SUPPLEMENT TO THE DECISION DOCUMENT
FOR NATIONWIDE PERMIT 29

This document is a supplement to the national decision document for Nationwide Permit 29, and addresses the regional modifications and conditions for this NWP. The South Pacific Division Engineer has considered the potential cumulative adverse effects on the aquatic environment that could result from the use of this NWP, including the need for additional modifications of this NWP by the establishment of regional conditions to ensure that those cumulative adverse effects on the aquatic environment are minimal. The Division Engineer has also considered the exclusion of this NWP from certain geographic areas or specific waterbodies. These regional conditions are necessary to address important regional issues relating to the aquatic environment. These regional issues are identified in this document. These regional conditions are being required to ensure that this NWP authorizes activities that result in no more than minimal individual or cumulative adverse effects on the aquatic environment. This document also identifies regionally important high-value waters and other geographic areas in which this NWP should be regionally conditioned or excluded from NWP eligibility, as described below, to further ensure that the NWP does not authorize activities that may exceed the minimal adverse effects threshold.

Text of NWP 29:

Residential Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Subdivisions: For residential subdivisions, the aggregate total loss of waters of United States authorized by this NWP cannot exceed 1/2-acre. This includes any loss of waters of the United States associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

Summary of changes to NWP 29 from 2007:

This NWP was modified to change the waiver provision for activities resulting in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, to clarify that the district engineer will only issue the waiver after making a project-specific written determination that the activity will result in minimal adverse effects.

1.0 Background

In the February 16, 2011, issue of the Federal Register (76 FR 9174), the Corps of Engineers (Corps) published its proposal to reissue 48 existing NWPs and issue two new NWPs. To solicit comments on its proposed regional conditions for these NWPs, the Los Angeles District issued a public notice on February 25, 2011. The issuance of the NWPs was announced in the February 21, 2012, Federal Register notice (77 FR 10184). After the publication of the final NWPs, the Los Angeles District considered the need for regional conditions for this NWP. The Los Angeles District's findings are discussed below.

2.0 Consideration of Public Comments

2.1 General Comments

Please See the attached response to comments document (Section III)

2.2 Comments on Proposed Regional Conditions

2.2.1 Proposed Regional Condition 1

Please see the attached response to comments document.

2.2.2 Proposed Regional Condition 2

Please see the attached response to comments document.

2.2.3 Proposed Regional Condition 3

Please see the attached response to comments document.

2.2.4 Proposed Regional Condition 4

Please see the attached response to comments document.

2.2.5 Proposed Regional Condition 5

Please see the attached response to comments document.

2.2.6 Proposed Regional Condition 6

Please see the attached response to comments document.

2.2.7 Proposed Regional Condition 7

Please see the attached response to comments document.

2.2.8 Proposed Regional Condition 8

Please see the attached response to comments document.

2.2.9 Proposed Regional Condition 9

Please see the attached response to comments document.

2.2.10 Proposed Regional Condition 10

Please see the attached response to comments document.

3.0 Waters Excluded from NWP or Subject to Additional Pre-Construction Notification Requirements

3.1 Waters excluded from use of this NWP

3.1.1 Special Aquatic Sites in Arizona and Mojave and Sonoran Deserts of California (Regional Condition 2)

Reason for Exclusion: With this regional condition, NWPs 3, 7, 12-15, 17-19, 21, 23, 25, 29, 35, 36, 39-46, and 48-52 may **not** be used to authorize the discharge of dredged or fill material into a jurisdictional special aquatic site in the State of Arizona and the Mojave and Sonoran desert regions in California, including wetlands, mudflats, vegetated shallows, and sanctuaries and refuges as defined in 40 CFR Part 230.40-45. The regional condition would require applicants to submit an application for a Standard Individual Permit subject to authorization under section 10 of the Rivers and Harbors Act, section 103 of the Marine Protection, Resource and Sanctuaries Act, and/or section 404 of the Clean Water Act (CWA). Special aquatic sites in the desert regions of the Los Angeles District support substantial aquatic resources that exhibit relatively high physical and biological functions. Furthermore, these aquatic areas can provide important and unique habitat for endangered species, neotropical migratory birds, and other indigenous wildlife. Past construction activities in and adjacent to these special aquatic sites have degraded portions of these high value systems. Regional Condition 2 would ensure compliance with the 404(b)(1) guidelines and evaluation and mitigation, if warranted, of activities that may have an adverse effect on special aquatic sites in the otherwise arid regions of the Los Angeles District.

In the Los Angeles District, the semi-arid climate limits the extent and number of special aquatic sites. This scarcity of special aquatic sites is especially evident in Arizona and in the desert

regions of California. In these areas, annual precipitation is usually below 10 inches, which precludes the development of wetlands in the majority of these desert regions. Furthermore, approximately 90 percent of wetlands in California have been affected by historic conversion to agricultural uses, grading, and filling activities. As a result, wetland areas are rare in the Los Angeles District and warrant more rigorous protection. Regional Condition 2 would serve to better protect special aquatic sites in desert regions of the Los Angeles District by requiring the additional scrutiny inherent in the Standard Individual Permit (SIP) process for most permanent discharges of dredged or fill material in these areas. The permit applicant would have to perform a 404(b)(1) alternatives analysis that would include careful examination of the purpose and need for the project and alternatives that avoid or reduce impacts to special aquatic sites. Regional Condition 2 would help ensure that discharges of dredged or fill material that would otherwise be authorized by NWPs would have minimal impacts, both individually cumulatively, to special aquatic sites in the Los Angeles District.

This regional condition has been amended from that included with the 2007 NWPs (Regional Condition 4) to clarify the definition of *desert regions of California* to include specific watersheds as defined by USGS Hydrologic Unit Code (HUC) accounting units. These include Lower Colorado (150301), Northern Mojave (180902), Southern Mojave (181001) and Salton Sea (181002). In addition, coral reefs and sanctuaries and refuges were removed from the list of special aquatic sites for which this regional condition would apply. Coral reefs were removed as they do not exist within the subject geographic area. Sanctuaries and refuges were removed as there are circumstances where a predominantly upland sanctuary or refuge may contain aquatic resources that exhibit relatively low physical and biological functions (such as a disturbed ephemeral drainage) yet nevertheless would be considered a special aquatic site. In those cases, mandatory notification (per regional condition 4a) would be sufficient to ensure a given project would have no more than minimal impacts by ensuring Corps review.

For additional information please see the supplemental decision document for Regional Condition 2.

3.1.2 Jurisdictional Vernal Pools (Regional Condition 5)

Reason for Exclusion: This regional condition would require any project proposing to discharge dredged or fill material into a jurisdictional vernal pool to be reviewed under the standard individual permit (SIP) process, which requires a more rigorous alternatives review. This regional condition has been amended from the 2007 version to include an exception for discharges associated with restoration, enhancement, management, or scientific study activities that qualify for NWPs 5, 6, and 27. NWPs 5 and 6 authorize temporary activities and structures that could be used to further the understanding of vernal pool functions and services or for monitoring the effectiveness of enhancement, restoration, and establishment projects. NWP 27 authorizes only activities that result in net increases in aquatic resource functions and services. Per this regional condition, authorization under other NWPs cannot be considered and a PCN must be submitted in accordance with General Condition 31 and Regional Condition 3. In discussions with local land managers, Regional Condition 5 has increased project costs and timelines in order to obtain an SIP for voluntary restoration and enhancement projects. This has also limited their ability to compete for grant and other public funding with restrictions on costs

and timelines. Therefore, the Los Angeles District believes that by allowing the use of these three NWPs, the scientific community and open space land managers would benefit from the streamlined process and there may ultimately be a net increase in functions and services in vernal pool ecosystems through the implementation of restoration, enhancement, and management activities.

The Los Angeles District Regulatory Branch previously determined that the 0.5-acre SIP threshold for vernal pool impacts (established by the District in 1997) would not adequately protect remaining vernal pool resources in the region. It is estimated that 95 to more than 97 percent of the vernal pools that historically existed in the region have been lost through urbanization or agricultural practices (USFWS 1998); in some counties the loss is virtually total. Under the new and modified NWPs, a single and complete project could impact up to 0.5 acre of vernal pool habitat and be considered for NWP authorization. The District had previously been using a 0.5-acre SIP threshold for vernal pool impacts since 25 November 1997 (previous District Regional Condition 1). Despite the establishment of this earlier regional condition, the District experienced additional losses of vernal pool habitat, requiring the establishment of Regional Condition 5 as part of the 2000, 2002 and 2007 NWP Programs. Within the boundaries of the Los Angeles District, the sizes of jurisdictional vernal pools generally range from approximately 200 to 4,900 square feet (e.g. 0.00459 to 0.11248 acre). Therefore, 0.5 acre of vernal pools could include a large vernal pool complex or individual pools made up of 5 to 100 pools. Compounding this situation, mitigation for vernal pool impacts is not well developed, and often takes the form of preservation and enhancement of remaining pools, resulting in a continued net loss of vernal pool acreage, functions and services. The SIP review process includes an analysis of the propriety of the proposed fill in a special aquatic site pursuant to the 404(b)(1) Guidelines.

Vernal pools in the region comprise a severely diminished class of aquatic habitats and are fragile, easily disturbed ecosystems. Due to the decline of vernal pool habitat in the region, the District determined future impacts to vernal pools in the region would result in more than minimal adverse environmental effects both individually and cumulatively. With the proposed regional condition, any quantity of dredged or fill material discharged into a jurisdictional vernal pool that is not temporary in accordance with NWP 5 or 6 or does not result in a net increase in aquatic resources functions and services in accordance with NWP 27 would be subject to an SIP review. By requiring an SIP, the remaining jurisdictional vernal pools in the region would be afforded the maximum level of protection under the Regulatory Program which includes a 404(b)(1) analysis (i.e., under this more rigorous process, the Corps can only authorize the least environmentally damaging practicable alternative for a given project).

With the modification of Regional Condition 5, the District recognizes certain regulated activities involving restoration, enhancement, management, and scientific study of vernal pools would not contribute to the overall loss of vernal pool habitat and in such cases (with few exceptions) SIP review would not provide any additional protection or benefit to vernal pools. Therefore, this regional condition has been modified since the 2007 NWPs to include language excluding these four categories of activities from this requirement. If the success of a proposed restoration or enhancement activity is uncertain, or the subject vernal pool is of particularly high ecological value, the District would still retain the ability to review any such action as an SIP

through our discretionary authority. In addition, the Corps has determined that issuance of Regional Condition 5 would not be contrary to the public interest. Overall, the implementation of Regional Condition 5, which requires an SIP for discharges of dredged or fill material in jurisdictional vernal pools (with the exception of activities associated with the restoration, enhancement, management or scientific study), would provide additional assurances that the activities permitted under the NWPs would result in minimal impacts on both an individual and cumulative basis in the Los Angeles District.

For additional information please see the supplemental decision document for Regional Condition 5.

3.1.3 New Permanent Fills in Perennial and Intermittent Watercourses and for Projects with Greater than 0.1 Acre in Ephemeral Watercourses in Murrieta Creek and Temecula Creek Watersheds in Riverside County (Regional Condition 6)

Reason for Exclusion: Stein and Ambrose (1998[1]) found that cumulative losses have adversely affected the aquatic resources in the Murrieta Creek and Temecula Creek watersheds, which are part of the Santa Margarita Watershed in Riverside and San Diego Counties. Most of the losses were attributed to development activities in these watersheds. Regional Condition 6 would exclude the use of NWPs 14, 29, 39, 42, and 43 for permanent fill activities within perennial and intermittent watercourses and for projects that would permanently impact more than 0.1 acre of ephemeral watercourses in the Murrieta Creek and Temecula Creek watersheds. Because of the cumulative losses in these watersheds, with Regional Condition 6, development-related projects in these areas would receive greater review and scrutiny through the SIP process, which includes a 404(b)(1) analysis.

For additional information please see the supplemental decision document for Regional Condition 6.

3.1.4 Bank Stabilization Projects in San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County and Bank Stabilization and Grade Control Projects in Gaviota Creek, Mission Creek, and Carpinteria Creek in Santa Barbara County (Regional Condition 7)

Reason for Exclusion: Regional Condition 7 would exclude bank stabilization from NWP authorization in San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County, and bank stabilization and grade control projects in Gaviota Creek, Mission Creek, and Carpinteria Creek in Santa Barbara County. This exclusion would require any project that would stabilize a stream bank and/or grade control in these particular watersheds receive greater review and scrutiny through the SIP process, which includes a 404(b)(1) alternatives analysis. This regional condition has been modified from the version adopted in 2007 (Regional Condition 9) to include Section 404 Letters of Permission (LOP) as an SIP that may be used following a final Environmental Impact Statement (2009) which evaluated cumulative impacts of bank stabilization in San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County, California. While NWP 12, 14, 18, 25, 29, 39, 40, 42 and 43 and 45 address utility lines, linear

1 Stein, E.D. and R.F. Ambrose. 1998. Cumulative impacts of Section 404 Clean Water Act permitting on riparian habitat of the Santa Margarita, California Watershed. *Wetlands* 18: 393-408.

transportation crossings, minor discharges, structural discharges, residential development, commercial/institutional development, agricultural activities, recreational facilities, stormwater management facilities, and repair of upland facilities damaged by discreet events respectively, these types of projects could also include stream bank stabilization or grade control. These watercourses were identified as vulnerable to adverse effects on endangered species and designated critical habitat associated with additional bank stabilization and grade control activities. In San Luis Obispo Creek and Santa Rosa Creek, a substantial number of bank stabilization projects have resulted in cumulative adverse impacts to flow velocity and water surface elevations during storm events. With the augmented flow velocity, channel substrate can be scoured during large storm events causing loss of vegetation and long-term channel incision. Although the existing bank stabilization projects have not resulted in the loss of a large amount of waters of the United States, the cumulative hydrogeomorphic effects of the bank stabilization have reduced the amount suitable of habitat for the threatened southern steelhead that utilizes these streams.

At present, the Los Angeles District has identified more than minimal cumulative impacts directly resulting from the use of NWP 13, and other NWPs in these stream channels. By taking discretionary authority over new bank stabilization projects in these two stream channels, the Los Angeles District will ensure future impacts are appropriately mitigated. In Gaviota Creek, Mission Creek and Carpinteria Creek in Santa Barbara County, bank stabilization and grade control structures have resulted in more than minimal cumulative impacts to flow velocity and water surface elevations during storm events. With the augmented flow velocity, channel substrate can be scoured during large storm events causing loss of vegetation and long-term channel incision. Although the bank stabilization projects have not resulted in large losses of waters of the United States, the cumulative hydrogeomorphic effects of the bank stabilization have reduced the amount suitable of habitat for the endangered California red-legged frog (*Rana draytonii*) and southern and central coast steelhead (*Oncorhynchus mykiss*) that utilize these streams and have had adverse affects on designated critical habitat.

At present, there has been a cumulative adverse impact as a result of use of NWP 13, as well as other NWPs that may authorize bank stabilization and grade control structures in these stream channels. By taking discretionary authority over new bank stabilization and grade control structure projects in these three stream channels, the Los Angeles District will ensure future impacts are appropriately evaluated and mitigated. This regional condition will allow the Los Angeles District to review bank stabilization activities in these waterways on a case-by-case basis, ensuring that only the least environmentally damaging practicable alternative is permitted. If, at a later time, there is clear unequivocal evidence that the above regional conditions do not produce the intended results, the Los Angeles District may further modify them, as warranted.

For additional information please see the supplemental decision document for Regional Condition 7.

3.1.5 San Diego Creek and San Juan Creek/Western San Mateo Creek SAMPs (Regional Condition 8).

Reason for Exclusion: Regional Condition 8 would exclude the use of selected NWP authorizations within all jurisdictional waters of the San Diego Creek, San Juan Creek, and western San Mateo Creek and their tributaries within three watersheds. This decision to revoke selected NWPs was made in accordance with two Special Area Management Plans (SAMPs) the Corps conducted in Orange County, and pursuant to the South Pacific Division (SPD) Commander's authority at 33 C.F.R. § 330.5(c).

Concurrent with establishing watershed-specific permitting frameworks, the following 24 NWPs are being revoked for use in these watersheds covered by the two SAMPs in Orange County: 03, 07, 12, 13, 14, 16, 17, 18, 19, 21, 25, 27, 29, 31, 33, 39, 40, 41, 42, 43, 44, 46, 49, and 50. The remaining 26 NWPs would be retained for use in the watersheds covered by the two SAMPs in Orange County: 01, 02, 04, 05, 06, 08, 09, 10, 11, 15, 20, 22, 23, 24, 28, 30, 32, 34, 35, 36, 37, 38, 45, 48, 51 and 52.

The decision to revoke selected NWPs within these SAMP Watersheds involved establishing alternative permitting procedures determined to be more appropriate for the given aquatic resources in the watersheds, and promoting long-term aquatic resource conservation. This exclusion would require any project that involved a regulated activity within these particular watersheds to receive the level of permit review and evaluation in consideration of the applicable SAMP framework.

Specifically, the San Juan Creek/Western San Mateo Creek Watersheds SAMP incorporated alternative permitting procedures consisting of the establishment of a Regional General Permit (RGP) 74 for maintenance activities for use outside the targeted aquatic resource conservation areas, new LOP procedures, and a long-term Standard Individual Permit (SIP) and LOP procedures for the SAMP participants. Similarly, the San Diego Creek Watershed SAMP incorporated alternative permitting procedures consisting of new LOP procedures and RGP 74. Regulated activities ineligible for retained NWPs or the SAMPs' alternative permitting procedures would be reviewed under the SIP process, which would include a 404(b)(1) alternatives analysis.

The Corps conducted extensive analyses in its environmental impact statement (EIS) for the San Juan Creek/Western San Mateo Creek Watersheds SAMP and its joint EIS/environmental impact report (EIR) with the California Department of Fish and Game Habitat Conservation Branch, South Coast Region for the San Diego Creek Watershed SAMP/Watershed Streambed Alteration Agreement (WSAA) Process. The final decision to revoke selected NWPs was made by the SPD Commander in his record of decision signed July 19, 2010.

For additional information please see the supplemental decision document for Regional Condition 8.

3.2 Waters subjected to additional pre-construction notification requirements

To qualify for NWP 29 authorization, proponents would be required to notify the Regulatory Division prior to each use. This pre-construction notification requirement is necessary nationwide to ensure that adverse impacts on aquatic resources associated with NWP 29 are minimal, both individually and cumulatively. Because NWP 29 includes a mandatory pre-construction notification provision, this section does not apply.

4.0 Alternatives

4.1 No Regional Conditions

Regional conditions to be adopted by the Los Angeles District for the 2012 NWPs would impose specific requirements in design or exclude the use of NWP 29 in certain areas or aquatic resource types because of sensitivity or rarity. Without specific design requirements for road crossings in waters supporting threatened or endangered fish species, there could be more than minimal impacts to these endangered species, such as southern steelhead (*Oncorhynchus mykiss*). Some aquatic habitat types are rare and sensitive; it is estimated that more than 95 percent of vernal pool habitat has been lost in the southern California area. Additional losses would thus have more than minimal impacts on this habitat type both individually and cumulatively. With no regional conditions, including the exclusion of vernal pools from NWP authorization, NWP 29 would have more than minimal impacts on jurisdictional vernal pools in the Los Angeles District. Similarly, without regional conditions, NWP 29 could be used to authorize discharge of dredged or fill material into wetlands, mudflats, vegetated shallows, and riffle and pool complexes in the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in the Los Angeles District. Given their relative rarity and sensitivity, residential development activities could have more than minimal adverse effects to them on an individual or cumulative basis. Similarly, based on research conducted by Dr. Eric D. Stein (1995[3]), permanent fills in perennial and intermittent streambeds and projects resulting in more than 0.1 acre of loss to ephemeral streambeds could have more than minimal adverse impacts on the Murrieta Creek and Temecula Creek watersheds in Riverside County. Moreover, additional bank stabilization in San Luis Obispo Creek or Santa Rosa Creek in San Luis Obispo County, and further bank stabilization or grade control structures in Gaviota Creek, Mission Creek, or Carpinteria Creek in Santa Barbara County, could result in more than minimal adverse effects; and therefore, all NWP authorizations involving those types of activities would be excluded in these specific locations. Finally, use of NWP 29 in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas could have more than minimal impacts if the alternative permitting strategies identified in the SAMP were not adopted. Overall, with no regional conditions, NWP 29 could adversely affect sensitive aquatic resources in some areas in the Los Angeles District, unless the Corps and/or the resource agencies are able to individually review them to ascertain an appropriate level of analysis and mitigation.

4.2 Alternative Regional Limits or Pre-Construction Notification Thresholds

Discharges of dredged or fill material authorized under NWP 29 are limited to 0.5 acre of non-tidal waters of the U.S. and 300 linear feet of streambed, unless for intermittent or ephemeral

streambed, this 300 foot limit is waived in writing by the district engineer. Also, this NWP does not authorize any discharges in non-tidal wetlands adjacent to tidal waters, which are considered a sensitive aquatic resource. Pre-construction notification would be required in each case to use NWP 29, to ensure through case-specific review that those activities result in minimal individual and cumulative adverse effects to the aquatic environment and other public interest review factors, such as floodplain values. The new general conditions and the Los Angeles District's regional conditions impose further limitations on the use of NWP 29, including exclusions in certain watersheds and particularly sensitive aquatic habitat types. With these constraints, NWP 29 would result in minimal impacts to aquatic resources, both individually and cumulatively, in most of the Los Angeles District.

As an alternative regional condition, the Los Angeles District could exclude from NWP 29 authorization all proposed discharges in special aquatic sites, including wetlands.
In the Los Angeles District, the semi-arid climate limits special aquatic sites throughout the region. In dryland areas, lack of vegetation and poorly developed soils result in high peak discharges for large storm events. With a predominance of deep alluvial soils, dryland systems are dominated by overland flow, with groundwater recharge and throughflow only contributing a relatively small quantity to stream discharge. During the past fifty years, agriculture, development, and other activities have resulted in a loss of approximately 90 percent of wetlands and more than 95 of the vernal pools in southern California. Residential development has been a major contributor to these losses and could further degrade aquatic resources in the future. For this reason, NWP 29, which would address residential development activities, would include a blanket pre-construction notification requirement that would enable the Corps examine the specifics of each proposal and ensure that NWP 29 authorizations would result in minimal adverse effects on the aquatic ecosystem throughout the Los Angeles District on an individual and cumulative basis. With the regional conditions that focus on specific regions and resources, the Los Angeles District has provided enhanced protections to these sensitive resources that warrant such scrutiny. Expanding upon these provisions to include a regional condition that prohibited use of NWP 29 in all special aquatic sites could add substantially to the Los Angeles District's workload to subject all such projects, even those proposing very minimal impacts and/or impacts to relatively low-functioning special aquatic sites, to SIP review. The additional workload would not be likely to result in a commensurate level of protection to the aquatic environment. For this reason, such an alternative regional condition would not be practicable.
Some aquatic habitat types are particularly at risk from further degradation and warrant exclusion from the NWP program, as supported by resource agencies such as the USFWS and USEPA. For example, given their scarcity and sensitivity, further losses of vernal pools in the Los Angeles District and of any special aquatic sites in the desert areas of southern California and Arizona could result in more than minimal cumulative adverse impacts on an individual or cumulative basis. Thus, the Los Angeles District would eliminate the use of all NWPs, including NWP 29, in jurisdictional vernal pools throughout the District, and many of the NWPs, including NWP 29, which could otherwise authorize substantial permanent fills in special aquatic sites in Arizona and the desert regions of California. In addition, development-related activities have adversely affected aquatic resources in the Murrieta Creek and Temecula Creek watersheds in Riverside County (Stein, 1995), and therefore, the Los Angeles District is proposing to eliminate several NWPs, including NWP 29, from authorizing additional permanent impacts in perennial and intermittent watercourses and for individual projects that would permanently impact more

than 0.1 acre of ephemeral watercourses in Murrieta and Temecula Creek watersheds. Similarly, past bank stabilization and grade control activities have adversely affected San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County and Gaviota Creek, Mission Creek, and Carpinteria Creek in Santa Barbara Creek, which is the basis for the Los Angeles District eliminating NWP authorization of future projects (except restoration projects, which could be authorized by NWP 27) that would stabilize banks or add grade control structures in these specific creeks. With the inclusion of the above modifications to NWP 29, the Los Angeles District would ensure minimal impacts to aquatic resources, both individually and cumulatively, through additional review without substantially increasing our workload.

4.3 Alternative Regional Nationwide Permit Conditions

As proposed, NWP 29 would be excluded from use in special aquatic sites in Arizona and the desert areas of southern California. Therefore, NWP 29 and other NWPs could be used to authorize impacts in special aquatic sites outside of these areas as long as they are not disallowed by other exclusions imposed by the general conditions (e.g., critical resource waters) and other regional conditions.

An alternative regional condition would require the Los Angeles District to conduct agency coordination for all NWP 29 PCNs in accordance with the agency coordination procedures described for specific circumstances in General Condition 31 (notification) as has been suggested by agencies in the past. As discussed above, each NWP 29 would only impact a maximum of non-tidal 0.5 acre of waters of the U.S. (except non-tidal wetlands adjacent to tidal waters) and up to 300 linear feet of a streambed, unless in the case of intermittent or ephemeral streambeds, the district engineer waives in writing the 300 linear foot limit. The terms and conditions of the 2012 NWPs, in particular the requirements of General Condition 31 require agency coordination for NWP 29 for any action that proposes the loss of greater than 300 linear feet of permanent intermittent and ephemeral streams. Expanding this requirement to include all proposed uses of NWP 29, including those not involving a special aquatic site or not exhibiting relatively high physical and biological functions, would likely result in substantial delays and workload increases of the Los Angeles District in order conduct the coordination process without a commensurate increase in benefits to aquatic resources in the Los Angeles District. Also, NWP 29 would require notifying the Corps prior to each use, and if the Corps determines the proposed project's impacts would be more than minimal, the district engineer may take discretionary authority under 33 CFR 330.1(d) and require completing the more rigorous SIP process. As a result, the Los Angeles District has determined the above alternative notification requirements would not be practicable and would result in only minor additional benefits to aquatic resources.

With the proposed regional conditions, the Los Angeles District has identified the aquatic resources and watersheds that warrant additional scrutiny under NWP 29. As a result, the District's proposed modifications would result in a relatively minor increase in overall workload, but would provide potentially substantial benefits to the aquatic environment in the identified areas.

5.0 Endangered Species Act

5.1 General Considerations

NWP 29 authorizes the discharge of fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development. To avoid and minimize impacts to the aquatic environment, the terms and conditions of NWP 29 contain several restrictions including that the discharge not cause the loss of greater than 0.5 acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of streambed, unless for intermittent and ephemeral streambeds this 300 linear foot limit is waived in writing by the district engineer. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. For residential subdivisions, the aggregate total loss of waters of the United States authorized by this NWP cannot exceed 0.5 acre. This includes any loss of waters of the United States associated with development of individual subdivision lots. The permittee must submit a pre-construction notification to the district engineer prior to commencing activity.

The general and regional conditions, as discussed above, would provide further limitations on the use of NWP 29 in sensitive and scarce aquatic ecosystems. With these constraints, it is expected that NWP 29 would not result in more than minimal adverse impacts to threatened and endangered species, both individually and cumulatively, in the majority of the Los Angeles District. With no regional conditions for NWP 29, there could be more than minimal impacts in specific geographic areas and certain habitat types that exhibit relatively high physical and biological functions. These areas include Murrieta Creek and Temecula Creek watersheds in Riverside County; San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County and Gaviota Creek, Mission Creek, and Carpinteria Creek in Santa Barbara County; watercourses supporting federally listed fish species; jurisdictional vernal pools throughout the Los Angeles District; and wetlands, mudflats, vegetated shallows, and riffle and pool complexes in the State of Arizona and the Mojave and Sonoran (Colorado) desert regions of California in the Los Angeles District. To ensure adequate review and analysis, the use of NWP 29 is precluded or severely restricted for projects in these areas or impacting specific aquatic habitat types. In addition, the NWP 29 blanket requirement for submittal of a pre-construction notification ensures potential long-term minor impacts to endangered and threatened species in the Los Angeles District would be further reduced. Moreover, given the large number of listed species in Los Angeles District, continued coordination with USFWS and NMFS is required to ensure minimal impacts to endangered species. With the continuation of the existing informal coordination procedures, the development and implementation of standard local operating procedures for endangered species (SLOPES), and the inclusion of additional notification requirements, the use of NWP 29 would have minimal impacts, both individually and cumulatively, to threatened and endangered species in the Los Angeles District.

In southern California, the large number of listed species has made the public more aware of the need to contact the USFWS and NMFS for many proposed projects. In addition, NWP General Condition 18 requires the applicant to contact the Corps if their proposed project may affect a threatened or endangered species or critical habitat. The District has substantial information, including maps, previous studies, and survey data that document areas that support threatened and endangered species. The Los Angeles District is also very careful to inform all prospective applicants of the need to comply with the ESA. If the District has no available data for a proposed project, the applicant may be referred to the USFWS or NMFS for additional information. When the District receives an application within the range of a listed species and/or the project area otherwise supports suitable habitat, the USFWS or NMFS is contacted early in the review process. To facilitate compliance with the ESA, the District has coordinated with the USFWS to complete programmatic consultations for several threatened and endangered species in Ventura, Santa Barbara, and San Luis Obispo counties.

As proposed, the NWP general and regional conditions ensure that other federal statutory requirements are met. For example, in instances where a project may impact a federally listed species or its critical habitat, the applicant would be required to submit to the Corps appropriate biological investigations and supporting documentation for an "effects determination" with respect to the ESA. Per General Condition 18, if the Federal Action were determined to have a potential effect on a federally listed species, or its designated critical habitat, consultation would be required pursuant to Section 7 of the ESA. (It should be noted that the Los Angeles District would ensure all federal project activities authorized under the NWPs comply with the ESA and use of the NWPs shall be determined to have minimal impacts on threatened and endangered species in the Los Angeles District, pursuant to the ESA).

5.2 Local Operating Procedures for Endangered Species

The Los Angeles District has various procedures for ensuring compliance with the ESA. SLOPES formalize additional procedures between agencies to enable the agencies to ensure better compliance with the ESA. With the implementation of SLOPES, these procedures could be formally documented, facilitating the compliance of NWPs with the ESA. It is anticipated there will be many situations that will not be addressed by SLOPES and a case-by-case determination will be made regarding consultation with the USFWS or NMFS pursuant to Section 7 of the ESA. In January 2003, the Corps of Engineers, Los Angeles District, Regulatory Branch (now Regulatory Division) and the U.S. Fish and Wildlife Service, Ventura Office finalized SLOPES for informal and formal ESA consultations. In addition, some the activities authorized by the NWPs that may adversely affect Essential Fish Habitat have been addressed by the General Concurrence dated August 5, 2003 and a Programmatic Consultation that was completed by the Corps of Engineers, Los Angeles District, Regulatory Branch (now Regulatory Division) and NOAA's National Marine Fisheries Service. The District has conducted several preliminary meetings with USFWS and NMFS staff to determine the direction of further SLOPES discussions, and additional meetings will be conducted in the future.

As proposed, the NWP general and regional conditions ensure that other federal statutory requirements are met. For example, in instances where a project may impact a federally listed species or its critical habitat, the applicant would be required to submit to the Corps appropriate

biological investigations and supporting documentation for an "effects determination" with respect to the Endangered Species Act (ESA). Per General Condition 18, if the Federal Action were determined to have a potential effect on a federally listed species, or its designated critical habitat, consultation would be required pursuant to Section 7 of the ESA. (It should be noted that the Los Angeles District would ensure all federal project activities authorized under the NWPs comply with the ESA and use of the NWPs shall be determined to have minimal impacts on threatened and endangered species in the Los Angeles District, pursuant to the ESA).

6.0 National Historic Preservation Act

6.1 General Considerations

The Los Angeles District would ensure that activities authorized by NWP 14 would comply with the National Historic Preservation Act (NHPA). The District would review the latest version of the National Register of Historic Places (NRHP) to make an effect determination that activities verified under NWP 14 would have on Historic Properties. Once an effects determination has been made the District will coordinate with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), recognized Tribes, and, if necessary, the Advisory Council on Historic Preservation (ACHP) as appropriate. The District has considered the requirement of pre-construction notification for NWP activities in geographic areas of high site potential, or known locations of cultural resources including prehistoric sites, historic sites, tribal lands, traditional cultural properties, state landmarks or National Historic Landmarks. In areas where there is a high likelihood of cultural resources within the Corps' area of potential effect (APE), the district engineer may: (1) consult with SHPO, THPO, or Tribes during the NWP review process or (2) the district engineer may assert its discretionary authority to require an individual permit for the proposed activity and initiate consultation through the individual permit process. Option 2 would only be used if there is value added that compensates for the increase in workload due to processing more SIPs. If the consultation would be conducted under the NWP process without the district asserting discretionary authority to require an SIP, then the applicant would be notified that the activity could not be verified under the NWP until all Section 106 requirements have been satisfied.

6.2 Local Operating Procedures for National Historic Preservation Act

The district engineer would ensure that NWP 14 complies with section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulation 36 C.F.R. Part 800: Protection of Historic Properties (amended August 5, 2004), and Appendix C (33 U.S.C. 325): Procedures of Historic Properties. Under section 106, federal agencies are prohibited from approving any federal "undertaking" (e.g., the issuance of any license, permit, or approval) without taking into account the effects of the undertaking on the historic properties, and affording the ACHP a reasonable opportunity to comment on the undertaking. In order to comply with section 106, the Corps, if evaluating an undertaking, must go through the process outlined in the ACHP's regulations at 36 C.F.R. Part 800 and Appendix C. Pursuant to 36 C.F.R. § 800.4, 800.5, and 800.6, the Los Angeles District is required to consult with the SHPO, or tribal equivalent, THPO, if the undertaking would result in a "No Effect", "No Adverse Effect", or "Adverse Effect" to Historic Properties. The district engineer must (a) determine the permit

area/ APE; (b) identify historic properties within the permit area/APE; and (c) determine whether those properties are listed or eligible for listing in the NRHP. If the district engineer determines that NWP 14 would have no potential to cause effects to Historic Properties a memorandum for the record would be prepared and no further consultation with the SHPO/THPO or recognized tribes would need to occur.

7.0 Government-to-Government Consultation with Indian Tribes

7.1 Summary of the Consultation Process

Prior to the issuance of the Los Angeles District's public notice announcing the proposed rule for the 2012 NWPs and our proposed regional conditions, all federally recognized tribes within LAD were contacted via letter dated December 13, 2010 to provide advance notification of the Corps' intent to issue the 2012 NWPs and upcoming opportunity to engage in government-to-government consultation. Follow-up letters were sent to the same set of federally recognized tribes February 11, 2011 announcing the issuance of the proposed rule and formally requesting government-to-government consultation. An advance copy of the proposed rule was also included. One tribe provided a response, indicating they did not foresee a need to utilize the NWPs. No requests for government-to-government consultation were received.

7.2 Local Operating Procedures for Protecting Tribal Resources

The Los Angeles District will avoid or minimize adverse effects to tribal lands, historic properties, sacred sites, or trust resources. This may involve identifying categories of activities that require pre-construction notification and/or conducting consultation with Tribes for specific activities in a particular geographic area. If coordination with recognized tribes is required the District Engineer will obtain a list if recognized tribes from the Native American Heritage Commission. From that list provided the District Engineer will initiate a 30-day coordination period to obtain comments on the project. The District Engineer will review comments and address as appropriate.

8.0 Essential Fish Habitat

Pursuant to the Magnuson-Stevens Fishery Management and Conservation Act, Federal agencies are required to consult with the National Marine Fisheries Service (NMFS) for actions that may adversely affect essential fish habitat (EFH). The marine and estuarine waters within the Los Angeles District contain designated EFH, which are administered by four fishery management plans (FMP): the Pacific Groundfish FMP, the Highly Migratory Species FMP, the Pacific Coast Salmon FMP, and the Coastal Pelagic Species FMP. The Los Angeles District's Regional Condition 4b requires submission of a PCN for any NWP authorization in EFH. A similar PCN requirement has been in place since the issuance of the 2002 NWPs. The current proposed regional condition includes the additional requirement that applicants include an EFH assessment with the PCN. By requiring a PCN with an EFH assessment for all activities within designated EFH, the Los Angeles District ensures the appropriate level of consultation with NMFS is conducted and effects to EFH are adequately addressed prior to verification.

To facilitate the consultation process, the Los Angeles District has developed an EFH general concurrence with Southwest Region of the NMFS. The general concurrence establishes a coordination procedure between NMFS and the Los Angeles District and covers a variety of Corps-regulated activities with minimal and/or temporary adverse effects to EFH. In addition, the Los Angeles District has developed a programmatic consultation with the Southwest Region of the NMFS that covers a broader range of activities that do not fit within the scope of the general concurrence. In summary, the inclusion of Regional Condition 4b, in conjunction with Los Angeles District's well-established set of procedures for addressing the effects of regulated activities within EFH (including conducting coordination with the NMFS as appropriate) will ensure the effects to EFH from the implementation of the 2012 NWPs will be minimal.

9.0 Supplement to National Impact Analysis

9.1 Public interest review factors (33 CFR 320.4(a)(1))

In addition to the discussion in the national decision document for this NWP, the Los Angeles District has considered the local impacts expected to result from the activities authorized by this NWP, including the reasonably foreseeable cumulative effects of those activities.

(a) Conservation: On a per-project basis, NWP 29 could authorize discharges of dredged or fill material into a maximum of 0.5 acre of non-tidal waters of the U.S. (excludes non-tidal wetlands adjacent to tidal waters) and up to 300 linear feet of streambed, unless in the case of an intermittent or ephemeral streambed, this 300 linear foot limit is waived in writing by the district engineer. Pre-construction notification would be required in each case to use NWP 29, which would allow the Corps to ensure that adverse effects are minimal or to take discretionary authority and require the more rigorous SIP process. The general conditions (e.g., exclusion for areas within or affecting criteria resource waters) would provide further limitations on the use of NWP 29 in waters of the U.S. With the above constraints, NWP 29 would result in minimal impacts to conservation of aquatic resources, both individually and cumulatively, in the majority of the Los Angeles District.

In addition, regional conditions for NWP 29 would preclude discharges of dredged or fill material in jurisdictional vernal pools; wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; the Murrieta Creek and Temecula Creek watersheds for certain types of fill activities; San Luis Obispo Creek and Santa Rosa Creek in San Luis Obispo County and Gaviota Creek, Mission Creek, and Carpinteria Creek in Santa Barbara County for projects involving bank stabilization or grade control structures; and in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. In many cases, compensatory mitigation would be required, including the restoration, enhancement, establishment, or preservation of aquatic habitats that would offset losses of conservation values. With the requirement to notify the Corps in each case, the noted watershed and aquatic resource exclusions, and the expectation of compensatory mitigation in most cases, long-term minor impacts to conservation of aquatic resources in the Los Angeles District would be further reduced.

(b) Economics: Same as discussed in the national decision document.

(c) Aesthetics: Same as discussed in the national decision document.

(d) General environmental concerns: Activities authorized by this NWP would affect general environmental concerns, such as water, air, noise, and land pollution. The authorized work would also affect the physical, chemical, and biological characteristics of the environment. It is expected that the adverse effects of the activities authorized by this NWP on general environmental concerns would be minor. Adverse effects to the chemical composition of the aquatic environment would be controlled by General Condition 6, which states that the material used for construction must be free from toxic pollutants in toxic amounts. General Condition 23 requires mitigation to minimize adverse effects to the aquatic environment through avoidance and minimization at the project site. Compensatory mitigation may be required by district engineers to ensure that the net adverse effects on the aquatic environment are minimal. The semi-arid environment in the southern California/Arizona area limits the extent of aquatic resources. Habitat loss or modification in this area has also contributed to adverse impacts on numerous plant and animal species, many of which are associated with aquatic resources. Regional conditions relevant to NWP 29 address many of these situations and would preclude discharges of dredged or fill material in jurisdictional vernal pools; discharges in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; projects involving bank stabilization or grade control in specific creeks in San Luis Obispo and Santa Barbara Counties; permanent development-related discharges in perennial and intermittent watercourses and those exceeding 0.1 acre for any project in ephemeral watercourses in the Murrieta Creek and Temecula Creek watersheds; and the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. In addition, any NWP 29 qualifying project that would include a road crossing in a watercourse supporting federally listed fish species would have to employ a span or bottomless arch culvert-type crossing design that ensures passage and/or spawning is not hindered in any way. Compensatory mitigation would be required in most cases, which would result in restoration, enhancement, establishment, or preservation of aquatic habitats to offset aquatic losses. With the inclusion of the blanket notification requirement, the general and regional condition exclusions for NWP 29, and expectation of compensatory mitigation in most cases, adverse effects on general environmental concerns in the Los Angeles District would be further reduced through site-specific review.

(e) Wetlands: In the Los Angeles District, the semi-arid climate limits the extent and number of wetland resources. This scarcity of wetlands is especially evident in Arizona and in the desert regions of California. In these areas, annual precipitation is usually less than 10 inches, which often precludes the development of wetlands. As a result, special aquatic sites, such as wetlands, are relatively rare in the Los Angeles District and warrant more substantial protection. Projects authorized under this NWP typically require mitigation to compensate for both temporary and permanent impacts. The activities authorized under this NWP usually result in permanent impacts, and could result in a loss of wetland functions and values, or the loss of unique or rare wetland types within the region. To ensure minimal impacts to all aquatic resources, including wetlands, the terms and conditions of NWP 29 would require pre-construction notification for any project. If the Corps determines the adverse effects of a proposal would be more than minimal on the aquatic ecosystem individually or cumulatively, the project would be evaluated

under the more rigorous SIP process. In addition, there would be exclusions for discharges of dredged or fill material in jurisdictional vernal pools (a very specific type of wetland) anywhere in the Los Angeles District, in wetlands in Arizona and the desert regions of California. Based on a review of permit data during the period of fiscal year 2009 through 2011, of the approximately 60 actions authorized under NWP 29 none resulted in any permanent loss of wetlands. With the inclusion of the blanket pre-construction notification requirement, which would allow the Corps to ensure that adverse effects are minimal or to take discretionary authority and require the more rigorous SIP process, the general and regional condition exclusions for NWP 29, and the expectation of compensatory mitigation in most cases, NWP 29 would have long-term, minor impacts to wetland resources, both individually and cumulatively, in the Los Angeles District.

(f) Historic properties: Known and unknown historic properties and cultural resources occur in many areas of throughout the Los Angeles District. Given the scarcity of permanent water sources, the aquatic resources in the region attracted many of the historic and prehistoric settlers in the region. The evidence left behind by these settlers is typically associated with these aquatic resources that are found within the landscape. As such, this historic and cultural evidence, may be affected by projects proposed for authorization under NWP 29. Section 106 of the NHPA requires any federal action agency to determine the eligibility of any known or discovered cultural resources that may be affected by the agency's action, and coordinate with the SHPO/THPO for purposes of ascertaining the project affects on these properties. Because projects that may potentially be authorized under NWP 29 are brought to the attention of the Corps only when there is a specific need for a proposed project, and because the project's relationship to the cultural resource may not be known until appropriate surveys are conducted, the Los Angeles District is unable to state with any specificity which and to what extent any of these historic and/or cultural resources may be affected. The Los Angeles District can state with certainty that coordination with the SHPO/THPO and the implementation of all appropriate and necessary mitigation measures that all projects authorized under NWP 29 would result in only minor adverse impacts to historic properties.

(g) Fish and wildlife values: On a per-project basis, NWP 29 would authorize discharges of dredged or fill material associated with residential development into a maximum of 0.5 acre of non-tidal waters of the U.S. or up to 300 linear feet of streambed, unless for ephemeral or intermittent streambeds, the 300 linear foot limit is waived by the district engineer in writing. Because of the sensitivity of coastal habitats, NWP 29 could not be used to authorize regulated discharges into tidal waters or into non-tidal wetlands adjacent to tidal waters of the U.S. NWP 29 would require Corps pre-construction notification in each case, which would allow the Corps to ensure that adverse effects would be minimal or to take discretionary authority and require the more rigorous SIP process. In addition, the general conditions further limit the use of NWP 29 in waters of the U.S., such as within or adjacent to critical resource waters. Compensatory mitigation may be required by district engineers to ensure that the net adverse effects on the aquatic environment are minimal. The regional conditions would exclude NWP authorizations for discharges of dredged or fill material in jurisdictional vernal pools (a very specific type of wetland that supports specialized flora and fauna) anywhere in the Los Angeles District; discharges in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; permanent development-related discharges in perennial and

intermittent watercourses and those exceeding 0.1 acre for any project in ephemeral watercourses in the Murrieta Creek and Temecula Creek watersheds in Riverside County; activities that would involve bank stabilization or grade control structures in certain watersheds in San Luis Obispo and Santa Barbara Counties; and the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. In addition, any NWP 29 qualifying project that would include a road crossing in a waterbody supporting federally listed fish species would have to employ a crossing design that ensures passage and/or spawning is not hindered in any way. With the blanket pre-construction notification requirement, the exclusions intended to protect sensitive habitat types and watersheds, and the expectation of compensatory mitigation in most cases, NWP 29 would result in minimal impacts to fish and wildlife values, both individually and cumulatively, in the Los Angeles District.

(h) Flood hazards: With the dynamic storm season typical of southern California and parts of Arizona, relatively large floods are a normal part of the hydrologic regime. Due to a general lack of soil development and vegetation coverage in semi-arid areas, peak discharges for very high magnitude storm events are potentially larger for dry-land basins than similar-sized humid region basins. Construction of residential and other developments in the District have substantially impacted many watercourses throughout the District, and have confined the drainages to reinforced channels often devoid of the resource values they supported previously. Continued development in many watersheds has led to a situation in which previously constructed channels have insufficient capacity to convey the additional quantities of runoff generated by subsequent development in other areas of the watershed, frequently resulting in damage to older facilities. NWP 29 would substantially limit construction of residential development sites under general permit unless the project applicant designs the project to avoid and minimize impacts to the existing drainages and provides alternative drainage scenarios. With the blanket pre-construction notification requirement, which would allow the Corps to ensure that adverse effects are minimal or to take discretionary authority and require the more rigorous SIP process, and the various general and regional conditions, it is expected that adverse effects associated with NWP 29 would not be more than minimal on an individual and cumulative basis.

(i) Floodplain values: Considerations are similar to those discussed in the national document. General Condition 10, Fills Within 100-Year Floodplains, restricts the applicability of NWP 29 and other NWPs. It requires that the activity must comply with applicable FEMA-approved state or local floodplain management requirements. NWP 29 also would include a blanket pre-construction notification requirement, which would allow the Los Angeles District to determine whether floodplain values are being adequately protected, and if necessary, take discretionary authority and require the more rigorous SIP process. This differs significantly from past development practices in the Los Angeles District where modification of drainages through channelization or other hardscaping was the norm and resulted in substantially modified watercourses in most urban areas. These modifications severely degraded known floodplain values, such as those related to riparian and wetland functions in the Los Angeles District. Floodplain-relevant regional conditions applying to NWP 29 would exclude discharges in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; in perennial and intermittent watercourses and in ephemeral watercourses for development-related projects permanently filling more than 0.1 acre waters of the U.S. in the Murrieta Creek and Temecula Creek watersheds; in cases involving bank stabilization or grade

control in certain watersheds in Santa Barbara and San Luis Obispo Counties, thereby allowing the District to individually review projects prior to impacts occurring in these sensitive watersheds and aquatic resources. In addition, any NWP 29 qualifying project that would include a road crossing in a watercourse supporting federally listed fish species would have to employ a crossing design that ensures passage and/or spawning is not hindered in any way. Such crossing designs would be expected to protect more of the floodplain in most cases. Moreover, it is expected that compensatory mitigation would be required for most NWP 29 authorizations. Considering all these factors, direct, permanent impacts to floodplain values would be expected to be minimal with NWP 29 on an individual and cumulative basis.

(j) Land use: Same as discussed in the national document.

(k) Navigation: Same as discussed in the national document.

(l) Shore erosion and accretion: Same as discussed in the national document.

(m) Recreation: Same as discussed in the national document.

(n) Water supply and conservation: Same as discussed in the national document.

(o) Water quality: In the heavily populated or otherwise utilized areas of southern California and Arizona, existing water quality in most watercourses is impaired by runoff from upland agricultural, residential, commercial, institutional, and industrial sources. On a per-project basis, NWP 29 would authorize discharges of dredged or fill material associated with residential development into a maximum of 0.5 acre of non-tidal waters of the U.S. (excluding non-tidal wetlands adjacent to tidal waters) and 300 linear feet of streambed, unless for intermittent or ephemeral streambeds, the district engineer waives in writing the 300 linear foot limit. All potential permittees seeking NWP 29 would be required to notify the Corps prior to commencing the activity. The Corps has discretion to determine whether a particular proposal needs to be evaluated under the more rigorous SIP process. The general conditions further limit the use of NWPs in waters of the U.S. In addition to requiring avoidance and minimization of impacts to waters, they require compliance with applicable FEMA-approved state or local floodplain management requirements, use of appropriate soil erosion and sediment controls, use of only suitable material, removal of temporary fills and revegetation as appropriate, avoidance of designated critical resource waters, and, as appropriate, compensatory mitigation to ensure effects on the aquatic ecosystem are minimal. Regional conditions affecting implementation of NWP 29 would preclude discharges of dredged or fill material in jurisdictional vernal pools; in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; in certain creeks in Santa Barbara and San Luis Obispo Counties for activities including bank stabilization or grade control; in perennial and intermittent watercourses or in ephemeral watercourses in Murrieta Creek and Temecula Creek in Riverside County if a project would permanently fill more than 0.1 acre of the ephemeral waters of the U.S.; and the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. In addition to the restrictions on the use of this NWP imposed by the permit criteria such as pre-construction notification, the NWP general conditions, and the District's regional conditions, applicants requesting authorization of their projects under NWP 29 must acquire water quality certification

pursuant to Section 401 of the Clean Water Act from the applicable Regional Water Quality Control Board on California non-tribal lands, the Arizona Department of Environmental Quality on Arizona non-tribal lands, from the U.S. Environmental Protection Agency for most tribal lands in California and Arizona, or from tribes with 401 authority for projects on their tribal property, to ensure the project meets water quality standards. With the required pre-construction notification and the above constraints intended to protect sensitive aquatic habitats and watersheds, NWP 29 is expected to result in minimal impacts to water quality, both individually and cumulatively, in the Los Angeles District.

(p) Energy needs: Same as discussed in the national document.

(q) Safety: Same as discussed in the national document.

(r) Food and fiber production: Same as discussed in the national document.

(s) Mineral needs: Same as discussed in the national document.

(t) Considerations of property ownership: Same as discussed in the national document.

9.2 National Environmental Policy Act Cumulative Effects Analysis (40 CFR 1508.7)

Please see the attached supplemental analysis (Section I), and the 404(b)(1) guidelines cumulative effects analysis (Section 9.4), below.

9.3 Section 404(b)(1) Guidelines Impact Analysis (Subparts C-F)

(a) Substrate: With NWP 29, there could be long-term direct and short-term indirect adverse impacts to channel substrate in the immediate vicinity of the residential development site. On a per-project basis, NWP 29 would authorize discharges of dredged or fill material into a maximum of 0.5 acre of non-tidal waters of the U.S. and 300 linear feet of streambed, unless for intermittent or ephemeral streambeds, the 300 linear foot limit is waived in writing by the district engineer. Pre-construction notification would be required to use NWP 29 in each case, which would allow the Corps to ensure that adverse effects are minimal or to take discretionary authority and require the more rigorous IP process. Furthermore, the general conditions have additional limitations on the use of NWP 29 in waters of the U.S., such as exclusion in areas within or affecting critical resource waters. With the above constraints, NWP 29 would result in minimal adverse impacts to substrate, both individually and cumulatively, in the majority of the Los Angeles District.

With no regional conditions for NWP 29, there could be more than minimal impacts in specific geographic areas and certain aquatic habitat types in the Los Angeles District that exhibit relatively high physical and biological functions. The regional conditions with respect to NWP 29 would preclude discharges of dredged or fill material in jurisdictional vernal pools; in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; in certain creeks in Santa Barbara and San Luis Obispo Counties for projects involving bank stabilization or grade control (other than habitat restoration projects); in

Murrieta Creek and Temecula Creek watershed streams for certain types of fill activities; and in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. In addition, any NWP 29 qualifying project that would include a road crossing in a watercourse supporting federally listed fish species would have to employ a crossing design that ensures passage and/or spawning is not hindered in any way. Such crossing designs would be expected in many cases to protect channel substrate, as described in Regional Condition 1, which is important to steelhead passage and spawning. With the blanket pre-construction notification requirement for NWP 29 and exclusions for sensitive aquatic habitat types and watersheds, the above long-term minor impacts to channel substrate in the Los Angeles District would be further reduced, resulting in long-term minor impacts to channel substrate, both individually and cumulatively, in the Los Angeles District.

(b) Suspended particulates/turbidity: In heavily populated areas of southern California and Arizona, existing turbidity levels in most rivers have been increased by runoff from upland agricultural, residential, commercial, institutional, and industrial sources. Short-term construction activities may increase turbidity levels in waters of the U.S., but many projects must control flow and sediment runoff pursuant to their Section 401 water quality certification as well as applicable Section 402 NPDES requirements (e.g., compliance with California's General Permit for Discharges of Storm Water Associated with Construction Activity). These activities would generally result in only short-term, minor changes in turbidity levels, and in some of the larger watercourses, their contributions to the sediment load are not measurable relative to ambient levels in the stream or river. On a per-project basis, NWP 29 would authorize discharges of dredged or fill material into a maximum of 0.5 acre of non-tidal waters of the U.S. (excluding non-tidal wetlands adjacent to tidal waters) and 300 linear feet of streambed, unless for intermittent or ephemeral streambeds, the district engineer waives in writing the 300 linear foot limit. Use of NWP 29 would require pre-construction notification in each case, which would allow the Corps to ensure that adverse effects are minimal or to take discretionary authority and require the more rigorous SIP process. Furthermore, the general conditions have additional limitations on the use of NWP 29 in waters of the U.S., such as prohibition within or in areas directly affecting designated critical resource waters. With the blanket pre-construction notification and the general condition and permit term restrictions, NWP 29 would result in minimal adverse impacts to turbidity levels, both individually and cumulatively, in the majority of the Los Angeles District. Regional conditions applicable to NWP 29 would further limit potential adverse impacts in specific geographic areas and certain habitat types that exhibit relatively high physical and biological functions. The regional conditions with respect to NWP 29 would preclude discharges of dredged or fill material in jurisdictional vernal pools; in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; in certain creeks in San Luis Obispo and Santa Barbara Counties involving bank stabilization or grade control; in Murrieta Creek and Temecula Creek watershed streams for certain types of fill activities; and in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. With the blanket pre-construction requirements for Corps notification and the exclusions using NWP 29 to impact certain sensitive watersheds and aquatic habitat types, the above long-term minor impacts to suspended sediment levels in the Los Angeles District would be further reduced. In addition, the required 401 water quality certification and any applicable Section 402 NPDES requirements would also address short-term and long-term minimal impacts to turbidity and suspended sediment loads in the rivers and

streams in the Los Angeles District. As a result of these requirements and restrictions, NWP 29 would have long-term minor impacts to turbidity levels in waters of the U.S. within the Los Angeles District.

(c) Water: Impacts are expected to be the same as discussed in the national document (long-term minor impacts).

(d) Current patterns and water circulation: Activities authorized by this NWP may adversely affect the movement of water in the aquatic environment. All activities authorized by this NWP require pre-construction notification to the district engineer, which will help ensure that adverse effects to current patterns and water circulation are minimal. Road crossings within a residential development may alter water flow patterns and circulation. General Condition 9 requires the authorized activity to be designed to withstand expected high flows and to maintain the course, condition, capacity, and location of open waters to the maximum extent practicable. General Condition 10 requires activities to comply with applicable FEMA-approved state or local floodplain management requirements, which will reduce adverse effects to surface water flows.

Because NWP 29 is limited to 0.5 acres of permanent impacts to non-tidal waters of the U.S. (excluding non-tidal wetlands adjacent to tidal waters) and 300 feet of streambed, unless for intermittent and ephemeral streambeds the district engineer waives the 300 foot limit in writing, and with the additional restrictions imposed by the general conditions and regional conditions as discussed previously, use of this NWP would be rather limited in the Los Angeles District. Any changes to current pattern and water circulation would be localized at the project site, and the effects would likely be attenuated within a very short distance downstream of the project site. During review of the pre-construction, the Corps would have discretion to require the more rigorous IP process if the adverse effects on current patters or water circulation are expected to be more than minimal. Therefore, NWP 29 would have relatively long-term, minor adverse impacts to current patterns and water circulation in waters of the U.S. within the Los Angeles District.

(e) Normal water level fluctuations: Impacts are expected to be the same as discussed in the national document (long-term minor impacts).

(f) Salinity gradients: The activities authorized by this NWP are unlikely to adversely affect salinity gradients, because the NWP is restricted to discharges of dredged or fill material into non-tidal waters, excluding non-tidal wetlands adjacent to tidal waters.

(g) Threatened and endangered species: On a per-project basis, NWP 29 would authorize discharges of dredged or fill material into a maximum of 0.5 acre of non-tidal waters of the U.S. (excluding non-tidal wetlands adjacent to tidal waters) and 300 linear feet of streambed, unless for intermittent and ephemeral streambeds, this 300 linear foot limit is waived in writing by the district engineer. Corps pre-construction notification would be required for all uses of NWP 29, which would allow the Corps to ensure adverse effects are no more than minimal or to take discretionary authority and require the more rigorous SIP process. Furthermore, the general conditions have additional requirements and limitations on the use of NWP 29 in waters of the

U.S., such as prohibition within or in areas directly affecting designated critical resource areas. With the above requirements and constraints, NWP 29 by itself would be expected to result in no more than minimal adverse impacts to threatened and endangered species, both individually and cumulatively, in the majority of the Los Angeles District.

With no regional conditions for NWP 29, there could be more than minimal impacts in specific geographic areas and certain habitat types that exhibit relatively high physical and biological functions. The regional conditions with respect to NWP 29 would preclude discharges of dredged or fill material in jurisdictional vernal pools in Los Angeles District; in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; in certain creeks in San Luis Obispo and Santa Barbara Counties for projects involving bank stabilization or grade control; in Murrieta Creek and Temecula Creek watershed streams for certain types of fill activities; and in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. With the blanket pre-construction notification requirements for NWP 29 and requirements and exclusions for specific sensitive watersheds and aquatic habitat types, the above long-term minor impacts to endangered and threatened species in the Los Angeles District would be further reduced. In addition, given the large number of listed species in Los Angeles District, continued coordination with USFWS and NMFS is required to ensure minimal impacts to endangered species. During the period of fiscal year 2009 through 2011, the Los Angeles District conducted six formal consultations and five informal consultations with the USFWS or NMFS in association with NWP 29. With the continuation of the existing informal coordination procedures, the development and implementation of Standard Local Operating Procedures for Endangered Species (SLOPES), and the blanket pre-construction notification requirements, the use of NWP 29 would have minimal impacts, both individually and cumulatively, on threatened and endangered species in the Los Angeles District.

(h) Fish, crustaceans, molluscs, and other aquatic organisms in the food web: Same as discussed in the national document (long-term minor impacts).

(i) Other wildlife: In the semi-arid southern California climate, rivers and streams and their associated riparian habitat represent an important resource for wildlife. On a per-project basis, NWP 29 would authorize discharges of dredged or fill material into a maximum of 0.5 acre of non-tidal waters of the U.S. (excluding non-tidal wetlands adjacent to tidal waters) and 300 linear feet of streambed, unless for intermittent and ephemeral streambeds, the 300 linear foot limit is waived in writing by the district engineer. NWP 29 would require pre-construction notification for every use, which would allow the Corps to ensure that adverse effects would be no more than minimal or to take discretionary authority to require the more rigorous SIP process. In addition, the new general conditions impose additional requirements and limitations on the use of NWP 29 in waters of the U.S., such as prohibition within areas directly affecting designated critical resource waters. They also allow Regulatory Division to require mitigation to ensure adverse effects on the aquatic ecosystem, which includes wildlife, are minimal individually and cumulatively. With the blanket pre-construction notification requirements and the general condition exclusions and requirements, NWP 29 would result in no more than minimal adverse impacts to wildlife, both individually and cumulatively, in the majority of the Los Angeles District.

With no regional conditions for NWP 29, there could be more than minimal impacts in specific geographic areas and certain aquatic habitat types that exhibit relatively high physical and biological functions. The regional conditions with respect to NWP 29 preclude discharges of dredged or fill material in jurisdictional vernal pools; in wetlands, mudflats, vegetated shallows, and riffle and pool complexes in Arizona and the desert regions of California; in specific creeks in San Luis Obispo and Santa Barbara Counties for projects involving bank stabilization or grade control; in the Murrieta Creek and Temecula Creek watershed streams for certain types of fill activities; and in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. With the blanket pre-construction notification requirements for NWP 29 and requirements and exclusions for specific sensitive watersheds and other aquatic habitats, the above long-term minor impacts to wildlife in the Los Angeles District would be further reduced.

(j) Special aquatic sites: The potential impacts to specific special aquatic sites are discussed below:

(1) Sanctuaries and refuges: Same as discussed in the national document (long-term minor impacts).

(2) Wetlands: The activities authorized by NWP 29 would have minimal adverse effects on wetlands. The Corps would review pre-construction notifications for all activities proposed for authorization pursuant to NWP 29 to ensure that the adverse effects on the aquatic environment are minimal individually and cumulatively. Depending on the quality and quantity of the aquatic resource, the Corps has the discretion to determine that a given project would result in more than minimal adverse effects on the aquatic ecosystem and require the more rigorous SIP process. The Corps also has the authority to require mitigation for impacts, such as restoration, establishment, enhancement, or preservation of aquatic habitat, to ensure impacts are minimal individually and cumulatively. As discussed in Section 9, it is expected that compensatory mitigation would be required in most NWP 29 authorizations.

In the Los Angeles District, the semi-arid climate limits the extent and number of wetland resources. This scarcity of wetlands is especially evident in Arizona and in the desert regions of California. In these areas, annual precipitation is usually below 10 inches, which precludes the development of wetlands in the majority of these desert regions. Furthermore, approximately 90 percent of wetlands in California have been affected by historic conversion to agricultural uses, grading, and filling activities. As a result, wetland areas are rare in the Los Angeles District and may warrant more rigorous protection. For this reason, in the State of Arizona and the Mojave and Sonoran (Colorado) desert region of southern California, NWP 29 would be unavailable for authorization of discharges into any wetlands. The regional conditions with respect to NWP 29 would also preclude discharges of dredged or fill material into jurisdictional vernal pools, a unique type of wetland. Based on a review of permit data between fiscal year 2009 through 2011 the Los Angeles District authorized approximately 60 actions under NWP 29, which resulted in a total permanent loss of 0.45 acre of wetlands over 3 years. A total of 9 acres of wetland and non-wetland compensatory mitigation were required to offset all impacts authorized under NWP 29 (both wetland and non-wetland).

In light of these historic trends, and with the blanket pre-construction notification requirements, the general and regional requirements and exclusions for NWP 29 in special aquatic sites and sensitive watersheds and other aquatic habitats, and the authority to require mitigation for impacts, long-term adverse effects to wetlands would be no more than minimal, individually and cumulatively, in the Los Angeles District.

(3) Mud flats: In the Los Angeles District, historic coastal development activities have greatly reduced the extent and number of mud flat resources. Approximately 90 percent of wetlands, including coastal wetlands and mud flats, in California have been affected by historic conversion to agricultural uses, grading, and filling activities. However, the activities authorized by NWP 29 would have no more than minimal adverse effects on these mud flats, because the NWP does not authorize activities in tidal waters. Additional mud flat areas associated with lake and pond fringes, and river deltas, have also been affected by a variety of activities such as dredging to maintain deeper water for aesthetic purposes, to allow boating access, and to increase circulation. As a result, mud flats are especially rare in the Los Angeles District and warrant more rigorous protection. To ensure minimal impacts to mud flats, the Los Angeles District would require pre-construction notification for any activity discharging dredged or fill material in any mudflats. In addition, NWP 29 would require pre-construction notification for every proposed use, so the Corps could ensure adverse effects would not be more than minimal, which could involve requiring compensatory mitigation, or take discretionary authority and require the more rigorous SIP process. The blanket pre-construction notification requirements and the requirements and exclusions imposed by the general conditions and regional conditions would be expected to ensure that activities authorized by this NWP in the Los Angeles District result in no more than minimal adverse impact to mud flats.

(4) Vegetated shallows: The activities authorized by NWP 29 would have minimal or no adverse effects on vegetated shallows in tidal waters, because the NWP does not authorize activities in tidal waters. Activities in non-tidal vegetated shallows may be authorized by this NWP, but the district engineer would review all proposed NWP 29 activities to determine if those activities would result in minimal adverse effects on the aquatic environment. The Corps could require compensatory mitigation for unavoidable impacts. If the non-tidal vegetated shallows are high value and the proposed work would result in more than minimal adverse effects on the aquatic environment, the district engineer would exercise discretionary authority to require the more rigorous IP process.

(5) Coral reefs: This is not applicable within Los Angeles District or to NWP 29, which is limited to non-tidal waters (excluding non-tidal wetlands adjacent to tidal waters).

(6) Riffle and pool complexes: In the semi-arid southern California and Arizona areas, limited water resources and the need for flood control have led to the construction of numerous dams in the mountains of southern California and Arizona, and on the Colorado River. With the construction of these dams, many riffle-and-pool complexes have been eliminated by the reservoirs. Furthermore, construction of a dam also modifies the hydrologic regime of the river, which can also degrade downstream riffle-and-pool complexes by sediment management practices by the dam keepers, scouring events, loss

of appropriate bedload material to maintain the composition, structure and location of the complexes, and other actions. As a result, riffle-and-pool complexes in the Los Angeles District are essentially confined to montane and foothill regions. They warrant more rigorous protection due to their relatively high production of invertebrate fauna and other contributions to riparian aquatic resources such as aeration of the water, provision of substrate for decomposers, and other factors.

To ensure minimal impacts to riffle-and-pool complexes, the Los Angeles District would require pre-construction notification for any activity discharging dredged or fill material in any special aquatic site, including riffle-and-pool complexes. In addition, NWP 29 would require pre-construction notification for each proposed use, so the Corps can evaluate whether that use would result in more than minimal adverse effects to the aquatic ecosystem on an individual and cumulative basis, which would require the more rigorous SIP process. The NWP general conditions would impose additional requirements and restrictions, such as prohibition within or in areas affecting designated critical resource waters, which would be expected to include some of the District's riffle and pool complexes. The Corps also has the authority to require mitigation for aquatic resource impacts to ensure adverse effects are minimal individually and cumulatively. The regional conditions would exclude from NWP authorization discharges of dredged or fill material in riffle and pool complexes in Arizona and the desert regions of California. In addition, other regional conditions would restrict the use of NWP 29 in specific geographic areas that may contain riffle and pool complexes, including specific creeks in San Luis Obispo and Santa Barbara Counties for projects involving bank stabilization or grade control (except for habitat restoration projects), in Murrieta Creek and Temecula Creek watershed streams for certain types of fill activities, and in the San Diego Creek and San Juan Creek/Western San Mateo Creek SAMP areas. In addition, any NWP 29 qualifying project that would include a road crossing in a watercourse supporting federally listed fish species would have to employ a crossing design that ensures passage and/or spawning is not hindered in any way. Such crossing designs, as described in Regional Condition 1, would be expected in some instances to protect riffle and pool complexes. With the blanket pre-construction notification requirements, which would afford the Corps the opportunity to evaluate each project and determine whether to take discretionary authority and require the more rigorous SIP process, and the requirements and restrictions of the general and regional conditions, NWP 29 would have minimal impacts to riffle-and-pool complexes in the Los Angeles District on an individual and cumulative basis.

(k) Municipal and private water supplies: Effects are expected to be essentially the same as those discussed in the national document. New residential development projects require access to a dependable water supply, which is a critical issue in the arid southwest, including the Los Angeles District. Many municipalities and states require allocation of available water supplies through designated agencies. These agencies determine access to the available water by the new (and existing) users, with the intention that the provided water is of suitable quantity and quality. It is anticipated that these agencies would ensure that residential projects, whether or not they impact waters of the U.S., have sufficient water supplies.

(l) Recreational and commercial fisheries: Effects are expected to be similar to those discussed in the national document. Prior to widespread urbanization or conversion to agriculture, piscine communities in southern California and Arizona were well developed and much more diverse than they are currently. With modifications to riverine and lacustrine habitats, as well as the relatively common practice of introducing non-native fish species to new watersheds or stillwater habitats, endemic species were stressed by the new conditions or out-competed by the introduced species, or in certain circumstances, hybridized with the new species. As a result, few fisheries are comprised of healthy native fish populations. Inland in the arid southwest, recreational fisheries are generally restricted to various coldwater fisheries in montane regions and warm water fisheries in reservoirs and lowland and foothill rivers and streams. NWP 29 is not expected to further adversely affect these recreational fisheries because they are representative of modified conditions or because these recreational fisheries are usually located in areas away from impacts from new residential development projects.

(m) Water-related recreation: Effects are expected to be the same as those discussed in the national document (long-term minor impacts).

(n) Aesthetics: Effects are expected to be the same as those discussed in the national document (long-term minor impacts).

(o) Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar areas: Effects are expected to be the same as those discussed in the national document (long-term minor impacts).

9.4 Section 404(b)(1) Guidelines Cumulative Effects Analysis (40 CFR 230.7(b)(3))

The cumulative effects of this NWP on the aquatic environment are dependent upon the number of times the NWP is used and the quantity and quality of waters of the United States lost due to the activities authorized by this NWP. Impacts to aquatic resources authorized by the Los Angeles District's permit actions are tracked using the ORM (OMBIL Regulatory Module) database. This includes both temporary and permanent impacts, as well as any compensatory mitigation required. Impact and mitigation data was collected for the period of Fiscal Year 2009 through 2011 to provide a reasonable basis to examine the cumulative effects of each NWP as well as the NWP Program as a whole within the Los Angeles District. Based on an analysis of the types of activities authorized by the Los Angeles District during this period, the Los Angeles District estimates that this NWP will be used approximately 21 times per year, resulting the loss of approximately 2 acres of waters of the United States. Impacts to wetlands and other special aquatic sites are expected to be a very small fraction, if any, of this amount, given that no losses of wetlands or other special aquatic site were authorized under NWP 29 during this same period. To ensure that these activities result in minimal adverse effects on the aquatic environment, individually and cumulatively, the Los Angeles District estimates that approximately 6 acres of compensatory mitigation, plus additional purchase of mitigation bank or in-lieu fee credits, will be required to offset the authorized losses of waters of the United States and ensure that the NWP authorizes only activities with minimal individual and cumulative adverse effects on the aquatic environment.

Use of NWP 29 under the 2007 NWP program, along with the associated impacts to waters of the U.S., was substantially less than what was anticipated in Los Angeles District's decision document for the 2007 version of NWP 29. This is likely the result of the prolonged economic downturn and substantial drop in the housing market which began in 2007. The use of NWP 29 during it 5-year term from 2012 through 2017 will be in large part dependent on the recovery of the housing market within the Los Angeles District. Housing in many areas of the Los Angeles District continues to experience oversupply, which is likely to curtail future residential development relative to the years preceding the economic downturn, and therefore use of NWP 29. Therefore, the Los Angeles District believes the projected use of NWP based on the 2009-2011 ORM data is a reasonable basis to project future use of, and impacts associated with, NWP 29 going forward.

In addition, based on the same review of permit data indicate that the majority of impacts (57 out of 69 recorded impacts or 82%) authorized under NWP 29 were for temporary impacts or permanent impacts of than 0.2 acre or less.

10.0 List of Final Corps Regional Conditions for NWP 29

10.1 Regional condition 1

For all activities in waters of the U.S. that are suitable habitat for federally-listed fish species, the permittee shall design all road crossings to ensure that the passage and/or spawning of fish is not hindered. In these areas, the permittee shall employ bridge designs that span the stream or river, including pier- or pile-supported spans, or designs that use a bottomless arch culvert with a natural stream bed, unless determined to be impracticable by the Corps.

10.2 Regional condition 2

Nationwide Permits (NWP) 3, 7, 12-15, 17-19, 21, 23, 25, 29, 35, 36, or 39-46, 48-52 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 as defined at 40 CFR Part 230.40-45. The definition of "loss" for this regional condition is the same as the definition of "loss of waters of the United States" used for the Nationwide Permit Program. Furthermore, 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).

10.3 Regional condition 3

When a pre-construction notification (PCN) is required, the appropriate U.S. Army Corps of Engineers (Corps) District shall be notified in accordance with General Condition 31 using either the South Pacific Division PCN Checklist or a signed application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional

Conditions. The PCN Checklist and application form are available at: http://www.spl.usace.army.mil/regulatory. In addition, the PCN shall include:

a. A written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States;

b. Drawings, including plan and cross-section views, 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 project site. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and area (in acres) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the mean high water mark and high tide line, should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation. All drawings for projects located within the boundaries of the Los Angeles District shall comply with the most current version of the *Map and Drawing Standards for the Los Angeles District Regulatory Division* (available on the Los Angeles District Regulatory Division website at: www.spl.usace.army.mil/regulatory/); and

c. Numbered and dated pre-project color photographs showing all waters proposed to be impacted on the project site. The compass angle and position of each photograph shall be documented on the plan-view drawing required in subpart b of this regional condition.

10.4 Regional condition 5

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 31 and Regional Condition 3.

10.5 Regional condition 6

Individual Permits shall be required in Murrieta Creek and Temecula Creek watersheds in Riverside County for new permanent fills in perennial and intermittent watercourses otherwise authorized under NWPs 29, 39, 42 and 43, and in ephemeral watercourses for these NWPs for projects that impact greater than 0.1 acre of waters of the United States. In addition, when NWP 14 is used in conjunction with residential, commercial, or industrial developments the 0.1 acre limit would also apply.

10.6 Regional condition 7

Individual Permits (Standard Individual Permit or 404 Letter of Permission) 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.

10.7 Regional condition 8

In conjunction with the Los Angeles District's Special Area Management Plans (SAMPs) for the San Diego Creek Watershed and San Juan Creek/Western San Mateo Creek Watersheds in Orange County, California, the Corps' Division Engineer, through his discretionary authority has revoked the use of the following 24 selected NWPs within these SAMP watersheds: 03, 07, 12, 13, 14, 16, 17, 18, 19, 21, 25, 27, 29, 31, 33, 39, 40, 41, 42, 43, 44, 46, 49 and 50. Consequently, these NWPs are no longer available in those watersheds to authorize impacts to waters of the United States from discharges of dredged or fill material under the Corps' Clean Water Act section 404 authority.

10.8 Regional condition 9

Any requests to waive the 300 linear foot limitation for intermittent and ephemeral streams for NWPs 29, 39, 40 and 42, 43, 44, 51 and 52 or to waive the 500 linear foot limitation along the bank for NWP 13, must include the following:

a. A narrative description of the stream. This should include known information on: volume and duration of flow; the approximate length, width, and depth of the waterbody and characters 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 associated vegetation community (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information.

b. An analysis of the proposed impacts to the waterbody in accordance with General Condition 30 and Regional Condition 3;

c. Measures taken to avoid and minimize losses, including other methods of constructing the proposed project; and

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

10.9 Regional condition 10

Any compensatory mitigation required by special conditions of the NWP verification shall be completed before or concurrent with commencement of construction of the authorized activity, except when specifically determined to be impracticable by the Corps. When mitigation involves use of a mitigation bank or in-lieu fee program, proof of payment shall be submitted to the appropriate Corps district prior to commencement of construction of the authorized activity.

11.0 Water Quality Certification and Coastal Zone Management Act consistency determinations

Pursuant to Section 401 of the Clean Water Act (CWA), tribal or state Water Quality Certification, or waiver thereof, is required for activities authorized by NWPs that may result in a discharge of fill material into waters the U.S. In addition, any state with a federally-approved Coastal Zone Management (CZM) plan must concur with the Corps determination that activities authorized by NWPs that are either within the state's coastal zone, or will affect any land or water uses, or natural resources within the state's coastal zone, are consistent with the CZM plan. In accordance with Corps regulations at 33 CFR 330.5 (c) and (d), any state 401/CZM conditions for a particular NWP become regional conditions for that NWP. The Corps recognizes that in some tribes or states there will be a need to add regional conditions, or for individual tribal or state review for some activities to ensure compliance with water quality standards or consistency with CZM plans.

The Los Angeles District announced the proposal to reissue the Nationwide Permits and our proposed regional conditions in a Special Public Notice dated February 25, 2011. The Los Angeles District also send letters dated March 9, 2011 to the seven federally recognized tribes within the Los Angeles District (Big Pine Tribe, Bishop Paiute Tribe, Hopi Tribe, Hualapai Tribe, Navajo Nation, White Mountain Apache Tribe, and Twenty-nine Palms Band of Mission Indians) and the Arizona Department of Environmental Quality announcing the proposed rule and our proposed regional conditions, and requesting the State of Arizona and each tribe review the information for purposes of providing water quality certification pursuant to section 401 of the Clean Water Act. Similarly, acting on behalf of the three Corps Districts in California the Sacramento District provided the same letter on February 23, 2011 to the California State Water Resources Control Board (SWRCB) and EPA requesting 401 certification in the State of California and tribal lands within EPA Region 9, respectively (excluding those tribes with delegated 401 authority). The San Francisco District provided a letter to the California Coastal Commission (CCC) on behalf of both coastal districts in California on March 3, 2011, requesting Coastal Zone Management Act (CZMA) consistency certification. Additional discussions were held among the three Corps Districts in California and the SWRCB in an effort to strategize options for certifying a broader range of NWPs or NWP-eligible activities than under the 2007 NWPs.

Upon publication of the final rule in the February 21, 2012, issue of the Federal Register (77 FR 10184), the Los Angeles District again provided letters to each of the seven tribes with 401 authority, and the State of Arizona requesting final 401 certification of the 2012 NWPs within their respective geographic areas of responsibility. Copies of the final regional conditions for the Los Angeles District were also provided. Similarly, the Los Angeles District provided a letter to the CCC on behalf of both coastal districts in California requesting final CZMA consistency certification of the 2012 NWPs and the respective regional conditions (copies of the letters are provided in Section IV). Each tribe and the State of Arizona have 60 days to issue, waive or deny certification for any or all of the 2012 NWPs. The CCC has 90 days to make their final determination. Due to the fact that the final rule was published on February 21, 2012, there is not sufficient time to allow the full 60- or 90-day review period before the 2012 NWPs are scheduled to go into effect on March 19, 2012. Therefore, the final outcome of 401 and CZMA

certification within in the Los Angeles District is uncertain. Individual certifications will be required for any action authorized under the 2012 NWPs where applicable (i.e. projects within or affecting the Coastal Zone and/or projects that may affect water quality) until final determinations are provided by the respective state/tribal authorities.

The Los Angeles District believes, in general, that these NWPs and our regional conditions comply with State Water Quality Certification standards and are consistent with the Coastal Zone Management Plans.

12.0 Measures to Ensure Minimal Adverse Environmental Effects

The terms and conditions of NWP 29 include a 0.5-acre and 300-linear-foot limit on losses of non-tidal waters associated with NWP 29. The 300-linear-foot limit can be waived for intermittent and ephemeral streams with a project-specific determination by the Corps that there would be no more than minimal impacts individually and cumulatively. Furthermore any project proposing greater than 300 linear feet of permanent losses of intermittent and ephemeral streams is subject to the agency coordination requirements in General Condition 31. In addition, the Los Angeles District's regional conditions would provide additional measures to ensure environmental effects are minimized. Regional condition 1 would require any road crossings associated with NWP 29 in streams with suitable habitat for federally listed species must incorporate bottomless arch culvert or span-type crossings to ensure passage and spawning of such species unless specifically determined to be impracticable. Regional Condition 2 would restrict use of NWP 29 to authorize losses of most types of special aquatic sites in the State of Arizona and desert regions of California, which would serve to protect these high-functioning and sensitive resources. Regional Condition 3 would specify information requirements to include will all NWP 29 PCNs to provide the Los Angeles District information for making determinations on minimal impacts as well as to track it's use on a cumulative basis. Regional condition 5 would preclude use of NWP 29 in all jurisdictional vernal pools, a unique and rare type of wetland. Regional Condition 6 would limit impacts under NWP 29 to 0.1 acre in the Murrieta and Temecula Creek watersheds in light of cumulative impacts in these areas. Regional Condition 8 would preclude use of NWP 29 in the San Diego Creek and San Juan Creek/Western San Mateo Creek watersheds in favor of alternative permitting processes. Regional Condition 9 would specify detailed information needed to justify any waivers of the 300 linear foot limit, including a detailed description of the stream in a watershed context, proposed impacts, avoidance and minimization measures, and proposed compensatory mitigation, which would ensure impacts would be minimal. Finally, Regional Condition 10 would require any compensatory mitigation be installed (or bank/ILF credits purchased) prior to or commensurate with authorized impacts unless specifically deemed to be impracticable by the Corps.

Through the pre-construction notification process, the Los Angeles District will review all uses of NWP 29 on a case-by-case basis to ensure that those activities result in minimal adverse effects on the aquatic environment, individually and cumulatively. As a result of this review, the district engineer can add special conditions to an NWP authorization to ensure that the activity results in minimal adverse effects on the aquatic environment, individually and cumulatively. During the pre-construction notification process, the district engineer will exercise discretionary authority and require an individual permit for those activities that result in more than minimal

individual and cumulative adverse effects on the aquatic environment.

As described in Section 9.4 of this document, an examination of past uses of NWP 29 during the preceding 3 years (a period in which general and regional conditions were arguably less restrictive than under the 2012 NWP 29), it is evident that its implementation has resulted in minor impacts to the aquatic environment, both individually and cumulatively. In light of the amended terms and conditions of the NWP program, the applicable regional conditions that would be applied in the Los Angeles District, and the anticipated use of NWP 29 over its 5-year term, the Los Angeles District anticipates it will result in no more than minimal adverse effects on the aquatic environment, either individually or cumulatively. If, at a later time, there is clear, unequivocal evidence to the contrary, the modification, suspension, or revocation procedures at 33 CFR 330.4(e) or 33 CFR 330.5 will be used.

13.0 Final Determination

Based on the considerations discussed above, and in accordance with 33 CFR 330.4(e)(1) and 330.5(c), I have determined that this NWP, including its terms and conditions, all regional conditions, and limitations, will authorize only those activities with minimal adverse effects on the aquatic environment, individually or cumulatively.