of persistent pesticides from land runoff or percolation; spill records for petroleum products or designated (Section 311 of the CWA) hazardous substances; other public records of significant introduction of contaminants from industries, municipalities, or other sources:

Human Use Characteristics.

5.17 Water Supply and Conservation:

Water supply: water available for a community or region
Conservation: the careful utilization of a natural resource in order to prevent depletion

Where is water for the project going to come from? What type of water right does the applicant have? What is the outlook on water supply in the region? How would this project affect that outlook? Characterize downstream users that may be impacted.

How would the fill of waters of the U.S. on the site affect water supply? Is it possible to implement water conservation measures as a part of the project? If so, discuss how these measures were incorporated in the project design to reduce water use.

For example: "The proposed project would be developed in an overtaxed area with increasing water supply problems. This would add to the strain on an already overtaxed system. Loss of the ephemeral wetlands present on the project site would not have an effect on water supplies or conservation." "Filling in the wetlands and culverting Sacred Creek may contribute to lower water quality in downstream supplies. Sacred Creek is a tributary to Wine Creek, which is a part of the Steeple River watershed. Holy Lake is an impoundment on Steeple River is a reservoir that provides potable water to the City of Winesman. This water source is considered to be high quality potable water that supports domestic and commercial users."

5.18 Aesthetics:

Aesthetics: the study of the mind and emotions in relation to the sense of beauty What does the site look like? Does the appearance of the site and aquatic resources change from season to season? Are there any unique or rare natural water formations or aquatic habitat on the site? Are any of the characteristics of the site starting to disappear in then region (i.e. is the site a prime example of what is becoming rare in the area)? Is the aquatic ecosystem a part of an important vista or viewshed?

For example: "The natural aesthetics of the aquatic ecosystem on this site are of high quality. The site is composed of gently rolling hills at a 2000-foot elevation. Blue Oak Creek meanders through the site and an on-stream pond and adjacent wetlands enhance the diversity of the aquatic environment. The site contains wet meadows surrounded by 200+ year old oak trees. The site also contains a historic cemetery. Every portion of the natural habitat would be impacted with the development of the project as proposed. This would be a significant adverse impact to the aesthetics of the aquatic ecosystem and site overall. Aesthetics cannot be mitigated by off-site compensation." "The vernal pools and other wetlands on the proposed project site are located in an urbanizing area long well-used roads. In the spring, the pools fill with water, contrasting with adjacent grasslands. In the late spring and early summer, vernal pool plants bloom. The fill of these wetlands would have an adverse effect on the aesthetics of aquatic ecosystem in the area."

5.19 Traffic/Transportation Patterns:

Traffic: the movement of vehicles, ships, persons, etc., in an area along a street, highway, air lane, over a waterway, etc.

What are current traffic conditions in the project vicinity? What roads do people use in the area? Are there any highways nearby? What do peak and non-peak traffic conditions usually look like? Does traffic delays dramatically increase commute

times? Will the project temporarily and/or permanently increase or decrease traffic capacity and travel time on area roads? How will the project cumulatively affect traffic in the area? Will the project induce growth that could subsequently add to the traffic problems?

For example: "Currently, roads in the area of the project site are heavily used. Development of the proposed project would add traffic congestion in an area already adversely affected by the pace of development exceeding the capacity of transportation infrastructure. Major north-south and east-west connectors to existing highways are unable to adequately accommodate traffic during normal commute hours." "Construction worker commute trips and haul truck trips would temporarily increase traffic on Green River Boulevard and Highway 45 during project construction, but construction related trips would not be considered significant in relation to current traffic levels. Traffic congestion is likely to increase as a result of urban growth in the area once the flood control improvements are constructed."

5.20 Noise:

Noise: sound or a sound of any kind, but generally referring to loud, unpleasant, or undesired sounds

Describe in generic terms the ambient noise levels in the area. What types of physical and biological buffers are on the site to reduce noise levels (i.e. hills, trees, shrubs, etc.)? Do these features provide buffering for nearby residents or businesses? How will the proposed project affect these buffers? How will construction affect ambient noise levels? How will activities associated with the project once it is constructed affect noise levels?

For example: "There would be an increase in noise during project implementation and a permanent increase in ambient noise levels once the project is complete." "No long-term new sources of noise would be associated with the proposed levee improvements. Orchards surrounding the few residents located 1,000-1,500 feet from the project alignment would provide some shielding from construction-related noise. The applicant will be implementing noise abatement BMPs to reduce noise levels in the area if needed." "The noise levels at and around the project site would increase with the construction of the project. The site is currently a natural open space in a rural setting. If the project were constructed as proposed, this would change the area to a commercial development. If the entire wetland and vegetated oak areas on the project site were filled and destroyed as proposed by the development, their buffering capabilities would be removed making the urban noise levels even higher. Additionally, the noise levels created on the highway is expected to also increase in the immediate area because highway sounds will bounce off of the hard surfaces of the buildings and asphalt instead of being absorbed and diffused by the vegetation of the riparian habitat and oak woodland."

5.21 Safety:

Safety: condition of being safe; freedom from danger, risk, or injury
How will the project benefit or decrease public safety for nearby residents, project workers, future residents, and visitors to the area once the project is built? Will the resulting secondary impacts form the project affect public safety?

For example: "If the commercial development is constructed, it is expected to increase area visitors. These driving users are very likely to increase traffic accidents in the area. Residents have expressed concern over increase traffic in the area and are also worried about the safety of their homes with the high volume of customer use of the project site. Residents are concerned that the added use area will increase the crime in their neighborhood." "The deepending and widening of the creek corridor could increase the potential for water-related accidents in the area." "The protruding boat dock would constitute a navigation hazard that could be hit by high-speed recreational boaters in the area that would not have much time to react as they drive around the river bend." "The proposed project would increase the level of flood protection for the area and provide substantial benefit public safety. The levee improvements would be engineered and constructed to current standards with appropriate seepage control features and would be more stable than existing levees and less likely to fail under extreme conditions."

5.22 Recreation:

Recreation is a pastime, diversion, exercise, or other resource affording relaxation and enjoyment. How does both the project and project site influence recreation?

5.23 Recreational and Commercial Fisheries:

Fisheries: the industry or occupation devoted to the catching, processing, or selling of fish, shellfish, or other aquatic animals.
Recreation: pastime, diversion, exercise, or other resource affording relaxation and enjoyment.

Are there recreational or commercial fishery activities in the project area? How will the project affect downstream fisheries? Will the project result in increase sediment or pollutant loads in a watershed that supports recreational or commercial fisheries? Will the project affect shellfish beds? Will the project cause an impediment to harvesting?

For example: "Recreational fisheries do not occur on the project site. Blackbird Creek however, is a part of the West Creek watershed which supports a recreational fishery. Therefore, water quality and habitat functions of Blackbird Creek must be maintained and not degraded to continue to support the downstream fishery." "The Black Bear River is habitat for Central Valley spring-run Chinook salmon, Central Valley steelhead, and other game fish like bass and trout. The National Marine Fisheries Service (NOAA-Fisheries) has concurred with our determination that the project is not likely to adversely affect federally listed Chinook and steelhead

populations. Based on this determination, we do not anticipate other recreational fisheries to be adversely affected by the proposed project."

5.24 Navigation:

Navigation: travel or traffic by vessels, particularly commercial shipping or recreational travel

Would the project benefit or interfere with navigation? What types of navigation would be affected? How would the project affect local or interstate commerce uses? Would the project increase commercial traffic and result in restrictions of recreational traffic or vice versa?

For example: "The project would benefit navigation. It would deepen the ship channel by dredging and removing sediments that are currently jeopardizing commercial ship movement to the Port of Ye-Ole. The channel has been dredged every 5-8 years as needed since it the port began accommodating larger cargo ships in the 1920s." "The boat dock would protrude past the pier line on the river, interfering substantially with recreational and commercial navigation."

5.25 Energy Needs:

Consumption: the act of expending or using up
Generation: the act of brining into existence; to cause to be; to produce

What is the baseline energy consumption on the site? What types of energy are being consumed (for example, fossil fuels and/or electricity)? Are there types of energy being produced (for example, wind, solar, hydroelectric, or nuclear)? To implement the project, what types of energy will need to be consumed? What about after the project is constructed? If the project will produce energy, what type will be produced and how will it be used? Will the produced energy have any growth-inducing impacts? Are there any concerns with cumulative impacts in the region with energy consumption? What about energy production?

For example: "Currently, there is no energy consumption or generation at the project site. During construction and with project build-out, there would be an increased consumption of electricity and fossil fuels for urban uses." "The project construction activities would entail the consumption of fossil fuels and other resources needed to construct the flood control improvements. The new pump at the end of the slough will require a near continuous stream of power during the wettest times of the year in order to maintain the rate of water removal adequate to prevent flooding. Residential and commercial developments will be allowed in the once flood prone areas, dramatically increasing electricity consumption for urban uses and fossil fuel consumption for increased commute distances to major job centers in the region."

5.26 Mineral Needs:

Minerals: Any of a class of substances occurring in nature, usually comprising inorganic substances, as quartz or feldspar, of definite chemical composition and usually of definite crystal structure, but sometimes also including rocks formed by these substances as well as certain natural products of organic origin, as asphalt or coal

For example: "The site is located within 1 to 2 miles of the largest aggregate operations in the county and is in an area known to have large gravel and cobble deposits. In the Corps decision document for the Big Rock Mining permit, we recognized Big Rock's difficulty in obtaining aggregates near their existing plants and mining operations because of continued development in those areas. If these deposits underlay the site, they would no longer be accessible for use by the aggregates industry which is facing increasing demands for their materials in the current market."

5.27 Economics:

Economics: financial considerations

What is the cost to implement the project? Characterize local economic conditions: for example, if the project is residential, what are homes being sold for in the area? What type of return if any is the applicant going to get when the project is complete? Will there be economic impacts to the existing community? How does the city and/or county benefit from the project?

For example: "The proposed project entails the construction of 850 new homes that would be developed in an area where homes are now routinely sold in the low to mid-$400,000's. Building the project would also provide tax revenues to local entities." "Construction of the proposed project will benefit the applicant and retail developers and provide economic opportunities and jobs to the County. Avoiding more wetlands in the creek corridor in a modified development alternative, would not appreciably diminish this economic benefit. The existing residential community will not gain any economic benefit from the construction of the project. The neighbors have stated their concerns that their sales taxes will increase to pay for the cost of developing the project and upgrading the roadway over crossing. They are also concerned that their property values will decrease when the project is developed. The applicant has stated that the project must be permitted and constructed as proposed or they will not make a reasonable return on their investment. The U.S Environmental Protection Agency has stated that the project design may be changed to include avoidance of the creek, and that the LEDPA does not have to be the alternative with the greatest profit margin for the applicant. The applicant has not demonstrated that the project will not be viable or generate profit with the preservation of the creek corridor."

5.28 Food and Fiber Production:

Food production: growing or raising food (in the case of livestock)

Fiber production: the process of growing natural or making synthetic thread, yarn, cloth, etc.

Will the project impact farmland used to produce food and fiber? What about rangeland? You may want to tie-in what is happening with this project to the regional, statewide, and national trends in producing food and fiber.

For example: "The setback levee and detention basin footprints would consume approximately 125 acres (planted in fruits and nuts) of more than 90,000 acres of productive farmland in the county. Other agricultural lands not directly impacted by the levee construction would be subject to increased development pressures, likely reducing the area's capacity to grow agricultural products."

5.29 Prime and Unique Farmland:

Prime and unique farmland:
(A) prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion, as determined by the Secretary. Prime farmland includes land that possesses the above characteristics but is being used currently to produce live stock and timber. It does not include land already in or committed to urban development or water storage;
(B) unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops, as determined by the Secretary. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, cranberries, fruits, and vegetables; and
(C) farmland, other than prime or unique farmland, that is of statewide or local importance for the production of food feed, fiber, forage, or oilseed crops, as determined by the appropriate State or unit of local government agency or agencies, and that the Secretary determines should be considered as farmland for the purposes (Farmland Protection Policy Act, 7 U.S.C. 4201)

Is there prime or unique farmland on the site? Has the state or local entity declared the farmland as farmland of statewide or local importance? How much of it and how will be impacted? Will the uses of the land change? If the project will have secondary impacts like growth inducing impacts, how will that affect prime and unique farmland in the area?

For example: "The levee setback would directly impact 125 acres of prime farmland by converting approximately 55 acres in the levee footprint to floodway and 70 acres to detention basins, which are non-agricultural uses. Other agricultural lands not

directly impacted by the levee construction would be subject to increased development pressures, likely reducing the area's capacity to grow agricultural products." "The site does not contain prime or unique farmland. Therefore construction of the project is not expected to have an impact on prime and unique farmland."

5.30 Considerations of Property Ownership:

Private property: land not owned by the government or for public use

For example: "All lands along the setback levee alignment and in the levee setback area are privately owned. The applicant is conducting property appraisals in order to negotiate acquisition of these properties through eminent domain and will be relocating existing households." "Authorizing the project would allow for the applicant to develop the land that is held privately."

5.31 Land Use:

Land use: the human modification of natural environment or wilderness into built environment such as fields, pastures, and settlements
Zoning: a section of an area or territory established for a specific purpose, as a section of a city restricted to a particular type of building, enterprise, or activity

What is the current zoning on the project site? What are the current uses on the site and nearby sites? How does the project fit in with the uses in the rest of the area? Will the use on the project site effect the land use on other sites in the vicinity, such as growth inducing effects?

For example: "The general plan land use designation along the levee is 'Agriculture'. According to the applicant, the construction of the levee foundation is consistent with this designation. The project will have growth inducing impacts by accelerating the development of the south county area once a minimum 100-year flood protection level is established. The area has been planned for growth for 25-years, but due to two catastrophic floods of the area in 1986 and 1997, build-out of this area has been restricted. Related effects of urban development inside the levee will include impacts to agricultural lands, traffic, air quality, water supply, and energy consumption in the area."

5.32 Historic Properties:

Historic property or historic resource: means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register, including artifacts, records, and material remains related to such a property or resource (National Historic Preservation Act of 1966 as Amended.

Are there any historic structures (over 50 years old) or prehistoric artifacts or sites on in the project area that are in the area of potential effect? Are they potentially

eligible for the National Register for Historic Places and how? What was the result of our consultation with the State Historic Preservation Officer? Are there any previously recorded sites that were not located during the recent survey? What is the potential for uncovering buried artifacts or sites?

For example: "Two potentially significant prehistoric archaeological sites, CA-BUT-1312 and CA-BUT-1313, had been determined to be located in the vicinity of the project area. Test borings started last year along the project alignment uncovered three archaeological finds, including human remains. Test boring was halted in those areas and a recovery plan prepared and submitted to the State Historic Preservation Officer (SHPO). There is no additional information that other potentially eligible sites lie within the project's area of potential effect (APE) for the proposed action." "One significant historic resource, the Western Pacific Railroad, is within the APE of the proposed project, but would not be affected under the current action. The SHPO concurred that there would be no adverse effect to the railroad as a result of the project."

5.33 Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Areas:

National Parks, Monuments, and Memorials: in the Organic Act of 1916, the National Park Service (Department of the Interior) was given the authority to regulate the use of the federal areas designated by Congress known as national parks, monuments, and reservations which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations (Organic Act, 16 U.S.C. 1, 2, 3, and 4)
National Seashore: a seacoast recreational area that is protected and maintained by the federal government for public use
Wild and Scenic River: areas designated by Congress under the Wild and Scenic Rivers Act, 16 U.S.C. 1273(b). A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to below. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, and administered as one of the following:
(1) Wild river areas — Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America
(2) Scenic river areas — Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads

(3) Recreational river areas — Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past
Wilderness Area: a region whose natural growth is protected by legislation and whose recreational and industrial use is restricted

The application should let you know if your project is within a National Park or National Monument site. However, if the project is within the corridor of a Wild and Scenic River or near a National Park, Monument, or Wild and Scenic River that information may not be so clear. When working on a project along a major river, you should check to see if your project is along a reach considered to be wild and scenic. When working on a project on federal lands, you may want to check if that area is designated as wilderness. If you are looking at a waterway that also passes through a National Park, you may want to consider whether water quality in the National Park would be affected by the proposed project.

For example: "The Merced River is a Wild and Scenic River. The project to restore the 5-mile reach of the Merced River is in the Yosemite National Park. In the 1860's, the Yosemite Valley was a settled area with numerous ranching and orchard operations. There was a slaughterhouse, general store, and a few small hotels. In order to utilize more of the valley, the meadows were drained by dynamiting a deeper channel along the Merced River. In the decades since, trees have colonized the now dried meadows along the Merced River. The project would restore some of the sinuosity and shallow channels that supported the wet meadows along the river."

5.34 Air Quality:

Air quality: a description of healthiness and safety of the atmosphere (Webster's New Millennium Dictionary)

There is standard language provided already in the decision document that discusses the projects conformance with the Clean Air Act. However, if you believe additional details about how the project will affect air quality should be disclosed, you can follow the generic statement about conformance with additional air quality information. If the project is a residential or commercial development, how will it tie in with alternative modes of transportation (i.e. buses, trains, and bike trails)? Are commercial opportunities in close proximity to the proposed development so residents can walk to pick up basic necessities or will they need to get in their cars and drive? Are schools a part of the development? Are job opportunities going to be provided in the area for individuals that can afford the housing units that will be built there?

Standard language: "The proposed permit has been analyzed for conformity applicability pursuant to the regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit will not exceed de minimis levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153."

For example: "Any later indirect emissions are generally not within the Corps continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this permit action." "Emissions from urban sources will likely increase in the area as a result of urban growth once the levee improvements are constructed." "The project does not incorporate any commercial areas. Also, residents would not be served by public transit, making residents dependent on using their vehicles to pick up basic necessities and to commute to work, increasing the amount of fossil fuels consumed and greenhouse gases (particularly carbon dioxide) being released in the region."

5.35 Other anticipated changes to non-jurisdictional areas that have been determined to be within the Corps' NEPA scope of analysis:

5.36 Global Climate Change:

6.0 Cumulative Impacts. This section presents the requirements for cumulative impact analysis, and analyzes the potential for impacts for the Action Alternatives, including the proposed project, to combine with impacts of other past, present, and reasonably foreseeable future projects in each resource area's cumulative geographic scope, to result in significant cumulative effects. CEQ regulations implementing NEPA define a "cumulative impact" as follows:

Comment [PJB5]: For Section 6.0, an assessment of cumulative effects takes into consideration the consequences that past, present, and reasonably foreseeable future projects had, have, or will have on an area. Every permit application must be considered on its own merits. Its impacts on the environment must be assessed in light of historical permitting activity, along with anticipated future activities in the area. Although a particular project may constitute a minor impact in itself, the cumulative impacts that result from a large number of such projects could cause a significant impairment of water resources and interfere with the productivity and water quality of existing aquatic ecosystems. The content is flexible, depending on the issues and location of the proposed project (and alternatives), but all factors and impacts must be discussed here. If a factor is not relevant to the proposed action or alternatives, briefly discuss why it isn't relevant. Add other topics if they are brought up by the general public, by resource agencies, by the applicant, or by your own review.

Cumulative effects: The impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person, undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7)This can include identifiable present effects of past actions to the extent that they are relevant and useful in analyzing whether the reasonably foreseeable effects of the agency proposal for action and its alternatives that may have a continuing, additive and significant relationship to those effects (Guidance on the Consideration of Past Actions in Cumulative Effects Analysis, Council on Environmental Quality, June 2005)

For purposes of this analysis, significant cumulative impacts would occur if impacts related to implementation of an alternative, including the proposed project, added to the environmental impacts of other past, present, and reasonably foreseeable actions, result in a significant effect. For an impact to be considered cumulative, these incremental impacts and potential incremental impacts must be related to the types of impacts caused by the action alternatives. Therefore, the cumulative impacts discussion focuses on whether the impacts of an alternative are cumulative considerable within the context of impacts caused by past, present, or reasonably foreseeable future actions.

You can start by looking at infrastructure. If you are examining a residential development, is your project providing roadways, sewer, water or other infrastructure that can later be used to grow other developments? If you are permitting a road widening, interchange, or some other

traffic congestion relief project, could that facilitate growth in the area? Are things like air quality, regional water supply, and loss of agricultural land issues? Are there reasonable foreseeable "problems" such as increased health issues with worsened air quality, lack of transit access to area, not enough water to supply project growth in the next 20 years, and permanent loss of prime or unique farmlands? Is the project going to improve public safety or provide access to areas that were not accessible or "buildable" before? How does the regional, statewide, and national picture tie in together when it comes to loss of waters of the United States? Your cumulative assessment should include baseline information including available information on historic loss of the aquatic environment and project trends into the future.

For example: "The proposal will add to cumulative adverse effects in the region. The rapidly urbanizing landscape of the county has contributed to flows of reduced water quality into natural bodies of water, heavily congested roads, worsening air quality, and the loss of thousands of acres of farmland, pasture land, and wildlife habitat. According to the EPA, over 30,000 acres of vernal pool landscapes were destroyed between 1972 and 1993. A review of the Corps database indicates well over 500 acres of waters of the U.S., including wetlands, have been permitted to be impacted within the urban services boundary within the last 10 years. The project, which includes impacts to high-density and quality vernal pools, contributes considerably to the loss of these important aquatic resources." "These improvements, in combination with the Corps levee improvements, would provide cumulative flood control and related economic benefits to the region. The levee improvements would lift many of the growth limitations caused by flooding concerns and increase development pressures in all suitable undeveloped areas affected. A majority of the growth areas and areas not planned for development are zoned for agricultural use. Direct impacts account for only a small portion of the overall impacts to agricultural land resulting from the proposed project. Cumulatively, the region will continue to lose agricultural and undeveloped land to development in both planned and unplanned areas of growth that would grow slower or not at all if the proposed project was not constructed."

When determining the level of effort spent for cumulative effect RGL 93-2 specifically describes the flexibility afforded by the 404 (b)(1) Guidelines to make regulatory decision based on the relative severity of the environmental impact of the proposed discharges of dredged or fill material into water of the US.

6.1. The geographic area for this assessment is the watershed.

6.1.1 Baseline. Approximately % of the watershed area is wetland. There are also approximately stream miles contained within the watershed comprised of % perennial, % intermittent, and % ephemeral tributaries. Corps permits for the period has authorized the fill of acres and linear feet of stream. The projection is that authorizations will continue ☐ at the current rate/☐ increase/☐ because . Natural resource issues of particular concern [from Corps & non-Corps activities] are .

6.1.2 Past Projects. The following discussion describes the past projects that have contributed to cumulative impacts.

6.1.3 Current and Reasonably Foreseeable Future Projects. The following discussion describes foreseeable future projects.

Table - Related and Cumulative Projects.

ID	Project Name	Status

Cumulative effects of most concern associated with the above listed reasonably foreseeable projects and proposed project (or any of the practicable/reasonable alternatives) may include an increase in the loss of waters of the U.S. and/or marine habitats, detrimental impacts to fish and wildlife resources, loss of substrate, changes in water circulation and water quality, discharge of pollutants.

In summary, the Corps determined that the proposed project's contribution to potential cumulative impacts at the watershed level, in combination with past, present and reasonably foreseeable projects, [would/would not be] cumulatively significant.

7.0 Evaluation of Compliance with 404(b)(1) Guidelines

7.1 Evaluation of the 404(b)(1) Guidelines.

7.1.1 Factual Determinations.

Physical Substrate. ☒ See Paragraph 5.1. ☐ *Describe in more detail if needed.*
Water circulation, fluctuation, and salinity. ☒ See Paragraph 5.2. ☐ *Describe in more detail if needed.*
Suspended particulate/turbidity. ☒ See Paragraph 5.3. ☐ *Describe in more detail if needed.*
Contaminant availability. ☒ See Paragraph 5.16. ☐ *Describe in more detail if needed.*

Aquatic ecosystem and organism. ☐ See Paragraphs 5.13 and 5.15. ☐ ☐ *Describe in more detail if needed.*
Proposed disposal site. ☐ *Describe specific disposal site and associated impacts, if applicable.*
Cumulative effects on the aquatic ecosystem. ☐ See Paragraph 6.0. ☐ *Describe in more detail if needed.*
Secondary effects on the aquatic ecosystem. ☐ See Paragraph 5.0. ☐ *Describe in more detail if needed.*

7.2 Restrictions on Discharges (230.10).

7.2.1 Regulations state that "applications to erect protection structures will usually received favorable consideration; this paragraph also states that "if the protective structure may…adversely impact floodplain or wetland values…the district engineer will so advise the applicant and inform him of possible alternatives methods of protection his property." (33 CFR 320.4(g)(2). The Corps conducted its 404(b)(1) alternatives analysis to determine whether or not other practicable alternatives exist that would meet the project purpose and result in the same or fewer impacts to waters of the U.S. Through the 404(b)(1) alternatives analysis, the Corps has determined that the [Alternative xx] may adversely impact floodplain or wetland values (as discussed in Paragraph 5) and that other alternatives may exist that would decrease such adverse impacts, summarized as follows:

7.2.2 Therefore, based on the above paragraph and the discussion in Paragraphs 4, 5, 6, and 7.1, the Corps ☐has/☐has not determined that Alternative [xx] is the Least Environmentally Damaging Practicable Alternative (LEDPA). The activity ☐is/☐is not located in a special aquatic site (wetlands, sanctuaries, and refuges, mudflats, vegetated shallows, coral reefs, riffle & pool complexes). The activity ☐does/☐does not need to be located in a special aquatic site to fulfill its basic purpose.

7.2.3 The proposed activity ☐does/☐does not violate applicable State water quality standards or Section 307 prohibitions or effluent standards (☐based on information from the certifying agency that the Corps could proceed with a provisional determination). The proposed activity ☐does/☐does not jeopardize the continued existence of federally listed threatened or endangered species or affects their critical habitat. The proposed activity ☐does/☐does not violate the requirements of a federally designate marine sanctuary.

7.2.4 The activity ☐will/☐will not cause or contribute to significant degradation

Comment [A6]: PM: insert alternative(s) names that were analyzed, but not the LEDPA.

Comment [PJB7]: PM: insert alternative(s) names that were analyzed, but not the LEDPA.

Comment [PJB8]: PM: insert text regarding why other alternatives discussed above are not the LEDPA

Comment [PJB9]: PM: Insert LEDPA alternative

of waters of the United States, including adverse effects on human health; life stages of aquatic organisms' ecosystem diversity, productivity and stability; and recreation, esthetic, and economic values.

7.2.5 Appropriate and practicable steps steps ☐have/☐have not been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem (see Paragraph 9 for description of mitigation actions).

8.0 Effects, Policies and Other Laws:

8.1 Effects, Policies and Other Laws.

Summary of All Public Interest Factors Considered for Alternatives:

+ Beneficial effect
0 Negligible effect
- Adverse effect
M Neutral as result of mitigation actions

+	0	-	M	
☐	☐	☐	☐	Conservation.
☐	☐	☐	☐	Economics.
☐	☐	☐	☐	Aesthetics.
☐	☐	☐	☐	General environmental concerns.
☐	☐	☐	☐	Wetlands.
☐	☐	☐	☐	Historic properties.
☐	☐	☐	☐	Fish and wildlife values
☐	☐	☐	☐	Flood hazards.
☐	☐	☐	☐	Floodplain values.
☐	☐	☐	☐	Land use.
☐	☐	☐	☐	Navigation.
☐	☐	☐	☐	Shore erosion and accretion.
☐	☐	☐	☐	Recreation.
☐	☐	☐	☐	Water supply and conservation.
☐	☐	☐	☐	Water quality.
☐	☐	☐	☐	Energy needs.
☐	☐	☐	☐	Safety.
☐	☐	☐	☐	Food and fiber production.
☐	☐	☐	☐	Mineral needs.
☐	☐	☐	☐	Considerations of property ownership.
☐	☐	☐	☐	Needs and welfare of the people.

Public Interest Factors. *(add factors that are relevant to specific project that you checked in number 6 above and add a discussion of that factor)*

8.1.1 Public Interest Factors.

Factor	Discussion

Comment [PJB10]: Add a more detailed discussion of the factors in the table below this one.

8.2 Endangered Species Act. ☐ NA *Check NA if no ESA - Explain*
The proposed project (or LEDPA):

8.2.1 Will not affect these threatened or endangered species:
☐Any/☐ . *Explain*.

8.2.2 May affect, but is not likely to adversely affect:

Comment [PJB11]: List species.

8.2.3 ☐Will/☐Will not adversely modify designated critical habitat for the .
Explain.

8.2.4 ☐Is/☐Is not likely to jeopardize the continued existence of the .
Explain.

8.2.5 The Services ☐concurred/☐provided a Biological Opinion(s). *Explain*.

8.3 Essential Fish Habitat. Adverse impacts to Essential Fish Habitat ☐will/☐will not result from the proposed project. *Explain*.

8.4 Historic Properties. The proposed project ☐will/☐will not have any affect on any sites listed, or eligible for listing, in the National Register of Historic Places, or otherwise of national, state, or local significance based on ☐letter from SHPO/☐ . *Explain*.

8.5 Corps Wetland Policy. Based on the public interest review herein, the beneficial effects of the project outweigh the detrimental impacts of the project.

8.6 (☐NA) Water Quality Certification under Section 401 of the Clean Water Act ☐ has/☐has not yet been issued by ☐ /☐State/☐Commonwealth.

8.7 Coastal Zone Management (CZM) consistency/permit: Issuance of a State permit certifies that the project is consistent with the CZM plan. ☐ There is no evidence or indication from the that the project is inconsistent with their CZM plan.

8.8 Section 176(C) of the Clean Air Act (CAA) General Conformity Rule Review. The proposed project [is/is not] in compliance with the CAA (see Section 6.3.1.8).

Comment [PJB12]: PM: insert associated paragraph number.

8.9 Other Authorizations.

8.10 (☐NA) Significant Issues of Overriding National Importance. *Explain*.

9.0 Compensation and other mitigation actions

9.1 Compensatory Mitigation

9.1.1 Is compensatory mitigation required? ☐ yes ☐ no [If "no," do not complete the rest of this section]

9.1.2 Is the impact in the service area of an approved mitigation bank?
☐ yes ☐ no

9.1.2.1 Does the mitigation bank have appropriate number and resource type of credits available? ☐ yes ☐ no:

9.1.3 Is the impact in the service area of an approved in-lieu fee program?
☐ yes ☐no

9.1.3.1 Does the in-lieu fee program have appropriate number and resource type of credits available?
☐ yes ☐no

9.1.4 Check the selected compensatory mitigation option(s):
☐ mitigation bank credits
☐ in-lieu fee program credits
☐ permittee-responsible mitigation under a watershed approach
☐ permittee-responsible mitigation, on-site and in-kind
☐ permittee-responsible mitigation, off-site and out-of-kind

9.1.5 If a selected compensatory mitigation option deviates from the order of the options presented in §332.3(b)(2)-(6), explain why the selected compensatory mitigation option is environmentally preferable. Address the criteria provided in §332.3(a)(1) (i.e., the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project):

9.1.6 Other Mitigative Actions

10.0 General Evaluation Criteria Under the Public Interest Review

We considered the following within this document:

10.1 The relative extent of the public and private need for the proposed structure or work. (e.g. Public benefits include employment opportunities and a potential increase in the local tax base. Private benefits include land use and economic return on the property; for transportation projects benefits include safety, capacity and congestion issues.) *Explain.*

10.2 ☐There are no unresolved conflicts as to resource use. (☐ There are unresolved conflicts as to resource use. One or more of the alternative locations and methods described above are reasonable or practicable to accomplish the objectives of the proposed structure or work but are not being accepted by the applicant.) (☐ There are unresolved conflicts as to resource use however there are no practicable reasonable alternative locations and methods to accomplish the objective of the purposed work.) *Check the appropriate box, delete the statements that do not apply and explain.*

10.3 The extent and permanence of the beneficial and/or detrimental effects, which the proposed work is likely to have on the public, and private uses to which the area is suited. ☐Detrimental impacts are expected to be minimal although they would be permanent in the construction area. The beneficial effects associated with utilization of the property would be permanent. Explain.

11.0 Determinations

11.1 Public Notice Comments, See Paragraph 3.4.

11.1.1 Discuss the Corps response to the public notice comments and reference the changes in the analyses and special conditions that support the Corps response to the public concerns.

11.1.2 Public Hearing Request: ☐NA

☐ I have reviewed and evaluated the requests for a public hearing. There is sufficient information available to evaluate the proposed project; therefore, the requests for a public hearing are denied.

11.2 Section 176(c) of the Clean Air Act General Conformity Rule Review: The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed in this environmental assessment (including all alternatives) would not exceed *de minimis* levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 C.F.R. Part 93.153.

For these reasons a conformity determination is not required for this permit action.

11.3 Relevant Presidential Executive Orders.

11.3.1 EO 13175, Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians. This action has no substantial direct effect on one or more Indian tribes.

11.3.2 EO 11988, Floodplain Management. ☐Not in a floodplain. (☐Alternatives to location within the floodplain, minimization, and compensation of the effects were considered above.

11.3.3 EO 12898, Environmental Justice. In accordance with Title III of the Civil Right Act of 1964 and Executive Order 12898, it has been determined that the project would not directly or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin nor would it have a disproportionate effect on minority or low-income communities.

11.3.4 EO 13112, Invasive Species.
☐There were no invasive species issues involved.
☐The evaluation above included invasive species concerns in the analysis of impacts at the project site and associated compensatory mitigation projects.
☐Through special conditions, the permittee will be required to control the introduction and spread of exotic species.

11.3.5 EO 13212 and 13302, Energy Supply and Availability. ☐The project was not one that will increase the production, transmission, or conservation of energy, or strengthen pipeline safety. (☐The review was expedited and/or other actions were taken to the extent permitted by law and regulation to accelerate completion of this energy-related (including pipeline safety) project while maintaining safety, public health, and environmental protections.)

11.3.6 Finding of No Significant Impact (FONSI). Having reviewed the information provided by the applicant and all interested parties and an assessment of the environmental impacts, I find that this permit action will not have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement will not be required.

11.4 Least Environmental Practical Alternative (LEDPA). I find that Alternative [x] is the LEDPA.

Compliance with 404(b)(1) Guidelines. Having completed the evaluation in paragraph 10, I have determined that the proposed discharge ☐complies/☐does not comply with the 404(b)(1) guidelines.

11.5 Public Interest Determination: I find that issuance of a Department of the Army permit for the proposed project [is/is not] contrary to the public interest (See Paragraphs 5.21 and 8.1.1).

11.6 Special Conditions: The following special conditions will be included in the permit to ensure the project is not contrary to the public interest and complies with the 404 (b)(1) Guidelines:

12.0 References

Insert references used in analysis here.

PREPARED BY:

_____ _____

Jesse Rice, Date
Regulatory Project Manager

REVIEWED/APPROVED BY:

_____ _____

Sallie Diebolt Date
Chief, Arizona Branch
Regulatory Division

APPENDIX A

Public Notice

APPENDIX B

Project Drawings and Maps

APPENDIX C

Public Notice Comments and Other Agency Documents

B7

CHECKLIST FOR SUBMITTING A SECTION 404 PRE-CONSTRUCTION NOTIFICATION

Checklist for Submitting a Section 404 PreConstruction Notification (PCN)

Instructions: The Consultant and the ADOT EPG planner will check the appropriate box to verify that the PCN package meets Corps' requirements. If any of the items are not complete, the EPG planner will return the PCN package to the consultant for correction. Refer to ADOT's www.azdot.gov/environmental for current Section 404 information/templates.

Consultant	EPG Planner	QC Checklist Items
☐	☐	Signed cover letter from EPG Planner.
☐	☐	Project location maps, including USGS map and FEMA floodplain map.
☐	☐	Copy of completed 4345 signed by District Engineer and EPG Planner.
☐	☐	Impact Sheets that are a minimum size of 11 x 17 inches (*HAND DRAWN GRAPHICS WILL NOT BE ACCEPTED*).
☐	☐	Supporting documentation (*i.e. BR, BE, concurrence letters, cultural survey reports*) for General Condition 17 and 18).
☐	☐	Current site photographs if conditions on the ground have changed since the JD photographs (*and noted in cover letter*).
☐	☐	Copy of 401 Individual Certification to the appropriate agency (*if a 401 Individual Certification is required*).
☐	☐	Mitigation Plan (*if applicable*).
☐	☐	Electronic copy of all documents that are scanned as separate files (*and grouped as reports, plans, etc.*) and to correct scaled size, and stored via FTP or CD. Hard copy submittal is double sided as appropriate.
		ADDITIONAL ITEMS FOR INDIVIDUAL PERMITS:
☐	☐	Hard copy and electronic copy of 404(b) (1) evaluation.
☐	☐	Electronic copy of public notice.
☐	☐	Mailing labels for adjacent landowners.
☐	☐	Electronic copy of all documents that are scanned as separate files (*and grouped as reports, plans, etc.*) and to correct scaled size, and stored via FTP or CD. Hard copy submittal is double sided as appropriate.

_____

Consultant signature and date

_____

ADOT EPG Planner signature and date

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REGIONAL GENERAL PERMIT (LINK), RGP INFORMATION SHEET, CONCURRENCE NOTIFICATION FORM

REGIONAL GENERAL PERMIT 96: https://azdot.gov/docs/default-source/environmental-planning-library/regional-general-permit.pdf?sfvrsn=2

REGIONAL GENERAL PERMIT 96

When do I use a Regional General Permit 96?

The Regional General Permit (RGP) 96 is used to permit the discharge of dredged or fill material into potentially jurisdictional Waters of the US, including wetlands, incurred from the construction of new transportation facilities or modifications to existing facilities within existing ADOT rights-of-way(ROW)/easement and/or Local Public Agency (LPA) ROW/easement on non-Tribal lands. Typical ADOT projects covered under the RGP 96 include new construction, replacement, or modifications of bridge piers and shafts, culverts, ditches, erosion protection measures, bridge scour retrofit, or roadway fill. The RPG is not authorized to be used on tribal lands or along new alignments where an existing facility is not already present or adjacent.

What do I need to apply for a RGP 96?

The amount of information you need to submit to be able to utilize the RGP 96 is dependent on the impacts realized by the project, potential effects to biological and cultural resources immediately adjacent to the waterbody, and the types of Waters of the US impacted.

If the project permanently impacts less than 0.1 acre and the work will only occur within intermittent and or ephemeral washes, the project can qualify as "non-notifying." However, the project **will not qualify** if it has a "may affect" determination on threatened or endangered (T&E) species or potential to modify their habitat. A project will also **not qualify** if it has an "adverse effect" determination on historic properties listed in the National Register of Historic Properties (NHRP) when cultural resources are within or immediately adjacent to the jurisdictional area. If the project can meet all parameters for impacts and avoids impacts to T&E species and historic properties, then it most likely will not require advanced notification to the U.S. Army Corps of Engineers (Corps) and work can begin after consulting ADOT Environmental Planning (EP) and the Water Resources Program Coordinator for project documentation.

The types of projects that are typically non-notifying include:

- Removal of sediment from a culvert to restore its design flow carrying capacity,
- Removal of storm debris or the replacement of small amounts of rock rip rap to repair or arrest erosion damages.

When do I need Notification?

There are two types of Notifications for the RGP 96. The type of Notification and subsequent Corps review is dependent on a variety of factors. The following is a brief explanation of the Notifications and the factors that affect them.

Concurrence Notification

This is required if the project permanently impacts between 0.10 acre and 0.50 acre to each Waters of the US within the project area; however, the project cannot exceed 0.10 acre of permanent impacts to perennial waters at each crossing. The project **will not qualify** for this notification if it impacts special aquatic sites, including wetlands.

To obtain this Notification, you must complete the RGP 96 Concurrence Notification Form (it can be found here). Once the Form is submitted to the Corps, there is a 14-day review period. During this period, the Corps reviews if the project may affect T&E species or adversely modifies T&E habitat. The Corps may require more information

or require a full Pre-Construction Notification (PCN). Also during the review, if the Corps determines the proposed activity may affect historic properties listed or eligible for listing in the NHRP, the Corps will notify the applicant to request additional information. Work can commence once the review period is complete, and ADOT has filed the completed documentation with the Corps. For state-funded projects not subject to NEPA Assignment, this review period may be extended if the Corps must undertake extensive consultation involving Section 7 of the ESA and/or Section 106 of the NHPA.

Full Pre-Construction Notification (PCN)
This is required when there is between 0.50 acre and 1.0 acre of permanent impacts to each Waters of the US. This Notification allows up to 0.025 acre of permanent or temporary impacts per crossing of special aquatic sites, such as wetlands, and permanent impacts to perennial Waters of the US greater than 0.10 acre. The PCN requirements are similar to the PCN requirements under the Corps Nationwide Program. Once the PCN is submitted, the Corps anticipates a 45-day review period. This review period may be extended if there is extensive consultation involving Section 7 of the Endangered Species Act and/or Section 106 of the National Historic Preservation Act. For more information regarding PCN submittals, please review the Application for Department of the Army Permit Form 4345 found here.

What do I Submit with the Notification?

Submittal of the Concurrence Notification includes:

1. A completed Preliminary Jurisdictional Determination Form including:
    - Project location (i.e., latitude/longitude coordinates of the approximate center point of the project in degrees/minutes/seconds format),
    - U.S.G.S. 7.5 minute quadrangle name and datum (the upstream and downstream coordinates) shall be reported; for all others, the approximate center of the project location shall be reported.

2. The RGP 96 Notification Form shall be used and include the following:
    - A brief description of the existing design features of the structure/facility/fill, proposed activities in Waters of the US, an estimate of temporary impacts (in acres), an estimate of permanent impacts (if any, in acres), an estimate of excavation/fill quantities (in cubic yards), and type of materials proposed to maintain or repair the structure/facility/fill.
    - A brief narrative or drawings of the methods to divert water/dewater.
    - A description of post-construction site restoration/revegetation.
    - A statement of the proposed activities' potential to affect cultural resources and a description of compliance with applicable federal regulations that protect these resources.
    - A statement of the proposed activities' potential to affect federally listed T&E species or designated critical habitat, and a description of compliance with applicable federal regulations that protect these resources.

Submittal of a Full PCN shall include all of the same information as defined under current Corps Nationwide Permit Notification requirements.

Additional Sources of information regarding the RGP 96:

- **Department of the Army Regional General Permit 96.**
  https://azdot.gov/docs/default-source/environmental-planning-library/regional-general-permit.pdf?sfvrsn=2

- **Concurrence Notification Form.**
  https://azdot.gov/docs/default-source/environmental-planning-library/concurrence-notification.pdf?sfvrsn=2

- **Regional General Permit Overview Presentation**.
  https://azdot.gov/docs/default-source/environmental-planning-library/regional-general-permit-overview-presentation.pdf?sfvrsn=2

Concurrence Notification Form For ADOT Regional General Permit 96	
1.Date Submitted (by ADOT):	**2.Date Approved (by Corps):**
3.Corps File Number:	**4. ADOT Project Number** (Tracs or MWO)**:**
5. Applicant Info.	**6. Agent Info.** (if different from Applicant)
a. Name:	**a. Name:**
b. Address:	**b. Address:**
c. Email:	**c. Email:**
d. Phone Number:	**d. Phone Number:**
7. Project Name:	**8. Project Location:**
9. Name of Waterbody:	**10. Center Latitude/Longitude in DD NAD83:**
11. Type of Waterbody (perennial, ephemeral, wetland, etc):	**12. Is the project within 1 mile of an Outstanding, Impaired, or Not-Attaining Water?**
13. Directions to the Site:	**14. Township, Range, Section:**
15. Project Purpose and Description of Existing features/Facility/Fill:	
16. General Description of Work, including plans to divert water/dewater (If bank stabilization project, describe whether method is permeable or impermeable and include both linear footage and average cubic yards per linear footage in boxes 19 and 20 below.):	
17. Estimated Start Date:	**18. Estimated End Date:**
19. Amount (cubic yards), Description, and Location of Material being Discharged:	
20. Surface Area in Acres (or linear feet if applicable) of Wetlands or Waters being filled (Include both temporary and permanent impacts)**:**	

21. Describe Avoidance, Minimization, and Compensation (include description of any post-construction site restoration/revegetation):
22. Endangered Species Act Compliance:
23. Cultural Resource Review:
24. 401 Certification Type:
25. List attachments (examples: biology document, 401 certification, cultural document, vicinity map, plans/drawings, impact calculations and/or figures, site photos, etc)

_____ _____

Applicant Signature Date

Submit Form to:

Jesse Rice
Regulatory Project Manager
U.S. Army Corps of Engineers
Los Angeles District
Regulatory Division, Arizona Branch
3636 N. Central Avenue Suite 900
Phoenix, AZ 85012-1939
602-230-6854
Jesse.M.Rice@usace.army.mil

Save a copy of the completed form in the project file.

APPENDIX C

NATIONWIDE PERMITS
(Refer to here for a complete list of all the Nationwide Permits)

C1

A SUMMARY OF 2017 NATIONWIDE PERMITS (CORPS 2017B)

Summary of the 2017 Nationwide Permits[1]

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 1 – Aids to Navigation	10	none	PCN not required	no	navigable waters of the U.S.	none	
NWP 2 – Structures in Artificial Canals	10	none	PCN not required	no	navigable waters of the U.S.	none	
NWP 3 – Maintenance	10/404						
(a) Repair, rehabilitation, or replacement of previously authorized, currently serviceable structures or fills		authorizes only minor deviations for maintenance	PCN not required	no	all waters of the U.S.	Clarify that NWP authorizes removal of previously authorized structures and fills.	Does not authorize: maintenance dredging for the primary purpose of navigation; beach restoration; or new stream channelization or stream relocation projects. Limits stream channel modification to the minimum necessary for the maintenance activity.
(b) Discharges associated with removal of accumulated sediments and debris in the vicinity of existing structures, including intake and outfall structures and associated canals		200 feet from structure; minimum necessary to restore capacity intake or outfall or associated canal	all activities	yes	all waters of the U.S.	Remove provision authorizing the placement of new or additional riprap to protect the structure (riprap may be authorized by NWP 13).	
(c) Temporary structures, fills, and work necessary to conduct maintenance activity			PCN not required	no	all waters of the U.S.	Clarify that NWP authorizes use of temporary mats, if regulated by the district.	Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations
NWP 4 – Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities	10/404	none	PCN not required	no	all waters of the U.S.	none	Does not authorize impoundments or artificial reefs. Does not authorize covered oyster trays or clam racks.
NWP 5 – Scientific Measurement Devices	10/404	25 cubic yards for weirs and flumes	PCN not required	no	all waters of the U.S.	none	Devices and any associated structures or fills be removed upon completion of the use and restored to pre-construction elevations to maximum extent practicable.
NWP 6 – Survey Activities	10/404	1/10-acre	PCN not required	no	all waters of the U.S.	none	Does not authorize fills for roads. Does not authorize permanent structures. Does not authorize fill associated with recovery of historic properties. Backfilling of exploratory trenches must not drain a water of the U.S.

[1] This table is intended to provide **general** information on the 2017 nationwide permits published in the *Federal Register* on January 6, 2017.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 7 – Outfall Structures and Associated Intake Structures	10/404	none	all activities	yes	all waters of the U.S.	none	Activity must comply with National Pollutant Discharge Elimination System Program.
NWP 8 – Oil and Gas Structures on the Outer Continental Shelf	10	none	all activities	no	navigable waters of the U.S.	none	Limited to facilities in areas leased by the Bureau of Ocean Energy Management of the Department of the Interior.
NWP 9 – Structures in Fleeting and Anchorage Areas	10	none	PCN not required	no	navigable waters of the U.S.	Remove reference to U.S. Coast Guard.	Applies to structures, buoys, and other devices placed in anchorage or fleeting areas established for those purposes
NWP 10 – Mooring Buoys	10	none	PCN not required	no	navigable waters of the U.S.	none	Non-commercial, single boat mooring buoys
NWP 11 – Temporary Recreational Structures	10	none	PCN not required	no	navigable waters of the U.S.	none	Structures must be removed within 30 days after use discontinued.
NWP 12 – Utility Line Activities	10/404	1/2 acre	• a section 10 permit is required • mechanized land clearing in forested wetlands for the right-of-way • discharges that result in the loss of >1/10 acre	yes, if PCN required	see text of NWP	Authorize the use of temporary mats. Add notes referencing concepts from definition of “single and complete linear project” and 33 CFR 330.6(d). Add note with reference to Corps regulations for required minimum clearances of overhead electric power transmission lines over navigable waters.	Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations.
utility lines			• utility line exceeds 500 linear feet in waters of the U.S. • utility line runs parallel to a stream bed within jurisdictional area		all waters of the U.S., including navigable waters	Clarify that NWP only authorizes crossings of waters of the United States associated with the construction, maintenance, and repair of utility lines. Add internet as form of communication carried by utility lines. Authorize regulated activities associated with remediation for inadvertent returns of drilling fluids that may occur during horizontal directional drilling operations to install utility lines. Add note stating that NWP authorizes utility line maintenance and repair activities that do not qualify for the CWA Section 404(f) exemption for maintenance.	Must restore area to pre-construction contours. For overhead utility lines, district engineer coordinates PCN and NWP verification letter with Department of Defense Siting Clearinghouse.
utility line substations					non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters		
foundations for overhead utility line towers, poles, and anchors					all waters of the U.S.		Separate footings for each tower leg should be used where feasible.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
access roads			• above-grade permanent access roads exceeding 500 feet; • permanent access roads constructed with impervious materials		non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters		Access roads must be constructed to minimize adverse effects to waters of the U.S.
NWP 13 – Bank Stabilization	10/404	• 500 feet along the bank (unless waived by DE – waivers for bulkheads limited to 1,000 linear feet along the shore) • 1 cubic yard per running foot (unless waived by DE)	• >500 linear feet in length • >1 cubic yard per running foot, as measured along the treated bank, below OHWM or HTL • discharges into special aquatic sites	yes, if PCN required	all waters of the U.S.	Clarify that NWP 13 authorizes a variety of bank stabilization techniques, not just bulkheads and revetments. Cubic yard limit to be measured along the bank, to cover applicability to in-stream fills to control erosion. Add provision requiring proper maintenance and state that NWP also authorizes maintenance activities. State that native plants instead of invasive plants must be used for bioengineering or vegetative stabilization.	Activity cannot impair surface water flow into or out of waters of the U.S. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. Native plant species appropriate for site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization.
NWP 14 – Linear Transportation Projects	10/404	• 1/2 acre in non-tidal waters • 1/3 acre in tidal waters	• >1/10 acre • discharges into special aquatic sites	yes, if PCN required	all waters of the U.S.	Add notes referencing concepts from definition of “single and complete linear project” and 33 CFR 330.6(d).	Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. Does not authorize storage buildings, parking lots, train stations, aircraft hangars, or other non-linear transportation features.
NWP 15 – U.S. Coast Guard Approved Bridges	10/404	none	PCN not required	no	navigable waters of the U.S.	none	Causeways and approach fills for bridges are not authorized by this NWP; those activities require separate section 404 authorization. Bridge structures can be authorized by Section 9 of the Rivers and Harbors Act or other applicable laws.
NWP 16 – Return Water From Upland Contained Disposal Areas	404	none	PCN not required	no	all waters of the U.S.	none	Water quality issues addressed through Clean Water Act section 401 certification process
NWP 17 – Hydropower Projects	404	none	all activities	yes	all waters of the U.S., except navigable (i.e., section 10) waters	none	Applies to activities licensed by the Federal Energy Regulatory Commission or activities exempt from licensing requirements.
NWP 18 – Minor Discharges	10/404	• 25 cubic yards discharged below plane of OHWM/HTL • 1/10 acre of waters of the U.S.	• >10 cubic yards discharged below plane of OHWM/HTL • discharges into special aquatic sites	yes, if PCN required	all waters of the U.S.	none	Does not authorize discharges for stream diversions.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 19 – Minor Dredging	10/404	25 cubic yards below plane of OHWM/ MHWM	PCN not required	no	navigable waters of the U.S.	Add requirement that all dredged material must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.	Does not authorize dredging or degradation through siltation of coral reefs, submerged aquatic vegetation beds, anadromous fish spawning areas, or wetlands. Does not authorize the connection of canals to navigable waters.
NWP 20 – Response Operations for Oil or Hazardous Substances	10/404	none	PCN not required	no	all waters of the U.S.	Change “and” to “or” in title of NWP.	Authorizes activities subject to the National Oil and Hazardous Substances Pollution Contingency Plan. Authorizes activities required for cleanup of oil releases in waters of the U.S. Authorizes use of temporary structures and fills for spill response training exercises.
NWP 21 – Surface Coal Mining Activities	10/404	• 1/2 acre • 300 linear feet of stream bed, but DE can waive for intermittent and ephemeral streams • No valley fills	All activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Remove paragraph that authorized surface coal mining activities that were previously authorized by the 2007 NWP 21. Clarify that any losses of stream bed are applied to the 1/2-acre limit.	Activities must be authorized, or currently being processed by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977.
NWP 22 – Removal of Vessels	10/404	none	• if vessel listed or eligible for National Register of Historic Places • activities in special aquatic sites	yes, if PCN required	all waters of the U.S.	Change Note 2 to refer to the possibility of shipwrecks being historic properties.	Does not authorize maintenance dredging, shoal removal, or river bank snagging. Disposal of removed vessel in waters of the U.S. may require separate authorizations from EPA and Corps.
NWP 23 – Approved Categorical Exclusions	10/404	none	PCN not required, except for certain activities identified in RGL 05-07	yes, if PCN required	all waters of the U.S.	Change “environmental documentation” to refer to an environmental impact statement or environmental assessment.	Categorical exclusions must be approved by the Office of the Chief of Engineers. See RGL 05-07 for list of agencies and their activities that are currently eligible for NWP 23.
NWP 24 – Indian Tribe or State Administered Section 404 Program	10	none	PCN not required	no	navigable waters of the U.S.	none	Does not authorize activities in navigable waters that require only a section 10 permit.
NWP 25 – Structural Discharges	404	none	PCN not required	no	waters of the U.S.	none	Structure may require a section 10 permit if located in navigable waters of the U.S. Does not authorize structures that support buildings or similar structures.
NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities	10/404	none	all activities, except for those that require reporting (e.g., activities under a binding agreement between the landowner and an agency)	yes, if PCN required	all waters of the U.S.	Add requirement to use an ecological reference to plan, design, and implement the NWP activity. Add the removal of stream barriers, such as undersized culverts, fords, and grade control structures, to list of examples of authorized activities.	Does not authorize stream channelization. Does not authorize relocation or conversion of tidal waters. Does not authorize conversion of natural wetlands or streams, except for relocation activities. Compensatory mitigation is not required for NWP 27 activities.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 28 – Modifications of Existing Marinas	10	activities limited to authorized marina area	PCN not required	no	navigable waters of the U.S.	none	Does not authorize dredging, additional slips, dock spaces, or expansion in waters of the U.S.
NWP 29 – Residential Developments	10/404	• 1/2 acre • 300 linear feet of stream bed, but DE can waive for intermittent and ephemeral streams	all activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Clarify that any losses of stream bed are applied to the 1/2-acre limit.	For residential subdivisions, the aggregate total loss of waters of the U.S. cannot exceed 1/2-acre.
NWP 30 – Moist Soil Management for Wildlife	404	none	PCN not required	no	non-tidal waters of the U.S.	none	Authorizes only on-going activities. Does not authorize construction of new dikes, roads, water control structures, etc. Does not authorize conversion of wetlands to uplands. Does not authorize impoundments. Does not authorize activities that result in net loss of aquatic functions and services.
NWP 31 – Maintenance of Existing Flood Control Facilities	10/404	maintenance baseline approved by district engineer	all activities	yes	all waters of the U.S.	Add provision stating that a flood control facility will not be considered abandoned if the prospective permittee is in the process of obtaining other authorizations or approvals required for maintenance activities and is experiencing delays in obtaining those authorizations or approvals. Add Note clarifying that the one-time compensatory mitigation requirement applies to the time since the maintenance baseline was established for this NWP, not every five years.	PCN must indicate location of sites for disposal of dredged or excavated material and baseline information. Authorizes the removal of vegetation from levees associated with a flood control project, if Corps permits are required for those activities.
NWP 32 – Completed Enforcement Actions	10/404	• 5 acres of non-tidal waters • 1 acre of tidal waters • also see text of NWP	PCN not required	no	all waters of the U.S.	Modify paragraph (i)(a) to clarify that activities authorized by this NWP cannot adversely affect more than 5 acres of non-tidal waters or 1 acre of tidal waters. Add provision stating that non-compliance with the terms and conditions of an NWP 32 authorization may result in an additional enforcement action, such as a Class I civil administrative penalty.	

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 33 – Temporary Construction, Access, and Dewatering	10/404	none	all activities in navigable (i.e., section 10) waters	yes	all waters of the U.S.	Require PCNs only for activities in navigable (i.e., section 10) waters.	Associated primary activity must be authorized by Corps or U.S. Coast Guard, or be exempt from permit requirements. PCN must include restoration plan.
NWP 34 – Cranberry Production Activities	404	10 acres, but activity cannot result in net loss of wetland acreage	all activities	yes	section 404 waters only	none	Does not authorize discharges in waters of the U.S. for attendant features, such as warehouses, processing facilities, or parking areas.
NWP 35 – Maintenance Dredging of Existing Basins	10	dredging to previously authorized depths or controlling depths, whichever are less	PCN not required	no	navigable waters of the U.S.	Require that dredged material be deposited in area with no waters of the U.S., unless authorized by the Corps by a separate permit.	
NWP 36 – Boat Ramps	10/404	• 50 cubic yards, unless waived by DE • 20 foot width, unless waived by DE	• >50 cubic yards • >20 feet wide	yes, if PCN required	all waters of the U.S., except special aquatic sites	none	Section 10 permit required if dredging navigable water is necessary for access to boat ramp. No placement of material in special aquatic sites.
NWP 37 – Emergency Watershed Protection and Rehabilitation	10/404	none	all activities	yes	all waters of the U.S.	none	Prospective permittee should wait 45 calendar days before proceeding with the activity if the DE has not yet issued a verification letter, but may proceed immediately if there is an unacceptable hazard to life or significant loss of property or economic hardship will occur.
NWP 38 – Cleanup of Hazardous and Toxic Waste	10/404	none	all activities	yes	all waters of the U.S.	none	Does not authorize the establishment of new disposal sites or the expansion of existing disposal sites.
NWP 39 – Commercial and Institutional Developments	10/404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams	all activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Clarify that any losses of stream bed are applied to the 1/2-acre limit. Add wastewater treatment facilities to the list of examples of attendant features.	Does not authorize construction of new golf courses or new ski areas. Authorizes the construction of oil or gas wells. For wind energy generating structures, solar towers, or overhead transmission lines, district engineer coordinates PCN and NWP verification with Department of Defense Siting Clearinghouse.
NWP 40 – Agricultural Activities	404	• 1/2 acre • 300 linear feet of stream bed, but DE can waive for intermittent and ephemeral streams	all activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Clarify that any losses of stream bed are applied to the 1/2-acre limit.	NWP can be used for agricultural activities, regardless of whether applicant is USDA participant. Does not authorize aquaculture ponds.
NWP 41 – Reshaping Existing Drainage Ditches	404	none	PCN not required	no	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Remove PCN requirement.	Reshaping drainage ditch cannot increase capacity of ditch or drain additional waters of the U.S. Does not authorize relocation of drainage ditches constructed in waters of the U.S.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 42 – Recreational Facilities	404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams	all activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Clarify that any losses of stream bed are applied to the 1/2-acre limit.	Authorizes variety of recreational facilities, except for hotels, restaurants, racetracks, stadiums, arenas, or similar facilities (these may be authorized by NWP 39).
NWP 43 – Stormwater Management Facilities	404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams	all activities involving expansion or construction of SWM facilities	yes, if PCN required	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features that are not waters of the United States, and maintenance does not require a section 404 permit. Clarify that any losses of stream bed are applied to the 1/2-acre limit. Authorizes the construction of pollutant reduction green infrastructure features designed to reduce inputs of sediments, nutrients, and other pollutants into waters to meet reduction targets established under Total Daily Maximum Loads set under the Clean Water Act.	Does not authorize construction of new stormwater management facilities in perennial streams. Maintenance does not require PCN if limited to restoring original design capacities. Also authorizes low impact development integrated management features and pollutant reduction green infrastructure features.
NWP 44 – Mining Activities	10/404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams	all activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	For mining activities in non-tidal open waters, the 1/2-acre limit applies to the mining area. The loss of non-tidal wetlands plus the mining area in non-tidal open waters cannot exceed 1/2-acre. Clarify that any losses of stream bed are applied to the 1/2-acre limit. Final reclamation plan required for PCN, if reclamation is required.	PCN must include final reclamation plan if reclamation is required by other statutes.
NWP 45 – Repair of Uplands Damaged by Discrete Events	10/404	Restore uplands to pre-event ordinary high water mark	all activities	yes	all waters of the U.S.	Provide district engineer with authority to waive 12-month limit for submitting PCN if permittee can demonstrate funding, contract, or similar delays.	PCN must be submitted to district engineer within one year of date of damage; work must start or be under contract within two years of date of damage.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 46 – Discharges in Ditches	404	1 acre	all activities	yes	certain types of non-tidal ditches constructed in uplands and determined to be waters of the U.S.	none	NWP does not authorize discharges into ditches constructed in streams or other waters of the U.S., or in streams that have been relocated in uplands.
NWP 48 – Existing Commercial Shellfish Aquaculture Activities	10/404	none	• the activity will include a species that has never been cultivated in the waterbody; or • the activity occurs in a project area that has not been used for commercial shellfish aquaculture activities during the past 100 years	yes, if PCN required	navigable waters of the U.S.	Project areas also include lands where other legally binding agreements establish enforceable property interests. Define "new commercial shellfish aquaculture operation" as operating in an area where such activities have not occurred during the past 100 years. Operator can submit one PCN for a group of contiguous project areas or one PCN per project area. Remove the PCN threshold for dredge harvesting, tilling, or harrowing in areas inhabited by submerged aquatic vegetation. Does not authorize activities that directly affect more than 1/2-acre of submerged aquatic vegetation beds in an area that has not been used for commercial shellfish aquaculture during the past 100 years. PCN should describe all species and culture activities the operator expects to undertake in the project area or group of contiguous project areas during the effective period of this NWP. PCN must include all species that are planned to be cultivated during the period the NWP is in effect. PCN must specify whether suspended cultivation techniques will be used and indicate the general water depths in the project area.	Does not authorize nonindigenous species not previously cultivated in the waterbody, aquatic nuisance species, or attendant features such as docks or staging areas. Does not authorize the deposition of shell material back into waters of the U.S. as waste. Project area is the area in which the operator is authorized to conduct commercial shellfish aquaculture activities, as identified through a lease or permit issued by an appropriate state or local government agency, a treaty, or any easement, lease, deed, contract, or other legally binding agreement that establishes an enforceable property interest for the operator.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 49 – Coal Remining Activities	10/404	Limited to sites that were previously mined for coal, but new mining may be conducted in adjacent areas if the newly mined area is less than 40 percent of the area being remined plus any unmined area needed for reclamation.	all activities	yes	non-tidal waters of the U.S.	None	Permittee must demonstrate net increase in aquatic resource functions through reclamation. Activities must be authorized by the Department of the Interior, Office of Surface Mining, or by states with approved programs under Title IV and V of the Surface Mining Control and Reclamation Act of 1977 or are currently being processed as part of an integrated permit processing procedure. Prospective permittee must receive written authorization prior to commencing the activity. Corps will review the SMCRA determination regarding the amount of previously unmined area necessary for the reclamation and make an independent determination of the amount needed.
NWP 50 – Underground Coal Mining Activities	10/404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams	all activities	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Clarify that any losses of stream bed are applied to the 1/2-acre limit.	Activities must be authorized by the Department of the Interior, Office of Surface Mining, or by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977 or are currently being processed as part of an integrated permit processing procedure. If reclamation required, a copy of the plan must be submitted with PCN. Does not authorize coal preparation and processing activities outside of the mine site. Prospective permittee must receive written authorization prior to commencing the activity.
NWP 51 – Land-Based Renewable Energy Generation Facilities	10/404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams	• discharges that result in the loss of >1/10 acre	yes	non-tidal waters of the U.S., except non-tidal wetlands adjacent to tidal waters	Change the PCN threshold to 1/10-acre. Clarify that any losses of stream bed are applied to the 1/2-acre limit. Revise Note 2 to include NWP 14 activities.	Authorizes construction, expansion or modification of land-based renewable energy production facilities, including attendant features. If only activity requiring DA authorization is utility line, then NWP 12 shall be used. Utility lines transferring energy to a distribution system, regional grid, or other facility are generally considered to be separate single and complete linear projects. For wind energy generating structures, solar towers, or overhead transmission lines, district engineer coordinates PCN and NWP verification with Department of Defense Siting Clearinghouse.

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 52 – Water-Based Renewable Energy Generation Pilot Projects	10/404	• 1/2 acre • 300 linear feet of stream bed but DE can waive for intermittent and ephemeral streams • No more than 10 generation units • Floating solar panels in section 10 waters limited to 1/2-acre in size	all activities	yes	all waters of the U.S. except in coral reefs	Add floating solar panels in navigable (i.e., section 10) waters to the list of activities authorized by this NWP, with a 1/2-acre limit. Add wave energy devices. Clarify that any losses of stream bed are applied to the 1/2-acre limit. Add note stating that hydrokinetic renewable energy generation projects authorized by the Federal Energy Regulatory Commission under the Federal Power Act of 1920 do not require separate authorization under Section 10 of the Rivers and Harbors Act of 1899.	Authorizes construction, expansion, modification, or removal of water-based renewable energy generation pilot projects and their attendant features. Limited to "pilot projects." Placement of a transmission line on bed of a navigable water of U.S. from generation unit to land-based collection facility is considered a structure under section 10 and is not considered a loss of waters of the U.S. Prohibits activities in coral reefs. Structures in anchorage areas must comply with U.S. Coast Guard requirements. Does not authorize structures in established danger zones, restricted areas, etc. Upon completion of pilot project, associated structures and/or fills must be removed unless authorized by separate DA permit. Utility lines transferring energy to a distribution system, regional grid, or other facility are generally considered to be separate and complete linear projects. An activity located on an existing, maintained Corps project requires separate approval under 33 USC 408. For wind energy generating structures, solar towers, or overhead transmission lines, district engineer coordinates PCN and NWP verification with Department of Defense Siting Clearinghouse.
NWP 53 – Removal of Low-Head Dams	10/404	none	all activities	yes	all waters of the U.S.	new NWP	Authorizes the removal of low-head dams for stream restoration and public safety. "Low-head dam" defined as a dam built to pass upstream flows over the entire width of the dam crest on a continual and uncontrolled basis. As a general rule, compensatory mitigation is not required for these activities because they result in net increases in stream ecological functions and services. NWP does not authorize regulated activities for restoration of stream in vicinity of former impoundment (these activities may be authorized by NWP 27), or bank stabilization activities (these activities may be authorized by NWP 13).

Nationwide Permit	Statutory Authority	Limits	Pre-Construction Notification (PCN) Threshold	Delineation Required?	Applicable Waters	Changes	Other Information
NWP 54 – Living Shorelines	10/404	• 30 feet channelward of mean low water in tidal waters or mean high water line in Great Lakes (unless waived by DE) • 500 feet along the bank (unless waived by DE)	all activities	yes	all waters of the U.S.	new NWP	Authorizes construction and maintenance of living shorelines for shore erosion control. Living shorelines consist of natural and man-made materials. May include stone or reef structures to protect the shoreline from low to moderate energy waves. Living shorelines must have a substantial biological component, either tidal or lacustrine fringe wetlands or oyster or mussel reef structures. Does not authorize beach nourishment or land reclamation activities. Discharges of dredged or fill material into waters of the United States, including the construction of fill structures such as sills or breakwaters, must be the minimum necessary for the establishment and maintenance of the living shoreline.

C2

Please go to the Environmental Planning website for all applicable Nationwide Permits:
https://www.azdot.gov/business/environmental-planning/water-resources/section-404-401-procedures

APPENDIX D

401 FORMS AND GUIDANCE

D1

ADEQ APPLICATION FOR CERTIFICATION UNDER THE CLEAN WATER ACTION SECTION 401 (ADEQ 2017)

Application Cover Letter
For a Clean Water Act Section 401 Water Quality Certification to a USACE Section 404 Permit

ADEQ Arizona Department of Environmental Quality

The application including maps/drawings and signatures may be submitted electronically. Please direct all emails to both:

Rosi Sherrill	LS7@azdeq.gov	(602) 771-4409
Christopher Henninger	CPH@azdeq.gov	(602) 771-4508

If mailing the application, please mail to the following address:

Arizona Department of Environmental Quality
Surface Water Section, 401 Certification, 5415A-1
Attn.: Rosi Sherrill and Christopher Henninger
1110 West Washington, Phoenix, Arizona 85007

CWA 401 Water Quality Certification Application Requirements:
Applications for an Arizona Water Quality Certification (CWA401 Certification) associated with a U.S. Army Corps of Engineers CWA Section 404 permit must include this cover page (completed by the applicant) and a complete copy of the 404 permit application.

Based on the type of CWA 404 Permit (NWP, RGP, IP) you are applying for, please check the appropriate box:

☐ Copy of completed CWA404 PCN form and all associated documents

☐ Copy of completed CWA 404 RGP Concurrence form and all associated documents

☐ Copy of completed CWA 404 Engineering Form #4345 for Individual Permit and all associated documents (Note: Application for a CWA401 to a Individual Permit will not be accepted until the U.S. Army Corps of Engineers has taken the permit application to public notice.

☐ Other: _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Applicant Signature: _____ Date: _____

D2

EPA CLEAN WATER ACT 401 HANDBOOK, EPA 2010.

INCLUDED ELECTRONICALLY

APPENDIX E

IN-LIEU FEE PROCEDURES

E1

PROCEDURES FOR PROCESS IN-LIEU PAYMENTS FOR 404 IMPACTS

PROCEDURE: Processing In-Lieu Payments for 404 Impacts

January 11, 2010

PROCESS:

ADOT EPG planner works with the PM and the USACE ADOT liaison to determine acreage of permanent impact to WUS, dollar value of in-lieu payment, and organization to which the payment will be made. **Note: Nationwide (NWP) 404 permits typically do not include in-lieu fees. Individual 404 Permits will generally include in-lieu fee (ILF) payments. When processing an in-lieu fee payment for an Individual or a Nationwide 404 permit, please notify the ADOT Project Manager to follow the ADOT/FHWA/USACE Operating Agreement which addresses in-lieu fee mitigation.**

1. ADOT EPG planner drafts Transmittal letter (sample attached)
2. Deliver transmittal letter to PM with a copy of the Section 404 permit that shows the special conditions to pay ILF
3. PM signs transmittal letter.
4. PM sends transmittal letter and attachments to R/W Group (or which ever group that has access to $ or can write a check) for payment of ILF. Either a transfer form for state ILF recipients or a check for non-state ILF recipients.
5. PM receives ADOT check or transfer documents for the named receiving agency.
6. PM arranges for mailing or delivery of the check or transfer documents to USACE ADOT Liaison. USACE will have the ILF recipient sign the transfer documents.
7. The USACE ADOT liaison prepares a USACE transmittal to send to the receiving agency.
8. Receiving agency receives the package, signs the transmittal letter, acknowledging receipt of the package and letter, mails or couriers the signed transmittal back to USACE.
9. USACE ADOT liaison sends to the ADOT PM a signed copy of the transmittals signed by the receiving agency, acknowledging payment in full.
10. ADOT PM scans the fully signed and executed transmittal letters and emails a copy of the letter to ADOT Accounting, and to ADOT EPG environmental planner.
11. ADOT EPG planner forwards the email to the ADOT EPG statewide biologist and on-call consultant, prints the signed transmittal letter, places it in the project file, updates the PTS database 404 section, and the details section, and saves the email.

TIMEFRAMES:

The in-lieu fee payment must be made by the date indicated by the USACE in the NWP authorization letter or Individual 404 Permit.

ASSOCIATED REGULATIONS:

ADOT /FHWA/USACE Operating Agreement
USACE 404 Individual Permit

QUICK LINKS:

N/A

APPENDIX F

SECTION 404 PAPERLESS SUBMITTAL PROCEDURES

F1

PROCEDURES FOR USING THE KMZ FORMAT FOR CLEAN WATER ACT SECTION 404 SUBMITTALS

APPENDIX F – SECTION 404 PAPERLESS SUBMITTAL PROCEDURES

This appendix details the procedures for submitting portions of Clean Water Act Section 404 documentation in a "paperless" format using keyhole markup language zipped (KMZ)-based files. These procedures are intended to be incorporated into the preparation of jurisdictional delineations (JD), as outlined in *Step 3C, (Construction Design/Planning) – Are Waters of the US Present within the Boundaries of the Activity?*, and the preparation of Section 404 permits, as outlined in *Step 5, What Type of Section 404 Permit is Necessary for the Activity?*

The term "paperless" derives from changes in how the US Army Corps of Engineers (Corps) currently reviews Arizona Department of Transportation (ADOT) submittals. The Corps will no longer have to print any of the components of a JD or Section 404 permit as hard copies. The next section of this appendix discusses the KMZ format.

What is the KMZ Format?

The KMZ format, used in conjunction with Google Earth, creates a "placemark" of the project vicinity on the aerial photograph basemap and allows other data to be layered over the basemap. Using the KMZ format allows ADOT and its consultants to include all of the map-based information required for Clean Water Act documentation as data layers over the Google Earth aerial basemap. Upon opening the KMZ file for a project, this format enables the Corps to zoom directly to the project vicinity, project area, or project limits, and to view the project data included in the KMZ file. Using KMZ files for as much of the map-based data as possible will change the applicability and format of some of the components of ADOT's Clean Water Act submittals. The next section of this appendix discusses the components and formats of each submittal.

How Will the Submittal Components Change?

Some of the components currently submitted as part of the Clean Water Act documentation for a project will no longer be applicable or required. The information imparted by those components will be added in the KMZ file and visible as data overlaid on the Google Earth aerial basemap.

Table F-1 lists the typical components of a JD, Section 404 pre-construction notification (PCN) for a Nationwide Permit, and Section 404 Individual Permit (IP), and the format in which they should be submitted.

Table F-1. Submittal Format of Clean Water Documentation Components

Component	Format
JD	
Cover letter from ADOT to the Corps	Adobe Acrobat portable document format (PDF) (prepared in Microsoft Word)
State Map	No longer required.
Aerial Project Vicinity Map	No longer required as a separate component. "Begin Project" and "End Project" callouts will be added to the KMZ file.
Topographic Project Vicinity Map (with Boundary of Area Surveyed)	No longer required as a separate component. The U.S. Geological Survey (USGS) topographic quadrangle and Boundary of Area Surveyed layer will be added to the KMZ file.
100-year Floodplain Map	No longer required as a separate component. The Federal Emergency Management Agency Flood Insurance Rate Map 100-year floodplain data will be added to the KMZ file.
Table 1. JD Physical Characteristics & Other Information	No longer required as a separate component. Data from this table will be added to the KMZ file.
Preliminary JD Form	Adobe Acrobat PDF (fillable)
Previous JD documentation (as applicable)	Adobe Acrobat PDF
Corps' Water Data Sheet	Microsoft Excel
Ground photograph log	No longer required as a separate component. Photographs and applicable notes will be linked to the KMZ file.
Aerial mapping showing the recommended ordinary high water mark (OHWM) and Waters of the US (Waters)	Now required as part of the KMZ file. Data from these maps will be added as layers within the KMZ file.
Other supporting documentation as applicable	Discuss with the ADOT Water Quality Group.
Wetland Delineation (in addition to JD components listed above)	
JD Report Including Wetlands	Adobe Acrobat PDF
Wetland Plant Communities Map	No longer required as a separate component. These data will be added as a layer within the KMZ file.
Wetland Determination Data Sheets	Adobe Acrobat PDF
Wetland ground photograph log	No longer required as a separate component. Photographs will be linked to the KMZ file.

Table F-1. Submittal Format of Clean Water Documentation Components

Component	Format
US Fish and Wildlife Service National Wetlands Inventory (NWI) Map	No longer required as a separate component. NWI data will be added as a layer within the KMZ file.
Nationwide Permit PCN	
Corps Engineering Form 4345	Adobe Acrobat PDF (prepared in Microsoft Word)
JD aerials showing permanent and temporary impacts	Now required as part of the KMZ file. Permanent and temporary impacts will be added as a layer within the KMZ file.
Plan sheets	Design line-work will be added as a layer within the KMZ file. Detail sheets may need to be included as a stand-alone component in PDF format.
General Conditions (written discussion)	Adobe Acrobat PDF (prepared in Microsoft Word)
Biological Evaluation and associated approvals	Adobe Acrobat PDF
Cultural resource report and associated approvals	Adobe Acrobat PDF
Individual Permit (in addition to PCN components listed above)[a]	
Corps Environmental Assessment and Statement of Findings (Section 404(b)(1))	Microsoft Word and Adobe Acrobat PDF
Public Notice	Microsoft Word
Mailing labels	Microsoft Word Avery 5164 template

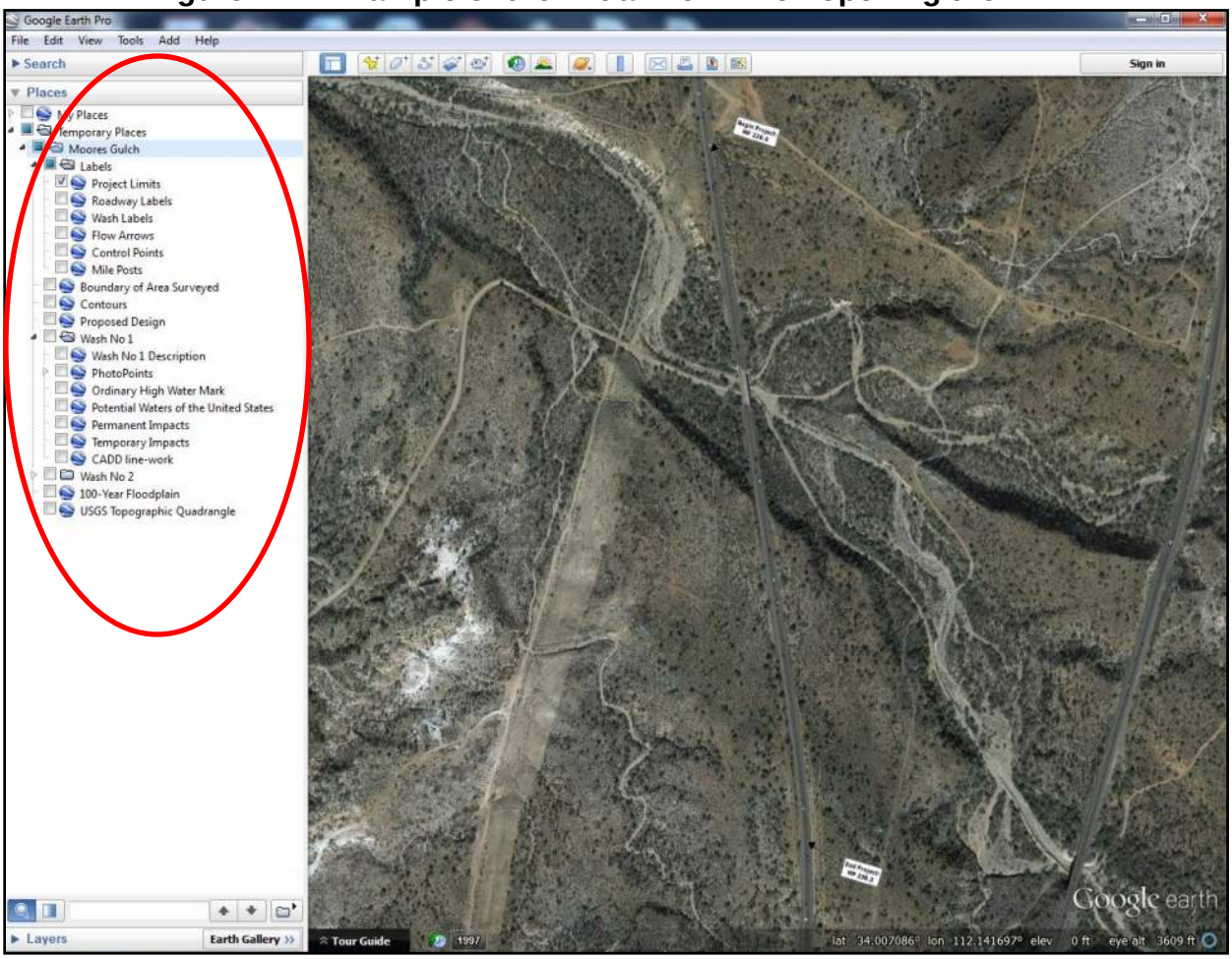
[a] A written discussion of the general conditions is not required for an IP.

For Section 404 documentation, ADOT will now use the KMZ file as the primary component to illustrate the extent of the Corps' jurisdiction and potential impacts within jurisdictional waters. The next section describes the information and data to be included in the KMZ file.

What Should the KMZ Data Look Like?

When the user opens the KMZ file, Google Earth will zoom to the placemark created for the project vicinity. The KMZ creator can set the extent to which the placemark will show upon opening the file, and also set which data layers will be turned on when the KMZ is opened. Each of the data layers included in the KMZ file will show up in the Google Earth sidebar, circled in Figure F-1, and they can be turned on and off by the user to customize the view. While the aerial basemap cannot be clipped to the project area, all KMZ data should be clipped to minimize file size and viewing speed.

Figure F-1: Example of the initial view when opening the KMZ.



Data layers to be added to the KMZ file include, but are not limited to:

- Annotation such as “Begin Project” and “End Project” callouts; milepost icons and labels; roadway labels; watercourse labels; and other labels to clarify features on the aerial basemap (e.g., dirt road, berm, swale, sheetflow, driveway, etc).
- Contours (that conform to the Corps’ current mapping standards)
- Latitude/Longitude Control points (for the final submittal of the JD)
- USGS topographic quadrangle
- Boundary of Area Surveyed
- 100-year floodplain or floodways
- Photopoints (the data associated with this layer is discussed in the next section)
- OHWM
- Waters
- Wetlands (as applicable)
- Wetland Plant Communities (as applicable)
- NWI data (as applicable)

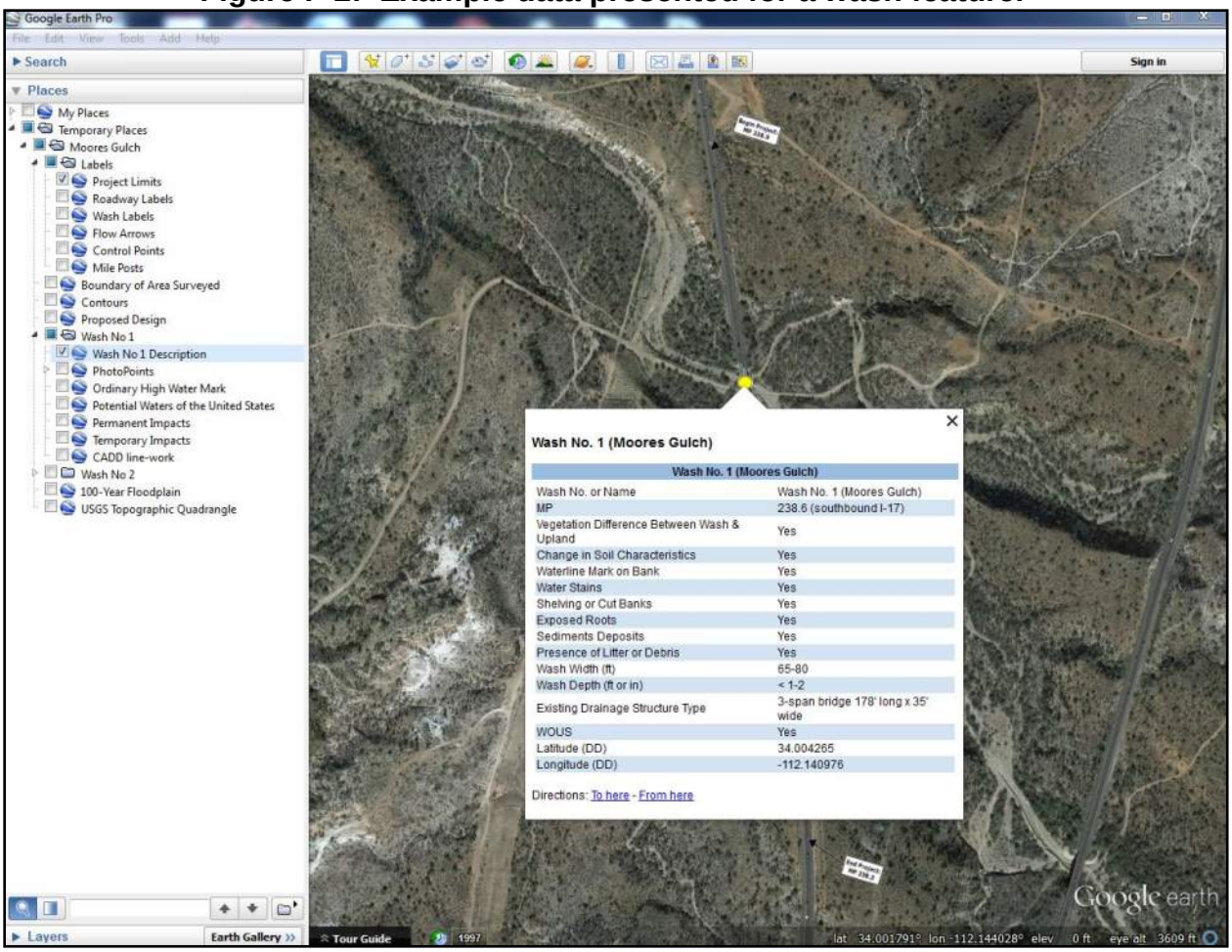
- Permanent impacts (for PCN or IP)
- Temporary impacts (for PCN or IP)
- Design line-work (for PCN or IP)

Even when a layer is turned on, some of the supporting data may not be immediately visible because it is linked to or embedded within a layer. The next section presents how the information that was previously documented by Table 1, JD Physical Characteristics & Other Information (as outlined in *Step 3C*), the ground photograph logs, and the JD aerials will now be presented.

How Will the Corps Access the Data Included in the KMZ file?

As mentioned in the previous section, the OHWM, Waters, and wetlands layers will be included in the KMZ file. This format allows the Corps to zoom in to view each feature separately and the supporting data for a given feature (wash, wetland, or photopoint) is linked to that feature. When the Corps clicks on a feature, a pop-up box appears with the wash name and number, location, physical characteristics, existing structure description, latitude, and longitude, as shown in Figure F-2.

Figure F-2: Example data presented for a wash feature.



When the Corps clicks on a photopoint, a pop-up box appears with the photo, location, direction the photo is facing, and any additional information that may help the Corps delineate the wash at that location. The photo direction must be formatted to include the direction the photo is facing (cardinal or intercardinal) and direction of flow, using the lead-in “Looking...”. For example, “Looking north/upstream.” The photopoint icon should be a dot with an arrow extending from the dot (for example, ●➔). Double-clicking on the photo in the pop-up box enlarges the photo. Figures F-3 and F-4 show examples of the photo pop-up box and enlarged photo.

Figure F-3: Example data presented for a photopoint feature.

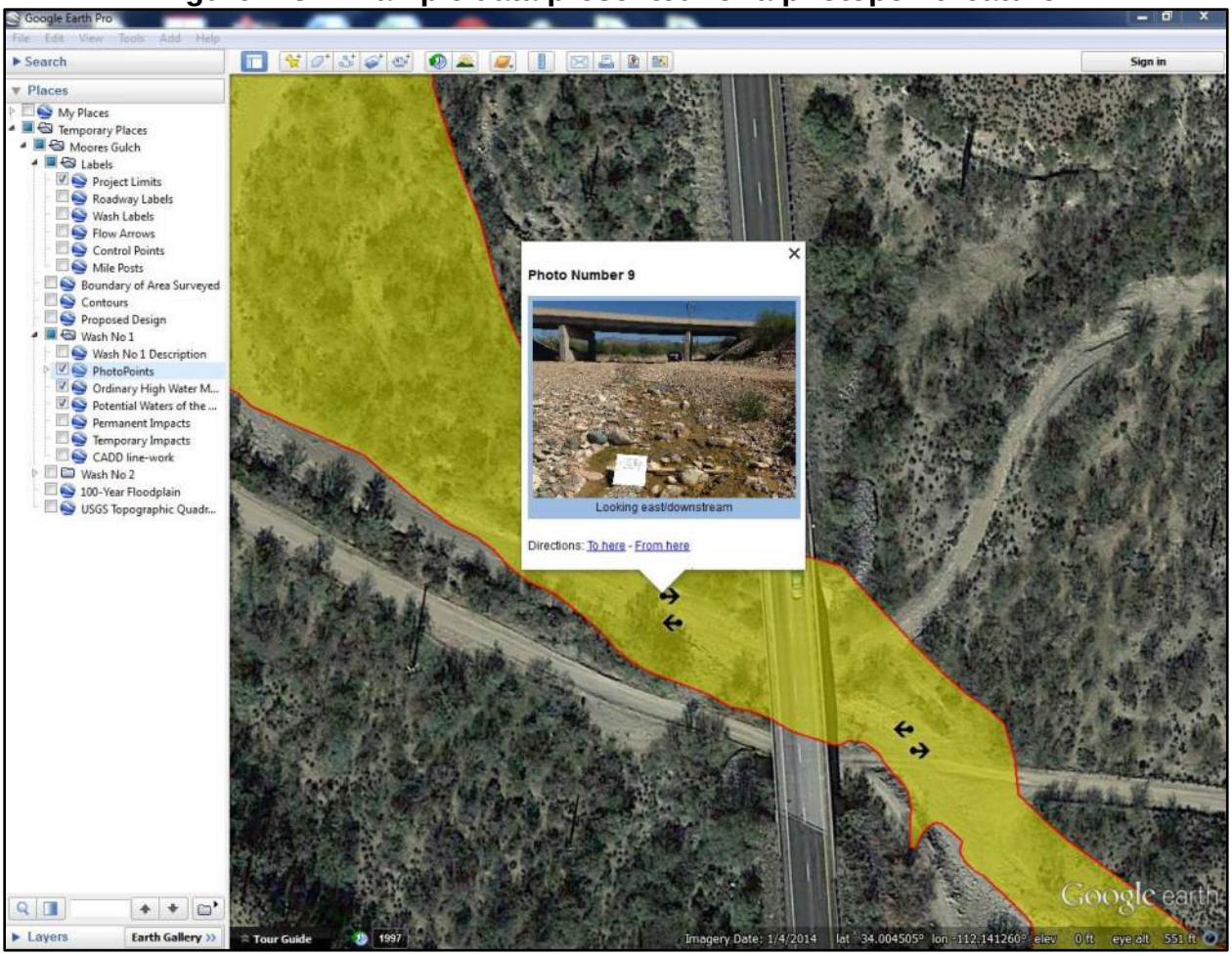
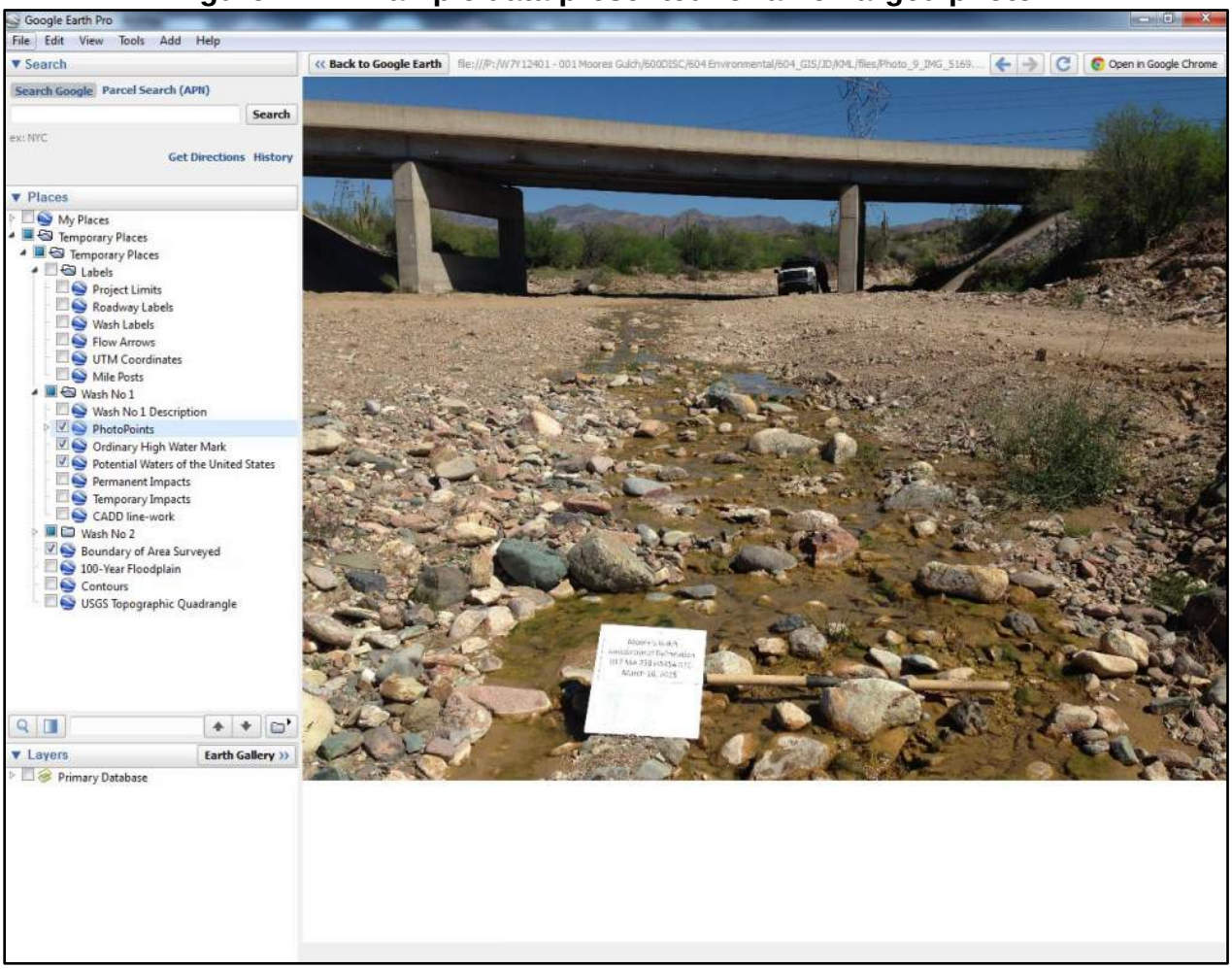


Figure F-4: Example data presented for an enlarged photo.



Once the Corps has reviewed the information in all components of the submittal and is ready to approve the recommended JD, ADOT and the consultant will create final PDFs of the aerial basemap overlaid with the boundary of area surveyed, OHWM, Waters, and applicable annotation. The next section presents how to create the final PDFs.

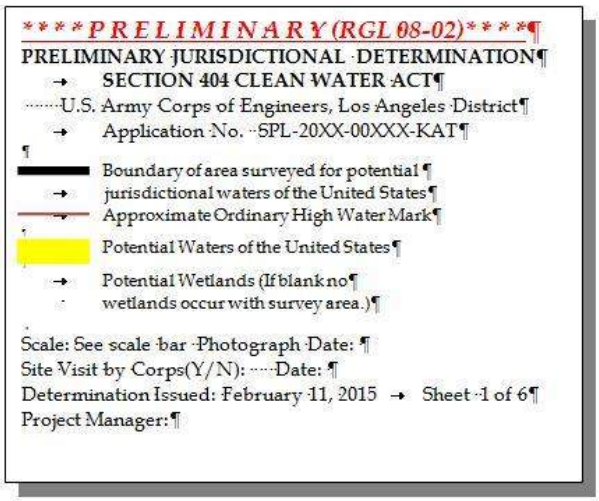
How Will the Final Paperless Submittals be Prepared for the Corps?

When possible, JD, PCN, and IP applications can be submitted to the Corps with electronic signatures. If the application is signed by hand, hard copies with original signatures should be provided.

ADOT and the consultant will provide 11x17-format aerials at 1 inch =100 feet or 1 inch =200 feet scale using the KMZ data approved by the Corps. The aerials will be prepared as PDFs directly from Google Earth in accordance with the Corps' current mapping standards and the requirements described in Step 3C of this manual for JDs and Steps 4 and 5 for permit components.

The Corps JD label can be created electronically and sent to the Corps for signature. The Corps will sign the label and provide a JPG, screenshot, or other image of the complete, signed label to be added to each page of the JD PDF. Acreages shown in the legend can represent the total for each wash. Figure F-5 shows an example of a completed JD label.

Figure F-5: Example of a paperless Corps JD label.



All files smaller than 10 megabytes (MB) may be submitted by email. Files exceeding 10 MB can be provided by file transfer on the Corps' S.A.F.E. site:

https://safe.amrdec.army.mil/safe/Default.aspx

The Corps cannot accept the information on thumb drives. The ADOT Environmental Planning Group website provides guidance for electronic submittals to the Corps and instructions for accessing the Corps S.A.F.E. site:

http://www.azdot.gov/business/environmental-planning/environmental-guidance-documents/section-404-401-procedures

The Corps will return to ADOT any revisions to the KMZ file, the supporting documentation, maps, JD approval, permit verification letter, etc. as a single PDF that is electronically certified. The PDF maps with the Corps signature constitute approval of the limits of jurisdiction shown in the KMZ data and represented in the maps.

What are Some General Guidance Points for Preparing and Submitting a Paperless JD?

- In the cover letter, address any water resources not present in the project area or departures from Corps or ADOT guidance. (For example, mention if the project area does not contain any 100-year floodplains.)
- Adhere to the Corps' current mapping standards.
- Photo resolution and format should allow photos to be easily zipped and transferred to ADOT and the Corps. Photo resolution must be sufficient to discern wash features and characteristics (or lack thereof).
- When developing the KMZ file, position the pop-up boxes and enlarged photos such that the relevant features are still visible on the screen along with the pop-up boxes and photos.
- Compact disc submittal is no longer required.

- To have full functionality between the KMZ and all linked files, user must have Google Earth Pro Version 7.1.2 or better, which available for free download online.

APPENDIX G

SECTION 402 AND 408 INFORMATION

MORE INFORMATION ON ADOT'S STORMWATER PROGRAM AND REQUIREMENTS CAN BE FOUND HERE: https://azdot.gov/business/environmental-planning/water-resources

G1

CONSTRUCTION GENERAL PERMIT INFORMATION SHEET

CONSTRUCTION GENERAL PERMIT INFORMATIONAL SHEET

What is Section 402 of the Clean Water Act?

Under Section 402 of the Clean Water Act (CWA), the U.S. Environmental Protection Agency (EPA) was required to develop a phased approach to regulate stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) program. The EPA published the final regulations on the first phase of the NPDES stormwater program on November 16, 1990. These regulations, commonly known as the Phase I stormwater regulations, established permit application requirements for discharges from municipal separate storm sewer systems (MS4s) serving a population of 100,000 or more. The Arizona Department of Environmental Quality (ADEQ) received authorization to administer the NPDES program in Arizona on December 5, 2002. The Arizona Pollutant Discharge Elimination System (AZPDES) program applies throughout Arizona, except for tribal lands. Where there is no approved tribal program, EPA remains responsible, consistent with its trust authority for implementing and enforcing the NPDES program in tribal land. Under the AZPDES program, ADEQ issues the Construction General Permit (CGP) for all ADOT projects regulated under the AZPDES program. If the project is on tribal land, the NPDES permit is issued by the EPA.

What is the Construction General Permit?

The CGP authorizes stormwater discharges from construction-related activities where those discharges have a potential to enter waters of the United States or a MS4 leading to Arizona surface waters.

To obtain coverage under the CGP, ADOT must develop a Stormwater Pollution Prevention Plan (SWPPP), then submit a Notice of Intent (NOI) to ADEQ. The NOI is sent to the EPA if the project activities are on tribal land. The NOI is not a permit; rather it identifies the project and activity that requires a permit. Through the submittal of the NOI, you are acknowledging that the project activities require coverage under the CGP.

Refer to ADOT Stored Specification 104.09 for the project for roles and requirements for stormwater pollution prevention and CGP compliance.

When do I need a CGP?

Construction activities that disturb one or more acres of land, or will disturb less than one acre, but are part of a common plan of development or sale that will ultimately disturb one acre or more, require a CGP. Remember if these activities involve tribal land, the EPA is the permitting authority. Typical activities that require a CGP include clearing, grading, excavation, and stockpiling that will result in the disturbance of one or more acres.

If the project is classified as a maintenance project, a CGP is not required unless it disturbs over five acres. ADEQ defines routine maintenance as “performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility and that disturbs less than five acres”. Maintenance projects typically involve minimal grading and are short-term in duration. Consult the ADOT Water Resources Program Manager if you have questions regarding classification of a maintenance or construction project.

In special circumstances, there may be waiver options applicable to the project and, it would not require a CGP. Please visit here to find out more information regarding waiver. **Below are guidelines to determine if CGP coverage is needed.** Calculations during design are done by Roadside Development in coordination with the project team.

- The Construction General Permit has a one acre threshold for requiring permit coverage. The activity that requires coverage and is included in the calculation is “construction activity” as defined in the permit.
- Include in the one-acre calculation:
    - Earth disturbing work area (clearing, grading, excavating, stockpiling of fill material)
    - Access roads exclusive to the project
    - Construction support activities exclusive to the project
    - Grubbing
    - Trenching
    - Blading
- To add up to one acre, the activity must be contiguous.
    - If a work area is connected by an access road, it is contiguous
    - Various bridge projects under one contract, but separated by paved highway and other permanently stabilized areas, not connected by access road, are not contiguous.
    - If a work area is within the same parcel, it is contiguous.
- If a portion of the project includes work in a Water(s) of the US that is covered by a Clean Water Act Section 404 permit, do not include the portion covered by the 404 permit (bound by the Ordinary High Water Mark) in the acreage calculation. Contact Environmental Planning Water Resources team for help with this.
- If the acreage calculation reaches 0.9 acre, consider the project limits, area, and activities included in the calculation. If some activities are being left to the Contractor to identify and locate, assume that permit coverage is needed.
- When a project involves both construction activities and maintenance activities (to maintain original line and grade, hydraulic capacity, or original purpose), all earth-disturbing activities should be interpreted as construction activity and calculated together if contiguous.

<u>ADOT will not obtain permit coverage under the circumstances below:</u>

- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility and that disturbs less than five acres. By definition, maintenance projects are expected to be short-term and involve minimal mass grading. For ADOT purposes, this could also be used for projects that go through the development process if the purpose is consistent with the first part of this paragraph. Replacement in-kind or minor improvement = maintenance. Re-blading shoulders is considered maintenance.
- Vegetation removal that is conducted by cutting, that does not include grubbing/clearing/excavating or creation of an access road
- Routine earth disturbing activities that are part of the normal day-to-day operation of a completed facility (e.g., daily cover for landfills, maintenance of gravel roads or parking areas, landscape maintenance, etc.).
- Re-paving roads if the sub-grade is undisturbed.
- Construction activity that disturbs less than one acre and is not part of a larger common plan of development that disturbs more than one acre, unless designated as discussed in the above section.
- Geotechnical, environmental, and archeological explorations if those activities collectively disturb less than one acre.
- Vegetation removal when vegetation is being cut off at the stumps and no access road is created.

How do I apply for a CGP?

The myDEQ Online Service portal is used for submitting all information to acquire the CGP. Paper applications for the CGP are no longer accepted, it must all be done online! Make sure your project SWPPP has been developed and approved per Stored Specification 104.09.

Additional Sources of information regarding the AZPDES CGP:

- **Why do I need an AZPDES Construction Activity General Permit (CGP) for Stormwater?** http://www.azdeq.gov/node/524

- **AZPDES Fact Sheet** https://www.azdot.gov/docs/default-source/planning/azs0000018-2015_ms4_fact_sheet.pdf?sfvrsn=2

G2

WHEN DO YOU NEED A SECTION 408 PERMIT?

WHEN DO YOU NEED A SECTION 408 PERMIT?

What is Section 408?

In order to ensure that these projects continue to provide their intended benefits to the public, Congress mandated that any use or alteration of a US Army Corps of Engineers (Corps) Civil Works project by another party is subject to the approval of Corps. This requirement was established in Section 14 of the Rivers and Harbors Act of 1899, which has since been amended several times and is codified at 33 USC 408 (Section 408).

Given the widespread locations of these projects, many embedded within communities, over time there may be a need for others outside of Corps to alter or occupy these projects and their associated lands. Reasons for alterations could include improvements to the projects, relocation of part of the project, or installing utilities or other non-project features. Some ADOT specific projects include sidewalk installation on levees, culvert installation into levees, or trail or sidewalk installations near, through, or over levees.

What do I need to apply for a Section 408 Permit?

Corps Civil Works projects include dams, basins, levees, channels, navigational channels, and any other local flood protection works constructed by the Corps. In order for the Corps District to approve any proposed alterations requests, it must meet Corps standards and must not be injurious to the public interest or affect the Corps project's ability to meet its authorized purpose. Corps has established the following policy and procedures for implementing Section 408.

If the project is in the vicinity of a known civil works project, coordinate with the Corps immediately. Section 408 can apply even if the project doesn't directly impact a civil works project!

Submitting the Request

The processing of a Section 408 Permit request begins with a written request from an non-federal sponsor of the civil works project; typically, this will be a representative from the floodplain control district. Please note, this request is not completed by ADOT Environmental Planning (EP); it is initiated and completed by the ADOT design team through coordination with the non-federal sponsor. The permit application (SPL Form 25) should be completed, along with the other documents as required in the Submittal Checklist. Each request for an alteration will be evaluated on a case-by-case basis. All application packages will be screened for completeness before they are filed in the District. A request for additional information may be sent to notify you of any additional information which may be necessary for the Corps to review your proposed project. If an application is complete, the Corps will notify you with the identification number.

Evaluation of the Application

Once sufficient information is provided, it is the responsibility of the Corps Levee Safety Program Manager/Dam Safety Officer to evaluate proposed alterations. The proposal will be evaluated for impacts of the proposed alteration to flood conveyance, structural integrity, operation and maintenance, National Environmental Policy Act (NEPA) requirements, and flood fighting capabilities as well as meeting Corps policy and criteria. Upon completion of the review, the non-federal sponsor is notified whether the proposal is approved or denied.

Approval

Upon permit approval, the permittee is responsible for the construction oversight to ensure construction is in accordance with the plans and specifications approved by the Corps. After construction completion, notification is provided to the Corps that all permitted construction is complete and final documentation submitted.

How long does it take to get the Section 408 Permit?

Regardless of the type of Section 408 request or information submitted, the Corps District is expected to provide a response to requesters within **30 days** of receipt of information.

- If the Corps District determines the information is incomplete, they have **30 days** to notify the applicant in writing detailing information required to complete the application.
- When the Corps District determines the information is complete, they have **30 days** to notify the applicate that they will be proceeding to the review and decision phase.
- In some situations, the Corps District can provide a final Section 408 Decision approval notification in lieu of providing a completeness determination letter.

A final Section 408 Decision will be provided by Corps within **90 days** from the completeness determination unless:

- If a final decision cannot be made in **90 days**, the Corps District will provide a notification to the requester with an estimated decision date.
- If the date extends beyond **120 days**, the Corps District will send a memorandum through the Division Commander to the Director of Civil Works with justification for the rationale of the decision

Additional Sources of information regarding the Section 408 Permit:

- Engineer Circular (EC) 1165-2-220, Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408, found at *www.publications.usace.army.mil* by searching under Engineer Circulars.
- Section 408 Permitting Information- Decision Process Flow Chart, U.S. Army Corps of Engineers Los Angeles District, found: http://www.spl.usace.army.mil/Missions/Section-408-Permits/
- Memorandum, Interim Guidance on Section 408 Decision Level, 10 November 2016, found: http://cdm16021.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2008 .
- Memorandum, Interim Guidance on Applicability of EC 1165-2-216 within Navigable Waters, 16 June 2017, found: http://cdm16021.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2007
- Memorandum, Extension of EC 1165-2-216, Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 U.S.C. 408, 07 November 2017, found:http://cdm16021.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2006
- Director's Policy Memorandum, Section 408 – Interim Changes for Immediate Implementation and Future Policy Revisions, 12 January 2018, found: http://cdm16021.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2005 .

APPENDIX H

ADDITIONAL PROJECT FORMS AND CHECKLISTS

H1

WATER RESOURCES CHECKLIST

INITIAL REVIEW WATER RESOURCES CHECKLIST

1 Project Information

Project Name	**Federal Aid Number**
State Route	**Advertisement Date**
ADOT Project Number	**Project Administration:** ☐ ADOT ☐ LPA

Waters of the US is a term used to denote the Corps' jurisdictional limits under Clean Water Act (CWA) Section 404. The full definition of the term is provided in Title 33 Code of Federal Regulations (CFR) Chapter II, Part 328—Definition of Waters of the United States (available online: http://www.wetlands.com/coe/coe328p0.htm).

The following are the results of an initial review of the project area performed by a qualified professional to determine the presence or absence of potential Waters of the US. This initial review includes the results of: a review of aerial imagery or ground photographs; review of topographic mapping of the activity area if a site visit is not performed; results from the National Wetland Inventory database search; and other relevant information used for the assessment. The review is evaluating the type of, if any, surface waters (e.g., streams, roadside ditches, potential wetlands) occurring within the project area, and if there is an anticipated Section 404 required for the project, including any possible mitigation needs.

2 Project Description

Provide a concise but thorough description of the proposed action:

Form continues on next page

4 Identification of the Potential Waters of the US

Please review the project location on the following websites: Review the National Wetlands Inventory Wetlands Mapper and Arizona Department of Environmental Quality eMap. The information collected will assist you in answering the following questions:	
Where there potential Waters of the US identified within the Project Area ? *If Yes, continue to Question 2. If No, provide a brief description of the project area and attach information used for the assessment:*	Yes ☐ No ☐
List the potential Waters of the US within the Project Area *(For streams/washes, indicate whether perennial, intermittent or ephemeral. For wetlands, indicate whether palustrine forested, palustrine scrub-shrub or palustrine emergent.)*	
Where there any other special aquatic sites other than wetlands? *If Yes, describe here:*	Yes ☐ No ☐
What type of Section 404 Permit is anticipated for this Project? ☐ **Nationwide? If so, number?** ☐ **Regional General Permit 96** ☐ **Individual Permit** Provide reasoning for determination and indicate if Notifying or Non-notifying:	
Is Mitigation Anticipated? *If Yes, provide explanation here:*	Yes ☐ No ☐

Name of Preparer:	**Date**
ADOT Environmental Planner:	**Date**

Attachments
(May include maps, google drop pin, aerial imagery of project area, or server information)