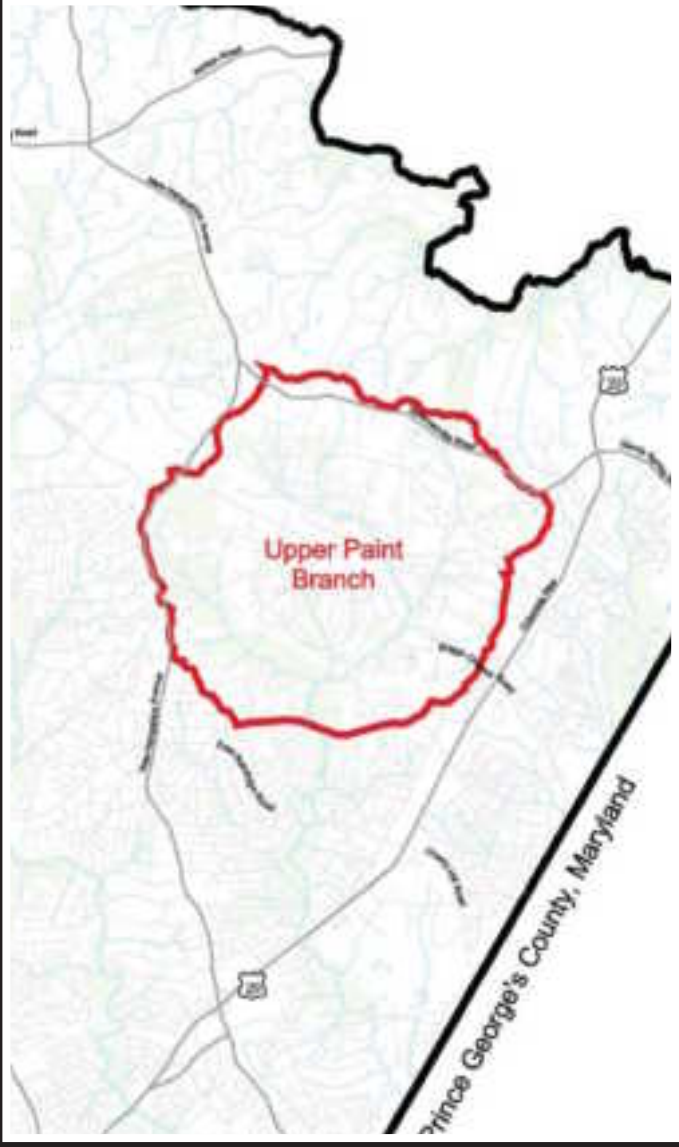
INTERCOUNTY CONNECTOR
ICC

Montgomery County Special Protection Areas and the ICC



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Montgomery County Special Protection Areas and the Intercounty Connector

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Introduction

In 1995, by Executive Regulation 29-95, Montgomery County established requirements for development in certain areas of the County, termed "Special Protection Areas" (SPAs) (see Appendix A). Although the Executive Regulation applies directly to private and County developmental activities in SPAs, State and federal projects may become involved through the local planning agency, the Maryland-National Capitol Park and Planning Commission – Montgomery County (M-NCPPC-MC), and its Mandatory Referral process. The Montgomery County Department of Permitting Services (MCDPS) administers SPA requirements with respect to development and approval of Water Quality Plans, and M-NCPPC-MC is responsible for compliance with zoning overlays. During a typical development process in the SPA, the Montgomery County Department of Environmental Protection (MCDEP) provides applicants with environmental data to aid their understanding of the resources that may be the subject of the special protection and to customize strategies to protect those resources. SHA/MdTA relied upon MCDEP's data as well as data from Maryland Department of Natural Resources Fisheries and from other sources in preparing the environmental documents for the ICC.

The State Highway Administration (SHA) and the Maryland Transportation Authority (MdTA) or SHA/MdTA are jointly constructing the Intercounty Connector (ICC), a six lane roadway running from I-370 in the Gaithersburg section of Montgomery County to I-95 / US 1 in the Beltsville section of Prince Georges County. The ICC crosses two Montgomery County SPAs. One crossing comprises approximately 4,500 linear feet of roadway in the Upper Rock Creek SPA between Muncaster Mill Road (MD 115) and North Branch Rock Creek, and the second crossing comprises approximately 2.5 miles or roadway in Upper Paint Branch SPA between New Hampshire Avenue (MD 650) and the SPA boundary in the vicinity of Old Columbia Pike. See Appendix B, Figure II-13. The Lead Agencies on the ICC (SHA, MdTA, and the Federal Highway Administration (FHWA)) are committed to work with the local County and regional planning body to ensure that an environmentally sound Water Quality Plan is achieved for the project so that, if the ICC were a private development, the Plan would be approved through the County's SPA review process. Because the Lead Agencies are either State or Federal entities, the Maryland Department of the Environment (MDE) is authorized to review and approve the project pursuant to Title 4, Subtitle 2 of the Environment Article of the Annotated Code of Maryland, and Section 26.17.02 of the Code of Maryland Regulations (COMAR), pertaining to stormwater management (SWM), and Title 4, Subtitle 1 of the Environment Article of the Annotated Code of Maryland and COMAR 26.17.01 governing erosion and sediment control (ESC).

Pursuant to the process set forth in the National Environmental Policy Act (NEPA), SHA/MdTA has completed Natural Environment Technical Report (NETR) and Draft and Final Environmental Impact Statements (DEIS and FEIS). Development of the

NETR, DEIS and FEIS included baseline preconstruction monitoring and data collection, assessment of anticipated and potential future impacts, public input about the studies and alternatives being considered, compensatory mitigation to address anticipated impacts, and proposed Environmental Stewardship (ES) projects. ES activities are included in the project scope to improve existing cultural, community, and natural resources within the ICC study area, which have been impacted by past development.

In addition to commitments made in the FEIS, crossings of streams and impacts to aquatic life, wetlands, and streams must conform to the conditions of an MDE-issued Nontidal Wetlands and Waterways Permit (Permit No. 04-NT-0408/200560011) and an Individual Permit issued by the US Army Corps of Engineers (USACOE or the Corps) (Permit No. CENAB-OP-RMS 05-60011-1) based on the planning studies performed for the project to date. SWM and ESC plans developed for the project must meet MDE requirements at a minimum and be approved by MDE prior to any earth disturbing activities being undertaken on the project. SWM and ESC plans and an application for MDE approval will be developed during the definitive design stage of the project, once a Design-Builder has been selected and a Notice to Proceed has been granted.

This document reduces over 2000 references to the phrase “Special Protection Area” (SPA) found in the ICC FEIS published in January 2006, into a unique reference that will provide reviewers and interested parties with a level of comfort that the project demonstrably complies with the intent of Montgomery County SPA requirements. It is not the purpose of this document to identify every SPA reference in either the FEIS or the permits and describe them in detail. Instead, each of the ten SPA Performance Goals is listed below along with a short description evincing how the ICC meets each goal. The text includes references to where the reader may find information and the formal commitments. Appendices to this document comprise all pertinent references and cross references, namely SPA maps, Executive Regulations and Montgomery County Code provisions with respect to SPAs (Appendix A); text-referenced sections of the FEIS (Appendix B); text-referenced sections of the Request for Proposals (RFP) for ICC Contract A – From I-370 to Georgia Avenue (Appendix C); USACOE and MDE permits issued on June 13, 2006 and June 23, 2006 respectively (Appendix D); pertinent meeting minutes documenting agency coordination in SPAs (Appendix E); ICC FEIS (Appendix F – (2) in CD Format); and ICC Natural Environment Technical Report (Appendix F – (1) in CD Format).

Special Protection Area Performance Goals

(See Montgomery County Executive Regulation No. 29-95)

1. Stream / Aquatic Life Habitat Protection

The ICC includes many features that provide general stream and aquatic life protection. SWM requirements for the project follow the MDE stormwater Design manual procedures and exceed them in several respects. SHA/MdTA's commitment to providing enhanced SWM is found in FEIS section VII.B.5 - Stormwater Management Features (page VII-25), and these are reiterated in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in the Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.7. In FEIS Section VII.B.5 (page VII-25) both the overall SWM requirements are detailed as well as what is different and more restrictive in the SPA. The anticipated effects of the ICC on stream / aquatic life habitat are explained in FEIS Section IV.F.5 - Surface Water Resources and Section IV.F.6 - Aquatic Biota (pages IV-151 and IV-195, respectively). Effects of the ICC on Montgomery County Unique and Sensitive Areas (primarily SPAs) may be found in FEIS Section IV.F.11 (page IV-299). An analysis of anticipated secondary and cumulative impacts resulting from the ICC on the environment may be found in FEIS Section IV.K.8 (page IV-415).

To comply with NEPA and gain approval from FHWA, SHA/MdTA prepared a Compensatory Mitigation (CM) package for anticipated environmental impacts resulting from the ICC. A description of the CM proposed and accepted for the ICC may be found in FEIS Section VII.C.3 - Environmental Measures and Conceptual Mitigation (page VII-52). Within this section is a table listing each Compensatory Mitigation site, the watershed in which the site exists, the restoration objectives (e.g., restoration of X linear feet of stream), and a description of the mitigation concept.

SHA/MdTA has committed to constructing Environmental Stewardship (ES) projects that exceed the mitigation required under law. These ES projects are classified as either community/cultural or natural/environmental. The natural/environmental projects are intended to address existing problems in the natural environment that are not related to or caused by the ICC. Two examples of these projects are stormwater retrofits of existing, developed areas, and stream stabilization and restoration projects upstream of the ICC. Descriptions, concepts, and maps for each ES project may be found in FEIS Section VI.

The environmental agencies involved in the ICC Interagency Work Group (IAWG) expressed concerns about aquatic life habitat protection, and, as a result, placed conditions within their permits to ensure that impacts are minimized and mitigated. MDE permit Special Conditions nos. 8, 9, 10, 15, 17, 18, 19b(mod), c, g(mod), and h(mod), 20, 21, 22, 24, 35, 36, 37, 39, 46, 48, 49, 50, 51, 57, and 58, and USACOE permit Special Conditions nos. 2, 3, 4c, g, and h, 6 through 9, 14, 15, 17 through 21, 25 through 28, 30 through 33, 35 through 39 together confirm SHA/MdTA's commitment to protect streams and aquatic life habitat along the ICC.

2. Maintain Stream Base Flow

Background studies and data collection was performed during development of the FEIS to determine stream base flow in critical locations within the ICC Study Area. Background studies included obtaining data collected by SHA/MdTA, MCDEP, MDNR Fisheries and other sources in preparing the Upper Paint Branch Baseflow and Temperature Monitoring Study Summary, Summer 2004 Data as found in Appendix F of this report. The purpose of this report was to establish baseline base flow and temperature data for future comparison.

A significant element of the project is the typical roadway cross section (see Part 6 – RFP Plans TS-1 through TS-5 (Appendix C). In the roadway cross section SHA/MdTA includes roadside swales throughout that will meet MDE's grass channel credit requirements, both inside and outside SPAs. Additionally, within SPAs the median is widened to 50 feet from 36 feet to allow room for redundant water quality treatment by grass channel credit and dry-swale (called Linear Filters in the FEIS).

The planned dry-swale or bioswale is essentially a biofilter placed beneath grass channels to enhance chemical water quality and provide relief from runoff temperature spikes caused by impervious surface runoff. The bioswales will be constructed in short segments separated by storm inlets and / or checkdams to prevent any system-wide failures. Inlets are required to be placed on intervals to prevent the discharge velocity from the 1.5 inch rainfall event from exceeding 1 fps. Check dams will be placed as necessary to keep the 10-year return period storm flow velocity below the erosive threshold. Bioswales will include a shallow depth of stone beneath the underdrain to allow infiltration to occur, thereby recharging groundwater.

Within the SPA, SHA/MdTA has committed to providing infiltration where feasible based on soil test results. (See FEIS Section VII.B.5.c.). The infiltration method discussed there involves creating bottomless collection manholes downstream from the linear filter devices. The bottomless manholes will be set at an elevation that meets the separation distance minimum between the manhole device and groundwater as well as soil requirements found in MDE's 2000 Maryland Stormwater Design Manual.

The permitting agencies included conditions within their permits to ensure that spring seeps and infiltration are maintained, groundwater impacts are minimized and mitigated, and unnecessary impacts to streams are avoided in SPAs and elsewhere along the project. MDE permit General Condition no. 16 and Special Conditions nos. 6, 9, 11, 17, 18, 19b(mod), c, g(mod), and h(mod), 22, 28 through 34, 49, 50, 51, 57, and 58, and USACOE permit Special Conditions nos. 14, 15, 17 through 20 reinforce SHA/MdTA's commitments to maintain stream base flow.

3. Protect Spring Seeps and Wetlands

Spring seeps and wetlands along the ICC are described in FEIS Section II.E.7 (page II-82). Great pains and coordination with agencies were taken to minimize roadway footprint and concomitantly, environmental impacts, especially in areas of wetlands and seeps. Preconstruction monitoring was performed on streams throughout the ICC study area to supplement and corroborate stream data previously collected by MCDEP (See Upper Paint Branch Baseflow and Temperature Monitoring Study Summary,

summer 2004 Data in Appendix F of this report). The FEIS Plates include a "Limits of Disturbance" or "LOD" line set approximately 25 feet from the cut or fill limit of the roadway. The 25 feet line was a compromise between ensuring that sufficient space is available for the Design-Builder to construct in an environmentally sensitive and innovative manner, and the push to minimize impacts. Bridges that span the floodplains (not just the stream channels) are included on the project to minimize impacts to wetlands, streams and spring seeps. Discussions regarding existing spring seeps and wetlands may be found in FEIS Section II.E.7 (page II-82) and avoiding spring seeps and wetlands may be found in FEIS Section IV.F.7.e (page IV-223).

Because saving wetlands and forests along the ICC is a priority, SHA/MdTA is offering incentives in the Design-Build contracts to further avoid impacting these areas. A description of the incentives to foster decreases and disincentives to prevent increases in wetland impacts may be found in RFP Part 3 – Design Requirements, PS 310 – Environmental Performance Specification, Section 3.3.4, subsections 3.3.4.8 through 3.3.4.10 for seeps and wetlands. In PS 310 – Environmental Performance Specification, Section 3.3.5, there are incentives to encourage the Design-Builder to avoid existing forested areas.

Conditions placed within the issued permits ensure that the ICC avoids spring seeps and wetlands, and that unavoidable impacts are minimized and mitigated in SPAs and elsewhere on the project. Throughout both the MDE' permit and the Corps' permit, the agencies have reinforced regulatory requirements with regard to seep and wetland protection, as well as SHA/MdTA's commitments to avoid and minimize impacts to spring seeps and wetlands. MDE Special Condition no. 24 addresses one of the larger seeps in the SPA, in Upper Paint Branch.

4. Maintain On-site Natural Stream Channels

Similar to protecting seeps and wetlands, minimization of disturbance and encroachment on natural stream channels was performed to the extent practicable during the planning process for the ICC. The primary methods for avoiding natural stream channels were to minimize project footprint and use bridges longer than hydraulically necessary in most cases to span streams. Discussions regarding existing natural stream channels (Waters of the US) along the project may be found in FEIS Section II.E.7 (page II-82), and avoiding natural stream channels may be found in FEIS Section IV.F.7.e (page IV-223).

Means and methods for maintaining on-site stream channels may be found in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in the Part 3 – Design Requirements, PS 310 – Environmental Performance Specification, subsections 1.1, 2.5, 3.1, and 3.3. In addition, discussions regarding incentives and increased disincentives to reduce impacts may be found in subsections 3.3.4.9 and 3.3.4.10.

Permit conditions ensure that the ICC avoids and maintains on-site natural stream channels, and that unavoidable impacts are minimized and mitigated in SPAs and elsewhere on the project. MDE permit General Conditions nos. 16 through 21, and Special Conditions nos. 2 through 6, 8, 11, 17, 18, 19b (mod), c, g (mod), h (mod), 20, 23, 44, 45, and 49, and USACOE permit Special Conditions nos. 1, 3, 4b, c, g, and h,

5, 15, 19, and 20, reinforce regulatory requirements and confirm SHA/MdTA's commitments to minimize impacts to natural stream channels.

5. Minimize Storm Flow Runoff Increases

Within the SPAs and Use III watersheds, the linear filter system that addresses SWM also has a quantity management component. Where possible outside of parkland, surface ponds that meet MDE's Channel Protection Volume (Cpv) requirements are proposed to address quantity management. These dry, 12-hour Cpv ponds meet MDE requirements and minimize the potential for temperature increases from solar radiation. Within parkland and where space is not available for surface ponds, Cpv will be addressed through underground storage either in pipes or concrete chambers. Underground pipes or chambers should further mitigate any thermal runoff concerns because underground storage by definition is shaded from the hot summer sun. Commitments to address storm flow runoff increases may be found in FEIS Section VII.B.5 Stormwater Management Features (page VII-25), and are reiterated in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.7.

Because the environmental agency-members in the ICC Interagency Work Group (IAWG) expressed concerns about the effect of storm flow runoff increases in receiving streams, permit conditions have been included to ensure that impacts from potential runoff increases are minimized and mitigated. MDE permit Special Conditions nos. 6, and 28 through 34, and USACOE permit Special Conditions nos. 14, 15, and 17 through 20, reinforce SHA/MdTA's commitments to minimize runoff increases.

6. Identify and Protect Stream Banks Prone to Erosion and Slumping

Stream bank conditions along the ICC have been assessed as part of the ICC Natural Environment Technical Report (NETR), the results of which have been incorporated into the FEIS, Part II - Affected Environment, Section E.5 - Surface Water Resources (page II-57), and discussions specific to North Branch and Upper Paint Branch stream characteristics may be found in this section.

A discussion about anticipated consequences of ICC construction related to stream bank erosion in North Branch and Upper Paint Branch SPAs may be found in FEIS, Part IV - Environmental Consequences, Section F.5 - Surface Water Resources (page IV-151).

Means for protection of stream banks may be found in FEIS, Part VII - Preferred Alternative, Section C.3 - Environmental Measures and Conceptual Mitigation (pages VII-52 through VII-87), with streams addressed in general terms in subsection b (page VII-62). Additional measures for stream bank protection are offered in FEIS, Part VI - Environmental Stewardship, Section C.2.c - Stream Restoration Sites (page VI-11). This section provides a discussion on the repair and restoration of stream reaches in the study area that have degraded because of urbanization in the watershed and/or other factors not influenced by the ICC. FEIS Part VI, Sections C.2.e and C.2.f (page VI-11) discuss stormwater management retrofits considered under the Environmental Stewardship commitment. These stormwater retrofits include fulfilling

recommendations made in watershed plans prepared by Montgomery County Department of Environmental Protection (MCDEP) to address existing water quality and water quantity control problems. In addition, SHA/MdTA identified a number of Special Protection Area Best Management Practices (SPA-BMPs) intended to improve stormwater runoff water quality and groundwater recharge from existing developed areas on a small scale, specifically within the SPAs.

The Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek may be found in Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.7. General SWM requirements are set out in FEIS Section VII.B.5, as well as what is different and more restrictive in the SPAs.

Bridges proposed at major stream crossings generally span the floodplain, and, although temporary construction impacts may result at needed crossings, the ICC should not affect the long-term stability of streams under bridges. Bridge and culvert crossings of streams must conform to the conditions of the MDE and USACOE permits, as well as Federal Emergency Management Agency (FEMA) floodplain requirements. The MDE permit was issued based on general, planning level analyses that will be refined during design of the project. As project design progresses, MDE must review and approve all engineering analyses of crossings to ensure that stream quality and geomorphic characteristics will be maintained in accordance with MDE requirements (See MDE permit General Conditions and Special Conditions). The Corps permit includes numerous conditions for bridge and culvert crossings to ensure stream protection (See USACOE permit General Conditions and Special Conditions).

7. Minimize Increases to Ambient Water Temperature

During planning for the ICC, SHA/MdTA realized the sensitive nature of Use III and IV receiving streams within the ICC study area, and consequently obtained stream temperature data from MCDEP, performed additional temperature monitoring as documented in Upper Paint Branch Baseflow and Temperature Monitoring Study Summary, Summer 2004 Data (Appendix F of this report), and established a Brown Trout Work Group (BTWG) specifically to raise concerns and discuss impacts caused by runoff temperature increases and measures to mitigate for them. BTWG held numerous meetings and field walks that included members and guests from MCDEP, M-NCPPC-MC, MDE, Maryland Department of Natural Resources (DNR), Federal Highway Administration, USACOE, US Fish and Wildlife Service (FWS), US Environmental Protection Agency (EPA), and Metropolitan Washington Council of Governments. BTWG activities resulted in identification of important areas of North Branch and Upper Paint Branch to be avoided, and establishment of priorities for SWM BMPs. Indeed, it was through BTWG that the concepts of a wider median, use of infiltration, and use of linear filters in roadway side ditches were developed and refined, and presented to the permitting and other stakeholder agencies of the IAWG.

The linear approach to SWM for the ICC was well received when discussed at BTWG meetings and with MCDPS. This approach, being applied in Montgomery County SPAs and Use III watersheds (North Branch Rock Creek and Upper Paint Branch), involves constructing stormwater filtering systems (bioretention or sand filtration) within the roadway cross section, e.g. in median and roadside ditches as appropriate, to address

water quality. After roadway runoff passes by overland sheet flow through vegetation to the linear filtering systems, these systems will remove suspended sediments and attached pollutants prior to discharge into a pipe underdrain system then a storm drain. The storm drain will lead to a large pipe and outlet reducer designed to attenuate flows in accordance with water quantity control requirements. Where appropriate (in North Branch only), dry, 12-hour extended detention (ED) ponds or underground storage chambers may be constructed in place of linear pipe systems for the purpose of providing flow attenuation to meet MDE Channel Protection Volume (Cpv) water quantity control requirements.

To facilitate the linear approach, earthen checkdams would be placed in medians and roadside ditches where stormwater filtering systems will be employed to limit drainage areas treated to manageable sizes. The actual spacing of the earthen checkdams would vary depending on the roadway grade, and will help limit potential failures to short segments of median (less than approximately 600 feet) where they can be quickly identified and corrected when they occur.

Stormwater management facilities will be designed based on appropriate geotechnical studies. These studies would include careful evaluation of soil and in-situ permeability tests at the design depth of infiltration devices. Infiltration rates determined by the permeability tests would be used to evaluate the feasibility of providing infiltration in specific locations as well as to size the infiltration devices. Facility designs will be in accordance with procedures set forth in the 2000 Maryland Stormwater Design Manual (MDE, 2000) and substituting a rainfall depth of P=1.5 inches in place of the P=1.0 inch presented.

In addition to the infiltration that will occur through the bottom of the linear stormwater management approach, infiltration devices will be employed where geotechnically feasible through the use of bottomless deep sump inlets and manholes to force treated water contact with native soils. Infiltration trenches and galleries would be provided where conventional approaches to stormwater management water quality treatment are being pursued. These practices will help offset the reduction in natural infiltration and recharge that occurs with construction of impervious surfaces and soil compaction.

Development of the concept and presentation to MCDPS and others specifically ensured that the concept was one that MCDPS typically would require of a developer in the SPA (See BTWG Meeting Notes and MCDPS Meeting Minutes). SHA/MdTA moved forward with the linear filter concept based on feedback from the various groups involved in the meetings.

To further guard against stream temperature resulting from increases in runoff events in the summer months, SHA/MdTA has committed to constructing the ICC roadway profile in such a way that drainage of approximately 13 acres of the Upper Paint Branch watershed in the vicinity of New Hampshire Avenue will be diverted to Northwest Branch after construction is complete. The diversion of the drainage area will be limited to an area approximately 200 feet to 400 feet wide, running approximately 2,200 feet East from the crossing of the ICC at New Hampshire Avenue, plus runoff from the first 1 inch of rainfall from the Montgomery County Department of Public Works and Transportation (MCDPW&T) yard on Cape May Road (See FEIS

Part VII, Sections B.5.c page VI-27 and 28, USACOE permit Special Conditions nos. 15 and 18, and MDE permit Special Conditions nos 29 and 32). Even though surface runoff is being diverted from the Upper Paint Branch watershed area, infiltration devices will be employed to meet groundwater recharge needs (See USACOE permit Special Condition no. 19, and MDE permit Special Condition no. 33).

Diverting drainage area west of the ICC / Good Hope bridge raises the question about what happens to the highway runoff east of the diversion high point. SHA/MdTA has committed to conveying highway runoff west of Good Hope across the bridge over Good Hope and to the east where stormwater management measures may be employed prior to discharge to the mainstem of Paint Branch near the Good Hope / Paint Branch confluence.

In addition, bridge deck drainage within SPAs, from the North Branch and Tributary to North Branch bridges and Good Hope and Gum Springs / Paint Branch bridges, will be captured and treated by SWM measures prior to discharge. The commitment to capture and treat bridge deck runoff within the SPAs may be found in FEIS Part VII, Sections B.5.c page VI-27, with reinforcement in USACOE permit Special Condition no. 15, and MDE permit Special Condition no. 29.

The commitments mentioned above are confirmed in FEIS Section VII.B.5 Stormwater Management Features (page VII-25), and are reiterated in the Contract Documents for Contract A with respect to the Use III watershed of Upper Rock Creek in the Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.7.

8. Minimize Sediment Loading

SHA/MdTA has committed to exceed regulatory requirements to protect receiving streams from sedimentation both during and after construction. The FEIS speaks to existing soil conditions and meeting MDE requirements for erosion and sediment control measures during construction and limiting sediment as a water quality feature post construction in FEIS Sections II.E.1.a-b (pages II-44 through II-48), II.E.5.a-b (pages II-57 through II-68), III.E.1.b-c (pages III-27 through III-35), IV.A.1-7 (pages IV-1 through IV-11), IV.F.1 (pages IV-132 through IV-138), IV.F.5 (pages IV-151 through IV-187), IV.F.6.a-b (pages IV-195 though IV-207), VI.A-C (pages VI-1 through VI-12), VII.B.1 (page VII-4), VII.B.4-5 (pages VII-25 through VII-28).

SHA/MdTA has adopted several internal, voluntary upgrades to MDE minimum erosion and sediment control inspection and compliance requirements over the last several years. These upgrades are included in ICC performance specifications and the ICC Project Management Plan. For example, SHA/MdTA is employing an Independent Environmental Monitor (IEM) who inspects the construction project for adherence to environmental commitments and reports directly to the permitting agencies (See MDE permit Special Condition no. 10 and USACOE permit Special Condition no. 44). In addition, SHA/MdTA has included construction performance incentives and liquidated damages pertaining to erosion and sediment control in the Contract Documents for Contract A Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.8.

Furthermore, SHA/MdTA has committed to make a lump sum payment for ESC maintenance to the Design-Builder whenever any rainfall amount of 3.0 inches is exceeded in a 24 hour period. The Severe Weather Event specification in Contract A Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.14, ensures the Design-Builder will be compensated for repairing ESC devices damaged by severe weather without worry that the Design-Builder's original bid did not cover such a storm event.

Within the SPA, ESC specifications exceed regulatory requirements by requiring the Design-Builder to provide a narrative commitment describing construction methodologies within the SPA that incorporate the mandatory primary and supplemental ESC devices within the SPA as set out in Contract A Part 3 – Design Requirements, PS 303 – Drainage Performance Specification, subsection 3.15.

9. Minimize Nutrient Loading

ICC SWM facilities are designed and constructed to reduce nutrient loads from urban runoff as provided in MDE's 2000 Maryland Stormwater Design Manual (See "http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater;" select "2000 Maryland Stormwater Design Manual" from the left column). ES projects that repair failing stream banks and retrofit existing developed area with SWM BMPs will reduce nutrient loads reaching receiving waters as well. A spreadsheet computer model developed to assess water quality impacts associated with the ICC as compared to existing land uses within the project right of way (See FEIS Section IV.F.5.b (page IV-172) demonstrates that the sections of Rock Creek (Table IV- 58, page IV-182) and the Anacostia River (Table IV-59, page IV-183) crossed by the ICC will see reductions in Total Nitrogen after construction of the ICC when compared to loadings from the existing, pre-construction land uses.

During construction, SHA/MdTA will minimize nutrient loading by requiring the Design-Builder to develop Nutrient Management Plans. (See Contract Documents for Contract A Part 3 – Design Requirements, PS 301 – Planting and Landscape Architectural Performance Specification, subsection 5.2.) SHA/MdTA coordinated with the local planning agency and others to develop Planting and Landscape Architectural Performance Specifications that rely heavily on use of native plant materials to limit the need for long term maintenance and reduce the need for fertilizers and additional nutrients that may otherwise be required for maintenance. The discussion of use of native plan materials may be found throughout Contract A Part 3 – Design Requirements, PS 301 – Planting and Landscape Architectural Performance Specification, and specifically subsection 4.1.1 (page 3).

10. Control Insecticides, Pesticides, and Toxic Substances

SHA/MdTA has set out requirements to control insecticides, pesticides, and toxic substances during construction. (See the Contract Documents for Contract A Part 3 – Design Requirements, PS 301 - Planting and Landscape Architectural Performance Specification, subsection 4.2.1, and PS 310 – Environmental Performance Specification, subsection 3.6.) SHA/MdTA coordinated with the local planning agency and others to develop Planting and Landscape Architectural Performance Specifications that rely heavily on use of native plant materials to limit the need for

long term maintenance and reduce the need for insecticides, pesticides, and toxic substances that may otherwise be required for maintenance. The discussion of use of native plan materials may be found throughout Contract A Part 3 – Design Requirements, PS 301 – Planting and Landscape Architectural Performance Specification, and specifically subsection 4.1.1 (page 3).

Summary

SHA/MdTA has performed many environmental studies and impact analyses associated with the Intercounty Connector project as documented in the project Natural Environment Technical Report and Draft and Final Environmental Impact Statements (available at the ICC project website http://www.iccproject.com). The NETR, DEIS and FEIS contain a multitude of references to Montgomery County Special Protection Areas (SPAs). This document has highlighted Montgomery County SPA Performance Goals and provided a narrative description demonstrating that the ICC project complies with the intent of the SPA. This document references sections of the ICC FEIS, environmental permits issued for the project, and other related and/or referenced documents (see Appendices) that substantiate the narrative descriptions of SPA compliance and the commitments by the Lead Agencies to develop, construct, and operate an environmentally sound project.