

Division of Surface Water

Response to Comments

**National Pollutant Discharge Elimination System (NPDES) General Permit
for Discharges of Storm Water Associated with Construction Activity (Big
Darby Creek Watershed General Permit)**

Ohio EPA General Permit No.: OHCD00002

Agency Contact for this Package

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Ohio EPA held a public hearing and information session on January 31, 2012 regarding NPDES General Permit for Discharges of Storm Water Associated with Construction Activity within the Big Darby Creek Watershed (OHCD00002). This document summarizes the comments and questions received at the public hearing and/or during the associated comment period, which ended on February 7, 2012.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. The name of the commenter follows the comment in parentheses.

General

Comment 1: Please find this letter in support of retaining or enhancing any measure to protect the Big Darby Watershed. We are constantly attacking our natural resources, and we have to ask ourselves quality of life issues. Please put Quality of Life issues ahead of financial interests of developers. Our children and grandchildren will thank us. (*Von E. Stuckert*)

Response 1: Comment noted.

Comment 2: This draft Construction General Permit has been modified in multiple sections to be consistent with latest

US EPA Construction General Permit. However, the 2008 US EPA Construction General Permit is effective until February 14, 2012. The US permit has been postponed on multiple occasions and may still be subject to change. Therefore, the data contained within the report should not be assumed to be final. Recommendation: We recommend that the language modified within the draft permit (OHCD00002) be removed until the final US EPA Construction General Permit is adopted. (ODOT)

Response 2: On December 1, 2009, the U.S. Environmental Protection Agency (EPA) published effluent limitation guidelines (ELGs) and new source performance standards (NSPS) to control the discharge of pollutants from construction sites. The regulation became effective on February 1, 2010 (40 CFR 450.21-24). After this date, all construction storm water permits issued by EPA or states must incorporate the final rule requirements.

This regulation included both numeric and non-numeric effluent limitations. Effective, January 4, 2011, U.S. EPA stayed the numeric limitation of 280 NTU that was published in the December 1, 2009, Construction and Development Effluent Limitation Guideline. U.S. EPA will propose a revised limit in a future rulemaking. However, the non-numeric limitations are still applicable and required to be included in this general permit renewal.

Comment 3: **The OEC encourages the Ohio EPA to lower the acreage that would trigger a general permit. Currently the Agency lists one acre as the trigger. Given the exceptional resource that is the Darby Watershed, the threshold should be lowered to .5 acres for construction activities. (Ohio Environmental Council)**

Response 3: The permit is applicable to disturbances of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. The comment was evaluated but no changes were made to the permit.

Comment 4: **The impervious surface that is allowed under the draft permit will result in a degradation of the Big Darby Creek. It is known that as little as 2% of impervious surface will negatively impact a stream by altering the flow; thus the proposed levels in the permit (as high as**

60%) ensure a negative outcome in protecting the Big Darby. The permit needs to establish a natural flow regime and one that can be demonstrated to protect the sensitive species of the watershed. (Ohio Environmental Council)

- Response 4:** The addition of impervious surface is mitigated under this permit with the ground water recharge requirements. The net loss of ground water recharge with the addition of impervious surface must be compensated through structural infiltration controls and/or land use improvements. In addition to the ground water mitigation requirements, the post-construction water quality requirements require an attenuated release of the 80th percentile rain event.
- Comment 5:** **Riparian corridors are critical to reducing run off, providing habitat, and providing shade to the waterway. The OEC supports strong measures that dissuade developers from impacting the buffer of a waterway. No building should occur within the meander belt. If the stream's meander belt stops because of a bluff, at least a one hundred foot setback should be applied on top of the bluff to prevent development looking over the Darby. This type of development could lead to bank erosion and a degradation of the Big Darby watershed. The OEC does support the draft permit's inclusion of prohibiting the building of structures or fill in the 100 year floodplain. As hundred-year events are becoming more frequent, it is not wise to allow the impact of the floodplain. (Ohio Environmental Council)**
- Response 5:** All development within the designated setback, including the floodplain, must be mitigated under this permit to compensate for any encroachments. The agency believes that the application of the setback formula as a whole is sufficiently protective for water quality purposes. The setback will be calculated and applied to equal elevations on both sides of the stream. The intent is to provide protection to all areas which have a dynamic interaction with the stream and will serve to provide better protection to flood prone areas which have a positive impact on water quality.
- Comment 6:** **The overall goal of the permit should be to protect the ecological integrity of the Big Darby Creek Watershed based on sound science; it should not be to further degrade it. The Ohio EPA should make considerable changes to this draft and consider reviewing it in two**

years to determine if it is adequately protecting the Big Darby Creek Watershed. (Ohio Environmental Council)

Response 6: As described in Part VI (Reopener Clause) of the permit, if there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with construction activity covered by this permit, the permittee of such discharge may be required to obtain coverage under an individual permit or an alternative general permit or the permit may be modified to include different limitations and/or requirements. No change in the expiration of the permit will be made.

Comment 7: **Reduction of high levels of impervious surface: As one of the most outstanding points, we are very concerned about the amount of impervious surface allowed as a goal in the permit, and consequently the limited groundwater recharge required by the current and proposed permit. We do not believe that basing the permit on a previously damaged condition, characterized as drained row crop farmland, represents an appropriate level of impervious surface that can be shown to protect streams. The 2006 permit allows impervious surface levels from development to considerably exceed known thresholds that cause loss of species, degradation and failure to attain use designations. These levels are as high as 50-60%, similar to the levels in many developments that are not subject to this permit. This is far above the 2% level known to cause loss of sensitive stream species and the 4-5% documented to cause degradation in Ohio. Therefore, each new development permitted at this higher level adds to the stress to the streams. Because agricultural land in Ohio has been shown to have considerably lower levels of biological impact than urban/developed land, we do not believe the use of drained agricultural land to set an impervious surface level is appropriate. (The Nature Conservancy)**

Response 7: The general permit is renewed every five years. Many factors are considered with each generation such as water quality issues, development rates, BMPs, mitigation measures, etc. The intent is to provide a permit which provides adequate protection to preserve the overall water quality integrity of the Big Darby Creek watershed. The agency believes this permit is protective based on current development conditions. Ground water recharge

requirements are specifically incorporated in the permit for mitigation purposes to address impervious cover. We understand the current recharge values represent current land use but remain confident this is sufficient to protect stream integrity based on observations of the first generation permit. Ohio EPA will continue to evaluate the performance of the 2nd generation permit and make needed improvements with the next renewal.

Comment 8: **Need to address departure from natural flow regime:**
The permit needs to establish requirements for flow patterns similar to natural flow regimes that can be demonstrated to be protective of stream life. The present permit continues a flow pattern that is the result of managed flows from storm water units, and could be very far from maintaining flow components such as natural base flows. Specifically, the permit needs to be designed to reach and maintain the hydrology and natural flow regimes necessary to support the sensitive stream species that are or should be present in these streams. This needs to be based on, supported and demonstrated using biological data analyses. The Ohio EPA's recent draft TMDL for the lower Grand River addresses some aspects of flow related to stream quality. It appears this concept is significantly ahead of the content for the present Big Darby storm water permit. While the Grand River draft TMDL's concepts might need considerable improvement, we urge consideration of this concept here. We are willing to work with the Agency to help understand and advance this science. (The Nature Conservancy)

Response 8: The General Permit incorporates design mandates that require the implementation of specific water quality treatment measures. There are specific requirements which provide for the collection, treatment and attenuated release of a specific Water Quality Volume (WQv). The WQv is sized to provide treatment for approximately 80 to 85 percent of the storms which occur annually in the state of Ohio. We understand the attenuated release of a WQv does not reduce the volume; however, conditions of this permit do have significant impact on runoff reduction and natural flow regimes associated with current development pressures. Ohio EPA will continue to evaluate improvement opportunities of this permit during the permit term.

Comment 9: **Need for thermal impact control:** The permit should address thermal impacts from storm water discharges and ensure they are adequate to protect sensitive aquatic life. Stormwater units gain heat through solar radiation and transfer from the air. Stormwater units are known to increase water temperatures. In a natural condition, lower temperatures would be seen in groundwater discharges, but storm water units do not reach the same rates of natural groundwater recharge, including in the Big Darby storm water permit area. A permit should require temperatures leaving units be low enough to ensure no adverse impacts to sensitive species. As stated above, there is a need for attention to temperature increases that are a common result of present storm water BMPs that rely on units on the surface, such as ponds and channels. Kieser et al (no date) stated “flow regime change may help explain the continued degradation of receiving waters despite BMP implementation” and “According to EPA data (http://oaspub.epa.gov/waters/national_rept.control), there are 298 approved temperature-related TMDLs in the nation.” Ohio’s Water Quality Standards, OAC 3745-1-07, Table 7-1, state “At no time shall the water temperature exceed the temperature which would occur if there were no temperature change attributable to human activities.” This criterion should apply to storm water discharges and be incorporated or referenced in this permit. (The Nature Conservancy)

Response 9: The General Permit does incorporate several mechanisms which address thermal impacts associated with development. The preservation of the riparian corridor through setback requirements of the permit provides a natural shade and subsequent cooling effect to the stream. The groundwater recharge requirement results in run-off reduction from the development which has a net effect to reducing thermal impacts. The agency recognizes the potential of thermal impacts from specific water quality BMPs. However these types of BMPs are limited in scope as they are only permissible through specific case-by-case evaluation as all SWP3s are reviewed and approved prior to issuance where the thermal impacts will be considered.

Comment 10: **Avoidance of storm water units in the riparian setback, floodplain or meander belt:** In the efforts to manage storm water runoff, storm water BMPs often have been permitted and constructed adjacent to a stream and/or

within the floodplain of a stream they are trying to protect. While this might temporarily reduce some impacts, it create others which also are detrimental to stream quality, and can lead to complete loss of the storm water unit or any positive effect when the meandering stream floods or eventually consumes the unit. While improving water quality in some ways, storm water BMPs in the floodplain or setback can be damaging to two other key ecological factors, habitat and water quality. They can add to water quality problems and should not be considered under this permit. (The Nature Conservancy)

Response 10: All impacts to the riparian setback, floodplain or meander belt are closely evaluated concurrent with the required individual review of the SWP3. The SWP3 must be reviewed and approved prior to issuance. In the event the permittee pursues the placement of a water quality BMP within the floodplain, there must be a clear demonstration it will be protected and operational through the 100 year storm event. In addition, placement of water quality BMPs within the delineated setback would require riparian setback mitigation.

Comment 11: **Improvement of stream restoration goals: Attachment B of this permit recommends use of “Over-wide channel design.” This proposal is not acceptable because it commits streams to very low habitat design standards, and consequently low biodiversity. While the Conservancy supports Attachment B, Part 2, item d’s statement: “Include a water quality setback of 100 feet from centerline of stream on each side,” this appears to conflict with the proposed revision’s intent for section III.G.2.b.i on page 12. See our comments on section III.G.2.b.i, also. (The Nature Conservancy)**

Response 11: Ohio EPA has worked closely with ODNR Division of Soil and Water regarding restoration of the previously modified, low gradient headwater streams. Attachment B would only apply to such cases and provides improvements with respect to stream morphology and subsequently water quality. Inclusive with restoration is the excavation and protection of a new floodplain for purposes of water quality improvement. This facilitates the intent of section III.G.2.b. In addition, the water quality setback of 100 feet was inclusive to maintain consistency with the permit.

Comment 12: **Need to address mussel impacts:** The Big Darby Creek watershed is known for its diversity of mussels, with 44 species recorded. For its size, the Big Darby Creek is considered to have the one of the better assemblages of mussels in North America. While diverse, there are a number of species that have declined and are in peril. These include two federally endangered species, ten state endangered species, four state threatened species, and eight state species of special interest. While often featured as outstanding, this mussel diversity might be in serious trouble. Recent surveys strongly suggest that the number of species in the Big Darby Creek watershed may be declining. Populations of species, as well as the number of mussel beds, also may be declining. Hellbranch Run has seen significant recent mussel decline (See attached letter from Dr. Tom Watters in Attachment 3). We ask that this permit review and establish the methods and standards to protect mussels in the watershed. This should include analyses such as flow impacts, and beyond that for ammonia, which is under consideration by U.S. EPA under the National Water Quality Criteria. In Attachment 1 and 4, we are providing additional information on the species richness and need for mussel protection through mechanisms such as this permit. Attachment 4 includes a recent map of the results of mussel occurrence predictions for the Ohio River Basin (Martin et al 2011); this is based on modeling many factors related to the likelihood of finding mussels in sub-watersheds of the Ohio. Among the most influential natural habitat and anthropogenic stressor predictors found for this model were network drainage area, baseflow index, dam density, percent alluvium, dam density, percent forest, percent alluvium and impervious surface cover. The Big Darby Creek stands out on this map with a considerably higher predicted likelihood of mussel occurrences than any other stream in the Scioto River watershed. Note that Big Darby Creek is the only stream designated with the highest likelihood of mussel occurrence in the entire upper Scioto basin. We note that Ohio EPA monitoring of this watershed is scheduled for 2014 to support preparation of another TMDL. We recommend that this monitoring include mussels and be coordinated with the other biological sampling. (*The Nature Conservancy*)

Response 12: Ohio EPA recognizes the diversity of mussels within Big Darby Creek. Sediment during the construction process is

one of the major threats to the mussel populations within Big Darby Creek. In response, the general permit doubled the sediment storage requirements of all sediment basins concurrent with construction activities. In addition, the general permit will require the monitoring of sediment basin discharges during the construction process addressing a target of 45 mg/l Total Suspended Solids (TSS). This comment addresses many habitat stressors which threaten the mussel populations in Big Darby Creek. Many of these issues are through mussel surveys and avoidance measures inclusive in the 404/401 permitting process implemented by Army Corps of Engineers and Ohio EPA. This permit will require the individual review and approval of the SWP3. The agency is willing to work in a cooperative effort with ODNR to consider special avoidance measures and BMP's relative to known mussel populations concurrent with all SWP3 reviews.

Comment 13: **Goals for dissolved reactive phosphorus (DRP): Given the known impacts caused by dissolved reactive phosphorus, and not only total phosphorus, the permit should require goals and monitoring for DRP.** (The Nature Conservancy)

Response 13: Ohio EPA is currently developing a statewide nutrient reduction strategy. The establishment of numeric water quality criteria for phosphorus and nitrogen and load reduction targets for watersheds to protect downstream uses is key parts of the strategy. Once completed we intend to implement additional nutrient reduction measures in NPDES permits, including storm water, were necessary to meet the near field standards and to protect downstream waters.

Comment 14: **Two year rather than five year renewal: Again, we are very concerned that the present permit and this draft are inadequate to protect the biological diversity of Big Darby Creek and its tributaries. Therefore, we do not support this draft permit as proposed. We ask that the Agency conduct a complete review of the necessary components to establish an adequate permit that protects sensitive species, including, among other issues, the basic components we have listed. In place of a revised permit which adequately addresses the above components, alternatively, we ask that the revised permit expire in two years and that the Agency work to address the above issues during that interim period and before another permit renewal. This would**

coincide with Ohio EPA's monitoring scheduled for 2014 that would support preparation of another TMDL and inform the stormwater permit, as well as the Big Darby Accord. (The Nature Conservancy)

Response 14: As indicated in Response 6, Part VI (Reopener Clause) of the permit states that if there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with construction activity covered by this permit, the permittee of such discharge may be required to obtain coverage under an individual permit or an alternative general permit or the permit may be modified to include different limitations and/or requirements. Over the five year permit term, Ohio EPA intends on evaluating performance of the permit renewal and working with interested parties to identify improvement opportunities. No change in the expiration of the permit will be made.

Comment 15: **In regards to riparian setback and groundwater recharge requirements, the draft permit neglected to incorporate language which Ohio EPA has agreed to include for linear transportation projects which result in total new right-of-way of less than two acres, which are caused solely by correcting safety related issues, mandates of modern design requirements and/or resulting from other mitigation activities. (ODOT)**

Response 15: Agreed. Language has been included in Part III.G.2.b, Part III.G.2.c and Part III.G.2.d addressing riparian setback and groundwater recharge requirements for linear transportation projects which result in total new right-of-way of less than two acres, which are caused solely by correcting safety related issues, mandates of modern design requirements and/or resulting from other mitigation activities.

Comment 16: **Adaptive management: During the formative period for the Big Darby Creek watershed 208 plan and storm water permit in 2005-2006, there was discussion of "adaptive management" for the storm water permit. Six years have passed and now this revised permit proposal represents an opportunity to apply adaptive management and improve the level of protection. (The Nature Conservancy)**

Response 16: As indicated in Response 14, Ohio EPA intends on evaluating the performance of the permit renewal and

working with interested parties to identify improvement opportunities over the five year permit term.

Comment 17: While the Conservancy does not support this draft permit as proposed, we can support a revised permit if the conditions addressing the above are included. We ask that the Agency pursue the science and resources necessary to establish adequately protective measures. We ask that these be based on biologically-based demonstrations of adequacy, rather than just on engineering assumptions. We acknowledge this may require considerable changes to the present permit. These might be major and require significant changes to storm water and development plans. We ask that the Agency convene a technical advisory group, focused on biological assessment, to help address the necessary changes. The Conservancy is willing to help address the flow regime issues in depth and provide more technical background. *(The Nature Conservancy)*

Response 17: Please see Response 16.

Comment 18: The expiration date for this permit should be 3 years after the effective date. Much of the work that has been done in Western Franklin County through groups such as The Hellbranch Watershed Forum, The Environmentally Sensitive Development Area (ESDA) External Advisory Group (EAG) and the Big Darby Planning Accord have proposed applying adaptive management principals to deal with future uncertainties in addressing potential negative impacts resulting from urbanization in this area. Reviewing this permit after three years and its overall effectiveness is consistent with this policy. Once this area is opened up for urbanization, new development will rapidly occur. Waiting for five years to review the effectiveness of this permit may provide time for irreversible degradation to occur within the Hellbranch Subwatershed and portions of the Big Darby Creek mainstem that could have otherwise possibly been prevented through the modification of this permit. Review within this time frame will also provide an opportunity to evaluate the effectiveness of this permit with regard to protection of ecological thresholds and Total Maximum Daily Load (TMDL) goals established for Darby subwatersheds. *(ODNR, Division of Watercraft, Scenic Rivers Program)*

Response 18: Please see Response 14.

Part I

Comment 19: **Part I.A (page 3) Permit Area: Upon finalization of this permit, OEPA should also consider applying an identical permit to other Exceptional Warmwater Habitat, Coldwater Habitat, Seasonal Salmonid Habitat and Scenic River Watersheds where the principal threat to stream ecological, integrity and water quality is urbanization. Systems such as the Chagrin River, Grand River, Kokosing River, Little Miami River and Olentangy River have watersheds that are undergoing rapid rates of urbanization. Some of these systems are already beginning to show signs of degradation resulting from urbanization. In the case of the Little Miami River, OEPA recently approved expansions of major wastewater treatment facilities without taking into consideration how the additional impervious surfaces and associated urban non-point source pollutant load may compound the impact on the river. In a situation such as this, the need to apply a general storm water permit to minimize these impacts could be considered critical to protect water quality, stream habitat, biological diversity and rare and endangered species. Immediate application of this permit to other similar watersheds may prevent those streams from reaching an irreversible point in stream degradation resulting in the loss of rare, threatened, endangered and sensitive species from those systems as well. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 19: Ohio EPA is currently in the process of developing a watershed specific permit for the Chagrin River watershed. Ohio EPA intends on evaluating other watersheds throughout the state and developing applicable watershed specific permits where warranted and as resources permit.

Comment 20: **Part I.B.1 of the draft permit states that all construction activities disturbing one or more acres that are located fully or partially within the permit area will be eligible for permit coverage, including the entire area disturbed in the larger common plan of development or sale. The Federal definition of storm water associated with small construction activity codified at Title 40, Code of Federal Regulations (40 C.F.R.) 122.26(b)(15)(i) includes disturbances of less than one acre of total land area that**

is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. We recommend that Part I.B.1 include discharge authorization for land disturbing construction activities where less than one acre of land area is disturbed that is part of a common plan of development or sale that would disturb more than one acre of land. (U.S. EPA)

Response 20: This suggested language was Ohio EPA's intent with the draft permit language. However, the language will be revised to more clearly indicate this.

Part II

Comment 21: **Part II.D (page 7): Notices of Intent (NOIs) and Stormwater Pollution Prevention Plans (SWP3s) should be made available upon request to other agencies such as the Ohio Department of Natural Resources and Soil and Water Conservation Districts, conservation organizations such as the Darby Creek Association and the general public. Ohio EPA should consider re-establishing a certification or volunteer monitoring process whereby trained members of other agencies, local conservation organizations and the general public could conduct construction site inspections and report possible violations or inadequate practices. Access to sites for the purpose of conducting such inspections would be by landowner permission only. A program such as this could help ease inspection demands on OEPA and other local government agencies and reinforce requirements on permittees to properly maintain storm water treatment facilities and Best Management Practices (BMPs) on site. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 21: In regards to making SWP3s available upon request, Part III.C.2.b and c of the permit addresses this concern. Also, permit applications are available to be viewed by contacting Ohio EPA.

In the mid-1990s, the Ohio EPA Storm Water Section met with several county SWCDs to discuss a proposed memorandum of understanding (MOU) between the Ohio EPA and SWCDs. The purpose of these MOUs was to provide participating SWCDs more involvement in assisting Ohio EPA in ensuring that the NPDES construction storm

water general permit requirements are being implemented. As a result, there are currently 17 working agreements; whereas, Clark County SWCD, Franklin County SWCD and Pickaway County SWCD have agreements within the Big Darby Creek watershed.

The Ohio EPA construction storm water program cannot be delegated; therefore, these agreements should be characterized as an agreement for mutual cooperation. These agreements can, in no way, be construed as a contract, but rather an agreement to collaborate with the SWCDs. There are no monetary funds provided for these working agreements. Under these agreements, the basis expectations of the SWCDs are to: review construction site storm water pollution prevention plans (SWP3s) for adequacy, conduct construction site inspections, provide technical assistance to contractors/developers on the requirements of the NPDES storm water general permit for construction activity and communicate issues of non-compliance with Ohio EPA.

Part III

Comment 22: **Part III.C.2.a & III.D: What section of law provides that a permittee may claim to OEPA that any portion of a SWP3 is confidential? What advantage is there to a developer to do this? Could this be utilized as a mechanism to cover up inadequate levels of storm water treatment onsite? If this comment was added to provide additional post-9/11 protection to treatment facilities, it would be beneficial to limit confidentiality to those sections that involve specific infrastructure (storage locations of chemicals, maps of pipeline locations, etc) rather than the complete SWP3. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 22: Reemphasizing the opening sentence of Part III.C.2.c, Ohio EPA will generally consider SWP3s as public record. Although it should be rare that any part of an SWP3 qualifies under an exception, there are nonetheless exceptions in public record laws (see R.C. Chapter 149) to the requirement that such records are available to the public. A person claiming confidentiality of any part of the SWP3 will have to notify Ohio EPA of that claim and supply information sufficient to show that the part qualifies for the exception and for confidentiality. Thus, meeting the relevant requirements for confidentiality will dictate whether any part of an SWP3 is

kept confidential. That determination will not be dictated by a person's desire to cover up inadequate levels of storm water treatment.

Comment 23: **Part III.G.1.e (page 9): As part of the SWP3, permittees should be required to provide data pertaining to the quality of any discharges from the site. Any existing storm water or agricultural drainage discharges not meeting TMDL goals should be incorporated into storm water treatment facilities developed for that site so as to improve the quality and reduce future impact of the pre-existing discharge. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 23: Ohio EPA has no legal authority to mandate treatment of off-site drainage. In many cases the property is owned by an alternate landowner. In addition treatment of off-site drainage would have a direct impact on the size of any Best Management Practice (BMP) as they all are based on drainage area. Given off-site drainage could include significant drainage acres; it could potentially have a direct impact on the feasibility of development as the majority of the site would be dedicated to treatment.

Comment 24: **Part III.G.1.j (page 10): SWP3s with centralized sediment and erosion controls capable of controlling multiple lots should be emphasized within the Darby Watershed. Individual lot erosion and sediment control practices should be avoided. This could lead to the installation of BMPs by untrained individual lot owners resulting in decreased efficiency and increased failure of the practices. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 24: Centralized controls are emphasized as a result of the individual review of the SWP3. The plans are reviewed to ensure positive flow of storm water to all impoundments intended for sediment control prior and following storm installation.

Comment 25: **Part III.G.1.m.xiii (page 11): Permit states: The location of any areas of floodplain fill, floodplain excavation, stream restoration or stream crossings.” These activities should be avoided as much as possible. This particular item number seems to imply that these are acceptable rather than discouraged activities, which are actually regulated in other sections of the permit. These**

areas should be set aside as permanently protected areas or open space on all sites. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 25: The agency believes these activities are discouraged as they would require mitigation under the Big Darby Creek Permit and applicable 404/401 permitting. These issues are closely evaluated and additional conditions are relayed to the permittee concurrent with the individual SWP3 review.

Comment 26: **Part III.G.2 of the draft permit requires storm water pollution prevention plans (SWPPP) to contain a description of the control appropriate for each construction operation and the operator(s) must implement the controls. EPA restructured its storm water general permits to conform to a recent court decision regarding effluent limits. In *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2nd Cir. 2005), the court held that because the terms of the Nutrient Management Plan (NMP) employed by concentrated animal feeding operations (CAFO) imposed restrictions on discharges, those restrictions amounted to effluent limitations that needed to be made part of the permit and to be subject to public and permit writer review. Consistent with this decision, EPA explicitly established effluent limitations in one part of its general permits and in a separate part of the permit clarifies that the requirement to develop a SWPPP is an information gathering tool for dischargers to document, among other things, how control measures will be selected, designed, installed, and implemented to comply with the permit's effluent limitations. We recommend that Ohio EPA use this approach to effluent limitations in the draft permit. (U.S. EPA)**

Response 26: Even though it would not result in any new requirements, Ohio EPA has elected to not restructure the permit based upon this comment. Ohio EPA discussed this approach with USEPA and they do not object to our approach. Ohio EPA will follow this recommended permit structure for upcoming construction storm water general permit renewals.

Comment 27: **Part III.G.2.b. - Riparian Setback Requirements: The proposed permit in section G.2.b. appears to reduce part of the problem with riparian setbacks compared to the 2006 permit. The proposed option centers the setback along the midline of the meander belt. However, the**

outer edge of this meander belt appears to be inadequately protected by this option, and we ask that for larger streams the outer edge of the riparian setback be extended significantly beyond the limited 100 foot minimum. In section G.2.b.i.1, the Conservancy strongly supports the inclusion of “The regulatory 100 year floodplain based on FEMA mapping” in this and any other riparian setback. No fill, development or stormwater units should be allowed within the 100 year floodplain or setback. We ask that this restriction always be applied stringently without variances. (*The Nature Conservancy*)

Response 27: Please see Responses 5 and 10.

Comment 28: Part III.G.2.b - Avoidance of storm water units in the riparian setback, floodplain or meander belt: The revised draft of 12/17/11 G.2.b (page 13) states: “No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond) or structural post-construction controls shall be used in a surface water of the State or the delineated setback.” In the efforts to manage stormwater runoff, stormwater BMPs often have been permitted and constructed adjacent to a stream and/or within the floodplain of a stream they are supposed to protect. While this might reduce some impacts, it create others which also are detrimental to stream quality, and can lead to complete loss of the stormwater unit or any positive effect when the meandering stream floods or eventually consumes the unit. While improving water quality in some ways, stormwater BMPs in the floodplain or setback can be damaging to two other key ecological factors, habitat and water quality. They can add to certain water quality problems. Placement of stormwater units in the floodplain or meander belt already has led to some streams entering the stormwater unit. For example, Blacklick Creek below Winchester Pike in Franklin County has breached a stormwater retention basin and threatens a section of the MetroPark’s Blacklick Creek Greenway Trail. The Scioto River below I-270 has meandered and entered a former quarry (although this was not a “stormwater unit,” it is a comparable situation). Because this meandering is natural, desired and cannot be avoided, no units should be allowed within this setback. Also, stormwater units located next to a stream or within a setback allow thermal discharges

that raise stream temperatures and add other pollutants. Below is a brief statement on some of the reasons stormwater units, especially berms and ponds, should not be built in floodplains or the setback:

- 1. Streams may eventually erode the unit's berm and flow through it, destroying stream habitat, and eliminating the stormwater retention function.**
- 2. Units within a setback will likely result in flushing of pollutants out of the unit. This reduces or eliminates the treatment function of the unit. During floods, materials in the stormwater pond may be washed from the pond if the stream flow is high enough to enter the pond.**
- 3. Berms of stormwater ponds or artificial wetlands restrict belt or meander widths of streams, leading to unstable channels because of heightened water levels, thereby preventing the formation of natural habitat. Efforts to reduce problems 1 and 2 above can restrict the channel width and cause damage to the stream channel through channel scouring and forming an unstable channel.**
- 4. Berms often are maintained to prevent tree growth, and therefore ecological functions such as stream shading and filtering are reduced where the berm is near the stream. Also, allochthonous inputs are eliminated because there are no or few trees and shrubs to provide leaf litter input. Primary production in stormwater ponds is autochthonous (e.g., algae) and not natural to stream ecology in small to medium-sized systems. A lack of trees also eliminates shade and raises stream temperatures.**
- 5. If stormwater ponds are built with low permeability materials (e.g., $<10^{-6}$ cm/sec permeability), groundwater recharge is hindered. This results in the loss at least some water filtering and groundwater recharge functions, and higher BMP unit temperatures, as water is held in the unit.**
- 6. Open water ponds are not the natural riparian habitat; they are unlikely to provide comparable natural ecological benefit to a riparian system. The purpose of open space is to allow for infiltration of stormwater. Ponds in floodplains gain no "filtration offset;" they provide less infiltration than densely vegetated natural habitat would.**

Stormwater management should not be allowed within the setback, as this constitutes a discharge to an area, which will eventually add these pollutants to the stream. (The Nature Conservancy)

Response 28: Please see Response 10.

Comment 29: **Part III.G.2.b (page 12): Controls (Riparian Setback Requirements); in the second sentence “No construction activity shall occur without appropriate mitigation within the delineated setback boundary,” the phrase “without appropriate mitigation” appears to have been added to this version of the permit. Again, this phrasing seems to apply a degree of acceptability to construction activities within the setback areas rather than discouraging such activities. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 29: The SWP3 must be reviewed and approved prior to the issuance under the general permit. During this process all potential impacts to the delineated setbacks are discussed in detail. This process ensures proper mitigation in the event impacts are unavoidable. There is an alternative analysis review conducted during this meeting with emphasis on avoidance. The agency feels the permit’s mitigation requirements and review process discourages impacts in the riparian areas and encourages avoidance.

Comment 30: **Part III.G.2.b.i.1 (page 12): Setback distances for the 100 year floodplain should be established through the use of the most current Federal Emergency Management Agency FEMA maps and data available. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 30: Agreed. Ohio EPA will consult with local officials to ensure the most current FEMA maps are used.

Comment 31: **Part III.G.2.b.i.2 (page 12): The minimum 100 foot distance as described in G.2.b.i.2. should be measured from the Ordinary High Water Mark (OHW) or the top of the stream bank, not from the centerline of the channel. The Scenic Rivers Program would also like to recommend that the 100 foot minimum be increased to 120 feet as measured from OHW or the top of the stream bank. The Scenic Rivers Program has long recommended a minimum riparian forest buffer depth of 120 feet along state designated wild, scenic and**

recreational rivers. This standard is still applied in some local zoning codes on the Big and Little Darby Creeks as a riparian setback distance. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 31: Ohio EPA has consulted with ODNR Division of Soil and Water who has agreed the method of applying the setback formula as addressed in the general permit is acceptable and utilizes current stream morphology principles. The agency is confident this method of applying the setback will increase protection of critical areas which provide maximum interaction between the stream and the corresponding flood prone areas.

Comment 32: **Part III.G.2.b.i.3 (page 12): Centering W over the meander pattern of the stream such that a line representing the setback width would evenly intersect equal elevation lines on either side of the stream has the potential to result in critical/sensitive riparian forest buffer directly adjacent to the stream being left unprotected. Such is the case with an outside bend directly adjacent to a high bank or bluff rising up from the stream. In situations such as this it may be better to divide W equally and apply half the distance as a setback from the top of each bank. If this application does not result in protection of a portion of the 100 year floodplain on either side of the stream then G.2.b.i.1. should be applied to that side of the channel connected to the 100 year floodplain with the $\frac{1}{2}$ W setback being applied to the bluff or high bank side of the stream.**

The application of the 100 year floodplain as a setback also has the potential to result in high outside banks and bluffs being left unprotected. The protection of these areas is critical as the steepness of the slopes associated with these areas makes them highly sensitive to erosion. Protecting these bluffs in riparian forest buffer is essential to reduce erosion and the resulting sedimentation, filter pollutants from surface runoff, provide shade for stream temperature mitigation, and to limit the destabilization of the entire slope. We have seen bluffs and high banks on scenic rivers all across the state where landowners have built homes, gazebos and other structures at the top of the bank or bluff and cut swaths of trees from the hillside so as to have a view of the river. This ultimately contributes to

destabilization of the bank as well as potential degradation of stream quality.

To ensure the protection of high banks and bluffs that are not captured by any of the above three riparian setback requirements we recommend that the following setbacks based on slope (Table 1) be applied in addition to the greater of the previously mentioned riparian setback requirements.

Table 1: Recommended minimum riparian buffer setback distances based on slope.

Slope of Land Above Water Body	Minimum Width of Riparian Forest Buffer (applied to each side of stream)
0-10%	100 feet
10-20%	115 feet
20-30%	135 feet
30-40%	155 feet
40% +	175 feet

An alternative which would more effectively maximize protection of steep slope areas would be to require that; any slope greater than 10% be incorporated entirely within the riparian setback area and include an additional 25 foot setback from the top of the slope to further increase slope stability. Slopes less than 10% could be protected under the minimum recommended Scenic Rivers Program guidelines requiring a 120 foot riparian setback. Other sensitive areas left relatively unprotected by this permit are tributary headwater streams that are associated with ravines. Again, steep nearly vertical slopes result in these areas being particularly sensitive to erosion and destabilization if deforested. Permanent protection of all riparian setback areas should be accomplished through conservation easements held by an appropriate conservation agency or private conservation organization. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 32: Please see Response 31.

Comment 33: Part III.G.2.b.ii (Page 13): "In the event the stream segment exceeds the minimum criteria in Attachment B to be classified as a "Previously Modified Low Gradient Headwater Stream," Part III.G.2.b.iii may be considered on a case-by-case basis." Recommendation: Part

III.G.2.b.iii no longer exists. Revise the section reference. (ODOT)

Response 33: Ohio EPA agrees with the comment. The reference has been changed to Part III.G.2.b.ii.

Comment 34: **Part III.G.2.c (page 13): Riparian Setback Mitigation; What criteria and scientific justification were used to determine the depths of Zones 1, 2 and 3 and the associated levels of mitigation? These zones and mitigation levels should only be applied in areas where the riparian setback defaults to a minimum of 100 feet on each side as the greatest of the possible setback distances as defined in III.G.2.b.i.2. In areas where the riparian setback is determined by either the width of the 100 year floodplain or $W=133DA^{0.43}$ we recommend the following mitigation criteria:**

- 1. Zone 1 should be defined as the floodway portion of the 100 year floodplain or the floodway portion of W and any steep slopes or bluffs directly adjacent to the stream having a slope equal to or greater than 10%. Any disturbances within these areas should be mitigated at the 4:1 mitigation level within Zone 1 of the mitigation location.**
- 2. Zone 2 should be defined as any portion of the 100 year floodplain or W beyond the floodway boundary. Any disturbances within these areas should be mitigated at the 3:1 mitigation level within Zone 1 and/or 2 of the mitigation area.**
- 3. Eliminate Zone 3.**

The sensitive nature of floodplains, riparian forest buffers and wooded hillsides adjacent to the streams in the Darby Watershed require that these areas be adequately protected. Stringent mitigation requirements will be necessary to offset negative impacts in these critical areas and to serve as a deterrent to future disruption of these areas. Permanent protection of all mitigation areas should be accomplished through conservation easements held by an appropriate conservation agency or private conservation organization. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 34: The comment has been noted but no changes to the riparian setback mitigation language have been made. The intent of the mitigation ratios was to compensate for the increasing

severity of the impact to water quality as an intrusion into the setback moves from the periphery of the setback towards the stream edge. They are also designed to provide a disincentive for intrusions into the setback that go all the way to the stream edge. Ohio EPA will continue to evaluate the riparian setback mitigation requirements for improvement opportunities over the permit term.

Comment 35: **Part III.G.2.d: Groundwater Recharge Requirements:** **The draft permit currently states “The SWP3 shall ensure that the overall site post-development groundwater recharge equals or exceeds the pre-development groundwater recharge.” Setting this standard for groundwater recharge may not adequately maintain stream base flows essential for protecting the high biological diversity, rare and endangered species, Exceptional Warmwater Habitat (EWH), and Outstanding State Resource Water (OSRW) designations of the Big and Little Darby Creeks. Matching existing groundwater recharge rates which may already be altered due to field tiling, existing impervious surfaces and other land use changes on the site will result in maintenance of the status quo which in the Hellbranch and some other Darby sub watersheds that have resulted in already degraded conditions. Maintaining this same level for discharges directly feeding the Big and Little Darby Creeks may result in a degradation of those systems over time as well. A standard for a groundwater recharge rate that mimics a more natural condition such as woodland or prairie (two naturally occurring ecosystems in the Darby Watershed) should be established for a post construction groundwater recharge rate. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 35: The groundwater recharge requirements was specifically derived from the information collected from the Big Darby Creek TMDL approved by US EPA on March 31, 2006. The TMDL identified the potential threats to Big Darby Creek and the associated tributaries. EWH and OSRW designations were addressed in this report. It is the intent of the agency and this permit to implement protective measures associated with construction to protect the current use designations. As a result, ground water mitigation was implemented to protect base flows which impact water quality based on current land conditions identified in the TMDL process. Ohio EPA is confident the current language is providing adequate

protection of current use designations and will continue to evaluate the permit for improvement opportunities.

Comment 36: Part III.G.2.d.ii (page 16): The pre-development ground water recharge volume should be calculated using a land use-soil group pairing that is more reflective of a natural condition, ie. Wood/Forest or Meadow, rather than the existing land use-soil type pairing on the site. Much of the existing land use-soil grouping in the Darby Watershed will be “Row Crop, Tiled C & D”, soils which we do not feel is representative of the natural conditions in the Darby Watershed. Many of the soil types that exist in this area are hydric soils, such as Kokomo soil, that will hold water for extended periods of time and leach slowly to upper aquifers that provide extended periods of slow recharge to stream flows. We believe this is critical with regard to protecting base flows necessary to support the high biological diversity, rare and endangered species, EWH and OSRW use designations within the Darby Watershed, particularly during summer dry periods. These soil types with agricultural drainage dry out, thus reducing water available to upper aquifer and consequently stream recharge. Tiled row crop fields also discharge to streams at an accelerated rate during wet periods following rain events resulting in unnaturally elevated flows and then conversely provide little or no recharge during dry periods once hydric soils have been drained. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 36: Please see Response 35.

Comment 37: Part III.G.2.f.i. Table 4 (Page 18): Temporary Stabilization: Replaced 21 day requirement with 14 day requirement. Recommendation: Ohio EPA is intending to modify this Construction General Permit requirement to be consistent with the US EPA draft Construction General Permit requirements for temporary stabilization. However, the US EPA 2008 CGP was extended until February 14, 2012. Comments by the US EPA were specifically requested on the stabilization requirements and are unknown until the final CGP is adopted. We recommend keeping the current requirement threshold of 21 days for temporary stabilization until the formal adoption of the proposed CGP by the US EPA. (ODOT)

Response 37: As indicated in Response 2, all construction storm water permits issued by EPA or states must incorporate the December 1, 2009 federal construction and development effluent limitation guidelines (40 CFR 450.21-24). The 14 day stabilization requirement is a part of this regulation that Ohio EPA is required to incorporate into this permit renewal.

Comment 38: **Part III.G.2.g and Part III.G.2.i: “linear construction projects must be designed to minimize the number of stream crossings and the width of disturbance.”** The storm water permit should specify standards for the design of stream crossings, and establish the appropriate and best designs as requirements. Any single stream crossing (a bridge or a culvert) has a limited distance it immediately impacts through construction, but can have a major impact on all fish and amphibian life upstream of the crossing. Therefore, we encourage the Agency to establish adequate requirements for any stream crossings covered by this general permit, require that stream crossing designs conforming to the more specific standards, thereby avoiding an individual permit. Generally, a better design for a stream crossing (bridge or culvert) is the widest opening possible, in order to avoid restricting stream channel habitat near the crossing. The first option considered should use existing crossings and have no disturbance of natural habitat and native vegetation at the surface. *(The Nature Conservancy)*

Response 38: This process is already addressed in the 401/404 permitting process. The Agency reviews all SWPPPs prior to issuance and ensures all applicable 401/404 permits are adequately addressed. The number of crossing per linear mile is evaluated concurrent with this process. Applicable nationwide permits 12 and 14 evaluate the number of crossings per linear mile and provide mitigation if deemed necessary.

Comment 39: **Part III.G.2.i (page 22): Post-Construction Storm Water Management Requirements; States “Construction activities that do not include the installation of any impervious surfaces (e.g., soccer fields)are not required to comply with the conditions of Part III.G.2.e of this permit.”** With regard to soccer and other sporting fields (baseball/softball diamonds, football fields, golf courses etc.) these facilities are often very well drained with subsurface

drainage and have firmly compacted surfaces from repeated grading, mowing and/or maintenance. Also, non-native grasses used in these facilities typically produce a rhizomatous mat that is not as conducive to groundwater infiltration as native vegetation. Sporting fields of this nature should be treated as impervious surfaces for the purposes of calculating groundwater recharge rates and subject to Part III.G.2.e of this permit. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 39: Ground water recharge is required for such installations which incorporate subsurface drainage and is evaluated concurrent with individual SWP3 review. As stated all SWP3s are reviewed prior to issuance. As a whole the installation of such facilities with no impervious surface represent a small portion of development and is generally addressed through the calculation of the run-off coefficient which is mandated under this permit. The commenter raises a good point which will be evaluated with the review of each application.

Comment 40: **Part III.G.2.i (page 22): Large Construction Activities. The draft permit states “post construction BMP(s) chosen must be able to detain storm water runoff for protection of stream channels, stream erosion control and improved water quality” however requirements on subsequent pages seem to lack the level of detail for post construction BMP(s) to ensure that this requirement is met. The permit should include more specific language to ensure that BMP(s) are designed such that drain time is long enough to provide WQv treatment while still releasing at a rate that mimics the natural flow regime of the receiving stream for the given rain event. Release rates should be such that they do not result in excessive bank erosion, stream bed down cutting or other forms of channel destabilization while still providing for a flow regime that is protective of the high biological diversity, rare and endangered species, and EWH and OSRW designations of the Darby Creeks and many of their tributaries. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 40: Part III.G.2.i. (Page 24) includes language that requires the permittee to provide a description of all BMPs installed following construction and state the rationale for the specific selection. The rationale must address the anticipated impacts on the channel and floodplain morphology, hydrology, and water quality. Each specific BMP is

evaluated concurrent with the individual SWP3 review to ensure adequate protection of stream erosion resulting from development.

Comment 41: **Part III.G.2.i. (Page 24) Post-Construction Storm Water Management Requirements: “Transportation Projects The construction of new roads and roadway improvement projects by public entities (i.e., the state, counties, townships, cities or villages) may implement post-construction BMPs in compliance with the current version (as of the effective date of this permit) of the Ohio Department of Transportation’s “Location and Design Manual, Volume Two Drainage Design” that has been accepted by Ohio EPA as an alternative to the conditions of this permit. Recommendation: We recommend the language “(as of the effective date of this permit)” be removed from the permit. This language implies that only the version of the Manual published on the date of the permit is valid. ODOT’s L&D Manual is periodically updated and is referenced in multiple Ohio EPA Construction General Permits. This language is used consistently in the permits and creates potential for multiple versions of the L&D Manual being used simultaneously versus the most current version. The Ohio EPA is provided with all changes and has an opportunity for concurrence before final changes to the Manual are published. Elimination or modification of this language will ensure that the latest version of the L&D Manual is being reference by the permit. (ODOT)**

Response 41: Given the language is stated as a specific permit condition, removal of the language “(as of the effective date of this permit)” would eliminate the potential for public comment in the event of a change during the permit term.

Comment 42: **Part III.G.2.j (page 25): Surface Water Protection. Storm water discharge to natural wetlands should not be permitted. Natural wetland hydrology is typically based on more diffuse surface flows and fluctuating groundwater elevations rather than a more consistent and concentrated flow that would result from waters being discharged from a post construction storm water treatment BMP. Wetland plants and animals are frequently sensitive to and dependent upon very subtle and cyclical water level variations, which may be disrupted by concentrated flows from storm water BMPs. Also, residual pollutant loads may negatively**

impact certain species of wetland plants and animals that inhabit these wetland systems. Species of *Ambystomid* and other salamanders have been declining in recent years as a result of the loss of vernal pools, wooded wetlands and associated forest buffers that are critical to their reproductive success and life cycle. These areas should be protected under this permit with an appropriate wooded buffer to provide adequate habitat for these and other species utilizing these sensitive habitats. (ODNR, Division of Watercraft, Scenic Rivers Program)

Response 42: Ohio EPA does not have the authority to prohibit storm water BMP discharges to natural wetlands. Ohio EPA has the authority to require conditions on such discharges; whereas, Part III.G.2.j requires such conditions. This permit condition is part of the SWP3 review process for each application submitted for coverage under this general permit.

Comment 43: **Part III.G.2.k.i. (Page 26) Non-Sediment Pollutant Controls: “No solid (other than sediment) or liquid waste, including building materials, shall be discharged in storm water runoff. The permittee must implement all necessary BMPs to prevent the discharge of non-sediment pollutants to the drainage system of the site or surface waters of the state. Under no circumstance shall wastewater from the washout of concrete trucks, wash out stucco, paint, form release oils, curing compounds, and other construction materials be discharged directly into a drainage channel, storm sewer or surface waters of the state. Also, no pollutants from vehicle fuel, oils, or other vehicle fluids can be discharges to surface waters of the State. No exposure of storm water to waste materials is recommended. The SWP3 must include methods to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, storm water runoff, and snow melt. The SWP3 must include measures to prevent and respond to chemical spills and leaks.” Recommendation: “discharges” should read “discharged.” (ODOT)**

Response 43: Ohio EPA agrees with the comment and the typo has been corrected in the final permit.

Comment 44: Part III.G.2.k.i. (Page 26) Non-Sediment Pollutant Controls: “No solid (other than sediment) or liquid waste, including building materials, shall be discharged in storm water runoff. The permittee must implement all necessary BMPs to prevent the discharge of non-sediment pollutants to the drainage system of the site or surface waters of the state. Under no circumstance shall wastewater from the washout of concrete trucks, wash out stucco, paint, form release oils, curing compounds, and other construction materials be discharged directly into a drainage channel, storm sewer or surface waters of the state. Also, no pollutants from vehicle fuel, oils, or other vehicle fluids can be discharges to surface waters of the State. No exposure of storm water to waste materials is recommended. The SWP3 must include methods to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, storm water runoff, and snow melt. The SWP3 must include measures to prevent and respond to chemical spills and leaks.” Recommendation: We recommend that “The SWP3 must include measures to prevent and respond to chemical spills and leaks” be removed from the permit or modified. ODOT has concerns that the SWP3 may not be the appropriate document to describe the spill prevention and response protocol. The contact individuals and response protocol in case of a spill should be held in a conspicuous location on site or be ensured by other methods. We do not believe that the SWP3 can be retrieved in a timely manner or that all individuals have the plan available for an immediate response. The language could be modified to allow another document to replace this SWP3 requirement such as a SPCC plan or Safety Response Plan. The required content for the SWP3 plan would only need to indicate the specific location for the SPCC protocol. (ODOT)

Response 44: Language has been added to the final permit which would allow the SWP3 to reference another document (i.e., Spill Prevention Control and Countermeasure (SPCC) plan, Safety Response Plan) which has been developed and addresses the minimum requirements of this permit condition. A copy of the referenced document would be required to be kept on site.

Attachment B

Comment 45: **Part 2.a (Page 39) Construction of a floodplain – floodplain construction should be as wide as possible to maximize pollutant removal and release of flood flow energies during large flood events. If the stream being restored has a delineated 100 year floodplain adjacent to sections upstream or downstream of the section proposed for restoration then every attempt should be made to construct a 100 year floodplain within the section of stream that is to be restored. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 45: The overwide channel restoration is only applicable to previously modified, low gradient, headwater streams. In most cases the stream is entrenched and disconnected with the 100 year flood plain. The excavation of a new flood plain is measured by 10 times the channel's self-forming width. In accordance with ODNR, Division of Soil and Water this new excavated floodplain is at ample width to maximize pollutant removal and provide the release of flood flow energies during large flood events.

Comment 46: **Part 2.d (Page 39) Water quality setback areas should be 120 feet as measured from the top of the stream bank. Restored water quality setback areas should be re-vegetated with a mixture of native riparian tree species. Efforts should also be incorporated to control aggressive naturalized plant species and invasive vegetation. (ODNR, Division of Watercraft, Scenic Rivers Program)**

Response 46: In consultation with ODNR Division of Soil and Water, the agency feels the 100 foot setback in this section combined with the new excavated interactive floodplain will provide positive water quality improvements. The permit requires all such areas to be protected in perpetuity via a conservation easement or environmental covenant where native vegetation is addressed.

End of Response to Comments