



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

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Regarding Amendments to and Issuance of General Aquatic Resource Alteration Permits
Notice of Determination

April 7, 2020

This notice presents the final determination of the Tennessee Department of Environment and Conservation, Division of Water Resources, and responds to comments on the proposed amendment of fifteen current and issuance of one new General Aquatic Resource Alteration Permits.

I. Background

Under the *Tennessee Water Quality Control Act of 1977* where the Commissioner finds that a category of activities or discharges would be appropriately regulated under a general permit, the Commissioner may use a general permit to authorize alterations to waters for specific categories of activities that are substantially similar in nature and that result in no more than an insignificant or *de minimis* degradation of water quality.

Notices of coverage by the Division of activities that qualify under general permits also serve as a section 401 Water Quality Certification pursuant to the federal *Clean Water Act*.

The valid duration of a permit under the *Tennessee Water Quality Control Act of 1977* is five years. The Department must therefore re-issue or deny the general permits every five years. The current general permits were issued on April 7, 2015, with the exception of the permit for Stream and Wetland Habitat Enhancement, which was effective on October 15, 2015, the permit for Recreational Prospecting, which was effective December 9, 2015, the permit for Minor Stream Grade Stabilization, which was effective July 23, 2015, and the current permits for Minor Dredging and Filling, Public Access Structures and Boat Ramps, Bank Armoring and Vegetative Stabilization, and Construction or Removal of Minor Road Crossings, which were each effective May 6, 2019. All of the existing general permits will expire on April 6, 2020.

Fifteen current general permits are proposed for revisions, and two new general permits are proposed for issuance: Structural Discharges and Minor Water Withdrawals. The proposed amendments to or issuances of the above-referenced general permits were

advertised for public comment on January 22, 2020. A public hearing was held on February 24, 2020 in Nashville with simultaneous videoconference hearings at eight environmental field offices across the state. The public comment period ended on March 2, 2020. The Comments for the Minor Water Withdrawal General Permit, and the Division's responses to those comments will be provided in a separate notice of determination document.

II. Comments and Responses

The public's concerns and questions, along with the Division's responses are supplied in this section. These comments were gathered through the course of public hearings along with submittal of written comments through email and mail.

A. General Comments

Comment 1: *With regard to work meeting all necessary authorizations pursuant to The Rivers and Harbors Act, Clean Water Act...as well as any other federal, state or local laws, TDEC's regulations need to clarify that projects that impact the Obed Wild and Scenic River must be reviewed by the NPS to meet the requirements of Section 7 of the Wild and Scenic Rivers Act. We would also like to ensure that any new pipelines that may affect a Wild and Scenic River or ONRW are not covered under a general permit. Proposed projects should be reviewed specifically with regard to protecting NPS values including stream beds, water quality and other resources.*

Response 1: Most of the proposed General ARAP Permits contain a specific provision prohibiting their use in Wild and Scenic Rivers or ONRWs (as they had in the current GPs), including the General Permit for Utility Line Crossings. The Division has determined that a small subset of General Permits, associated with emergency repairs or spill response, and minimally invasive common activities such as maintenance of existing structures and outfall structures are suitable and appropriate for use in Wild and Scenic Rivers or ONRW. A specific provision was also added to the Minor Road Crossing GP in consultation with the NPS to allow them to perform upgrades to their road infrastructure without having to obtain an Individual Permit.

Comment 2: *The undersigned commenters have significant concerns about whether the proposed general permits comply with the requirement that no permit can be issued that would cause a condition of pollution by itself or in combination with others. We do not believe that any of the general permits adequately require consideration of cumulative impacts, as required by Tennessee law. The proposed general permits should be strengthened by the addition of adequate monitoring and data collection requirements to ensure that these important overarching principles of Tennessee law are promoted. In particular, we believe the proposed general permits do not, but should, adequately*

address the situation where the permit will allow activities in waters listed as impaired under Clean Water Act section 303(d).

Response 2: The limitations and special conditions of each general permit prohibit activities that cause more than *de minimis* degradation to water quality. This includes cumulative impacts within a common plan of development (CPD). The Division uses mapping tools and statewide databases, as part of the review process to evaluate all activities within the CPD from the past and into the reasonably foreseeable future. The terms and conditions contained within these permits have been carefully crafted and refined to provide a maximum amount of protection for our water resources while providing the maximum amount of flexibility for our permittees so that growth and development may continue.

The Division's responsibility through its consistent and vigilant oversight of the administration of the ARAP program as a whole, and these general permits in particular, is to ensure that the cumulative nature of these singular permitted activities have no more than a *de minimis* impact to water quality. TDEC does evaluate each applicant's proposed activity on a case-by-case basis. Cumulative impacts, whether the same activity or a different activity, can cause adverse effects in the watershed where the activities are taking place. If any activity within the CPD exceeds the threshold of *de minimis* degradation, all activity within that CPD is subject to an individual permit, which often contain monitoring and mitigation requirements. This ensures that no net loss of resources is authorized without proper avoidance, minimization, and/or compensatory mitigation.

A *de minimis* level of additional impact, which is the maximum threshold allowed under an ARAP General Permit, is allowable under the Department's Antidegradation Statement, even for waters currently impaired for one or more designated uses and on the CWA 303(d) list. For applications that propose more than *de minimis* degradation an individual permit and full antidegradation review would be required.

Comment 3: *Every General Permit should include the following in the "Activities Covered" section: a. A statement that General Permits are only available to activities with a de minimis impact, b. A definition of de minimis that does not include the allowance of compensatory mitigation to achieve de minimis impact, and c. A statement that activities having more than a de minimis impact may be rejected for a General Permit but may be eligible for an Individual Permit.*

Response 3: The Division agrees with the commenter's descriptions of the acceptable limits of projects eligible for General Permit coverage, but has determined that the proposed permit language already captures these concepts. Every GP has a clause in the "Activities Covered" preamble stating that not all projects may be eligible for GP coverage due to a variety of factors, and every GP

have conditions that prohibit coverage to activities that individually or cumulatively result in an appreciable permanent loss of resource value, or that cause a condition of pollution (violations of water quality criteria or impairment of uses). The Division's rationale for the draft permits, and in fact the ARAP Rules themselves also state clearly that all General Permits may only authorize alterations to waters for specific category of activities that result in no more than an insignificant or *de minimis* degradation of water quality

Comment 4: *Every General Permit should include a provision for treatment of invasive plant species to allow for the re-establishment of a native plant community.*

Response 4: All of the General Permits contain provisions requiring any type of permanent vegetative stabilization related to the project itself be performed using native species only. Additional removal of invasive species and planting of native species in the riparian zones or within a wetland could generally be done without permit authorization, unless the scale of the treatment had the potential to negatively alter the properties of those waters.

Comment 5: *Provisions for inspections during or immediately following construction should be included and an expedited enforcement protocol needs to be put in place to ensure that all permit conditions were met. Issuing the permit with conditions is meaningless unless there is assurance that the conditions were met.*

Response 5: The Division agrees that ensuring compliance is an important aspect of all DWR permitting programs, and on-site inspections are a useful tool to that end. Currently TDEC tries to establish routine inspection on around 25% of sites each year, but does not have resources to inspect all ARAP GPs. We have added a new provision to several of the most-used GPs that requires notification from the permit holder when construction commences, which will improve the Division's ability to more efficiently and effectively conduct compliance inspections. In addition, every permit holder is required to submit a Notice of Termination after the project is completed, including photo-documentation that all permit conditions have been met.

Comment 6: *General Permits should not contain such subjective terms appear throughout the permits (e.g., the term "excessively" in the Bank Armoring and Vegetative Stabilization permit. Such subjective terms make it difficult for both permittees and the interested general public to make sure that the permits are both meaningful and applied consistently in all instances.*

Response 6: The Division has striven to provide objective, measureable limitations and condition wherever possible. However it has not been possible to eliminate all usages of such language and still have a workable and somewhat flexible permitting tool. The example cited is a good example of where the Division has been unable to

determine a universal measurement method for the rate, degree, or severity of bank erosion that would represent a condition intended for ARAP coverage in all situations and stream types

Comment 7: *Unlike Individual Permits, General Permits have no provision for public comments or hearings, so they should be posted on the TDEC website the same day as issuance to allow for adequate monitoring.*

Response 7: The General Permits themselves are subject to public comments, including a public hearing held in January 2020, the responses to which this document addresses. The commenter is correct that specific Notices of Coverages issued under the GPs are not subject to additional public input. NOCs are typically available for public viewing on the same day (or following day) as issuance through the Division's public Permit Dataviewer at : http://tdec.tn.gov:8080/pls/enf_reports/f?p=9034:34001:0:

Comment 8: *"Blasting within 50 feet of any jurisdictional stream or wetland is prohibited." We are concerned that this condition will cause undue costs without being demonstrably more protective of natural resources. Is there any published research to support 50 feet as a protective distance? Surely certain rock formations should be competent to resist fracturing at a closer distance. Licensed professionals (e.g., geologists and blasting technicians) should be allowed to determine the width on a case-by-case basis based upon site specific conditions and evaluate the risk of hydrologic losses and the ensuing violation of water quality criteria.*

Response 8: The limitations and conditions built into this general permit, especially the prohibition of blasting near the streams and other BMPs designed to reduce the risk of streamflow capture, will ensure that activities properly conducted under this permit will not result in a greater than *de minimis* impact. The Division has had a history of complaints and enforcement related to streamflow capture from utility line trench construction, and literature supports that blasting adjacent to streams exacerbates this problem in manner that is relatively permanent once occurred. The Division believes 50 feet is a reasonable protective distance to include in a universal general permit. Licensed professionals (e.g., geologists and blasting technicians) can be allowed to determine the width on a case-by-case basis based upon site specific conditions and evaluate the risk of hydrologic losses and the ensuing violation of water quality criteria through a site-specific and conditioned Individual Permit (which may include pre- and post-project hydrology monitoring to ensure not net loss).

Comment 9: *"The use of monofilament-type erosion control netting or blanket is prohibited in the stream channel, stream banks, and riparian corridor." This condition will cause undue delays and potential non-compliance. Sediment and Erosion Control crews often have limited amounts of material on a project site, with non-monofilament-*

type erosion control netting sometimes difficult to source. Having to field-verify the beginning and end of a riparian corridor on a project site has the potential to cause confusion, as well. Is the riparian corridor the entire TDEC buffer (30-60 feet)? We are concerned that this condition will cause undue additional projects costs and the potential to cause a condition of unintentional non-compliance.

Response 9: The provision to use non-monofilament erosion control materials has been a common provision in all existing General ARAP permits and Individual ARAP permits since 2015, and the Division has not received significant reports of undue additional project costs, delays, or widespread non-compliance. Many vendors on-line sell non-monofilament products, and it would be anticipated that crews installing EPSC materials associated with alterations authorized through an ARAP permit order in advance what materials they would need based upon approved plans submitted in support of an ARAP application. The Division does agree with the commenters' point as to the confusion around the physical extent meant by the term "riparian corridor", and will add clarifying language as follows: *The use of monofilament-type erosion control netting or blanket is prohibited in the stream channel, stream banks, or any disturbed riparian areas within 30 feet of top of bank.*

Comment 10: *General Condition 12 (General Condition related to usage of monofilament netting):*

TDOT recommends removing "and riparian corridor". The regulatory boundaries of a stream's riparian corridor are not clearly defined therefor difficult to meet in the conditions of the permit. It is also unclear how the use of monofilament-type erosion control netting or blanket causes an impact to the quality of the water.

Response 10: Please see previous response on clarification of the term "riparian corridor". Use of non-biodegradable monofilament erosion matting in and around water resources has been shown to have a detrimental effect on aquatic and semi-aquatic-species due to its penchant for trapping and killing organisms, and its long-lasting persistence in the aquatic environment.

Comment 11: *What is the reasoning for changing the prohibition on "adversely affecting" wetlands to "directly impacting" wetlands in several permits (for example, the Surveying and Geotechnical Exploration Permit)?*

Response 11: Based on its experience, the Division believes that "adversely affecting" was subject to multiple interpretations as to whether the scale or degree of an impact to wetland vegetation or hydrology was in fact an adverse effect. The condition was intended to prohibit any impact to wetlands in the subject General Permits, regardless as to the permittees or others opinion of the result of the impact.

Comment 12: Specifically, General Condition 5 is proposed as: *'Activities that directly impact ~~adversely affect~~ wetlands, or impair surface water flow into or out of wetland areas are prohibited.'* The revision from "adversely affect" to "directly impact" suggests that secondary impacts are not considered, and temporary impacts are considered. Specifically, there may be an instance where a temporary impact directly impacts a wetland area but is restored to pre-construction contours and seeded once construction is completed, allowing surface water to naturally flow again. This type of impact should not be considered when addressing this condition as it would not contribute aquatic degradation as a result of the proposed activity. Therefore, Barge suggests that the General Condition remain "adversely affect" to continue to capture permanent and secondary impacts within the Division's jurisdiction and consider cumulative impacts that may result from a proposed activity.

Response 12: Please see previous response. In addition, the need to ensure proposed temporary impacts to wetlands are in fact fully restored to prior condition is another reason for the change of language in the subject permits. Unless otherwise indicated, temporary impacts to wetlands are properly authorized and regulated through the Minor Wetland Alteration General Permit, or and Individual Permit.

Comment 13: Lastly, General Condition 13 is proposed as: *"Where practicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clean rock (containing no fines or soils, steel sheeting, or other non-erodible, non-toxic material). All such diversion materials shall be removed upon completion of the work. Activities may be conducted in the flowing water if working in the dry will likely cause additional degradation. If work is conducted in the flowing water it must be for a short duration and with minimal impact. And any disturbance to the stream bed or banks must be restored to its original condition."*

The Division should provide clarification to the added language, including what constitutes a short duration, and suggests a threshold or way to measure minimal impact. If specifics cannot be incorporated into the General Conditions to remain applicable across activities, clarification stating, "...as approved by the Division staff permit reviewer" may be suggested.

Response 13: The Division agrees with the commenter, and will revise the General Condition as follows :

"Where practicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clear rock (containing no fines or soils, steel sheeting, or other non-erodible, non-toxic material). All such diversion materials shall be removed upon completion of the work. Any disturbance to the stream bed or banks must be restored to its original condition. As approved after Division review, activities may be conducted in the flowing

water if working in the dry will likely cause additional degradation. Any work conducted in the flowing water must be for a short duration and with minimal impact, and conform to the Division-approved methodology.”

Comment 14: *Multiple commenters addressed the special condition in several permits requiring notification to TDEC within 24 hours of activity, citing it as redundant to general notification via application, notification to EFO's prior to diversion of flow, increasing workload for applicant and for the Division, leading to increased violation and/or enforcement actions, and being unrealistic particularly due to weekends and holidays. The commenter also recommends that these notification requirements should only apply to projects that meet the no-notification threshold.*

Response 14: The proposed revision adding the requirement for notification to the Division upon or just prior to the actual start of construction to a few of the general permits reflects the need for more efficient and effective inspections where appropriate to ensure compliance with the permit, the Act, the Antidegradation Statement, and the ARAP rules, based on the experience and suggestions of both Division staff and the regulated community over the last several years. In addition, the permits subject to these requirements are also known to generate a larger share of public complaints, which similarly can be more efficiently and effectively handled if the start of construction is known by the Division. Projects commonly will not actually begin for months or even years after permit coverage is issued, and so more timely notification is warranted in the Division's opinion. We believe the language is flexible enough to accommodate work beginning on a weekend or holiday, as it allows notification just prior to, or just after these dates.

Comment 15: *TVA has operations in all of TDECs Environmental Field Office areas. TVA would like to recommend the creation of a dedicated email address which will serve as the contact for any ARAPs which require a notification to a TDEC field office when work begins.*

Response 15: The Division recognizes the utility of the commenter's suggestion, and will explore options for establishing dedicated email addresses for each EFO, for this and other permit-related purposes.

Comment 16: *In order to further streamline Section 26a and §401/ARAP reviews for activities that have been determined to have de minimis impacts in water resource areas managed by TVA, TVA recommends including the reservoirs making up the Beech River projects (Beech, Cedar, Pin Oak, Sycamore, Dogwood, and Redbud) in the list of resources managed by TVA within the applicable General ARAPs. Alternately, TDEC could replace the specific list of reservoirs TVA manages with the following statement within the obtaining permit coverage section of the applicable General ARAPs, “On waters managed by TVA under its Section 26a jurisdiction...”*

Response 16: On August 10, 2018, the Nashville District Corps of Engineers issued Programmatic General Permit 18-01, authorizing certain categories of minor structures, fill and work in specified Tennessee Valley Authority (TVA) reservoirs within the states of Alabama, Kentucky, Mississippi, Tennessee & Virginia. The programmatic general permit (18-PGP-01) allows the TVA, under section 26a, to be the lead federal agency for this set of activities and its permit would include the Corps section 404 authorizations as well. TDEC conditionally certified this PGP as well, providing the needed 401 State Water Quality certification for these activities as well. Primary benefits of the Corps of Engineers' programmatic general permit (18-PGP-01) are agency coordination of those permits covered under the PGP, and the avoidance of duplication of effort between these agencies. Since the Beech River projects cited above were not included in this PGP, they are also not included in the list of TVA lands eligible for no-notification activities in related ARAP General Permits. If an expanded PGP is promulgated that includes additional reservoirs or all water managed by TVA, the Division may consider further revisions to the General Permit language.

Comment 17: *All of the draft ARAPs include the following updated language in the general conditions regarding temporary stream crossings: "Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream bank vegetation is disturbed. Stream beds shall not be used as linear transportation routes for construction mechanized equipment, rather, the stream channel may be crossed perpendicularly with equipment provided no additional fill or excavation is necessary." The proposed changes to this general condition limiting the activities covered under any of the general ARAPs to one temporary stream crossing is contrary to the proposed changes within the General ARAP for Construction and Removal of Minor Road Crossings. The proposed changes within the General ARAP for Construction or Removal of Minor Road Crossings, as drafted, require a notification to seek coverage for any and all proposed temporary road crossings, regardless of length of temporary impact, which seems to nullify the referenced general condition because a Notice of Coverage for any temporary road crossing is required. TDEC should consider removing the first sentence of the referenced general condition or specifically authorize up to 25 feet of temporary impact for stream crossings within the general condition to carry out construction activities without separate notification and cover under the General ARAP for Construction or Removal of Minor Road Crossings.*

Response 17: The Division agrees with the commenter, and will add a no-notification provision to the General ARAP for Minor Road Crossings to read as follows : *"A temporary road crossing associated with ongoing construction activities where the total length of disturbance along the stream channel needed to temporarily install, and remove any fill or structure associated with the crossing is less than 25 feet may be done without submittal of an application or written authorization from the Division prior to the commencement of work, provided the work is performed in accordance with this permit's terms and conditions. Following construction, all materials*

used for the temporary crossing shall be removed and disturbed stream bed and banks shall be restored and stabilized with native vegetation”.

Comment 18: *In the General Condition prohibiting use of streams as linear transportation routes, why has “construction equipment” been replaced with “mechanized equipment” in some, but not all, the permits (for example, the Minor Stream Grade Stabilization Permit)?*

Response 18: This was an oversight by the Division, whose intent was that all of the general conditions, including this one, have the same language throughout all of the General permits. It will be corrected to match the common final language

Comment 19: *Why are the “General Conditions” different across the various permits?*

Response 19: For any specific general condition the intent of the Division is to have the language be identical across all of the general permits for which the general condition is included. There have been instances pointed out in comments where there are erroneous inconsistencies that will be corrected. However, an identical set of general conditions is not always applicable across all general permits, so the full suite may not appear in each GP. A good example is the general condition prohibiting direct impact to wetlands. This would not be applicable to include in the Minor Wetland Alteration or Stream and Wetland Enhancement General Permits for instance.

Comment 20: *General Condition 4 (or General Condition related to removal of riparian vegetation):*

TDOT recommends rewording to incorporate an “if feasible” statement. In areas where rip-rap will be installed native vegetation cannot be reestablished.

TDOT recommends the rewording to: “Clearing, grubbing, and other disturbance to riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including tree removal, is prohibited. The area of disturbance must be revegetated after work is complete. If feasible, native riparian vegetation should be used. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.”

Response 20: The Division’s intent is that all areas disturbed during the project installation should be permanently revegetated with native vegetation. Structures that are part of the authorized impacts, such as a riprap revetment or outfall headwall are not intended to have native vegetation planted within it, under the General Permits. The Division will clarify by changing the condition to :

“Clearing, grubbing, and other disturbance to riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary native riparian vegetation removal, including tree removal, is prohibited. Native riparian vegetation must be reestablished in all areas of disturbance outside of any permanent authorized structures after work is completed. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.”

Comment 21: *TDOT recommends rewording a sentence in General Condition 9 (or General Condition requiring authorization for adverse effects to federally listed species) as follows to provide clarity to the statement:*

“Adverse effects to federally listed threatened and endangered species are not authorized by this permit. Permittee is responsible for obtaining prior authorization from the United States Fish and Wildlife Service (USFWS) as required by Section 7 or Section 10 under the Endangered Species Act.”

Response 21: The Division agrees with the revised language and will incorporate it

Comment 22: *General Condition 17 or 18 (related to temporary perpendicular stream crossings for equipment):*

TDOT recommends modifying to allow the use of necessary stone and pipes due to existing stream bed substrate conditions.

TDOT supports the change to not require stone to be required on temporary stream crossing when stream bed material is adequate to support the crossing.

However, TDOT does not support the proposed change that would require a separate permit application or even possibly an IARAP because rock and/or pipes are required for a temporary stream crossing due to inadequate stream bed material such as sandy soils.

Response 22: Please see response to Comment # 17 above.

Comment 23: *Special Condition or General Condition (depending on permit) related to timing of soil stabilization with vegetation within 15 days of project completion: TDOT recommends modifying to better correspond with the Construction General Permits requirement of 14 days.*

Response 23: The Division agrees with the commenter and will change as proposed

B. General Aquatic Resource Alteration Permit for Bank Armoring and Vegetative Stabilization

a. Activities Covered by this Permit

Comment 24: *Multiple comments addressed the fact that the word “excessively” was added to the first sentence. Concerns were that this wording was subjective.*

Response 24: Using the word “excessively” allows the Division flexibility in determining the severity of stream bank erosion, and the appropriate treatment for such erosion. The intent of the permit is to address situations where the streambank erosion has been exacerbated and is now problematic.

Comment 25: *TVA recommends that TDEC provide specific examples of items that are prohibited from coverage under this ARAP and any rationale for their prohibition. This information will aid TVA in determining how to treat the techniques that fall in the “other treatments” category when they are submitted to TVA during the 26a permitting process.*

Response 25: Special condition 11 speaks to acceptable materials to use in a bank stabilization project. Special condition 1 describes the limited application of some treatments, such as seawall, grouted riprap, concrete, retaining walls, and bulkheads. And in general the permit is not intended to be used to armor or otherwise impact streambanks and shorelines where there is no ongoing excessive erosional issues.

Comment 26: *The definition of “hard armoring” includes the treatment “stacked stone” without further description. Clearly, the height of such stacking separates the use of stacked stone from hard armoring from bioengineering. It is not uncommon in rock substrate streams to have rocks from the base of the bank underwater to the normal high water (not flood or bank full) mark. Efforts that use stacked stone to replicate this level of bank protection should not be considered hard armoring as plants can grow through the gaps between rock and the spaces between rocks underwater provide habitat for aquatic species. This distinction becomes important when treatment distances are listed under special conditions.*

Response 26: Some stacked stone designs incorporate principles of natural stabilization techniques. Projects that incorporate methods that mimic the properties of a natural shoreline into the design are preferred. For the general permit, use of stacked stone or other hard armor as toe protection can be considered part of a bioengineering treatment if it does not exceed one-fourth of the bank height and is used in conjunction with soil & vegetative techniques. If designs exceed the conditions of soil bioengineering, an individual permit may be applicable. Such permits may include monitoring efforts and performance standards commensurate with the proposed alteration to demonstrate naturalization.

b. General Conditions

Comment 27: *[1] This is a new provision which seems strangely inappropriate. The mention of fill and stream channel modification would normally not be part of work under this General Permit.*

Response 27: This is a general condition that applies to all general permits. The Division would expect, in this general permit, that the installation of stabilization measures would be limited to the minimum amount of disturbance to achieve the activities. However, this general permit is necessary to reinforce the importance of the permittee conducting impacts within the scope of the authorized activity. Impacts associated with the activity that exceed the minimum necessary to accomplish the project or are beyond the scope of authorized impacts may be subject to enforcement mechanisms.

Comment 28: *[2] If you chose to drop the reference to penalties under section TCA 69 3 115, what is the plan for non-compliance with the permit conditions?*

Response 28: Tenn. Code Ann. § 69-3-115 remains applicable. Noncompliance with permit conditions remains enforceable.

Comment 29: *[4] This section does not, but should, make reference to invasive plant removal. Requiring the re-establishment of native riparian vegetation is not possible in areas dominated by aggressive invasive plants such as privet and bush honeysuckle without removing those plants from the area. Both of these invasive plant types are greatly inferior in preventing bank erosion to their native plant alternatives, but their roots do provide some structure to easily erodible soils. Cut and paint techniques are therefore the least disruptive.*

Response 29: Thank you for this comment. The Division has revised the second sentence in the general permit as follows: "Unnecessary native riparian vegetation removal, including tree removal, is prohibited." This would allow for the removal of invasive species when native riparian vegetation is proposed to be reestablished.

Comment 30: *Under General Conditions, page 3, #9, TVA makes federal determinations for Sections 7 and 10 and we request that this condition not apply to projects receiving a Section 26a permit or to TVA projects.*

Response 30: While the Division is required to coordinate with state resource agencies and divisions, federal agencies like the U.S. Army Corps of Engineers and TVA have the lead for conducting federal resource coordination with the USFWS. This general condition specifically states that adverse effects to federally listed species are not authorized, and the state is not required to wait for a federal action or opinion from USFWS before issuing a permit.

c. Special Conditions

Comment 31: *TDOT recommends the rewording proposed:*

“Hard armoring bank stabilization treatment shall not exceed 300 linear feet for the treatment of one bank, and 200 linear feet per bank if the treatment includes opposite banks, with the following special conditions :”

Bank areas needing stabilization are not always “directly” across from each other. Also the hard armoring lengths are not always the same length on each side of the stream.

Response 31: The Division understands that stabilization treatments may involve work on one bank or both banks. Work done on both banks may or may not be directly across from each other. In order to provide better clarity as to the limits of impact for this general permit, the language has been revised as follows : *“Hard armoring bank stabilization treatment shall not exceed 300 linear feet for the treatment of one bank, or 200 linear feet per bank if the treatment includes both banks, with the following special conditions :”* .

Comment 32: *Special Condition 1b – “Army” misspelled*

Response 32: Corrected. Thank you.

Comment 33: *Special Condition 3b: TDOT recommends restricting the in-stream measures to a stream or steam segment not the entire project. Linear transportation projects by nature can be multiple miles long with many crossings. Reword to “Projects must be limited to a maximum of five (5) in stream structures within any 300 ft stream segment.”*

Response 33: All General Permits by their nature must be limited in scope due to the requirement that they be individually and cumulatively *de minimis*, result in no permanent appreciable loss of resource value, not cause a condition of impairment, are not subject to any additional conditions or monitoring requirements, and provide “one size fits all” impact authorizations. Therefore the Division believes the limitation on instream structures under the General Permit is appropriate, and a project that is multiple miles long with many crossings and >5 instream structures is more appropriately considered under an Individual Permit.

Comment 34: *Item 4 is overreaching and should be eliminated. How are you going to enforce? Are you going to be the grass police and harass the property owners for mowing the banks or spraying it. I don’t think you need to go there. You are infringing on property rights with this requirement. Also Public Works agencies may also be currently maintaining areas, which I guess is addressed by the public infrastructure easement statement, but limiting that ability could drastically alter the flow*

characteristics of the channel and create flooding in areas that were developed prior to the Clean Water act unless they are maintained . Having this requirement on new developments is one thing but enforcing it on private property owners and on existing conditions that were not set up for flow conditions with channels blocked by vegetation can have disastrous flooding consequences.

Response 34: The Division is not intending to police private property or require this condition on water features in which are not being altered (and therefore no permit would have been applied for or required). However, the Division believes this provision is appropriate as a protective condition of the permit authorization to alter waters through the Bank Armoring and Vegetative Stabilization General ARAP permit. As the commenter notes, the permit does allow for such activities where public infrastructure easements require it.

Comment 35: *In the redline version of this General Permit, Special Condition #4 states "Unless required by a public infrastructure easement, any spraying, mowing, or other disturbance of the stabilization treatment that interferes with its ability to naturalize is prohibited." Please clarify how this would be regulated and whether permittees will be responsible for installing "no mow/spray" signs along the stabilization treatment.*

Response 35: Any spraying, mowing or otherwise disturbing the stabilization treatment would result in non-compliance with the General Permit. As with any non-compliance with permit coverages, it would be considered a violation of the permit conditions and would be addressed accordingly, through the various compliance and enforcement means the Division uses for all permitting issues. In some situations the applicant may choose to propose the installation of "no mow/spray" signage to encourage compliance with the permit.

Comment 36: *It needs to be clear when talking about linear treatment length that this refers to treatment area. For example, a project site could cover 1000 feet of stream which contains three different 100-foot sections of hard armoring (not opposite) and still be eligible under this permit, or a 5,000-foot site could include many treatment areas that don't exceed a total of 1,000 treated feet with bioengineering.*

Response 36: Linear feet of treatment length refers to the treatment length of proposed stabilization treatment(s), as the commenter describes. The Division also considers cumulative impacts, so existing stabilization treatments within the same common plan of development would be considered in the evaluation of stabilization length. We believe the proposed language offers adequate clarity, but welcome any specific suggestions for improvement.

Comment 37: *[1] Hard armoring limitations are appropriate but the discrimination about the use of stacked rock should be made clear here.*

Response 37: Some stacked stone designs incorporate principles of natural stabilization techniques. Projects that incorporate methods that mimic the properties of a natural shoreline into the design are preferred. If designs exceed the conditions of soil bioengineering, an individual permit may be applicable. If permitted, the Division would prefer to cover such activities under an Individual Permit. Such permit may include monitoring efforts and performance standards commensurate with the proposed alteration to demonstrate naturalization.

Comment 38: *[2b] The discussion of stone toe protection is good, but should be clarified by noting that the bed-bank interface may well be underwater even at normal flows and the stone protection would be allowed to extend one layer above that normal level regardless of the portion of bank height this entails.*

Response 38: Under the general permit, stone toe protection used in conjunction with soil bioengineering techniques is limited to the minimum height necessary to stabilize the bed-bank interface and may not exceed $\frac{1}{4}$ the bank height. Activities which exceed this criteria may be covered under a general permit if treatment length is limited to special condition 1. Certain activities due to size, location or potential water quality impacts are not covered under this general permit, as described in both the Special and General Conditions sections. Activities not qualifying for authorization under this general permit may be authorized by an individual permit provided that all requirements of the *Tennessee Water Quality Control Act of 1977* (the Act) are met.

Comment 39: *[3] The in-stream structures discussion has a couple of confusing or inappropriate rules. The first is the statement that the treatment lengths must be part of the cumulative treatment lengths. It provides no guidance in how the treatment lengths should be calculated. For example, for a rock vane, is the treatment length the length of the bank where the vane is keyed in, the length of the backfill that will accumulate upstream of the vane, or the distance from the point of contact where it is keyed into the bank to the perpendicular point on the bank to the end of the vane in the stream?*

Response 39: Special condition 3 states, "in-stream structures may be used in conjunction with bank treatments, subject to the same cumulative limitations on streambank hard armoring and total project lengths". In-stream structures would be limited to being installed within the same project area other stabilization methods are proposed. Those total project lengths are those listed in special condition 1 and 2. Projects are limited to a maximum of five in stream structures within 300 or 1000 linear feet depending on what treatment type is used in conjunction with the instream structures. The length of impacts includes areas along the bank that are disturbed or impacted as a result of the installation of an instream structure, or treatments upstream or downstream of a structure. Activities and structural components that are a component of the installation and maintenance of the

instream structure should be included when calculating the length of impact along a bank.

Comment 40: *[3b] The second problem is the limitation of five in-stream structures. Since the point of General Permits is to cover projects with de minimis impacts, such a numerical limitation does not make sense. The use of heavy equipment in the stream is already excluded from the permit, so large structures are not going to be an issue. In a headwater stream with a gravel/cobble substrate (not to mention sand/silt substrates), multiple small vanes may be the only way to provide lateral stability. If all other conditions are met to meet the de minimis standard, there should not be a numeric limitation on number of structures.*

Response 40: The Division sees the need to set a numeric limitation on the number of structures eligible for coverage under this general permit. The intent of limiting the number of in-stream crossings is to define a threshold where the potential for greater than *de minimis* impacts may exist. If any activity exceeds the terms and conditions of this general permit, the activity may be authorized by an individual permit.

Comment 41: *[5] Notification of commencement of work is a new requirement. Will such information become public, i.e., will interested third parties be able to know that the project has begun?*

Response 41: Thank you for your comment. Documentation submitted to the Division regarding the commencement of work is considered part of the public record and would be available to the public. The Division will also internally track the date associated with the commencement of the authorized activity.

Comment 42: *[9] See the discussion above on 3b about in-stream structures. The fact that a stream has a protective designation should not limit opportunities for stabilization that have de minimis or positive impacts on ecological functioning.*

Response 42: The Division believes that because State Scenic Rivers are a special category of waters designated as such by legislation, the use of hard armoring treatments and artificial instream structures is not appropriate for authorization under a general permit, including the inability to receive public and inter-agency input on the project. Certain activities due to size, location or potential water quality impacts are not covered under this general permit, as described in both the Special and General Conditions sections. Activities not qualifying for authorization under this general permit may be authorized by a standard (individual) permit provided that all requirements of the Tennessee Water Quality Control Act of 1977 (the Act) are met.

Comment 43: *[14] There is one not-uncommon material found in streams that could be used for stabilization which this provision prohibits: concrete. Whether from failed attempts at bank stabilization, old bridge abutments or piers, culvert protections, etc., concrete, which is “unnatural” has been permitted to be used in streams but salvaging such materials for use in stabilization is prohibited. Requiring such material to be removed and disposed of off-site simply adds to the cost of the project. Recycling and reusing limestone rip-rap which may be quite abnormal for a particular stream is not prohibited. What is the rationale? Obviously, there are limitations as to the amount of such material that could be reused, or it will fit into the scope of hard armoring and its limitation.*

Response 43: Reusing salvaged concrete is an inappropriate revetment material for stabilization. The quality of stone and appropriate sizing is a typical design specification for riprap. The introduction of materials like salvaged concrete does not meet typical size and gradation requirements and will not provide effective protection. Riprap must be properly installed, of adequate size and suitable gradation, to provide effective streambank armoring. Riprap should be clean and free of sand, dust, and organic materials, excessive cracks, or other impurities.

Comment 44: *Under Special Conditions, page 1, #1b, and any other place that “waters managed by the TVA” is referenced, we suggest revising to “waters managed by the TVA under its Section 26a jurisdiction.” This would clarify that these locations include on tributaries that TVA considers “off reservoir” but still within its jurisdiction. In addition, “Army” is misspelled.*

Response 44: The Division agrees that the current phrase “located within water resource development lands and waters managed by the Tennessee Valley Authority or the United States Army Corps of Engineers” is confusing, difficult for the public and Division staff to determine, and needs clarification. The intent of the condition was to allow a longer reach of hard armoring in the lentic environments that have additional oversight from these federal entities. Upon further consultation with the TVA, it was determined that a change to the simpler language “located within Tennessee Valley Authority or the United States Army Corps of Engineers reservoirs” would provide the needed clarity and intent.

Comment 45: *Under Special Conditions, page 2, #4, we request inclusion of TVA infrastructure in the public infrastructure easement exception. TVA applies aquatic-approved herbicides on stabilization near dams, levees, and other TVA infrastructure to minimize expenses, maintain integrity of the structures, allow for efficient inspection, etc.*

Response 45: The Division reached out and collaborated with TVA further after receiving this comment to ensure the intent of this condition was clear and would capture the intended public utility infrastructure. Based on those conversations the Division additionally expanded the language to include structures subject to similar

safety requirements, such as the Safe Dams Act. The Division has revised this Special Condition as follows : *Unless required to maintain the safety and structural integrity of public utility infrastructure (including utility line easements), or structures subject to State Safe Dam regulations or similar requirements, any spraying, mowing, or other disturbance of the stabilization treatment that interferes with its ability to naturalize is prohibited.*

d. Obtaining Permit Coverage

Comment 46: *TDOT recommends increasing the 50 feet to 100 feet. If stabilization on a stream bank is needed, typically greater than 50 feet of stabilization will be needed.*

Response 46: Thank you for your comment. The Division believes thresholds for non-notification activities must be especially limited in order for the Division to ensure *de minimis* cumulative impacts, and therefore believes the limit should remain at 50 feet. If more work is required, a GP NOC may be applied for.

C. General Aquatic Resource Alteration Permit for Emergency Infrastructure Repair

a. Activities Covered by this Permit

Comment 47: *Unlike other General ARAP Permits, this one does not refer to the requirement of de minimis impact on streams and wetlands, which should be included here. It is understood that previous infrastructure work may have caused impacts that are ongoing, and it is to this point that the statement “restore to pre-existing conditions” should apply. For example, the preceding phrase “where feasible” should not allow the replacement of an inadequately sized culvert by the same size or smaller simply because that size was immediately available, and a larger size was not. It is this kind of emergency infrastructure repair – the washing out of a culvert and the road that crosses it – that is not uncommon. There is understandable public pressure (hence “emergency”) to get the road back in service, but multiple wash-outs coating the stream bottom with rip rap for a half mile downstream creates an impact that is not de minimis. The General Permit should expressly prohibit such degrading repairs.*

Response 47: In the Division’s experience, the full extent of an aquatic resource alteration needed to address an emergency situation is not always known at the time of coverage issuance. Upon follow-up application (within 10 days of completion of the emergency repair work), it is determined whether the coverage under the General Permit suffices, or the need to cover the activity under an individual permit exists because alterations exceed *de minimis* or alterations may require compensatory mitigation. General Condition 1 speaks to using the least impactful practical method of construction. If the least impactful method degrades the resource, then compensatory mitigation must be proposed through an Individual Permit application.

b. Special Conditions

Comment 48: [1,2] See note above. The invocation of an emergency allows repairs to be made without authorization, allowing precisely the kind of degradation referred to above. If a prohibition to degradation is included in the "Activities Covered" section, it should be referenced here.

Response 48: The prohibition to degradation listed in the "Activities Covered" section applies to the entire permit and is enforceable. General conditions #3 and #16 additionally constrain the activities to not causing appreciable resource loss and not violating any water quality criteria.

Comment 49: Special Condition 2: This appears to be inconsistent with the "Obtaining Permit Coverage" section which states an application must be sent immediately after authorization is given. TDOT suggests adopting the language at this location.

Response 49: This language has been adopted

Comment 50: Special Condition 3: TDOT recommends the addition of "of stream impact" to the end of the sentence to clarify that the 300 ft. restriction is 300 ft of stream impacts not project length. This could be interpreted as the repair project must be under 300 ft not the stream impacts.

Response 50: This language has been adopted.

Comment 51: Special Condition 3: Given that emergency repairs for highway networks typically take place after a failure has occurred, 300 feet of repair along a stream is too limiting. TDOT suggests changing this to 500 ft.

Response 51: The Division will retain the 300 feet limitation to keep resource impact thresholds *de minimis* and consistent with other General Permits.

Comment 52: [6,7] In 6, it should be clarified that pre-existing conditions refers to stream conditions, not infrastructure condition. In 7, the prohibition against enlargements or realignments should be replaced with more flexible language in the case of road crossings to allow a larger diameter culvert or box culvert to replace an undersized round culvert, or to correct a previously mis-aligned culvert. There are many road crossing culverts that were improperly sized, improperly bedded, improperly sloped, or improperly aligned (being aligned perpendicular to the road rather than in-line with the stream channel.) Because of these initial installation errors, they are more likely to

fail in flood conditions and corrections should be made at the time of replacement, not repeated because it is an emergency.

Response 52: This language has been adopted in Special Condition 6. Special Condition 7 speaks to channel enlargements and realignments, not structure modification. If a structure was improperly sized initially, this special condition does not preclude properly sizing or aligning the pipe during an emergency replacement.

Comment 53: *Special Condition 6: Stream realignments are normally necessary if the side of the mountain containing the stream has slid. Technically the channel is gone and must be reconstructed to handle the water and drainage issues. TDOT recommends adding an exclusion for transportation projects to allow relocations if a Governor or Presidential state of emergency has been declared.*

Response 53: In the Division's experience, in these cases TDOT typically receives emergency authorization to construct the repair and is then required to apply for an individual permit once all environmental feature identification has been done, similar to if any aspect of the repair ultimately exceeds the General Permitting limitations and conditions.

Comment 54: *TDOT recommends adding a special condition that accommodates coordination for a large number of emergency repair projects at one time with limited impact information. During times of disaster TDOT could have hundreds of small and large emergency projects that occur at one time due to a storm event. For example, during a state of disaster providing a list of project locations and only needing authorization for impacts that will exceed the limits of the general permit.*

Response 54: Coordination is required for all emergency repair projects. During a state of disaster, TDOT will receive verbal or written approval from TDEC to construct the emergency repairs unless there are immediate threats to public health safety or the environment. In which case, TDOT does not need prior approval to construct the emergency repairs, as indicated in the General Permit language.

c. General Conditions

Comment 55: *TDOT has concerns regarding many of the General Conditions and the Obtaining Permit Coverage Section proposed when dealing with large land slide projects. Large emergency projects, especially landslides, are complex to stabilize and long in duration and phased construction of temporary and permanent fixes. Some of these projects contain situations where the road and all environmental features such as stream channels and wetlands are gone due to the slide. Many of the general conditions and the Obtaining Permit Coverage Section as proposed are concerning for the large land slide type projects.*

Response 55: Large land slide projects will often receive verbal authorization from the Division prior to submittal of a complete application. At the time of complete application submittal, if the aquatic impacts of the landslide exceed the *de minimis* threshold, coverage by an individual permit will be required. The Division has the authority to issue an emergency individual permit prior to public notice if necessary.

Comment 56: *General Condition 4: Rip-rap is traditionally used to provide stability to slide or washout areas that jeopardize the public transportation facility. Native riparian vegetation typically would not be possible in those locations for stability reasons.*

TDOT recommends modifying to say "Where feasible, the area of disturbance must be revegetated with native riparian vegetation after work is completed."

Response 56: The inability to establish native vegetation where hard armoring is required does not preclude a project from coverage under this GP. Disturbed areas that do not require permanent structures to be installed are expected to be revegetated with native species.

Comment 57: *General Condition 6: TDOT recommends modifying the wording to "Where feasible, this activity may not result in the permanent disruption to the movement of fish or other aquatic life upon project completion."*

For example, the stream channel has been destroyed by a slide event (channel slid with the embankment/mountain), the slide itself caused the aquatic barrier not the TDOT proposed project to fix the slide. In some areas restoring the aquatic passage may not be possible due to new conditions caused by the slide event.

Also Emergency repairs for highway networks typically take place after a failure has occurred and typically do not allow for right-of-way purchases because of the quick turnaround needed to reopen the roadway, this condition may become infeasible.

Response 57: If this condition is not feasible, the project will likely still be eligible for coverage under an individual permit. The Division has the authority to issue an emergency individual permit prior to public notice if necessary.

Comment 58: *General Condition 7: TDOT suggests removing this condition for emergency projects or allowing it on emergency repairs to linear transportation facilities.*

Due to the nature of Emergency situations such as rock falls the need for blasting is very possible and necessary at times.

Response 58: The need for blasting can be reviewed through the application for an individual permit.

Comment 59: *General Condition 8: Wetlands may be affected by emergency repairs. If wetland impacts are proposed to complete an emergency repair, this language could*

delay the repair until a General ARAP for Wetlands or an IARAP is issued. TDOT recommends allowing wetland impacts to occur for emergency repairs to linear transportation projects.

Response 59: The Division agrees and will remove this condition and update the special conditions section to allow up to 0.10 acres of wetland impacts.

Comment 60: *Item 9 is a problem. It states that work “may not be authorized without prior coordination with TWRA”. I understand if this work is not an emergency; however if I have sewage or water flowing into a stream I would think TDEC would want actions taken as quickly as possible to stop the pollution occurring that would affect the endangered species instead of waiting to TWRA to authorize the work. This is a general permit for EMERGENCY work. This section needs to be removed or modified to allow work to occur immediately to at least stop the pollution source. You are requiring submittal to follow for a permit after the fact so that should be enough to detail what actions were done to stop and repair the emergency situation. Please either remove the requirement for TWRA approval or modify to allow the agency to do work to stop the flow and repair under this permit.*

Item 10 is similar in nature. The agency responsible for the repair will be having to submit for the ARAP and you are asking for all the stuff needed to address the emergency repair. Once again I don't think you want the local agency waiting to get all necessary permits when the emergency is causing environmental damage and we cannot do work as required in the first sentence of 8.10 “Work shall not commence until the permittee has obtained all necessary authorization” I certainly understand this if it is not an Emergency however the ARAP if for EMERGENCY REPAIR and not one of the other ARAP general permits when time is not of the essence.

Response 60: The General Permit already allows for immediate work to be performed without advance authorization for immediate threats to public health, safety, or the environment, which seems to encompass the commenters' scenarios. However, the subsequent formal authorization by the Division through issuance of an NOC will require prior coordination with resource agencies if listed species are present, to allow for any additional measures to protect those species deemed necessary.

Comment 61: *General Condition 10: TDOT suggests removing this limitation [obtaining NPDES permit for construction stormwater]. During an emergency situation, TDOT will likely not have enough time to obtain an NPDES permit or have enough details to produce a SWPPP before emergency work begins.*

Response 61: TDOT has a long history of working with the Division during emergency repair situations and receiving provisional or emergency authorizations to perform work through the various emergency provisions available to the Division.

This includes receiving provisional written approval for land disturbance activities normally provided through NPDES permit authorizations in non-emergency situations. The Division believes the current emergency authorization process satisfies General Condition 10 as written.

Comment 62: *[2] This provision is meaningless since this General Permit allows the repairs to be made prior to submitting the ARAP (Special Condition 2).*

Response 62: Although this information is often submitted after the emergency work has been completed, the information is still required and must be reviewed and approved by the Division. If the completed work does not comply with the terms and conditions of the permit, or causes greater than *de minimis* impacts, additional actions may be necessary.

Comment 63: *[6] This provision is clear but must be emphasized that it overrides the provision of "restoring to pre-existing conditions" where the pre-existing condition included a hanging culvert or other barrier to fish passage.*

Response 63: The language will remain as it clearly states, regardless of the pre-existing conditions, that upon project completion there must be no barrier to aquatic life.

Comment 64: *[11] Without explicitly discussing the use of rip-rap or other hard armoring, this provision implicitly encourages hard armoring over bioengineering approaches. Dropping the provision that calls for returning contours supports this interpretation.*

Response 64: The Division will add clarifying language that the least impactful manner that is practicable be used to address lateral and vertical stream stability.

Comment 65: *[15] It is not clear what the meaning of this provision is within the context of this General Permit. By definition, emergency repairs will happen right away, if possible, regardless of stream flow conditions. One would expect emergency repairs to be of short duration. Rather than just using this provision lifted as a whole from other permits, a section drafted with the idea of emergency repairs should be drafted for this permit.*

Response 65: The Division disagrees and will keep the condition as stated. The condition is qualified with "Where practicable", allowing for work in the flowing water if necessary.

Comment 66: *General Condition 17: TDOT recommends rewording the first part of the first sentence to: "Erosion prevention and sediment control measures must be in place before the permanent repairs begin..." etc.. TDOT recommends modifying the wording to*

distinguish between the permanent emergency fix and the immediate stabilization activities that are required.

In cases of slides, the area can require earth moving stabilization activities to occur before any exploration work can begin for safety reasons and limited access to the site.

Response 66: The Division will update the general condition accordingly.

d. Obtaining Permit Coverage

Comment 67: *Step #1. The timing provisions are in conflict with Special Conditions 1 and 2. In this section, a detailed proposal is required with the initial email, but not in the special conditions section. A conditional approval is required here before commencing work while no such approval is required in the "Special Conditions" section. In both this section and in "Special Conditions," an exception allowing immediate repairs without communication with TDEC is allowable to protect immediate threats to human safety and welfare. Such conditions should be spelled out. Is being cut off from access to police, fire, and ambulance enough of a threat?*

Response 67: The Division will update the general permit accordingly to address these inconsistencies.

Comment 68: *Step #2. The listing of required information to be submitted in part exceeds the authority under a General Permit and conflicts with earlier requirements in this permit.*

- Under what conditions would Item 2 apply (existing CGP and ARAP permits)? And if there were existing permits, why would an emergency permit be needed?*
- Item 4 requires knowledge from previous permits when the infrastructure was originally built, but information about species changes over time. Can that information and TWRA review occur reliably within 10 days?*
- Items 10 and 11 suggest a disruption beyond de minimis, requiring a response that would extend beyond the emergency repair of infrastructure. It suggests that there should be a linkage between coverage under this General Permit for Emergency Infrastructure Repair and another ARAP for Stream Restoration.*
- Item 12 extends this argument by including a plan for stream remediation. While there is a certain logic to including both the immediate emergency response (let's get a culvert back in and the road fixed) and the longer-term needs (let's get all the rock and debris out and restore the channel) into one document, the emergency timeline and processes do not fit both needs well. If the stream channel has been disrupted for more than 300 feet, the two cannot be combined in this General Permit anyway, but more importantly, the skills and experience necessary to getting the culvert back in and the road repaired are not the same skills required for stream restoration and it may not be possible to come up with the best plan for restoration within the emergency timeline when access to the site may be impaired.*

This point is further underlined by the following paragraph that describes NOC and length of coverage. If this is an emergency permit designed to cover immediate work, the timeline for the work should be necessarily short, something which should be addressed in this permit. If the work is going to take a year, surely emergency procedures are not needed to review the work. A time limit of 30 days would be appropriate for emergency work. Work that will extend beyond that time should be covered under a normal review process which takes no more than 30 days by rule.

In addition, this paragraph should be rewritten to remove any generic wording that does not apply to the conditions of this permit. For example, an emergency permit would never be re-issued. Using generic language should be avoided where possible as it may lead to inappropriate interpretations.

Response 68: The commenter brings up some valid points, many of which resulted from the Division's use of language from the *Sediment Removal and Stream Remediation General Permit*, in the Obtaining Permit Coverage section of this GP. While the two permits have some analogous characteristics, the Division agrees with the commenter that not all of the conditions are appropriate and these have been revised to better reflect the specific activities intended to be authorized under this General Permit.

Comment 69: *First sentence of Step #1: "... and detail the proposed steps to be taken."*

TDOT recommends moving this requirement to Step #2. Given the nature of infrastructure repair, especially in slide areas, the proposed steps to be taken might be unknown until more investigative work can be performed. This investigative work typically occurs concurrently with work in the area.

Response 69: The Division understands the level of detail may vary giving the state of emergency. The Division requests as much information as possible to provide a conditional approval for the work. The Division cannot provide conditional approval with no information for the nature and scope of the emergency or broadly what type of work that is proposed. The Division will leave the language as written.

Comment 70: *Step #2: TDOT recommends modifying the statement to require the bulleted information be submitted within 10 days after work has been completed.*

Due to the nature of repairs under this permit, having an application immediately after authorization for a slide type project is not feasible. If this is required, multiple permit modifications will be needed for nearly every emergency repair project as the scope of work might change as work on the repair occurs.

Response 70: The Division will update the general permit accordingly to align this Step with Special Condition 2.

D. General Aquatic Resource Alteration Permit for Utility Line Crossings

a. Activities Covered by this Permit

Comment 71: *This permit, because it truly covers routine activities, does a very good job of defining what is allowed and covered with one exception. It does not address overhead electric, phone, and cable crossings. The construction of such overhead lines can have substantial impacts on riparian zones as well as where equipment crosses the stream, and maintenance of the right of way can have continued impacts on streambank stability. This is an area that needs to be addressed and this General Permit seems like the most appropriate place to do so.*

Response 71: The Division understands this concern and agrees that language should be included in the GP that clarifies that the alteration of wetlands and streams due to construction or easement maintenance of aerial utility lines, including permanent vegetation suppression is not authorized by this general permit. Such alterations may require coverage under a different general permit or individual permit depending on the nature and scope of the alterations. If overhead lines do not alter a water feature, they are not subject to any permitting requirements.

b. Special Conditions

Comment 72: *Item 3.5 C requires a site specific containment plan to be submitted as part of the ARAP application. This is a problem. When the City submits for an ARAP it is well in advance of a project going to construction. The City will not have even bid the project and will not have a drilling contractor under contract to discuss how and where his plan will be. We will not know exactly where he is installing his pit and what plans he has in place for containment in the event of a release. We cannot therefore submit a plan for something that we do not control. We will be happy to submit the plan after the preconstruction meeting is held when we can receive the plan from the contractor doing the work. Giving TDEC the plan on the front end is not feasible since we do not have a contractor at that time and do not schedule how he does his work. The last sentence needs to be reworded. The containment plan submitted prior to work will be followed in the case of an inadvertent release.*

Response 72: We agree with the comment. Where the permittee must accept bids during the process of applying for general permit coverage, they typically would not have the opportunity to develop a site specific contingency and containment plan as a part of the application. The Division's intent is that the site-specific contingency

and containment plan for inadvertent release of drilling fluid must be established *prior to commencement of work.*

We therefore have changed the wording to require that the submittal of the site-specific contingency and containment plan for inadvertent release of drilling fluid must be received and approved by the Division prior to commencement of work.

Comment 73: *These are clear specifications and the new ones on trench plugs will have a positive impact on water quality as lines are replaced and trench plugs are installed with the new lines.*

Response 73: We agree with the commenter and also believe that the trench plugs are necessary. Trench plugs are barriers placed within an open pipeline excavation in order to slow flow and reduce erosion in the trench and also to prevent the gravity sewer trench from becoming a subsurface drainage path, especially near streams where surface waters can be lost into the trench.

Comment 74: *Item 6 a requires a Sewer line crossing of streams must provide non-erodible fill and cover such as concrete or low strength materials. This section of the permit is requiring a concrete cap to be installed around and over the top of the sewer main crossing. This is needed for protection of the crossing and is good engineering practice. However in item 15 it eliminates the use of concrete or Riprap to line the bed of the channel. This is a contradiction of requirements. Please modify the last sentence as there will need to have some stabilization required over the top of the sewer or water crossing even if it is limited to 40 feet.*

Response 74: We appreciate the commenter identifying this area of confusion, however we do not feel they directly contradict each other. The intent is to provide a non-erodible cap to protect the pipe below the bed of the stream, and overlay this with natural substrate where practicable. Consequently, we have modified the last sentence to state: non-erodible fill and cover, such as concrete or controlled low strength materials (flowable fill) required for pipe protection must be the minimum necessary to protect the pipeline.

Comment 75: *Proposed modification: "Entry pit for auger boring shall be no closer than 20 feet from the stream bank or wetland margin." This condition, combined with limits of blasting, establishes a minimum of 40 feet for auger boring, and 100 feet for boring with blasting involved. We are concerned that this condition will cause undue additional projects costs without necessarily being demonstrably more protective of the resource.*

Response 75: Auger boring is less invasive than open cut and therefore we do not intend to disincentivize this method. However, the entry pits are invasive and some minimum distance from the stream or wetland is prescribed. We believe that a

distance less than 20 feet from the stream is inadequate to protect the integrity of the stream bank.

The minimum distance from the stream for blasting is common to each of the Division's general permits. Rock blasting fractures bedrock, increasing bedrock porosity and increasing hydraulic conductivity by as much as two orders of magnitude within the shock zone, depending on the explosive charge used.

Controlled blasting can be used to mitigate the degree of fracturing. However, the impact of blasting depends on many variables such as the competency of the rock and the explosive charge used. We know of no established blasting guidelines with which to reduce risk of flow loss from headwater streams and therefore have determined to retain the 50 foot setback for blasting.

Comment 76: *Special Condition 15: The maintenance permit allows for 25 ft of riprap with no notification at the end of structures on the banks and in the channel. Similar consideration should be given to utility line crossing locations.*

Under this ARAP, TDOT also recommends allowing hard armoring across the channel in the open cut where utility lines have been installed. Such armoring will provide protection against pipe ruptures in the stream.

Response 76: Special Condition 15 allows up to 40 feet of armoring associated with an open cut crossing along the streambank, as follows: Stream bank armoring at open cut crossings shall be minimized to the backfilled, disturbed area and shall in no case exceed 40 linear feet of stream bank.

Special Condition 6. a. states: Sewer line crossing of streams must provide non-erodible fill and cover, such as concrete or controlled low strength materials (flowable fill), and trench plugs at each end of the crossing.

We have also modified Special Condition 15 to state: non-erodible fill and cover, such as concrete or controlled low strength materials (flowable fill) required for pipe protection must be the minimum necessary to protect the pipeline, and be overlain by natural bed substrate to the maximum extent practicable..

E. General Aquatic Resource Alteration Permit for Gravel Removal

a. General Comments

Comment 77: *There is a major problem with this General Permit that has not been addressed in this revision. For the most part, removing bed material from a stream is a destructive activity and should be avoided. There are, however, a limited number of streams and stream sections where there is a large amount of mobile stream sediments*

of a size that could be harvested, within limits, without detriment to the stream. TDEC should maintain a list of such streams for which this General Permit is applicable and should create a process by which additional streams or stream segments could be added to this list.

Response 77: We agree that certain streams are less vulnerable to impact from gravel removal simply because of the relative volume of bedload gravel that they transport. However, the Division's intent is to recognize the riparian landowner's ownership of the gravel bars, and identify a *de minimis* threshold under which the riparian owner can use that gravel on their family farms or private residences. We believe that the limit of 50 cubic yards annually is *de minimis* in most streams that are large enough to move those volumes of gravel bedload, and will therefore retain this threshold for the general permit. The need for larger amounts of gravel removal in sites suitable for that activity can be authorized through an individual permit if warranted.

b. Activities Covered under this Permit

Comment 78: *Aside from the major objection noted above, this General Permit contains mostly minor changes, but there is a key provision that should not be permitted as written: the provision that allows activities covered under this permit to proceed without an ARAP permit or even written notice to the appropriate TDEC office. This permit authorizes the use of heavy equipment within the stream channel (though not the wetted channel) to remove stone material for use on the landowner's property. The term "gravel" is used in the permit, but the size of the stone referred to is not included anywhere in the permit. If there is an intention to limit the removal to small stone as might commonly be referred to as "gravel," such limitations should be specified. If no such limitation is intended, then the title of the General Permit should be changed to "Stone and Bed Material Removal."*

Response 78: The *General Permit for Gravel Removal* is a permit issued statewide under which persons qualify for coverage to conduct activities that are authorized by it. In the case of this general permit, written notification or authorization is not required; one simply conducts the activity in compliance with the special and general conditions of the permit.

The intent of this general permit is to allow the use of gravel as commonly defined on the riparian landowner's property; particularly for road base and surfacing. However, the commenter is correct that the term "gravel" can be interpreted many ways. We have therefore added a limit on the maximum particle size of material

that can be removed. This limit was determined based on the Wentworth scale¹ that classifies particles up to two and one-half inches as “gravel”.

Comment 79: *There are other deficiencies in the way the permit is written. While the permit requires that a dry buffer be maintained between the extraction area and the flowing stream, it does not specify the depth at which material can be excavated except below the water level at the time, setting up conditions for potential channel re-alignment during future high-water events.*

Response 79: We agree that removal of gravel from point bars has the potential to cause morphological changes to the stream, including channel realignment. The requirements of the 50 cubic yard limit, preserving a berm, and limiting the depth of cut, work together to minimize potential morphological changes. Further, the point bar is demonstrated to be an area of localized bedload deposition, so the expected tendency is continued gravel accumulation in the excavated area.

Comment 80: *The lack of required permit or notice makes the conditions specified under “General Conditions” or “Special Conditions” meaningless. If TDEC doesn’t even know that excavation within the stream channel is occurring, how can it assure that the operator is conforming to appropriate standards?*

Response 80: The commenter makes a good point: because notification is not required, the general permit must result in predictably minor impact. The basic conditions of the general permit are simple and can be conveyed easily to riparian owners who might avail themselves the use of gravel from their property.

c. General Conditions

Comment 81: *Use of boiler-plate language from other General Permits should be avoided. Item 16 of “General Conditions” is a perfect example. Harvesting of bed material should never be conducted except in the dry as Special Condition 2 states. We strongly urge that someone with experience in this area or with the legal implications of General Permits review this final draft. Item 19 is another inappropriate General Condition. Streams large enough to have gravel bars large enough to harvest would not use temporary stream crossings but would instead involve equipment crossing the stream bed which is prohibited in Special Condition 2.*

¹ C K Wentworth, A scale of grade and class terms for clastic sediments, J. Geology V. 30, 377-392 (1922)

Response 81: We agree with the commenter that these two general conditions contradict the special conditions of the permit. They address best management practices for gravel extraction that are already addressed in the special conditions.

The special conditions disallow stream crossings and specify work in the dry by leaving a berm. The two general conditions the commenter mentions address circumstances where stream crossings are allowed and cofferdams and diversions can be used to work in the dry. This contradicts the essential tenets of the general permit. Therefore those two general conditions are not needed and have been struck from the general permit.

d. Obtaining Permit Coverage

Comment 82: *Barring the need for a permit or even notification, how can enforcement and oversight occur to ensure that the waters of the state are being protected and that the impact is de minimis? What is to prevent a landowner from removing more than 50 cubic yards, or another from taking 50 cubic yards in December and another 50 cubic yards in January while claiming that this action did not exceed the requirement of no more than 50 cubic yards "annually." How would TDEC know if the material was used on that property or sold off the property? At a minimum, written notice should be given with a description of the work to be done and the time period, much like that used for "emergency" measures under that permit, so that TDEC can ensure that the impact will indeed be de minimis.*

Response 82: As stated earlier, The *General Permit for Gravel Removal* is a permit under which persons qualify for coverage to conduct activities that are authorized by it. A landowner who violates the conditions of the permit can be subsequently held accountable through enforcement.

Also, as stated earlier, the basic conditions of the general permit are simple and can be conveyed easily to riparian landowners. Landowners who obtain gravel under this permit are easily identified when investigating a complaint.

Our experience shows that enforcement surrounding gravel dredging is typically associated with commercial enterprise and does not involve this general permit.

F. General Aquatic Resource Alteration Permit for Maintenance Activities

a. Activities Covered by this Permit

Comment 83: *TDOT recommends adding slip lining and spin casting to the list of authorized impacts.*

Response 83: Slip lining and spin casting (or cured-in-place) activities are methods to replace culverts where they are no longer currently serviceable. These activities may be authorized by this general permit if the terms and conditions of the general permit are met..

Comment 84: *TDOT recommends changing the term “culverts” to “structures” which is more encompassing and can include (boxes, pipes, box bridges, bridges, etc.). This change would provide clarity and allow for maintenance on not only culverts but other structure types.*

Response 84: Activities covered by this permit include existing, currently serviceable structure or fills. The examples provided are not an exhaustive list of structures.

Comment 85: *TDOT recommends changing the 25 feet upstream and downstream to 50 feet.*

25 feet of riprap is typically not adequate to address scour issues and energy dissipation. A 50 feet rip-rap distance is commonly needed for stabilization repairs at the end of structures. The change to 50 feet will better meet the long term need of the structure while still being protective of water quality.

Response 85: The General Permit allows for the placement of clean rock fill material 25 feet upstream and 25 feet downstream of existing structures without submittal of an application or written authorization. This condition does not preclude applicants from requesting coverage under a separate permit for greater than 25 feet of riprap.

Comment 86: *TDOT recommends modifying this statement. It appears to conflict with the 1st and 2nd bullet under this section concerning replacement of structures (headwalls and culverts) being allowed*

Response 86: Replacement means to put a structure or fill back in place where such structure is no longer serviceable within the parameters of the special conditions, and is only allowable under this general permit for replacement of headwalls and culverts, provided they do not affect additional linear stream footage. Rebuilding or reconstruction of other types of structures is not intended to be covered under this general permit. The Division has added a special condition in an effort to make this more clear.

Comment 87: *The General Permit for Maintenance Activities as currently written cover the work done by the NPS in Big South Fork NRR and Obed WSR for our routine road and trails work. We do have a concern regarding other non-NPS areas associated with*

an ONRW re. activities related to excavation of accumulated sediments and debris obstructing or impeding the function of existing structures. The 100 linear feet immediately above and below the structure seems excessive. A 50 foot distance above and below would be more appropriate to protect an ONRW. A larger project should be reviewed.

Response 87: This general permit does not restrict activities located in a component of the National Wild and Scenic River System or waters designated as Outstanding National Resource. The provision to limit maintenance activities located in a component of these Waters is covered in this general permit because the minor degree of degradation and resource loss associated with the activity of concern. The excavation of accumulated sediments and debris is limited to those materials obstructing or impeding the function of existing structures. The removal of sediment or debris should not result in a significant disruption of the bed or bank of the stream. The removal of sediment or debris is not intended to be used as a form of flood control or drainage improvement. Activities conducted within 100 linear feet above and below the structure should not cause the size, design or pre-existing function of the stream bed and bank to change regardless of the resource designation. Larger projects or activities that exceed the terms and conditions of the General Permit for Maintenance Activities will not be authorized by this GP. Language was added to the general permit to limit disturbance from heavy equipment and protect all streams regardless of their designation.

Comment 88: *There is a definite contradiction in this section that has not been resolved by the few modifications proposed. "Rebuilding of the structure is not covered" is a new provision in this section but contradicts the first two provisions which allow reconstruction of headwalls and replacement of culverts. How is removing an old culvert and replacing it with a new and possibly larger culvert not considered "rebuilding?"*

Response 88: Thank you for your comment. Please see response to comment 86 for the changes the Division have made to clarify activities eligible for coverage under this general permit.

Comment 89: *The first provision allowing maintenance activities without a permit is not clear as it includes two different kinds of activities with different possible impacts. Removing excess sediment and debris should certainly be allowable without a permit. However, the process of adding "rock fill" is not clear. In the "Activities Covered" section, the term "rock fill" is used, but in the "Special Conditions" section, the term "rip rap" is used. Are these the same thing or different? If different, describe the differences. Because Special Condition 5 describes the process of properly bedding rip-rap, particularly upstream of a structure to prevent or stop flows underneath the structure, and recognizes that this process takes some special care in order to effectively accomplish its goals, it does not seem prudent to allow this kind of activity to proceed without a permit.*

There are certainly situations where simply placing additional rip rap may improve stability and could be allowed without a permit. A description of how to determine the difference between these situations should be included.

Response 89: The Division has revised the permit to remove the confusion between “rock fill” and “rip rap” by consistently applying the term riprap throughout the general permit. Riprap should generally consist of machined shot rock that is angular and clean. Riprap should not contain sand, dust, organic material, excessive crack, mineral lenses and intrusions, or other impurities. Special conditions have been added to the permit to ensure riprap is properly embedded. The intent of riprap being tamped into the subsurface or otherwise embedded is to ensure water will flow over the embedded riprap and that flow is not lost below or within the rock.

Comment 90: *In addition, while removing sediment is allowed without a permit and adding rip rap is proposed to be allowed, there is no requirement to remove displaced rip rap from the stream channel anywhere in this permit. It is not uncommon in many streams to have the gravel in the stream bottom substrate to be dominated by gravel and rip rap associated with stream crossings of roads and driveways. This is a cumulative impact that can be substantial, especially when the limestone gravel or rip rap does not match the normal rock composition in the stream and can alter the stream chemistry.*

Response 90: Thank you for this comment. The Division has included language in the general permit to include the removal of displaced riprap within 100 linear feet immediately above or below the structure.

Comment 91: *TVA recommends that TDEC consider including the removal of previously authorized structures or fills in this permit. Such a change would align with the Corps NWP 3 for Maintenance.*

Response 91: The intent of this General Permit is for maintenance activities. Maintenance means the repair, rehabilitation, or replacement of currently serviceable structures or fills, but not so degraded as to essentially require reconstruction. The removal of a previously authorized structure or fill may be more appropriately authorized by a separate general or individual permit.

b. Special Conditions

Comment 92: *TDOT recommends removing the terms “pipe or culvert” to include all structure types.*

TDOT also recommends allowing for a minor deviations in length with maintenance replacements. This would allow for small changes to length due to safety considerations or constructability issues due to the maintenance repair.

Response 92: Activities covered by this permit include existing, currently serviceable structure or fills. The examples provided are not an exhaustive list of structures. The general permit allows for minor deviations in the structure's configuration or filled area including those due to changes in materials, construction techniques, current construction codes, or safety standards which are required as part of repair or rehabilitation. However, if the length of the pipe or culvert increases in a manner that encapsulates any additional length of open stream or wetland, the activity should pursue coverage under the Minor Road Crossing General Permit or Individual Permit.

Comment 93: *TDOT recommends removing "Suitable substrate does not include soil." West TN's existing bedload consists of soils with very few if any rocks. There may also be a need to use clay soils to assist with managing the water.*

Response 93: The Division believes that Voids in the rock riprap should be filled with suitable non-erosive bedload substrate, such as smaller rocks.

c. Obtaining Permit Coverage

Comment 94: *Under obtaining permit coverage, we believe the additional following language would help clarify the scope of maintenance activities taking place within the limits of previously authorized fills as also being covered under this general permit without requiring notification: "Maintenance activities limited to the excavation of accumulated sediments and debris obstructing or impeding the function of an existing structure, for a cumulative maximum of 100 linear feet immediately above and/or below the structure, and/or the placement of clean rock fill material within 25 feet upstream and 25 feet downstream of existing structures **and fills** may be done without submittal of an application or written authorization from the Division prior to the commencement of work, provided the work is performed in accordance with the permit terms and conditions."*

Response 94: The Division's intent for this non-notification subcategory of activities is to only apply to removal of sediment obstructing the function of structures such as culverts and pipes, or placement of stabilizing fill immediately above or below structures to prevent their failure. These activities when associated with existing fill (not structures) would require written notification to assess the individual and cumulative effect of the proposed activity.

G. General Aquatic Resource Alteration Permit for Construction of Intake and Outfall Structures

a. Special Conditions

Comment 95: *The limitation of 10 structures within a project area could impact TVA pond closure projects, many of these projects include the installation of numerous storm water outfalls as part of the cap and cover system. The number of these outfalls may exceed 10 structures over the given project area.*

Response 95: The Division has determined that an unlimited number of structures cannot be assured to be *de minimis* and in that regard believe a limit is prescribed. Based on our review of numerous coverages under this general permit, we conclude that most industrial and residential projects will not be affected by this limit.

Further, projects which have more than 10 structures are not prohibited. Projects with more than 10 structures that do not fit the conditions of this general permit may be eligible for coverage under a standard permit.

Comment 96: *TDOT recommends an exclusion in the number of outfalls for linear transportation projects. A linear transportation project could easily exceed 10 outfalls when including roadside ditches.*

A recommended alternative approach is to limit the number of outfalls per stream for linear projects.

Response 96: In order to support a determination of *de minimis* impacts, a limit to structures is necessary. Projects which have more than 10 structures are not restricted from permit coverage. Projects with more than 10 structures that do not fit the conditions of this general permit may still be eligible for coverage under a standard permit.

Comment 97: *[5] This new provision is inappropriate as it is arbitrary and does not take into account the size of the stream impacted, nor does it specify the size of the project area. On a large river, having 10 intake or outfall structures might be possible without significant impact, but it is hard to imagine how that could be true for a small stream or one with significant seasonal flow variability. TDEC should be able to evaluate the proposal for intake or outfall structures and make a science-based judgement about the degree of impact. There is no shortcut here by using an arbitrary number of structures. The volume and velocity of the stream must be assessed in relation to the volume and velocity of the intake or outfall, combined with the characteristics of the stream substrate and banks to determine whether a de minimis impact is possible.*

Response 97: The Division agrees with the comments, however, this level of detail is often not known or supplied with all applications. The limits within the Divisions general permits must be easily understood by regulators, the regulated community, and the public at-large. In an effort to make permitting decisions consistent across the state, the Division will leave the proposed condition as written. If necessary, the Division and has the authority to require a standard permit where additional site-specific conditions are needed.

H. General Aquatic Resource Alteration Permit for Minor Dredging in Reservoirs and Ponds

a. Activities Covered by this Permit

Comment 98: *Because this section specifies that it does not apply to flowing water systems, it needs to clarify how the interface between the feeder stream and the reservoir is calculated and treated. Where a stream enters an impoundment, there may be considerable flow and the amount of flow will also be affected by the amount of throughput of the reservoir which depends on both rainfall amounts and the size of the reservoir. While TVA's conditions of no permit address this by only allowing for dredging during draw-down times when the substrate is exposed, this permit does not address equivalent conditions as desirable.*

Response 98: Dredging should be conducted during draw-down periods in managed reservoirs and may be conducted up to the elevation of the summer pool, including in the area of the confluence of tributaries with the reservoir. Language in the General Permit will be added to make this clear.

b. Special Conditions

Comment 99: *This is acceptable as written with need to allow for invasive plant removal.*

Response 99: Removal of invasive plants is not prohibited by this General Permit, it is recommended that approved herbicides be used for such activities to avoid spreading plants whose means of propagation include spreading by physical dispersion. General condition number 5 will also be changed to clarify that the removal of native riparian vegetation is that which should be minimized.

c. General Conditions

Comment 100: *[5] This is another example of not properly modifying boiler-plate provisions to meet the specific General Permit. As most reservoirs are, in fact, stream channels, dredging will increase the cross-sectional volume of the channel. Do you intend to say that the ordinary high-water width shall not be widened?*

Response 100: The intent of this language is to prevent dredging activities impacting outer channel dimensions. The permit will be modified by removing the word "stream" to better reflect this intention.

Comment 101: *[6] This does not seem to apply to this permit at all. How would dredging do this?*

Response 101: While it may be unusual for dredging to result in a permanent barrier to the movement of aquatic life, if it did such an activity could not be authorized by a General Permit.

Comment 102: *[12] When would there be any backfill activities in association with this permit? If there are some you can anticipate, specify them.*

Response 102: Dredging is sometimes accompanied by fill activities such as bank sloping followed by fill and replacement, which would not be authorized by this permit.

Comment 103: *[16] This should be re-written to match the actual conditions of this General Permit. Either talk about doing the work during draw-down conditions, creating barriers and pumping, or discuss installing silt and sediment curtains to allow work under water, for example.*

Response 103: The permit specifies that where practicable, dredging should be conducted in the dry, in the case of reservoirs this often would be during draw-down. While the other conditions discussed may be rarely encountered, they are intended to cover unforeseen activities.

Comment 104: *[18] How does this apply to this permit?*

Response 104: While rare, crossing of streams to allow access to areas to be dredged sometimes occurs and is limited to one temporary stream crossing by this General Permit.

I. General Aquatic Resource Alteration Permit for Construction or Removal of Minor Road Crossings

a. Activities Covered by this Permit

Comment 105: *There are two provisions that should be added to this section. The first concerns maintenance and should inform the permittee that road crossings are unavoidable restrictions to the flow of water and as such must be able to allow water to flow down the channel at various flow regimes as well as before the crossing was*

installed. They should be reminded that debris may become caught on the culvert and maintenance to remove it will be required to prevent water from seeking to erode a channel around the culvert.

Second, applicants should be warned that typically road crossings last 20 years or more, but stream channels can widen and deepen if upstream development increases stormwater run-off. They should anticipate increased future flow in properly sizing the culvert(s) and know there are ways to anticipate a future widening without widening the existing base flow channel.

Response 105: The removal of debris in and around culverts is allowed for under the General Permit for Maintenance Activities. Special Condition Seven addresses concentrating base flow within the culvert while also allowing for flood flows to pass through additional culverts (barrels) if needed.

b. Special Conditions

Comment 106: *Special Condition 1: TDOT recommends removing "Including temporary impacts".*

The addition of temporary impacts for temporary diversions or temporary stream crossings will increase the number of individual ARAPs. Temporary impacts will be removed and restored to pre-existing conditions.

Response 106: The Division disagrees and will leave the condition as is, so as to ensure no more than *de minimis* impact and no appreciable resource loss occurs. It has been the Divisions' experience that in a significant number of cases, planned temporary impacts may result in permanent alterations. The Division would need to require monitoring to ensure temporary impacts that exceeded the GP thresholds were in fact restored to pre-existing conditions, which cannot be authorized under a general permit.

Comment 107: *Special Condition 4: TDOT recommends excluding the non-notification permitted sites from this notification requirement.*

Response 107: Special Condition 4 refers to the commencement of *authorized* work. Activities which do not require notification to the Division are subject to the terms and conditions of this permit, but do not require a written application and do not receive prior authorization, and are therefore not subject to Special Condition 4.

Comment 108: *Special Condition 5: TDOT recommends removing “Suitable substrate does not include soil.” West TN’s existing bedload consists of soils with very few if any rock. There may also be a need to use clay soils to assist with managing the water.*

Response 108: Voids in the rock riprap should be filled with suitable non-erosive bedload substrate, such as smaller rocks.

Comment 109: *Special Condition 8: TDOT recommends adding an exclusion for aquatic passage if the upstream or downstream stream segments already have naturally occurring barriers in place. This direction also better aligns with the Army Corps of Engineers conditions.*

TDOT recommends rewording this to be more consistent with the Army Corps of Engineers Nationwide General Conditions: “No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water.”

Response 109: Applicants are not responsible for natural barriers in the vicinity of minor road crossings. If the road crossing is placed immediately up or downstream of a natural barrier, this does not exclude the use of this general permit. Applicants cannot create a condition that would result in a barrier, even if natural barriers or barriers that were not caused by the applicant exist elsewhere in the watercourse.

Comment 110: *[11] We strongly support this provision as meeting the real definition of “minor” – a single lane road. Acceptable as written with need to allow for invasive plant removal.*

Response 110: This condition applies to loss of stream length and is not the impact limit for this general permit. Road Crossings are limited to 200 linear feet. In most situations invasive plant removal can be done without the need for permit coverage. If invasive plant removal includes extensive clearing and grubbing of riparian vegetation, a permit may be required.

Comment 111: *“Road crossings for non-linear projects, including transition channels, endwalls, aprons, or rip rap, that either individually or cumulatively exceed a total length of 200 feet of impact, including temporary impacts, in the same Stream Catalog Unit (Waterbody) for the entire project are not covered.” Many other permits allow one temporary crossing, and often, access to install a road crossing is only available from one side of a stream, necessitating a temporary crossing. If a temporary crossing is considered de minimis for other activities (maintenance, intake, minor dredging, public*

access structures, stream and wetland enhancement, etc.), then certainly it should be considered *de minimis* for this activity.

Response 111: Temporary crossings are allowed under this general permit if the total impact including the temporary crossing is under 200 linear feet. The Division cannot allow the limit of the general permit to be exceeded. General Condition 17 addresses the limits for Temporary Stream Crossings that do not involve fill or excavation. This is the same general condition within other general permits such as those listed in the comment. Temporary stream crossings that do not involve fill or excavation are allowed under other general permits to prevent applicants from needing to also apply for a minor road crossing general permit.

Comment 112: *“Road crossings that result in more than 10 feet of stream length loss are not covered.” We are concerned that this will put constrain project design and lead to increased costs by requiring larger crossings than what is necessary to pass flows without altering the hydraulics of the channel. It doesn’t take the width of the resource into account. The existing permit prohibits “Road crossings that may significantly alter the hydraulics of the stream.” If a crossing is designed in a manner that does not significantly alter the hydraulics of the channel, and is under 200 feet of impact, the amount of channel loss should not be a factor in determining if the impact is greater than de minimis.*

Response 112: Applicants should not use the limits and conditions of any general permit as design standards or to influence engineering design. General permits limitations are the Divisions *de minimis* limit, not the Divisions only permitting or design standards. Activities that result in more than 10 linear feet of stream length loss are eligible for coverage under an individual permit.

Comment 113: *In the General Aquatic Resource Alteration Permit for Construction or Removal of Minor Road Crossings, a new Special Condition is proposed: “Road crossings that result in more than 10 feet of stream length loss are not covered.” The addition of this Special Condition suggests that greater than 10 feet of proposed stream length loss would result in greater than de minimis degradation and require mitigation, and potentially an Individual Permit. However, it is not clear if this 10 linear foot threshold triggers the need for compensatory mitigation. Further, the addition of this Special Condition appears contracting to the previously authorized Special Condition, limiting the road crossing related impacts to a total of 200 feet of impact. The addition of the new condition causes confusion when the Debit Tool may be required. Based on the public information session provided by TDEC on February 24, 2020, it is our understanding the 10 linear foot threshold is not intended to be a threshold for mitigation or authorization limits. Therefore, Barge requests that the Division clarify the Special Condition to directly address mitigation and impact type (temporary, permanent, encapsulation, fill), or remove the condition from the proposed authorization.*

Response 113: Stream length loss refers to loss of linear length of channel, which would be considered a Tier 6 impact in the debit tool. Minor road crossings that result in greater than 10 linear feet of stream length loss would require an individual permit and mitigation for this loss would be required.

Comment 114: *The special conditions for coverage under the General ARAP for Construction or Removal of Minor Road Crossings seems to indicate projects with more than one temporary road crossing can be covered under this permit provided the thresholds stipulated in this section are not exceeded. However, the proposed changes to general condition number 18 specify temporary stream crossings shall be limited to **one point** in the construction area. TDEC should update the proposed language in general condition 18 such that it's not in conflict with the intent of the general ARAP.*

Response 114: The intent of the general condition found in all general permits with regards to temporary crossings, is to only allow one temporary crossing that does not involve fill or excavation within the project area. To be eligible for coverage under this general permit the cumulative length of the temporary and permanent crossings that do involve fill or excavation must meet the limits as specified in the special and general conditions.

Comment 115: *TVA believes Special Condition 11 is written to mean that permanent impacts (stream loss) from stream crossings greater than 10 feet are not covered by this general ARAP. However, this condition could also be read to mean that temporary stream crossings greater than 10 feet cannot be covered by this general ARAP. We request TDEC update the language in this special condition to differentiate stream loss from temporary impact.*

Response 115: Stream length loss refers to permanent loss of stream length due to fill, encapsulations, spans, bridges, or other types of impacts covered by this permit. Temporary crossings are covered under this permit as specified in Special Conditions 1 and 2, and General Condition 17, and should never result in permanent loss of stream length if done properly.

Comment 116: *In the redline version of this General Permit, Special Condition 11 states "Road crossings that result in more than 10 feet of stream length loss are not covered," which suggests that greater than 10 feet of proposed stream length loss would result in more than de minimis degradation and therefore require coverage under an Individual Permit. However, there is no indication in the General Permit as to whether this amount of stream length loss would potentially trigger a compensatory mitigation requirement. According to the 2019 Stream Mitigation Guidelines, stream length loss would be categorized as a Tier 6 Impact as this impact type represents 100% loss of stream function. Although it is generally understood that impacts individually or cumulatively exceeding 200 feet would require mitigation, there is no minimum linear foot threshold identified under the Tier 6 description type within the Guidelines. It is also recognized that*

the Division requires mitigation for loss of stream length when there is an appreciable permanent loss of resource values; however, it is not clear from this General ARAP whether 10 feet of stream length loss would be considered an appreciable loss of resource value and require compensatory mitigation. We recommend that the Division provides clarification under this Special Condition by stating whether permittees that propose greater than 10 feet of stream length loss would have to assess their project in the Debit Tool and if compensatory mitigation would be required. If mitigation would not be required for 10 linear feet of stream length loss, we respectfully request clarification in this permit on the linear foot threshold and length loss type (i.e. fill, RCP's, channelization) that would involve mitigation so it helps permittees and mitigation providers better understand the process for this type of impact. We also recommend including a footnote to this statement that provides a citation and link to the 2019 Stream Mitigation Guidelines to help prospective permittees navigate the potential mitigation steps should they find their project cannot meet the maximum allowed stream length loss requirement listed in this General Permit

It is also not clear whether the statement under Special Condition 11 applies to temporary vs. permanent stream length loss; therefore, we suggest specifying the duration of stream length loss not covered in this statement.

Response 116: Stream length loss refers to permanent loss of stream length (linear length of channel) due to fill, encapsulations, spans, bridges, or other types of impacts covered by this permit, which would be considered a Tier 6 impact in the debit tool. Minor road crossings that result in greater than 10 linear feet of stream length loss would require an individual permit, would be considered an appreciable loss of water resource value, and mitigation for this loss would be required. Temporary crossings are covered under this permit as specified in Special Conditions 1 and 2, and General Condition 17, and should never result in permanent loss of stream length if done properly. The Division will clarify special condition 11 to indicate it refers to permanent loss of stream length.

c. General Conditions

Comment 117: *General Condition 6: TDOT recommends removing this condition. Blasting requirements will not be known until construction has started in that area. Having a contractor stop work in a certain area to obtain an individual permit will be costly during construction.*

Response 117: The Division does not wish to create undue economic burden on any applicant, however economic considerations are not the only factor the Division must consider when issuing permits. Blasting within or adjacent to streams has the potential to produce significant harm to water quality, requires site specific analysis and conditions, as well as coordination with other resource agencies to ensure no

permanent loss of resource value will result. The Division will leave the condition as written.

d. Obtaining Permit Coverage

Comment 118: *Multiple comments addressed that the 2020 permit eliminates the current exclusion of crossings less than 25 feet wide from requiring authorization. These comments expressed concern that this would unnecessarily increase workload on agency staff and would cause an increase in enforcement actions.*

Response 118: The Division agrees with the commenters, and will add a no-notification provision to the General ARAP for Minor Road Crossings to read as follows : *"Temporary road crossings associated with ongoing construction activities where the total length of disturbance along the stream channel needed to temporarily install, and remove any fill or structure associated with the crossing is less than 25 feet may be done without submittal of an application or written authorization from the Division prior to the commencement of work, provided the work is performed in accordance with this permit's terms and conditions. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream bed and banks shall be restored and stabilized with native vegetation".*

Comment 119: *TVA reviewed the records for our transmission construction group in 2019 and for those projects there were 82 culverts or stream crossings and 44 wetland crossings. These represent 33 construction projects and 36 temporary culverts for maintenance purposes. The proposed changes to the notification requirements under obtaining permit coverage to require a Notice of Intent for all stream crossings would result a significant increase and difficulty in permitting burden for TVA's linear construction projects and TDEC. Linear construction projects, such as transmission line construction and maintenance, can run hundreds of miles in length and may result in few or many temporary stream crossings in order to complete the project. Many times, the exact number and location of stream crossings for local access to the right of way cannot be fully understood when the project commences because of factors such as topography, vegetation density, and property owner input. TDEC should consider a less burdensome permitting approach for linear projects that by nature will only temporarily impact resources. TVA would prefer TDEC provide a separate notification requirement for linear construction activities under obtaining permit coverage equivalent to the currently effective permit.*

Response 119: This permit does not authorize impacts to wetlands, temporary or otherwise. Permanent or temporary impacts to wetlands will need to seek coverage under the General Permit for Minor Alterations to Wetlands or a standard permit. The no notification provision for permanent stream crossings was removed as it was not being consistently followed and implemented.

However, based on this, and similar comments, the Division has added the following no-notification activity to this General Permit:

“Temporary road crossings associated with ongoing construction activities where the total length of disturbance along the stream channel needed to temporarily install, and remove any fill or structure associated with the crossing is less than 25 feet may be done without submittal of an application or written authorization from the Division prior to the commencement of work, provided the work is performed in accordance with this permit’s terms and conditions. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream bed and banks shall be restored and stabilized with native vegetation.”

J. General Aquatic Resource Alteration Permit for Public Access and Boat Ramps

a. General Comments

Comment 120: *TVA recommends removal of the term “public” throughout the permit and rather refer to “access structures”. While the ARAP consistently refers to public access structures, the Obtaining Permit Coverage section broadens the definition to private and public structures.*

Response 120: The current wording is designed to express that the General Permit is for various public access structures in all waters, and boat ramps (private or public) in more limited settings. The one exception as noted in the *Obtaining Permit Coverage* section is for small stairs or landings. Certain wording and punctuation in the title and *Activities Covered by this Permit* section will be changed to reflect this.

b. Activities Covered by this Permit

Comment 121: *Under Activities Covered by the Permit section, page 1, first paragraph, TVA recommends removal of “specific” when referencing TVA-managed reservoirs. We would suggest the phrase “waters managed by TVA under its Section 26a jurisdiction.”*

Response 121: The term “specific” is intended to refer to those TVA reservoirs subsequently listed in the permit’s non-notification activities. On August 10, 2018, the Nashville District Corps of Engineers issued Programmatic General Permit 18-01, authorizing certain categories of minor structures, fill and work in specified Tennessee Valley Authority (TVA) reservoirs within the states of Alabama, Kentucky, Mississippi, Tennessee & Virginia. The list of specific reservoirs included mirror those authorized under this PGP, and not all waters managed by TVA under its 26a jurisdiction.

c. General Conditions

Comment 122: *Section 6 and 11 do not seem to apply to this permit.*

Response 122: While such conditions may not be readily foreseeable, these General Permits are intended to cover a wide range of activities and preclude specific impacts, which this language provides for.

d. Special Conditions

Comment 123: *Under Special Conditions, page 1, #3, TVA recommends clarification that this condition does not apply to “waters managed by TVA under its Section 26a jurisdiction.”*

Response 123: This condition is intended to apply to any “waters managed by TVA under its Section 26a jurisdiction” that are flowing streams and rivers, and not reservoirs.

e. Obtaining Permit Coverage

Comment 124: *The section regarding small access structures has an inconsistency and a place needing clarification. The inconsistency regards “private structures” yet this General Permit is for Public Access. It seems quite irregular to grant private landowners exemptions from permitting requirements in this General Permit, but if so, it should be stated in “Activities Covered.”*

Response 124: The prior wording and punctuation changes mentioned in response to Comment 121 should address this.

Comment 125: *The second issue is clarification regarding heavy equipment. For canoe and kayak access trails requiring ADA-compliant slopes and widths, small treaded machines with attachments are often used to cut the trail into a slope and spread the fill material to build the trail. If TDEC does not intend to ban such equipment, it should specify by size or weight the kind of equipment it intends to prohibit.*

Response 125: The ban on the use of heavy equipment only applies to this limited non-notification subset of activities in the General Permit. If the use of heavy machinery or significant bank sloping is required for a public, ADA-compliant access structure, written application for an NOC under this general permit may be necessary.

Comment 126: *Under Obtaining Permit Coverage, page 5, (b), TVA recommends replacing “public access points” with “public access structures”. TVA also recommends clarification on the width thresholds. It is unclear if the six foot width is the limit only for private structures and 12 feet is the limit for public structures. Or does this mean that public structures are limited to 6 feet but can go up to 12 feet if needed to meet ADA standards?*

Response 126: The suggested wording change will be made changing “public access points” to “public access structures”. The current wording will be changed to reflect that only public access structures subject to ADA standards may extend up to 12 feet.

Comment 127: *Under Obtaining Permit Coverage, page 5, we request consideration of concrete access structures installed consistent with the conditions of concrete boat ramps (i.e., fill and excavation in the dry, work cannot commence until a Section 26a permit is received, use of precast or preformed concrete is allowable) and subject to the width thresholds on page 5.*

Response 127: The allowable impacts that can be covered under this non-notification subset of activities under the General Permit are accurately specified as currently written.

Comment 128: *Item a. under obtaining permit coverage should be updated to agree with special condition 1. Special condition 1 authorizes a maximum length of permanent bank alteration up to 50 feet in waters managed by the TVA or USACE; however, item a under obtaining permit coverage still limits projects in these areas to a maximum alteration or 20 feet.*

Response 128: The 20-foot limit on disturbance on boat ramps in the specific TVA reservoirs found in the “Obtaining Permit Coverage” section applies only to this non-notification subset of activities within the General Permit. Other structures, including boat ramps, in waters managed by the TVA or USACE may disturb up to 50-feet with written application and issuance of a Notice of Coverage after Division review.

K. General Aquatic Resource Alteration Permit for Recreational Prospecting

a. General Comments

Comment 129: *Although Tennessee is long past the days of its brief initial gold rush, the last decade has seen a renewed interest in prospecting for gold in the state’s rivers. Gold prospecting, even when small-scale and “recreational,” can severely damage the habitat of rivers and streams through increased siltation and sedimentation.³⁰ In Coker Creek, where gold was first discovered almost two hundred years ago, “recreational gold collecting has significantly altered the habitat,” such that “[f]ine sediment deposits are well outside the normal range for mountain streams and indicate a serious disturbance within the watershed.”³¹ This increased sedimentation harms aquatic life, including macroinvertebrates, and Coker Creek is currently listed as an “impaired” stream for excess sediments.³²*

As a result of this increased popularity, and the accompanying environmental degradation, TDEC developed a general ARAP for Recreational Prospecting, which was released in August 2014.³³ TDEC published a revised draft of the permit in May 2015, and, after taking comments and scheduling a public hearing, published a final version of the permit, along with responses to comments, in December 2015 (“2015 Responses to Comments”).³⁴

SELC and other conservation organizations submitted extensive comments on the May 2015 proposed general ARAP for Recreational Prospecting.³⁵ In these comments, SELC expressed its position that recreational prospecting as regulated in the general permit may lead to more than de minimis impacts, and so should not be authorized under a general permit.

In particular, SELC’s comments noted that the U.S. Forest Service (USFS), the U.S. Fish and Wildlife Service (FWS), and the Tennessee Wildlife Resources Agency (TWRA) have all commented on proposed individual permits for the kind of prospecting allowed by the general permit—such as use of dredges and suction devices—as being highly disruptive to aquatic species. These devices move around large amounts of streambed substrate and release large amounts of sedimentation, damaging spawning habitat. TWRA stated unequivocally that “in high quality, biologically diverse streams, mechanical dredging is straight-forward destruction of habitat for fish and aquatic life.”³⁶ FWS was “very concerned that these activities could result in direct mortality to mussels, fish eggs, and larvae and indirectly have impacts on substrate stability, fish and mussel food sources, and reproductive success of fish and mussels,” and also noted that the cumulative effects of these activities could be significant.³⁷ USFS reiterated the concerns about damage to aquatic resources, and added that “[o]ther recreational activities (fishing) will be adversely affected and public health could be at risk.”³⁸ TDEC itself has noted in the public notice for this proposed individual ARAP that “mechanized prospecting with dredges will result in degradation to water quality.”³⁹

Although these comments and determinations were made in the context of an individual recreational prospecting ARAP, the same concerns applied to the 2015 general permit, and they continue to apply to the proposed 2020 general permit. Mechanized prospecting, at any scale, is simply too likely to lead to more than de minimis damage to waters of the state to allow in a general permit, which may only be issued for habitat alterations if TDEC can show that the permitted activities “do not result in an appreciable permanent loss of resource values.”⁴⁰ TDEC has not provided sufficient evidence or explanation to demonstrate that the individual or cumulative impacts of the proposed general permit will not result in such a permanent loss.

In the 2015 Response to Comments and the final ARAP, TDEC responded to some of these comments by making changes to the proposed permit to better protect the waters of the state. Many of these changes made between the 2015 proposed and final permits have, in the proposed 2020 permit, been rolled back to the proposed 2015 version without any

explanation from TDEC. We reiterate our objection to the inclusion of any form of mechanized recreational prospecting in the proposed Recreational Prospecting Permit and address the 2020 changes specifically below.

As a preliminary matter, the redlined version of the proposed Recreational Prospecting Permit does not reflect all of the proposed changes from the December 2015 final Recreational Prospecting Permit. For example, in the proposed 2015 Recreational Prospecting Permit, TDEC had set the maximum plume length for Class 1 and Class 2 activities as 300 feet, but in response to comments changed this in the final 2015 permit to 100 feet for Class 1 activities and 200 feet for Class 2 activities; in the current proposed Recreational Prospecting Permit the maximum plume length for both Class 1 and Class 2 activities has been re-set to 300 feet without any explanation. We have attempted to reconstruct the differences between the December 2015 Recreational Prospecting Permit and the proposed permit. As explained below, TDEC has not provided any explanation for its reversion to many of the standards it previously found insufficiently protective of water quality in the December 2015 Recreational Prospecting Permit. TDEC should not only maintain the protections in the December 2015 permit, it should strengthen those protections by eliminating general authorization for mechanized gold prospecting and otherwise limiting the permitted activities as described below.

Response 129: The Division advertised the wrong version of the document by mistake. The version of the document that we published was the original from 2015 before changes were made in response to comments.

With the exception of consolidating the general conditions across the general permits, there are no changes proposed to this general permit and it should have read similar to the 2015 general permit. We apologize for this error and the concern this caused for persons attempting to reconcile this.

We acknowledge that mechanical disturbance and removal of the stream bed substrate degrades habitat for fish and aquatic life and that these activities could result in direct mortality to bottom dwelling organisms such as invertebrates, mussels, and fish eggs and larvae. However a *de minimis* level of similar degradation also occurs with various other activities covered under other general permits.

We do not agree that Class 2 dredging *at any scale* is more than *de minimis*. The terms and conditions of the general permit are intended to limit the scope of habitat degradation to a *de minimis* impact. It should also be noted that such activities are rare – only three such Class 2 Coverages have been authorized by the Division since the inception of the General Permit. The Division has determined that the transitory, recreational nature of the activity together with limitations in the general permit will result in no more than *de minimis* degradation.

b. Special Conditions

Comment 130: *[1] This section is in direct violation of the Endangered Species Act, Section 9(a) which prohibits take of federally endangered or threatened species by any person subject to the jurisdiction of the United States. The removal of stream bottom sediments and subsequent processing for gold extraction will inevitably result in the mortality of fish eggs and other small non-mobile aquatic organisms.*

Response 130: This special condition prohibits Class 1 prospecting in waters designated as critical habitat under the Endangered Species Act, and in any stream segment with a wetted width of less than thirty (30) feet that is designated by the state or federal government as containing threatened or endangered aquatic species, or aquatic species deemed in need of management.

Class 1 activities with hand tools along the edges of larger streams were deemed unlikely to have any effect on listed species by the resource agencies when this GP was originally drafted. The division believes that the conditions of this GP, if followed, will be effective in preventing take, and we reserve the right to deny coverage under the GP if we believe that Class 1 activities are a threat to rare species in specific cases, or at the request of TWRA or USF&W. Class 1 prospecting is entirely non-mechanical.

Comment 131: *[2] We do not agree that private landowners should be exempt from this requirement. If the purpose of the permit is to protect the aquatic resources of the state, the fact that the aquatic resource, i.e., water of the state, happens to cross someone's private property does not give that landowner license to degrade the aquatic resource.*

Response 131: This wording is a relic of the posting of the wrong version of the general permit as detailed in Response 130. The Division agrees that impacts are independent of property ownership and did not include this language in the 2015 general permit or the newly issued general permit.

Comment 132: *Class 1 permit applicants should also be required to submit an application and receive a Notice of Coverage before commencing operation. In its 2015 Responses to Comments, TDEC indicated that Class 1 "non-mechanized" prospecting activities, as distinct from Class 2 "mechanized" prospecting activities, are likely to cause less impact.⁴¹ However, even if likely to cause less impact, the potential impact of Class 1 operations can still be severe, particularly when considered cumulatively. Class 1 permit applicants should also be required to submit an application and receive a notice of coverage before commencing operations.*

As with the Minor Water Withdrawals General ARAP, TDEC's decision to allow these activities to proceed without any application, approval, or even notice, stems from a desire to "avoid an unnecessary regulatory burden."⁴² Requiring permit applicants to submit a brief application indicating that they have read and agreed to the terms of the general permit, and noting where, how, and when they will be prospecting, does not seem overly burdensome.

More importantly, it is, in fact, necessary. If TDEC has no way of tracking where Class 1 permittees are operating, how can it possibly determine whether those permittees are causing negative impacts, either individually or cumulatively? In the 2015 Responses to Comments, TDEC justified the decision not to require Class 1 permittees to submit any application, or even notice of intent, by stating that "[i]f information arises that shows that review and approval is needed for non-mechanized prospecting, the general permit can be revised."⁴³ However, absent knowledge of the size or location of these operations, TDEC's ability to actually gather such information is severely limited.

Furthermore, without even a notification requirement, TDEC cannot be sure that permittees have been put on notice regarding their obligations under the general permit, and does not have the opportunity to check that the permittee is abiding by the permit's terms. In the General Conditions section, prospecting is outright prohibited in several circumstances, including in Outstanding Natural Resource Waters, in streams listed as impaired for contaminated sediments on the state's 303(d) list, and in streams or stream segments managed for brook trout. Prospecting is also not allowed in areas with state or federally listed endangered or threatened species, or species deemed in need of management or of special concern, without prior coordination with TDEC and the Tennessee Wildlife Resources Agency (TWRA).

At an absolute minimum, Class 1 permit applicants must be required to inform TDEC where they will be operating prior to beginning operation would allow TDEC to check that the activity is not taking place in one of these prohibited areas, or without appropriate coordination and approval. Requiring submission of notices of intent would at least allow TDEC to better monitor permit locations and stream segments for individual and cumulative impacts, and would also express the permit applicant's knowledge of and assent to the general permit conditions.

Response 132: We acknowledge that much of the information associated with the prohibitions and limitations of the general permits are not generally known by the public.

Nevertheless, the Division can proceed with an element of trust in its everyday operations. Persons do tend to contact the Division before altering streams, including engaging in Class 1 prospecting (and similarly with other general permits).

We have set aside certain low risk activities within the general permits that do not require notification, on the basis that the terms are simple and easily understood, and that if done in conformance with those terms of the general permit, would not result in more than *de minimis* degradation.

Comment 133: *At minimum, Class 1 requirements should be more stringent, to prevent more than de minimum degradation to waters of the state.*

Remove Wetted Width Exemption (Class 1 Special Condition 2):

In the 2015 Responses to Comments, TDEC agreed that, because “impacts [to waters of the state] are independent of property ownership,” it would remove the wetted width exemption for Class 1 permittees who were private landowners, or their family members, operating on their own property.⁴⁴ The final general ARAP issued in December 2015, accordingly, has this exemption removed.⁴⁵ However, the five-foot wetted width exemption for private landowners has reappeared at Class 1 Special Conditions 2 in the proposed permit. TDEC has not explained why it now believes that private landowners need not comply with a general condition that TDEC has deemed necessary to protect the waters of the state from degradation. Whether the owner of the land is the same as the person prospecting has no bearing on impacts to water quality, and TDEC should remove this exemption in the final permit.

Response 133: We agree that the impacts are independent of property ownership and therefore the wetted width exemption for private landowners was not included in the 2015 general permit or the 2020 general permit. The Division has not changed its determination. This wording is a relic of the posting of the wrong version of the general permit as described in Response 130.

Comment 134: *Exclude Use of #2 Shovels (Class 1 Special Condition 4)*

Use of #2 shovels during prospecting can cause significant damage to stream beds. TDEC acknowledged in the 2015 Response to Comments that there is “evidence of damage using these tools in the past,” but stated that it “believe[d] such tools when used responsibly under the conditions established in the general permit (including the prohibition on disturbing stream banks) will result in no more than de minimis impact.”⁴⁶ TDEC has not given the basis for this belief, and, since Class 1 permittees need not provide the location of their operations to TDEC, it is not clear how TDEC will gather the information to either prove or disprove it. Without further evidence to support this belief, and considering TDEC’s primary duty of protecting waters of the state from degradation, the use of #2 shovels in Class 1 permits should be prohibited.

Response 134: From the Division’s experience, Class 1 activities appear to be very low density in Tennessee waters at this time, and the Division has no evidence to suggest that these activities are resulting in significant degradation. Should our

regular watershed-based monitoring of streams, or public complaints reveal any water quality or habitat impacts resulting from these activities in the future, the General Permit can be revised accordingly. A great deal of investigation and effort went in to the formulation of the general permit when it was first issued in 2015. No information has been gained in the duration of this permit that would warrant changing this limit and therefore the Division has determined that the limitation remains valid and will remain unchanged.

Comment 135: *Limit Number of Pans and Sluices at Each Site (Class 1 Special Conditions 6 and 7)*

The proposed permit explicitly states that “[m]ore than one [pan/slui]ce may be in use at a given dig site.” This is a change from the final 2015 permit, which limited the numbers of sluices operating at a single site to three.⁴⁷ The three-slui]ce-limit was a result of comments on the proposed 2015 permit, with TDEC agreeing that “the number of sluices should be restricted.”⁴⁸ TDEC has not explained why it now believes that unlimited numbers of sluices operating at a single site pose no danger of more than de minimis degradation to waters of the state. The previously established limit of three sluices should be restored, and a limit placed on the number of pans, to prevent damage to streambeds and disturbance to aquatic life.

Response 135: We appreciate the comment. The Division has not changed its determination that the number of sluices should be restricted and has limited the number of sluices to three in the general permit as issued. This wording is a relic of the posting of the wrong version of the general permit as described in Response 130.

Comment 136: *Limit Plume to Maximum 100 Feet (Class 1 Special Condition 10)*

In the 2015 Response to Comments, TDEC agreed with the comments “that a 300 foot plume,” the initial length given in the proposed 2015 permit, “may be excessive,” because “for a plume to travel 300 feet downstream without dispersion would indicate a relatively high concentration of suspended solids.”⁴⁹ Additionally, such a plume “could result in a continuous plume of an even greater distance since sluices and dredging operations can be within 200 feet of each other.”⁵⁰ In the final 2015 permit, the plume length was restricted to 100 feet for Class 1 operations.⁵¹ TDEC should restore this maximum plume length of 100 feet, or explain why the reasoning given in the 2015 Response to Comments no longer applies.

Response 136: The Division still agrees that the plume length should not exceed 100 feet for Class 1 and 200 feet for Class 2 and has limited the plume lengths accordingly in the general permit as issued. This wording is a relic of the posting of the wrong version of the general permit as described in Response 130.

Comment 137: *Prohibit prospecting in any stream on 303(d) impaired waters list for channel, physical substrate, or habitat alteration*

Prospecting on streams listed by the state as impaired for channel, physical substrate, or habitat alteration is prohibited to Class 2 permittees, but not Class 1. In the 2015 Response to Comments, TDEC did not address this comment adequately, and the concern animating the initial comment remains. Although non-mechanized dredging may not be as severely destructive as mechanized dredging, it can still harm aquatic habitat. Prospecting in streams designated as impaired for contaminated sediment are forbidden for both Class 1 and Class 2 permits in the General Conditions section; this condition should be expanded to include streams impaired for channel, physical substrate, or habitat alteration.

Response 137: As conditioned in the permit, Class 1 activities are considered to be less-invasive than Class 2 activities and based on the Division's research and experience with these types of prospecting the resulting disturbance is relatively small in scale, and temporary impacts to habitat would be able to recover as substrate is redistributed naturally during bankfull flooding events. *De minimis* activities such as these can be undertaken in waters otherwise considered to have unavailable parameters for habitat (as with other types activities covered under General ARAP permits), because they are not considered to represent significant degradation (defined as an appreciable permanent loss of resource values).

Comment 138: *The plume for Class 2 operations should be revised downward to at least 200 feet, which was the standard for the final 2015 permit.*

In the proposed 2020 permit, the plume for Class 2 operations, like that of Class 1 operations, has been reset at 300 feet without any explanation by TDEC. In the final 2015 permit, the maximum plume length for Class 2 operations was set at 200 feet.⁵⁵ TDEC should, at minimum, change the proposed maximum plume length from 300 feet to 200 feet for Class 2 operations.

Response 138: The Division still agrees that the plume length should not exceed 100 feet for Class 1 and 200 feet for Class 2 and has limited the plume lengths accordingly in the general permit as issued. This wording is a relic of the posting of the wrong version of the general permit as described in Response 130.

c. General Conditions

Comment 139: *[13] This section should include the requirement that a copy of the permit must be posted prominently and visibly in direct proximity to the activity, including contact information for the relevant TDEC official with authority over the permit.*

Response 139: For Class 2 mechanical prospecting, Special Condition 7 states: The permit number shall be prominently displayed on any in-stream equipment, using two (2) inch or larger characters and numbers. This was included in the general permit so that complaints or inquiries could be properly directed. With Class 1 no written notice of coverage is required, so this is not possible.

Comment 140: *The prohibition on prospecting in stream segments designated as Exceptional Tennessee Waters because of exceptional biological diversity or stream segments with outstanding ecological or recreational value should be restored.*

General Condition 4 of the final 2015 general Recreational Prospecting ARAP states: Prospecting is not permitted in stream segments listed as Exceptional Tennessee Waters because of exceptional biological diversity or stream segments with outstanding ecological, or recreational value as determined by the Department (Rule 0400040-03-.06(4)6.7.)⁵²

This condition has been removed from the proposed 2020 general Recreational Prospecting ARAP, and TDEC has not supplied any reason for this change in the Rationale.⁵³ In the 2015 Response to Comments, TDEC noted that, because more restrictive water quality criteria are required for sensitive waters, this provision should be added to the general permit in order to prevent a more than de minimis impact.⁵⁴

Response 140: Just as the commenter points out, TDEC's determination in 2015 was to add to the general permit an exclusion for Exceptional Tennessee Waters listed because of exceptional biological diversity and other waters with outstanding ecological, or recreational value as determined by the Department (Rule 0400-40-03-.06(4)6.-7.)

TDEC has not changed this determination; this wording is a relic of the posting of the wrong version of the general permit as described in Response 130.

L. General Aquatic Resource Alteration Permit for Sediment Removal and Stream Remediation

a. Activities Covered by this Permit

Comment 141: *While the "Activities Covered" section suggests that certain events would be too large to be covered under this General Permit, no specific guidance is given in either the Special Conditions or General Conditions. It should be stated by volume. TVA's coal ash disaster in Kingston comes to mind as a sediment dam breach, but other kinds of dam breaches could also contribute amounts of sediment beyond what should be allowed under a General Permit.*

Response 141: The Division assesses individual applications to determine if the activity would exceed *de minimis* impacts to the specific waterbody in question. In an effort to allow for expeditious removal of a pollutant the Division has not historically implemented, nor had consistent issues without a specific volume limit in this permit. However, the Division always retains the right to require authorization for any activity under an Individual Permit when warranted, such as the long-term cleanup of something of the scale as the Kingston ash spill.

Comment 142: *As this section lists dam breaches as a mechanism by which sediments could be deposited, where does major flooding caused by excessive rains fit in, aside from the question of liability? Would a city use this permit to clear sediment from a stream through a park after heavy flooding? How would TDEC distinguish between this activity and clearing sediment for flood control which this permit prohibits?*

Response 142: This general permit authorizes stream remediation activities focused on removing recent sediment from inadvertent releases. This permit does not allow for removal of bedload deposited by natural processes or channelization for flood control nor does it authorize sediment removal as a preventative measure to be taken against future flooding.

These distinctions can be recognized by the investigator during initial discussion with the applicant as required under the requirements for Obtaining Permit Coverage.

b. Special Conditions

Comment 143: *In addition to the conditions given, there needs to be a provision that prohibits the use of this permit for certain types of sediment. Sediments containing toxic materials, including heavy metals, and/or those likely to cause a fish kill, such as coal mining wastes, radioactive wastes, high-nutrient sources, such as animal waste lagoons, or concrete plant settling ponds should all be excluded from this General Permit. The same logic that says this permit cannot be used if there is suspicion of dangerous substances in the stream substrate should apply to the composition of the sediment that has been released into the stream.*

Response 143: The Division addresses this provision in Special Condition 2: "Activities located in any waterbody which is suspected of or identified by the department as having contaminated sediments, and the activity will likely mobilize the contaminated sediments in such a manner as to likely harm aquatic life or human health are not covered."

Comment 144: *An additional Special Condition should be added to state that the permission to remove sediment under this permit does not release the applicant from*

any enforcement actions that TDEC may take in response to the release of sediment into the waters of the state.

Response 144: General condition 15 states “All activities must be carried out in such a manner as will prevent violations of water quality criteria as stated in TDEC Rule Chapter 0400-40-03, or impairment of the uses of waters of the state as designated by Rule Chapter 0400-40-04.” Any such violation of TDEC Rule would be subject to enforcement action. In addition, any violation of conditions of other governing TDEC permits, such as a separate ARAP or NPDES Construction General Permit associated with the initial sediment release would also be subject to possible enforcement as a permit violation.

c. General Conditions

Comment 145: *In the revised Sediment Removal and Stream Remediation permit, why has TDEC removed the General Condition noting that activities in a component of a Natural Wild and Scenic River System or waters designated as Outstanding Natural Resource Waters are not covered?*

Response 145: The Division removed this condition to allow inadvertently released pollutants to be removed as quickly as possible in response to a spill. All permit applications are reviewed prior to issuance. The Division and has the authority to require a standard permit where additional site-specific conditions are needed or to coordinate with the National Park Service in the case of the Obed National Wild and Scenic River.

M. General Aquatic Resource Alteration Permit for Stream and Wetland Enhancement

a. Activities Covered by this Permit

Comment 146: *This section’s description of covered activities does not match the activities described in the Special Conditions. For stream, it describes buffer enhancement, vegetative bank stabilization, in-stream habitat structures and removal of small obstructions in the channel. The Special Conditions in addition allow physical modification of the banks and floodplain or flood benches.*

Response 146: This section is intended to provide a brief overview of the purpose and activities covered by the general permit, with specific permit coverage and limitations addressed in the special and general permit conditions. In attempt to restrict the permit length, all special conditions, allowances, and limitations of the permit are not reiterated in this introductory section. However the Division will add “floodplain bench establishment” to the initial list.

b. Special Conditions

Comment 147: *[13] Because of the different criteria for categorizing streams used in Tennessee, a stream can be both an Exceptional Tennessee Water and impaired on the 303(d) list. Provisions for working on impaired waters within these protected categories should be allowed. The sentence itself should be reworked to separate the prohibitions on wetland work from the prohibitions on stream work.*

Response 147: Work can be authorized within these waters, but given the status of these waters and the need for additional oversight, site specific conditions, monitoring if necessary, and the need for public review and input, a standard permit is required.

c. General Conditions

Comment 148: *[7] As noted in other comments on other Permits, the term "component" of National Wild and Scenic River System or Outstanding National Resource Waters needs to be defined.*

Response 148: Outstanding National Resource Waters within Tennessee are defined in Tennessee Rule as:

The following streams or portions of streams are designated as ONRW:

WATERBODY PORTION DESIGNATED AS ONRW

1. Little River Portion within Great Smoky Mountains National Park.
2. Abrams Creek Portion within Great Smoky Mountains National Park.
3. West Prong Little Portion within Great Smoky Mountains National Park River upstream of Gatlinburg
4. Little Pigeon River From the headwaters within Great Smoky Mountains National Park downstream to the confluence of Mill Branch.
5. Big South Fork Portion within Big South Fork National Cumberland River River and Recreation Area.
6. Reelfoot Lake Tennessee portion of the lake and its associated wetlands.
7. The portion of the Obed River that is designated as a federal wild and scenic river as of June 22, 1999 is designated as ONRW.

The portion of the Obed River that is designated as federal wild and scenic river includes: The segment from the western edge of the Catoosa Wildlife Management Area to the confluence with the Emory River. Clear Creek from the Morgan County line to the confluence with the Obed River. Daddys Creek from the Morgan County line to the confluence with the Obed River. The Emory River from the confluence with the Obed River to Nemo Bridge.

N. General Aquatic Resource Alteration Permit for Minor Stream Grade Stabilization

a. Activities Covered by this Permit

Comment 149: *While there are excellent historical reasons that this General Permit targets the streams of Western Tennessee, there are other streams in Tennessee where similar dynamics of unconsolidated bedload subjects the stream to significant head-cutting, often leaving the channel incised as much as 10 feet from the top of the bank and thus cut off from its floodplain. Because these streams may still be cutting down to bedrock the process of over-widening may not yet have occurred, but the shifting bedload can lead to blow-outs where a section of stream can become over 150 feet wide while the channel above and below is at 34 feet. Grade control structures have proved highly effective in these streams, but the fact that they are not located in West Tennessee should not prevent the use of this General Permit for these kinds of stabilization efforts. Because such stream systems are limited in the rest of the state, TDEC could include a listing of such streams as part of this section of the permit.*

Response 149: This may be the case. In streams that were not subject to historical widespread channelization, the Division would like to retain the more detailed oversight of covering such grade stabilization activities through the Individual Permitting process.

Comment 150: *It is also important to note that this is the only permit that does not prohibit the use of heavy equipment within the stream channel, a normal trigger that requires an Individual Permit. There is no question that in all but the smallest streams, heavy equipment is required to install a stable grade control structure. Is this General Permit consistent with the ARAP rules that discriminate between General and Individual Permits? If grade structures installed with heavy equipment are acceptable under this General Permit, why not allow heavy equipment and grade structures in other General Permits seeking to stabilize stream channels?*

Response 150: The provision to allow this activity for this specific general permit is an acknowledgement of the fact noted by the commenter, that essentially the activity could never be authorized under the general permit without this allowance. Other general permits indicate that work should be done in the dry where practicable, but do allow for some instream work where working in the dry would cause greater impact. The overall goal of all general permits is to limit the possibility of significant impact (for which use of heavy machinery instream clearly represents) for these “one size fits all” permit types, and most of the types of activities covered under general permits can be done without use of instream machinery. Where they cannot, an individual permit may be applied for. This particular general permit, which has the overall goal of upstream resource protection, was felt to be an acceptable exception.

b. Special Conditions

Comment 151: *If this General Permit is expanded to other parts of the state, Items 1 and 3 should be modified. Item 1 should be expanded to 1000 feet as with other stabilization General Permits, and Item 3 should allow grade control structures to be combined with vanes above or below the grade structure to allow successful installation of a grade structure on streams that have meanders.*

Response 151: This general permit does not have a long history of project outcomes to evaluate, and therefore will not be expanded to other regions of the state at this time.

c. General Conditions

Comment 152: *[13] It is unclear how this provision is to be applied to the activities under this General Permit. A grade control structure, keyed into both banks and spanning the channel completely, cannot be installed without at least some portion of it occurring in flowing water. Scheduling the work for the driest time of the year and installing on the dry parts of the channel first can minimize but not eliminate the need to work in the water.*

Response 152: The phrase “where practicable” speaks to this case, and it is acknowledged that for this particular general permit, those options may be limited.

O. General Aquatic Resource Alteration Permit for Surveying and Geotechnical Exploration

a. General Comments

Comment 153: *The purpose of this permit is fairly well spelled out, though limitations are unclear and the Special Conditions as well as the General Conditions included in this permit suggest permissible activities could be impactful to the resources. There is no limitation on the use of heavy equipment which might be used for deep core samples and seismic explorations and “water quality improvement devices and structures” are not defined. It has long been TDEC policy that water quality improvement devices cannot be constructed or used in-stream, i.e., the stream cannot be the treatment facility. If such a device is allowed to be installed as part of a scientific experiment without a detailed permit application, there needs to be limitations on size of the structure and duration of the experiment. In addition, the final sentence about notification should conform with Special Condition 5, indicating that the notifications must include a full description of the activities.*

Response 153: Water quality testing devices and similar that will not have significant impact on water quality are intended to be authorized by this permit. This permit is not intended to authorize in-stream treatment. Improvement devices will be

removed from the general permit. The introductory section titled *Activities Covered by this Permit* is intended to provide a brief overview of what each permit covers. Additional details are then provided in the Special and General Conditions. All conditions of the permit must be followed. The Division does not see a need to reiterate special condition 5 in the introductory section.

b. Special Conditions

Comment 154: [2] *“Long term” should be defined. Is this one month, six months, one year, ten years?*

Response 154: The Division agrees and will update the general permit accordingly

Comment 155: [3] *Is excavating a stream bank or wetland covered under this permit? Does this permit cover archeological exploration of such areas? If so, such coverage should be explicit. If this provision is primarily to allow access to stream and wetland areas, the type of impacts allowed should be specified since a written permit where the permittee presents detailed plans is not required.*

Response 155: Excavation of stream banks or wetlands that would result in significant permanent alterations are not covered under this permit. Minor geotechnical or historic resources exploration may occur within a water feature if the impact is temporary and complies with the thresholds established in this special condition. This Division does not have regulatory authority, nor administer permits specifically for cultural resource surveys. If proposed impacts to water resources from phase I archeological surveys meet the terms and conditions of this permit, the impacts can be covered under this permit. This is addressed in the *Activities Covered by this Permit*, and listed as historical resources surveys. Written notification, including project specifics, is required to be submitted to the appropriate TDEC Environmental Field Office at least seven days prior to impact.

c. General Conditions

Comment 156: *It is unclear why this long list of boiler plate conditions are included here as the “Activities Covered” and “Special Conditions” limit activities in ways that many of these provisions should not come into play, specifically, numbers 1, 2 (there is no application), 3, 5, 7, 8, 10, 11, 12, 15, 17, and 19.*

Response 156: The Division does not agree and will keep the general conditions as listed. General conditions, while possibly infrequently applicable in certain general permit activities, are important to cover the unforeseen exception, and ensure impacts remain *de minimis* in all cases. Even though a written application is not

required, the conditions of the permit must be followed in order to not be in violation of the permit.

Comment 157: *General Condition 2: TDOT recommends adding the full name of the Act for clarity.*

Response 157: The full name has been added in Activities Covered by this Permit and abbreviated in General Condition 2.

Comment 158: *General Condition 18: TDOT recommends removing this statement from the General Conditions because it contradicts Special Condition #3 which allows for the use of temporary access roads (stream crossings) as long as temporary impacts remain below 200 ft. TDOT also recommends allowing for more than "one point"/ one temporary stream crossing in the construction area for this permit. More than one stream crossing will likely be needed on TDOT geotechnical projects. They are typically of very short duration, but cross several streams because of the scope of work of the project.*

Response 158: General Condition 18 has been modified to allow for more than one temporary crossing during survey work. All crossings should be temporary and limited to less than 200 feet.

d. Obtaining Permit Coverage

Comment 159: *Substituting a notification requirement for a formal permit is acceptable if additional limitations are spelled out above to ensure that impacts are truly de minimis. Does this alternative notification process also avoid permit fees? If so, this principle should be applied to other projects under General Permits that have de minimis impacts, or an additional nominal fee structure should be created for these no-impact (or positive-impact) projects.*

However, this notification in lieu of a formal permit raises another important issue. Violating the terms of a permit subjects an applicant to an enforcement action and penalties. Is notification under this permit the same as acceptance of the terms of the permit in regard to enforcement actions against violators?

Response 159: The commenter is correct that an application fee would not be collected for this general permit, despite the notification requirement. Fee payment is not contingent on the level of degradation, but rather the staff time it takes to review full applications and issue written Notices of Coverages, including significant database tracking input. These activities by TDEC staff will not occur with this particular permit. All actions must be in conformance with the terms and conditions

of this permit and all permits, whether notification is required or not. Violation of the permit conditions will be subject to enforcement action.

P. General Aquatic Resource Alteration Permit for Minor Alterations to Wetlands

a. Activities Covered by this Permit

Comment 160: *The opening sentence is problematic given that General Permits are only to be used for impacts that are de minimis. It is impossible to permanently alter (which usually means filling) a wetland and claim de minimis impact. (See Special Condition 6 for the standard.) Under current policy, mitigation has been required even for such small wetlands as are covered under this permit. If the alteration is temporary, then it could be covered under a General Permit.*

Response 160: The proposed limits in the general permit include permanent and temporary impacts. If the cumulative proposed impacts are within the allowable limits the impact is considered *de minimis* and mitigation is not required. The *de minimis* limits in this permit renewal are the same as the previous version. The limits as proposed do not represent a change from the current policy.

Comment 161: *We support the new language referencing both permanent and temporary wetlands. It might be well to define “ephemeral” wetlands and use it instead of “temporary” as temporary might imply a wetland created by a temporary obstruction to surface flow, rather than the kind of subsurface conditions generally associated with wetlands.*

Response 161: The language references temporary impacts to wetlands, not wetlands that are temporary in nature. Since this language does not refer to ephemeral wetlands, the Division feels the change would be more confusing in this instance. All wetland types that are waters of the state receive the same treatment under rule and under this general permit.

Comment 162: *Because this section refers to “moderate” and “low” resource values, these terms or conditions should be defined. It should also be stated that TDEC will consider management practices in making these determinations. For example, a wetland that is mowed annually during drought conditions will not be automatically considered “degraded” for purposes of this permit since it is the landowner causing the degradation.*

Response 162: Wetland resource value will be reviewed and determined by TDEC upon application submission. The resource value will apply to the wetland in its current state. If there are unpermitted wetland violations, the wetland will not be assessed as degraded or low resource value and enforcement actions will be taken if necessary.

Comment 163: *In the past, temporary access roads (mats or gravel) placed in wetlands which were removed after construction did not require notice. The language in the proposed permit would require submittal of an application and payment of fee anytime an access road must cross a wetland. Based on the thresholds of 0.25 acre (low quality) and 0.1 acre (moderate quality) wetlands, TVA would require significantly more individual ARAPs for construction projects than under the current general ARAPs, which could have significant schedule impacts.*

Response 163: Non-notification activities, including impacts to wetlands from temporary access roads are not an option under this proposed permit, nor in the current or previous versions of this permit. A permit application should be submitted anytime wetland impacts are proposed, whether they are temporary or permanent. The use of timber mats for temporary access roads are allowed if the impact is below the acreage thresholds established in the permit. If the proposed impact is above the permit limits, whether temporary or permanent, the activity will require coverage under a standard permit. There are preferred alternatives to using gravel, riprap, or other rock for access roads in wetlands and the use of such is not authorized under this permit.

b. Special Conditions

Comment 164: *[1] It is important to further explain what is meant by "located in a component" of the listed high-quality waters. It should include both riparian wetlands along the listed streams and their tributaries as well as in-stream wetlands on any tributaries.*

Response 164: The intent of the language is to restrict permit coverage for wetlands adjacent to and within ONRW and National Wild and Scenic River systems. Rather than include all descriptive language of these watersheds within the general permit, the Division proposes to leave the language as written. Applicants can find the boundaries of ONRW's and National Wild and Scenic Rivers within the state of Tennessee in the Division's rules, on the State's website, and in Response 149 of this document.

Comment 165: *Special Condition 4: TDOT recommends changing "signs or similar permanent structure" to allow for high visibility fencing to be installed for marking of non-impacted wetlands. This is adequate for marking non-impacted areas, and would not require a permanent sign to remain in place after construction.*

Response 165: The Division agrees and will adjust the language accordingly.

c. General Conditions

Comment 166: [11] This is another example of not properly modifying boiler-plate provisions to meet the specific General Permit. The permit is about wetlands, so it is assumed that conditions will be wet. The objective is to conduct the work during the driest time of the year and to limit, if possible, surface water from entering the wetland during the time of construction. This section needs to be rewritten in consultation with TDEC's wetland experts.

Response 166: The Division agrees and will adjust the language accordingly.

Q. General Aquatic Resource Alteration Permit for Structural Discharges

a. Activities Covered by this Permit

Comment 167: The coverage proposed under this General Permit is overly broad in its diversity and should not include both installation and removal under the same permit. The question of liability for these permanent structures is not addressed nor the responsibility for their maintenance or removal after installation. The conditions that would create ineligibility for the use of this General Permit are not adequately spelled out in Special Conditions. Each of these points will be discussed. First, installation and removal processes can be quite different, particularly for large structures that this permit apparently covers. Diverting the flow or using a waterproof form and pouring the concrete after some bottom excavation is quite different from having to break up concrete pylons from a former railroad trestle, for example. While the idea of tying the installation of such permanent structures to their removal would be ideal, there are lots of structures from the past whose removal would enhance the streams they were once part of. Second, the permit is too broad in its application. It does not distinguish between structures in streams, large rivers, ponds, or reservoirs. Nor does it distinguish between a concrete mooring for a boat at the bottom of a lake and a bridge piling extending above the high-water line.

Response 167: The Division agrees that the conditions of the general permit are broader than most other general permits, but believes the conditions as proposed will result in a general permit that is neither too limiting nor too restrictive in scope. The Division always retains the right to deem any specific proposed activity ineligible for coverage under a general permit due to size, location, or potential water quality impacts. The Division agrees that the process of installation and removal is quite different, but has drafted conditions that cover both. The Division agrees that removal of out-of-service structures could be a benefit to water quality and is part of the reasoning for inclusion of such within this permit. The Division has the option of using the Stream and Wetland Enhancement general permit or a standard permit to cover water quality improvements that may not be eligible for coverage under this permit. If the general permit were limited to waterbody or structure type, this would result in a general permit that is too restrictive and create the need for multiple general permits to address structural discharges by waterbody and activity type.

Issues of liability for installation or removal of structures is not addressed in any general permit. Consideration of liability related to an activity is the responsibility of the permit holder, as is maintenance of the structure.

Comment 168: *The liability issue occurs primarily in flowing waters but could be an issue in reservoirs and ponds during draw-down. Does the permitting process shift liability of navigational obstruction to the State from the individual? Is the owner of a bridge or boat house responsible for clearing floating debris so that it doesn't become a navigational hazard? If the boat house itself is swept away during flood conditions and blocks the channel, is the owner liable? If the bridge is abandoned or the property with the boat house or moorings sold, who is responsible for maintaining or removing these concrete structures?*

Response 168: Any activities which disrupt navigation (or have the potential to) may not be authorized by this permit. The Division will expand upon Special Condition 7 to more adequately address disruption to navigation. Maintenance of permitted structures is the responsibility of the owner of the structures. This Division has modified the no notification provision for support structures to exclude flowing waters.

Comment 169: *Where are limitations to this permit spelled out? Aside from impacting water quality directly, the only other limitations are National Wild and Scenic Rivers and Outstanding National Resource Waters. So a new 12-lane highway bridge's support pylons can be built under this General Permit? Only Special Condition 15 might be a limitation if the stream was small enough and the bridge needed more than one row of pylons. A bridge over the Tennessee or the Cumberland with two pylons would not substantially impact hydrology. Finally, the prohibition against using heavy equipment in the stream in order to use a General Permit is explicitly allowed here. That fact that this permit requires restoration of substrate after construction is complete does not negate the impact on aquatic organisms or substrate stability.*

Response 169: The work is limited to the minimum number of structures necessary, which will vary by size of the waterbody and type of work proposed. Creating strict limits for this permit could result in an allowable impact that results in pollution on a small stream, or disallow minimal impact on a large river. The use of heavy equipment in-stream is not a general permit exemption and will often be necessary for the installation of support structures. Restricting mechanical equipment within waters could limit the usefulness of this permit. The Division does agree that heavy equipment within waters should be limited and will add language addressing mechanical equipment in smaller streams. Historically, new highway bridge support structures have been authorized under the Division's Construction and Removal of Minor Road Crossings general permit. The creation of this permit is in-part a direct

response to requests to create conditions that adequately address bridge support structures.

Comment 170: *Why is a general permit authorizing underwater blasting acceptable in the context of the new Structural Discharges permit?*

Response 170: Underwater blasting is only acceptable if a blasting plan has been submitted, reviewed and approved by the Division. Blasting will only be approved if coordination and authorization has been received from the Tennessee Wildlife Resources Agency. Depending on waterbody size, scale of work, and quality of the water resource, blasting may not be permissible in all situations.

b. Special Conditions

Comment 171: *[7] This provision is not fully developed. If the stream is navigable by paddle crafts and/or fishing boats, this limitation should not be limited to the actual structure itself but also its potential to become a place where floating debris, especially large logs, could create a debris dam and a hazard for boaters.*

Response 171: The Division agrees and the special condition will be expanded.

Comment 172: *[9] This provision appears to be a violation of the de minimis intent of General Permits. Altering wetlands, regardless of size or classification, requires mitigation and is excluded from the use of a General Permit.*

Response 172: The altering of wetlands is not a violation of the *de minimis* intent of the general permits. The Division has a general permit which allows minor wetland impacts without mitigation, but only if they do not represent an appreciable permanent loss of resource value.

Comment 173: *Special Condition 12: TDOT recommends placing a limit on the depth this applies to. For example, This may not be possible on deep reservoirs.*

Response 173: The Division agrees and qualifying language will be added to this condition.

Comment 174: *[13] While this provision makes complete sense for a construction project, there should be an allowance for reuse of large-sized concrete rubble from a demolition project if there is a simultaneous bank stabilization need adjacent to the project site. It cannot fairly be argued that it is acceptable to introduce concrete structures into a stream and then argue that concrete chunks cannot be used as rip-rap for bank stabilization or as fill for a reconstructed bank.*

Response 174: The Division disagrees. There are more practicable and effective alternatives for bank stabilization than concrete rubble.

c. General Conditions

Comment 175: *[6] As the normal prohibition against heavy equipment in the stream is missing, why is this prohibition included without modification? Underwater blasting in a deep channel – which is allowed – assumes that such blasting will not change the benthic zone interface, while perhaps in a smaller stream it might affect the bedrock and change the amount of surface water. But in the case of demolition of a bridge pylon, it might be less disruptive to the stream to blast the pylon instead of using heavy equipment to break the concrete. It should be allowed under these conditions with a blast blanket used to prevent dispersion of the pieces.*

Response 175: The Division does not agree and will leave the condition as stated.

Comment 176: *General Condition 18: TDOT recommends removing General Condition #18 because it contradicts Special Condition #5.*

Response 176: The Division disagrees. Haul roads cannot extend across the entire stream and should not prevent movement of fish and aquatic life. The haul road should still be limited to one point within the channel and be oriented perpendicular to the waterbody.

d. Obtaining Permit Coverage

Comment 177: *The waiving of the permit or notification requirement for private boat houses should not be allowed for boat houses on navigable rivers because of safety and liability issues.*

Response 177: The Division agrees and will restrict the provision to only include reservoirs, lakes, and ponds.

Comment 178: *Under Obtaining Permit Coverage, page 4, #2, we suggest replacing the term “pilings” with “support structures” for docks and boathouses to incorporate other anchoring methods (such as deadman anchors).*

Response 178: The Division agrees and will make the recommended update.