Ecology
Buffer Variances

APPLICABILITY

Georgia Department of Natural Resources (GADNR) Environmental Protection Division (EPD) buffer variance requirements apply to projects with non-exempt encroachments to state-mandated buffers on state waters. Typically, a buffer variance—acquired through EPD's application process—is required before Certification for Let.

REGULATIONS, GUIDANCE, AND POLICY

State waters are defined by the Official Code of Georgia (OCGA 12-7-3(16)) and protected by the Georgia Erosion and Sedimentation Act of 1975. State-mandated buffer requirements apply to state waters that have wrested vegetation by normal stream flow or wave action, as well as cold-water (i.e., trout waters) ephemeral channels that exhibit wrested vegetation. Coastal marshlands have state-mandated buffers that are measured from the Jurisdictional Determination (JD) Line established by the Coastal Marshlands Protection Act (CMPA) (Chapter 5, Article 4, Part 4) and implemented by the GADNR Coastal Resources Division (CRD).

As stated in the Georgia Erosion and Sedimentation Act (OCGA 12-7-6), warm water streams require a 25-foot undisturbed buffer as measured from the point of wrested vegetation. Designated trout waters require a 50-foot riparian buffer, also measured from the point of wrested vegetation. Coastal marshlands have a 25-foot buffer as measured horizontally from the coastal marshland-upland interface (CMPA JD Line). Unless the activity is exempt, no land-disturbing activities shall be conducted within any state-mandated buffer; and a buffer shall remain in its natural, undisturbed state of vegetation, unless a variance is granted by the EPD Director.

The EPD provides a variance process for land disturbing activities within state-mandated buffers that requires application to and approval from the EPD per GADNR Rules 391-3-7-.05 and -.11. EPD will only review a buffer variance application if the applicant provides reasonable evidence that impacts to the buffer have been avoided or minimized to the fullest extent practicable and only for activities meeting one of the criteria listed at GADNR Rule 391-3-7-.05(2) or -.11(2).

EXEMPTIONS

Exemptions from state buffer variance requirements are provided for specific activities listed under GADNR Rules 391-3-7-.05(1) and -.11(1), as well as under Part IV (i, ii & iii) of the Authorization to Discharge Under The National Pollution Discharge Elimination System (NPDES) Storm Water Discharges Associated With Construction Activity For Infrastructure Construction Projects (General NPDES Permit No. GAR100002).

The General NPDES Permit is reissued every 5 years by EPD per federal regulations and coverage is obtained by submitting a Notice of Intent (NOI) to EPD. EPD does not require that the NOI and buffer variance application be filed concurrently. Submittal of the NOI is not the responsibility of the GDOT Office of Environmental Services or their agents.

The two main exemptions that apply to GDOT projects are drainage structures (non-trout waters) and roadway drainage structures. However, additional exemptions cover other activities that may be associated with GDOT projects, such as utility relocations.

Utility Line Crossing

Water and/or sewer line stream crossings can occur on GDOT projects for utility relocations due to roadway widening or other improvements. The EPD provides an exemption from buffer variance requirements provided the crossing occurs within 25 degrees of perpendicular to the stream and does not exceed a width of disturbance of 50 feet. This exemption only applies to water and sewer lines. Relocation or construction of other utility lines within the buffer do not qualify for this exemption.

For coastal marshlands, any utility crossings (not limited to water and sewer lines) are exempt as long as the width of disturbance does not exceed 50 feet.

Crossings for aerial utility lines are exempted under General NPDES Permit No. GAR100002, provided that (a) the new utility line right-of-way width does not exceed 200 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion, and (d) native riparian vegetation is reestablished in any bare or disturbed areas within the buffer.

Drainage Structures

Drainage structure is defined by OCGA 12-7-3(7) as a device composed of non-erodible material that conveys water from one place to another by intercepting the flow and carrying

it to a release point for storm-water management, drainage control, or flood control purposes. For GDOT projects, drainage structures within a state-mandated buffer typically consist of stormwater drainage outfalls discharging to the buffered stream or open water. Please note that earthen ditches do not qualify for this exemption, as they are erodible. Riprap is considered a non-erodible material by EPD and drainage outfalls are typically lined with riprap within the buffer, which qualifies for the drainage structure exemption. When completing plan reviews, the Ecologist should ensure all roadway drainage outfalls within the buffer are composed of non-erodible material (e.g., riprap or concrete). The drainage structure exemption covers clearing and grubbing, and land disturbance necessary for drainage structure construction, as well as erosion and sedimentation control Best Management Practices (BMP) installation adjacent to the drainage structure. When reviewing plans, the Ecologist must verify that land disturbance within the buffer for drainage structure construction is limited to the minimum area required for construction access and BMP installation, and coordinate with Design for plan revisions, as needed.

The drainage structure exemption does not apply to state-mandated buffers on trout waters. A stormwater drainage structure within a 50-foot state-mandated trout waters buffer requires a variance from the EPD prior to construction.

Roadway Drainage Structures

Roadway drainage structure is defined by OCGA 12-7-3(13) as a device, such as a bridge, culvert, or ditch, composed of non-erodible material that conveys water under a roadway by intercepting the flow on one side of a traveled way and carrying water to a release point on the other side. For GDOT projects, roadway drainage structures typically consist of bridges and culverts. The roadway drainage structure exemption applies to the 25-foot buffer of any state waters or the 50-foot buffer of trout waters.

Exemptions "Boxes"

A September 2010 Memorandum regarding buffer variance issues from the EPD Assistant Director to the GDOT Chief Engineer clarifies the extent of the roadway drainage structure exemption on GDOT projects. In this memorandum, the EPD stated that land-disturbing activities within 100 feet of the footprint of new bridge construction or within 50 feet of the footprint of new culvert construction would not require a variance, provided the land-disturbing activities are directly related to the drainage structure construction. The roadway drainage structure exemption area applies to new structures and not existing structures proposed for replacement. For culvert extensions, the exemption area applies to the new extension section. Refer to the Impact Example Plan Sheets for examples of roadway drainage structure exemption areas on GDOT plan drawings. Construction activities within the exemption area necessary to construct the roadway drainage structure would not require a variance.

Activities within the exemption area not necessary for roadway drainage structure construction do <u>not</u> qualify for the roadway drainage structure exemption and may require a variance from EPD for buffer disturbance. For example, a multi-use path or noise barrier

constructed beneath a bridge within the 100-foot exemption area would not qualify for the exemption and would require a buffer variance prior to construction.

In the event buffer disturbance for roadway drainage structure construction extends beyond the exemption area, GDOT may submit a letter request for concurrence of exemption to the EPD providing justification for why the additional disturbance is necessary. Additional disturbance should not proceed until concurrence is received from the EPD.

Activities Requiring Minimal Ground Disturbance

Per General NPDES Permit No. GAR100002, buffer variance exemptions apply to the following activities: fencing, right-of-way (ROW) posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within existing ROW. Land disturbance cannot exceed 100 square feet per structure and the area of buffer vegetation to be cut (not grubbed) cannot exceed 1,000 square feet per structure. Mainline Plans (Section 13), Crossroad Plans (Section 14), Utility Plans (Section 24), Lighting Plans and Details (Section 25), Signing and Marking Plans (Section 26), and/or Construction BMP Location Details (Section 54) must be reviewed to verify exempt activities comply with General NPDES Permit requirements. Installation of signage within state-mandated buffers would only be exempt provided installation requires no ground disturbance and clearing activities are limited to hand clearing.

Per the Georgia Erosion and Sedimentation Act, GDOT projects resulting in less than one acre of land disturbance are exempt from the requirements of that Act, including maintaining state-mandated buffers. Therefore, GDOT projects resulting in less than one acre of land disturbance typically do not require a buffer variance. However, the Ecologist must consult the Project Manager (PM) to determine if an NOI will be submitted for projects resulting in non-exempt disturbance to state-mandated buffers, as an NOI submittal could trigger the need for a buffer variance.

BUFFER VARIANCE CRITERIA

EPD provides criteria under which an applicant can apply for a variance from state-mandated buffer requirements as defined under GADNR Rule 391-3-7-.05(2) or -.11(2). The two most commonly used buffer variance criteria for GDOT projects include 391-3-7-.05(2)(a) or -.11(2)(a) and 391-3-7-.05(2)(h) or -.11(2)(h), with 391-3-7-.05(2)(k) or -.11(2)(k) also used at times.

Criterion 2(a) - GADNR Rule 391-3-7-.05 or -.11(2)(a)

This criterion involves construction or repair of an existing infrastructure project or a structure that, by its nature, must be located within the buffer. This criterion is typically used for existing roadway improvement projects, including widening, bridge replacement, and intersection improvements, resulting in non-exempt buffer disturbance. Criterion 2(a) cannot be used for new location roadway projects or buffer disturbance directly associated with stream piping, filling, or relocating that require a Section 404 Clean Water Act permit

(Section 404 permit). Some activities (e.g., bank stabilization) that require a Section 404 permit may qualify for Criterion 2(a). Please consult the GDOT Ecologist or Ecology Team Leader if unsure whether an activity qualifies for Criterion 2(a).

Under Criterion 2(a), a re-vegetation plan as described in the most recent publication of the EPD *Streambank and Shoreline Stabilization Guidance* and/or a plan for permanent vegetation as per the *Manual for Erosion and Sedimentation Control in Georgia* is required, where feasible.

Criterion 2(h) - GADNR Rule 391-3-7-.05 or -.11(2)(h)

This criterion is used for buffer disturbances associated with impacts to waters of the US (WOTUS) that require a Section 404 permit from the US Army Corps of Engineers (USACE) and have an approved mitigation plan as a permit condition. Criterion 2(h) does not apply to trout waters. To qualify for Criterion 2(h), the disturbance must be associated with an activity resulting in impact to the buffered stream, open water, or coastal marshlands. For example, longitudinal encroachment, resulting in piping or fill of a stream or placement of riprap below the ordinary high-water mark. Criterion 2(h) can be used for new infrastructure projects. Mitigation as described in the current EPD *Buffer Mitigation Guidance* is required for buffer disturbances under Criterion 2(h). Unless the project impacts would qualify under a "non-reporting" Nationwide Permit (NWP) or Regional General Permit (RGP), a copy of the transmittal letter and primary notification/application form from the Section 404 Permit application (including details of the proposed Section 404 mitigation, if required for the project impacts), as submitted to USACE, must be enclosed with the buffer variance application (BVA). For projects qualifying under a “non-reporting” NWP or RGP, a copy of the *Georgia Department of Natural Resources Notification Form*, as submitted to the EPD/CRD, must be enclosed with the BVA. In addition, the Section 404 permit verification or authorization letter must be enclosed, if available. Buffer mitigation credit calculations, if needed, must also be enclosed.

Criterion 2(k) - GADNR Rule 391-3-7.-05 or -.11(2)(k)

There are two separate sub-criteria under Criterion 2(k): 2(k)(1) and 2(k)(2). Buffer mitigation in accordance with current EPD *Buffer Mitigation Guidance* is required for use of Criterion 2(k).

Criterion 2(k)(1)

This criterion is used for non-exempt buffer disturbance associated with piping, filling, or rerouting of buffered warm waters and coastal marshlands that are not considered WOTUS (i.e., "non-jurisdictional). Criterion 2(k)(1) does not apply to trout waters. Typical buffered state waters that are not considered WOTUS on GDOT projects include offline stormwater detention basins constructed in uplands that exhibit wrested vegetation, have a distinct inlet and outlet, and are not confined to a single property. A buffer variance application under Criterion 2(k)(1) must include a narrative clearly stating that the buffered feature for which a variance is being requested is non-jurisdictional. The USACE Aquatic Resources Delineation Verification (See Ecology Process Guidebook) must be enclosed which

documents that the feature is not included as a jurisdictional resource within the project area.

Criterion 2(k)(2)

This criterion is used for non-exempt buffer impacts on infrastructure projects that do not require a Section 404 permit. Criterion (k)(2) addresses non-exempt buffer disturbances for new infrastructure projects only and applies to buffers on WOTUS and non-jurisdictional state waters. This criterion does not apply to maintenance and/or improvement of existing infrastructure which are covered under Buffer Variance Criterion 2(a). For example, a new location project that would result in non-exempt disturbance to the state-mandated buffer on a stream flowing parallel to the new roadway alignment, but would not impact the stream channel triggering a Section 404 permit, would be considered for a variance under Criterion 2(k)(2).

Criterion 2(k)(2) cannot be used for buffer disturbance directly associated with stream piping, filling, or relocating impacts that require a Section 404 permit. Some activities (e.g., bank stabilization) that require a Section 404 permit may qualify for Criterion 2(k)(2). Please consult the GDOT Ecologist or Ecology Team Leader if unsure whether an activity qualifies for Criterion 2(k)(2)

TROUT WATERS - GADNR RULE 391-3-6-.03(15)

EPD Trout Stream Designations by County provides a current listing of trout streams and watersheds.

The GADNR Wildlife Resources Division trout maps must not be consulted for determining state-mandated trout waters buffer requirements as these maps designate recreational trout fishing stream regulations and are not applicable to buffer requirements.

Designation

Per GADNR Rule 391-3-7-.01(cc), "trout streams" means all streams or portions of streams within the watershed as designated by the Division under the provisions of the Georgia Water Quality Control Act, OCGA 12-5-20 et seq. The term “trout stream” is synonymous with cold water stream. “Trout waters” is a collective term that may apply to streams, ponds, lakes, or other impoundments located within a trout watershed or associated with a trout stream in EPD guidance or regulations. There are two trout stream classifications included in GADNR Rule 391-3-6-.03(15): 1) Primary Trout Waters, and 2) Secondary Trout Waters. Both classifications require a 50-foot buffer. Trout stream designations may apply to the following:

- An entire stream reach within a county (e.g., Tallapoosa River, Carroll County);
- A portion of a stream and/or tributaries reach within a county (e.g., Chattooga River - all tributaries classified as primary in Rabun County and Little Tennessee River downstream from US Hwy. 441 Bridge classified as secondary in Rabun County);

- A portion of a watershed within a county (e.g., Boston Creek watershed upstream from Georgia Hwy. 20, Bartow County); or
- An entire watershed within a county (e.g., Chappell Creek watershed, Chattooga County).

If a watershed or portion of a watershed is listed as trout waters, all perennial, intermittent, and ephemeral streams, as well as ponds, lakes, and other impoundments located within that watershed or portion thereof require a 50-foot buffer.

Per OCGA 12-7-6(b)(16), small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute (gpm) or less shall have a 25-foot buffer or they may be piped. Approved methodology for documenting average annual flow is provided at GADNR Rule 391-3-7-.05(10). If a trout stream buffer is to be reduced from 50-foot to 25-foot on a GDOT project based on a documented average annual flow of 25 gpm or less calculated using EPD approved methods, annual flow documentation must be enclosed with the project Ecology Resource Survey and Assessment of Effects Report (ERS AOE) and any Addenda. If a project would result in non-exempt encroachment on the 50-foot buffer of a trout stream that may have an average annual flow less than 25 gpm, and reduction of the buffer to 25 feet would avoid non-exempt disturbance, the Ecologist must coordinate with the PM and Design to complete a determination of average annual flow per EPD acceptable methods.

Variance Restrictions

As stated above, the drainage structure exemption [GADNR Rule 391-3-7-.05(1)(b)] does not apply to state-mandated trout stream buffers. Also, Buffer Variance Criteria 2(h) and 2(k)(1) cannot be used for trout waters. Buffer Variance Criteria 2(a) must be used for state-mandated trout stream buffer disturbance associated with existing roadway maintenance or improvement projects. Criterion 2(k)(2) must be used for state-mandated trout stream buffer disturbance due to new location projects. Any piping, filling, and/or relocating of trout streams beyond an allowable exemption area requires a variance from EPD prior to construction.

Table 1 – Buffer Variance Criteria and Exemptions

Criteria/Exemption	Available for Use on Trout Waters
Criterion 2(a)	Yes
Criterion 2(h)	No
Criterion 2(k)(1)	No
Criterion 2(k)(2)	Yes
Drainage Structure Exemption	No
Roadway Drainage Structure Exemption	Yes

General Buffer Variance - 391-3-7-.05(9)

A general variance is provided for piping trout streams with an average annual flow of 25 gpm or less. This may be applicable for buffer impacts associated with piping ephemeral or intermittent trout streams. Terms for the general variance are listed at GADNR Rule 391-3-7-.05(11) and include limiting the length of stream piped in any one property to 200 feet. The general variance may be used for piping multiple trout streams on a single project, provided the cumulative length of trout stream piped does not exceed 200 feet. Further, the downstream end of the pipe must terminate at least 25 feet from the property boundary (i.e., ROW).

IMPACT CALCULATION PROCEDURE

Buffer disturbance area must be calculated and rounded to the nearest square foot for all non-exempt, ground-disturbing buffer encroachments. Buffer area protected by orange barrier fencing must not be included in impact calculations. Buffer impact length must be calculated in linear feet and measured along the adjacent streambank/wrested vegetation line corresponding to the buffer disturbance. If buffer disturbance occurs on both sides of a stream, buffer impact length must be measured along stream centerline corresponding to the buffer impact.

A BVA requires that details of a buffer disturbance be provided. Mainline Plans, Crossroad Plans, Staging Plans (Section 19 and 20), Utility Plans, Lighting Plans and Details, Signing and Marking Plans, and Construction BMP Location Details must be reviewed to verify that all buffer disturbances are identified. Erosion control BMP placement within the buffer must be included in impact calculations.

Minor Buffer Impact – GADNR Rule 391-3-7-.01(r)

A minor buffer impact results in no additional above ground materials or structures within the buffer, maintains the original grade, and results in less than 5,000 square feet of buffer impacts per stream crossing or individual area of encroachment for each project. Clearing and grubbing of required ROW for construction access within the buffer would be considered a “minor” impact provided the disturbance area does not exceed 5,000 square feet.

All minor buffer impacts require a re-vegetation plan in accordance with the EPD *Streambank and Shoreline Stabilization Guidance* and/or a plan for permanent vegetation as per the *Manual for Erosion and Sedimentation Control in Georgia*. GDOT typically does not plant multi-trophic vegetation (i.e., trees and shrubs) in ROW, as the ROW is subject to future clearing for safety and maintenance. All disturbed buffer areas must be revegetated with a native grass or herbaceous seed mix as detailed in GDOT Standard Specification 700.

If multi-trophic re-vegetation is required, the Ecologist must provide Design with recommended species and spacing for planting. Planting recommendations should be

based on species present in the existing vegetated buffer. Buffer re-vegetation plans must be included in Mitigation Plans (Section 30) and enclosed with the BVA.

Major Buffer Impact – GADNR Rule 391-3-7-.01(q)

A Major Buffer Impact includes any impact that does not meet the definition of Minor Buffer Impact. Construction of roadway lanes, shoulders, and cut/fill slopes are examples of Major Buffer Impacts, as well as any buffer disturbance exceeding 5,000 square feet.

A BVA for a Major Buffer Impact must include a Buffer Mitigation Plan addressing impacts to critical buffer functions based on an evaluation of existing and predicted post construction buffer conditions pursuant to GADNR Rule 391-3-7-.05(7)(c) or -.11(7)(c). Each buffer function listed at GADNR Rule 391-3-7-.05(7)(c) or -.11(7)(c) must be addressed in the BVA with documentation of mitigation for all lost buffer functions.

MITIGATION PROCEDURES

Mitigation is required for all non-exempt buffer impacts. Criteria (h) and (k)(1), and major impacts under (k)(2) in GADNR Rule 391-3-7-.05(2) and -.11(2) require mitigation in accordance with EPD *Buffer Mitigation Guidance*. Mitigation for the remaining criteria is as described in GADNR Rule 391-3-7-.05(7)(d)(1-10) and -.11(7)(d)(1-9).

The Ecologist must coordinate with the PM and Design during the Avoidance and Minimization Measures Meeting (A3M) to evaluate the feasibility of implementing mitigation requirements included in EPD *Buffer Mitigation Guidance* including: 1) Post-Development Total Suspended Solids (TSS) and/or Stormwater Runoff Reduction, and 2) Water Quality Protection. Implementation of these measures often are required for Municipal Separate Storm Sewer System (MS4) permit (NPDES General Permit No. GAR041000) compliance. Georgia's MS4 Areas should be consulted to determine if the project may be subject to MS4 permit conditions, but this must be verified by the PM and Design, as the MS4 permit includes exemptions and grandfather provisions.

In the event post-development TSS and/or stormwater runoff reduction, and/or water quality protection cannot be addressed on site, mitigation must be completed in accordance with of the EPD *Buffer Mitigation Guidance* Appendix B and typically requires mitigation credit purchase.

DOCUMENTATION REQUIREMENTS

Application Form

All BVAs should be submitted on the appropriate and current application form available on the EPD website. EPD provides three separate buffer variance applications:

- *Application for A 25-Foot Vegetative Buffer Encroachment On Designated Warm Waters Of The State*;

- *Application for A 50-Foot Vegetative Buffer Encroachment On Designated Trout Waters Of The State*; and
- *Application For A 25-Foot Vegetative Buffer Encroachment On Designated Coastal Marshlands.*

The following information should be consulted when completing the appropriate application form:

- *Property Owner's Name*: GDOT State Environmental Administrator (include name);
- *Contact Person's Name and Address*: GDOT Ecologist (include name);
- *Total Project Disturbed Acreage*: See Erosion Control Plans (50 Series) – Cover Sheet; and
- *Location of Buffer Impacts*: Consult GIS data for corporate boundaries of Georgia cities and insert the city name in which the impact is located and insert 'N/A' for County. If the buffer disturbance is not located within city boundaries, then insert 'N/A' for City on the form and insert the county name in which the buffer disturbance is located.

Buffer Impact Checklist

The Buffer Impact Checklists, included with the application forms, must be completed in their entirety and attached to all BVAs. Each of the aforementioned applications (i.e., warm waters, trout waters, and coastal marshlands) contain a corresponding Buffer Impact Checklist.

The Ecologist provides a narrative for each applicable checklist item that may be inserted in the application or provided as a separate attachment. Figures, plan sheets, and agency coordination referenced in the checklist narrative must be enclosed in the application's Appendix. The following information should be consulted for referenced checklist items. Checklist item numbers vary by BVA type.

Local Issuing Authority

There is no Local Issuing Authority for GDOT projects, as the EPD reviews all GDOT Erosion, Sedimentation, and Pollution Control Plans (ESPCP) for General NPDES Permit compliance. Insert 'N/A' for this checklist item.

305(b)/303(d) List Documents

The approved EPD 305(b)/303(d) List of Waters must be consulted to determine if a project is located upstream and within one linear mile of an impaired stream reach or other water body. Impaired waters are those "Not Supporting" their designated use. The EPD publishes a GIS data set for the approved Integrated 305(b)/303(d) Report to assist in locating impaired waters. Documentation in the BVA must include the non-supporting reach name, location, criterion violated (pollutant of concern), and potential causes from the

305(b)/303(d) List Document(s). The BVA must document that the project will not contribute to further impairment of the listed reach from the pollutant of concern, including documentation of water quality BMPs designed to remove the pollutant of concern from stormwater runoff, if applicable.

If the project is located upstream and within one linear mile of an impaired 303(d) listed stream segment, the Ecologist must consult the current EPD *List of Stream Reaches With TMDLs* (Total Maximum Daily Load) *and TMDL Implementation Plans* to determine whether a TMDL Implementation Plan has been published for the impaired reach or watershed. If a TMDL Implementation Plan has been published, the BVA must document project compliance with TMDL Implementation Plan measures designed to prevent stream impairment. Compliance measures differ by reach and are designed to address the specific pollutant of concern and pollution source for that reach/watershed.

CRD Documentation (Coastal Marshlands Applications Only)

Documentation from the CRD verifying the location of the CMPA JD Line must be enclosed with all coastal marshlands BVAs. The CMPA JD Line must also be clearly labeled on all plan sheets enclosed with the application.

Re-Vegetation Plan

A buffer re-vegetation plan must be included for all buffer impacts. Re-vegetation with a native grass or herbaceous seed mix as detailed in GDOT Standard Specification 700 typically satisfies this requirement.

Buffer Mitigation Plan

For all major buffer impacts, effects to all critical buffer functions listed at GADNR Rule 391-3-7-.05(7)(c) or -.11(7)(c) must be addressed based on an evaluation of existing and predicted post construction buffer conditions. If a critical buffer function will be lost due to the proposed buffer disturbance, documentation of mitigation to offset this loss must be provided.

Buffer Credits

For buffer disturbances that require buffer credits, typically Criteria 2(h) and 2(k), compliance with EPD *Buffer Mitigation Guidance* must be provided. If project design includes BMPs to address TSS and/or stormwater runoff reduction, and/or water quality protection, documentation of TSS and pollutant removal efficiency rates for proposed BMPs must be provided. To offset buffer mitigation requirements, project BMPs must reduce annual post-development TSS loadings by 80%. For water quality protection, BMPs must result in at least 60% pollutant removal efficiency from site run-off for the first 1.2 inches of rainfall, for each pollutant of concern. For roadway projects, oil and grease represent the main pollutants of concern, and pollutant removal efficiencies for oil and grease BMPs must be included in the BVA. The Ecologist must consult Design for TSS reduction and pollutant removal efficiencies for proposed stormwater/water quality BMPs.

If post-development TSS and/or stormwater runoff reduction, and/or water quality protection cannot be addressed on the project, justification must be provided, and mitigation credit purchase will be required. Instruction for completing buffer credit calculations are provided in EPD *Buffer Mitigation Guidance* Appendix B. Calculations must be included in the BVA along with the proposed bank(s) from which mitigation credits will be purchased with rationale for the chosen bank(s). Consult the GDOT Ecologist and Special Project Coordinator prior to including a proposed bank in the BVA.

Site Map

To comply with BVA site map requirements, the following figures from the ERS AOE must be enclosed with the application:

- Project Vicinity Map;
- Survey Area Map;
- State and Federal Waters Map – Topographic;
- State and Federal Waters Map – Aerial; and
- Soils Map.

The Floodplain Map from the Aquatic Resource Delineation Verification Request must also be enclosed.

ESPCP & Site Plan

Mainline Plan, Crossroad Plan, ESPCP Cover Drawing (Section 50) and Construction BMP Location Details plan sheets with buffer impacts highlighted, and buffer variance criterion, square footage (rounded to the nearest square foot) and length (rounded to the nearest foot) clearly labeled must be enclosed with the BVA. Roadway drainage structure exemption areas must be drawn and labeled on all applicable plan sheets. Exempt drainage structures within state-mandated buffers must also be identified on plan sheets. If the project will include additional non-exempt buffer impacts not shown on the aforementioned plan sheets, then all plan sheets including buffer impacts must be included with impacts highlighted and labeled, as described above. Applicable plan sheets may include, but are not limited to Staging Plans, Utility Plans, Lighting Plans and Details, and/or Signing and Marking Plans. If project design includes BMPs to address TSS and/or stormwater runoff reduction, and/or water quality protection these areas must be highlighted and clearly labeled on Mainline and/or Crossroad Plans with Special Construction Details (Section 38) depicting the BMPs also enclosed.

Stormwater Control Plan

If the project is located within a MS4 permit area, compliance with the GDOT MS4 permit must be documented. If the project is not located in a MS4 area, documentation of compliance with General NPDES Permit No. GAR100002 must be provided.

Appendix

An appendix for enclosures must be included with all BVAs. Enclosure items must be referenced under associated checklist items and must include the following:

- All ERS AOE Figures except Habitat Map and Protected Species Habitat Map;
- Floodplain Map;
- Mainline (Section 13) and Crossroad Plans (Section14);
- ESPCP (Section 50 and 54) – only Section 54 plan sheets showing non-exempt buffer disturbance are required;
- Additional plan sheets depicting non-exempt buffer disturbances not shown on Section 13, 14, and/or 54 including, but not limited to:
  - Staging Plans (Section 19 and/or 20),
  - Utility Plans (Section 24),
  - Lighting Plans and Details (Section 25), and
  - Signing and Marking Plans (Section 26);
- Mitigation Plans (30 Series) and Special Construction Details (Section 38), if applicable;
- Section 404 permit primary notification/application form and transmittal letter, and permit verification or authorization letter, if available (Criterion 2[h] only); and
- USACE Aquatic Resource Delineation Verification (Criterion 2[k][1] only).

SCHEDULE

Per the funding agreement with GDOT, EPD must complete review of BVAs within 20 business days (1 month) of receipt. Upon completion of application review, EPD must submit comments to GDOT or publish the required Public Advisory. A public comment period of 30 calendar days (1 month) is required from publication of the Public Advisory. Within 10 business days (2 weeks) of expiration of the Public Advisory period, EPD must grant or deny the buffer variance request. Therefore, issuance of a buffer variance requires a total of 2.5 months from submittal of a complete application.

The schedule provided above is the minimum review time required. Submittal of an incomplete or noncompliant application, or receipt of adverse comments in response to the Public Advisory can delay variance issuance.

Guidebook Revision History

Revision Description	Relevant Sections	Revision Date
Initial Publication	All	5/22/2019
Revision Table Added	Last Page	9/17/2020
Updated Acronyms, Hyperlinks	All	12/10/2020