

Building or Renovating a Pond in Georgia

A Pond Guide for Citizens

Introduction

This guide is for landowners who want to build a new pond or to renovate an existing pond. Part One provides a basic explanation of the steps needed during the planning and designing process. There are Federal, State, and local government agencies that can assist and help with the requirements. Part Two provides information, links, and explanations about why it is important to use this guide when constructing a pond in Georgia.



This document was prepared in cooperation with the United States Army Corps of Engineers (USACE), the United States Department of Agriculture, Natural Resources Conservation Service (NRCS), and the Georgia Department of Natural Resources, Environmental Protection Division (EPD). January 2010.

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PART ONE

Ponds used for agricultural purposes (i.e., **Farm Ponds**) may qualify for certain exemptions. Farmers produce food for our nation and are given special exemptions if the pond water is used for food production (e.g., irrigating crops or watering livestock). A pond for aesthetic or recreational uses, such as for a subdivision or a fishing pond, or for an **aquaculture operation**, would be considered a **Recreational Pond** for the purposes of this guidance.

Existing Operation Farm Ponds

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) and the United States Army Corps of Engineers (USACE) have executed a Field Level Agreement (FLA) to clarify what ponds are exempt from obtaining a Clean Water Act Section 404 permit from the USACE for impacts to waters of the United States (including wetlands). This exemption is only applicable to Farm Ponds used for agricultural purposes when specific criteria are met.

Farm Ponds used for agricultural purposes may be exempt from USACE permitting if the Farm Ponds meet the requirements described in the “**Georgia Farm Pond Exemption Guide**.” This guide describes when a pond in Georgia would be exempt from the USACE permitting requirements. Activities exempt from the USACE permitting requirements do not require compensatory mitigation. The “Georgia Farm Pond Exemption Guide” is available on the NRCS website (Appendix A).

There are two types of Farm Ponds that may qualify for this exemption - ponds used for **existing** agricultural operations and ponds used for **proposed** agricultural operations. As per the FLA, the NRCS submits an annual log to the USACE of **Farm Pond Exemptions** approved for **Existing Operation Farm Ponds** (under 10 acres in pool area) as per the “Georgia Farm Pond Exemption Guide.”

Proposed Operation Farm Ponds must be reviewed by the USACE to determine if the Farm Pond Exemption is applicable. The USACE will provide a written concurrence or denial of the Farm Pond Exemption. If the USACE determines that the proposed pond is not a Proposed Operation Farm Pond, it is considered to be a Recreational Pond and the USACE permitting requirements would be applicable.

■ **Natural Resource Conservation Service (NRCS)**

The NRCS is a non-regulatory agency that provides technical assistance to farmers who want to construct a Farm Pond.

The NRCS is available to help farmers with planning and designing Farm Ponds. To determine if a pond qualifies for a Farm Pond Exemption, the NRCS will require that the following three documents be completed:

- Farm Pond Exemption Information Paper,
- Water Budget, and
- Site Map with Pond GPS Coordinates.

The **Farm Pond Exemption Information Paper (GA-ENG-378-EX1)** is available on the NRCS website (Appendix A) and must be completed and signed by both the farmer and the NRCS representative. The Farm Pond Exemption Information Paper requires basic information about the type of farming, your agricultural water needs and the pond size. On the bottom of this form, you will be asked to sign a statement agreeing that if the pond is converted to non-agricultural uses in the future, that you may be required to obtain a permit (which may include compensatory mitigation) from the USACE or that you may be required to restore the site to its original condition. In addition, you will be asked to sign the statements, “I understand that this exemption does **NOT** free me from obtaining any other federal, state or local permits for construction of the proposed pond.” and “A pond exempt from the need for a Department of the Army permit is not exempt from the Georgia Erosion and Sedimentation Act of 1975, as amended, or other State regulations.”

The **Water Budget** is a calculation of the baseline of water quantity required to sustain normal livestock or irrigation operations. To be eligible for the Farm Pond Exemption, a Water Budget must be developed and/or approved by the NRCS. The Water Budget must define the pond storage requirements in acre-feet at normal pool. The pond size shall not exceed the Water Budget calculation. For most operations in Georgia, Farm Pond Exemptions for livestock drinking water are difficult to defend. The pond size for livestock drinking water would likely be very small; therefore, the NRCS recommends a well or an alternative watering facility for livestock drinking water needs. While there is not a single approved form or worksheet for calculating the Water Budget, the “Georgia Farm Pond Exemption Guide” contains examples of water budget calculations. The “Georgia Farm Pond Exemption Guide” is available on the NRCS website (Appendix A). The NRCS and the USACE use the “Georgia Farm Pond Exemption Guide” when planning and designing Farm Ponds.

You will need to provide a **Site Map with Pond GPS Coordinates**. Map sources include the USGS topographic, county and DOT maps or other map sources as appropriate. The NRCS can provide maps and assist landowners with recording the pond GPS coordinates.

NOTE: Landowners should retain copies of all of the above documents to demonstrate compliance with the Farm Pond Exemption.

■ **United States Army Corps of Engineers (USACE)**

The USACE Regulatory Division is a Federal agency that regulates impacts to Waters of the United States (including wetlands), issues permits and enforces the Clean Water Act (CWA). Ponds may require authorization from the USACE if the land disturbing activities impact Waters of the United States, including jurisdictional wetlands and streams.

Waters of the United States includes essentially all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters. Wetlands are areas characterized by growth of wetland vegetation (e.g., bulrush, cattails, rushes, sedges, willows, pickleweed) where the soil is saturated during a portion of the growing season or the surface is flooded during some part of most years. Wetlands generally include swamps, marshes, bogs, and similar areas. The USACE is responsible for **jurisdictional determinations** and **wetland delineations**. Landowners may also use a qualified environmental consultant to determine the presence and boundaries of any Waters of the United States and to obtain any necessary authorizations from the USACE.

NOTE: Ponds not classified as Waters of the United States may still be classified as State Waters with all the applicable State and local permitting and buffer requirements.

Additional information about permitting, compensatory mitigation and jurisdictional determinations is available on the USACE website, www.sas.usace.army.mil/Regulatory%201.htm. All ponds that impact Waters of the United States, that do **not** qualify for a Farm Pond Exemption, must be permitted by the USACE as a Recreational Pond.

■ **Environmental Protection Division (EPD)**

The Georgia Department of Natural Resources, Environmental Protection Division (EPD) enforces State laws, rules and regulations, and policies to protect and restore Georgia's environment. The EPD is charged with the regulatory duties associated with the Georgia Erosion and Sedimentation Act, O.C.G.A. 12-7-1, et seq (GESA). The GESA establishes the rules and regulations for minimizing soil erosion and preventing sediment deposition onto lands and into waters of the State and the Georgia Water Quality Control Act sets forth a **NPDES General Permit for Storm Water Discharges Associated with Construction Activity**.

If you are constructing a pond for agricultural purposes with a Farm Pond Exemption, you are **exempt** from the NPDES General Permit and the State buffer requirements. In addition, the construction of a pond for **aquaculture operations** as defined in GESA (O.C.G.A. 12-7-17(5)), is **exempt** from the NPDES General Permit and the State buffer requirements.

You may **not** construct an Existing Operation Farm Pond on Primary Trout Waters **except** on streams with drainage basins (i.e., watersheds) less than 50 acres upstream of the impoundment. Existing Operation Farm Ponds on Primary Trout Waters on streams with drainage basins less than 50 acres and all Existing Operation Farm Ponds on Secondary Trout Waters must be approved by EPD.

The EPD also implements the **Safe Dams Program** and the **Water Withdrawal Permitting Program** (Appendix A). The EPD Safe Dams Program inventories all existing and proposed dams over 25 feet tall or with a 100 acre-feet of storage at the top of the dam. Water withdrawals of significant volume (i.e., over 100,000 gallons per day), either from surface waters or from groundwater sources, require an **Agricultural Water Withdrawal Permit** from the EPD.

NOTE: In all instances, regardless of exemptions, you must provide adequate erosion control measures (i.e., Best Management Practices) to protect Georgia's soils and waters.

■ **Local Issuing Authority (LIA)**

A Local Issuing Authority (LIA) is the governing authority of any county or municipality, which is certified pursuant to the Georgia Erosion and Sedimentation Act (O.C.G.A. 12-7-8). Certified Local Issuing Authorities have enacted local Soil Erosion and Sedimentation Control Ordinances which meet or exceed the standards, requirements and provisions of GESA and the NPDES General Permit. A local Soil Erosion and Sedimentation Control Ordinance may also incorporate more stringent buffer requirements or other related ordinances (e.g., Storm Water Management, Stream Buffer Protection, Tree Protection) that may impact your pond.

If you are constructing a pond for agricultural purposes with a Farm Pond Exemption, you are **exempt** from local Land Disturbing Activity (LDA) permitting and buffer requirements. In addition, the construction of a pond for **aquaculture operations** as defined in GESA (O.C.G.A. 12-7-17(5)), is **exempt** from local LDA permitting and buffer requirements.

Contact your local government or the EPD to determine if your pond is located in an area with a certified Local Issuing Authority (Appendix A).

Proposed Operation Farm Ponds

If a landowner is seeking a Farm Pond Exemption but is **not** currently irrigating agricultural crops or using water to produce livestock, then the landowner would be constructing a **Proposed Operation Farm Pond**.

■ Natural Resources Conservation Service (NRCS)

The NRCS is available to assist farmers with determining the **Water Budget** and preparing a **Site Map and Pond GPS Coordinates**. The NRCS will sign the completed **Farm Pond Exemption Information Paper (GA-ENG-378-EX1)** for a Proposed Operations Farm Pond when they assist with the supporting data; however, the landowner will need to send the completed package to the USACE for evaluation and possible exemption of the USACE permitting regulations.

■ United States Army Corps of Engineers (USACE)

The USACE will evaluate the information provided by the landowner and the NRCS to determine if a Farm Pond Exemption is appropriate. Supporting evidence and documentation of an agricultural operation could include the USDA Highly Erodible Land Conservation and Wetland Conservation Certification forms (AD-1026 and AD-1026 Appendix).

After the appropriate paper work has been submitted to the USACE, the landowner will receive a letter from the USACE stating whether or not the Proposed Operation Farm Pond is exempted from the Section 404 permitting requirements. If the USACE determines that a CWA Section 404 permit will not be required, the landowner will receive a letter, restating the agricultural intent, reminding the landowner that if any revisions to the project or its intended use are made, the exempt status may be invalidated. You should **not** begin clearing or construction until you have received an approval letter from the USACE. Landowners should retain copies of all of the above documents to demonstrate compliance with the Farm Pond Exemption.

NOTE: All ponds that impact Waters of the United States, that do not qualify for a Farm Pond Exemption, must be permitted by the USACE as a Recreational Pond. If it has been determined that your pond be converted to non-agricultural use at any point, you may be required to comply with all permitting requirements (including compensatory mitigation), be subject to penalties or to restore the site to its original condition.

■ Environmental Protection Division (EPD)

If you are constructing a pond for agricultural purposes with a Farm Pond Exemption, you are **exempt** from the NPDES General Permit and the State buffer requirements. In addition, the construction of a pond for **aquaculture operations** as defined in GESA (O.C.G.A. 12-7-17(5)), is **exempt** from the NPDES General Permit and the State buffer requirements.

You may **not** construct a Proposed Operation Farm Pond on Primary Trout Waters **except** on streams with drainage basins (i.e., watersheds) less than 50 acres upstream of the impoundment. Proposed Operation Farm Ponds on Primary Trout Waters on streams with drainage basins less than 50 acres and all Proposed Operation Farm Ponds on Secondary Trout Waters must be approved by EPD.

The EPD also implements the **Safe Dams Program** and the **Water Withdrawal Permitting Program** (Appendix A). The EPD Safe Dams Program inventories all existing and proposed dams over 25 feet tall or with a 100 acre-feet of storage at the top of the dam. Water withdrawals of significant volume (i.e., over 100,000 gallons per day), either from surface waters or from groundwater sources, require an **Agricultural Water Withdrawal Permit** from the EPD.

■ Local Issuing Authority (LIA)

If you are constructing a pond for agricultural purposes with a Farm Pond Exemption, you are **exempt** from local Land Disturbing Activity (LDA) permitting and buffer requirements. In addition, the construction of a pond for **aquaculture operations** as defined in GESA (O.C.G.A. 12-7-17(5)), is **exempt** from local LDA permitting and buffer requirements.

Recreational Ponds

■ United States Army Corps of Engineers (USACE)

Recreational Ponds must be permitted by the USACE if jurisdictional wetlands or streams will be impacted. The landowner would need to retain a qualified environmental consultant to permit a Recreational Pond and to develop a Compensatory Mitigation Plan (if applicable).

Regional Permits: A **private single-family, non-commercial recreational pond**, less than 5 acres in size in non-tidal waters and impacting less than two acres of jurisdictional wetlands and/or 500 linear feet of jurisdictional streams may be eligible for authorization under Regional Permit (RP) 90. A copy of RP 90 is available on the USACE website, www.sas.usace.army.mil/RP90.pdf.

Nationwide Permits: Ponds for **residential, commercial** or other purposes, that impact less than 0.5 acres of wetlands and/or 300 linear feet of streams may qualify for authorization under any one of a number of Nationwide Permits (NWP) such as NWP 29 or 39.

Individual Permits: A pond that is **not** eligible for a Regional Permit or a Nationwide Permit may require authorization through an Individual Permit. The Individual Permit process requires an **alternatives analysis** documenting that the preferred alternative is the least environmentally damaging and most practicable alternative that meets the applicant's purpose and need. An Individual Permit should be submitted to the USACE as early as possible to ensure that that you have all of the required approvals prior to your planned starting date.

Compensatory Mitigation: If impacts to and/or losses of exceed 0.1 acres of wetlands or 100 linear feet of streams, compensatory mitigation is required for all impacts and losses. Mitigation can be accomplished by (1) purchasing mitigation credits from an approved commercial mitigation bank located within the same 8-digit Hydraulic Unit Code (HUC) as the pond; (2) participating in an in-lieu-fee mitigation program; or (3) developing a site-specific mitigation plan to create, restore, enhance or preserve wetlands and/or streams on or near the project site.

Documented base-line impairment data, Restrictive Covenant protection measures, and multi-year monitoring and contingency plans must be included in site-specific mitigation plans. Often, it is not practicable for landowners to develop site-specific mitigation plans. Therefore, it is preferred that landowners use an approved **commercial mitigation bank** or **in-lieu-fee banking** to compensate for all wetlands/streams impacts. The landowner may also use a qualified environmental consultant to develop an acceptable **Compensatory Mitigation Plan**. Mitigation is often the most expensive part of the USACE permitting requirements.

■ **Environmental Protection Division (EPD)**

Coverage under the **NPDES General Permit for Storm Water Discharges Associated with Construction Activity** is required for the construction of Recreational Ponds that result in land disturbances equal to or greater than one acre. For coverage under the NPDES General Permit, the following documents are required:

- Notice of Intent
- NPDES General Permit – Fee Form
- Erosion, Sedimentation and Pollution Control Plan

Notice of Intent (NOI)

The **Notice of Intent (NOI)** forms are available on the EPD website, www.gaepd.org (Appendix A). Any person that needs coverage under the

NPDES General Permit must submit a NOI to the appropriate EPD District Office at least 14 days prior to commencement of construction activities. In addition, a copy of the NOI must be submitted to the Local Issuing Authority in an area with a certified LIA.

The NPDES General Permit No. GAR100001 is applicable if the construction of a Recreational Pond is a **Stand Alone Construction Project**. However, if the Recreational Pond is located within a **Common Development** (e.g., subdivision), then the **NPDES General Permit No. GAR100003** may be applicable. Copies of the NPDES General Permits are available on the EPD website, www.gaepd.org (Appendix A).

NPDES General Permit – Fee Form

The **NPDES General Permit – Fee Form** is available on the EPD website, www.gaepd.org (Appendix A). In an area with no certified Local Issuing Authority, a fee of \$80 per acres disturbed must be paid to EPD. In an area with a certified LIA, a fee of \$40 per acres disturbed must be paid to EPD and a fee of \$40 per acres disturbed must be paid to the LIA. The NPDES General Permit fees are in addition to any local Land Disturbing Activity (LDA) permit fees required by the Local Issuing Authority.

Erosion, Sedimentation and Pollution Control Plan (Plan)

The Plan must be prepared by certified Design Professional (Level II) - as defined in the NPDES General Permit. The Plan must include, as a minimum, best management practices to prevent and minimize soil erosion and sedimentation and each Plan must include the applicable Erosion, Sedimentation and Pollution Control Plan Checklist (Appendix A). The Plan should clearly describe each major activity and the appropriate control measures and timing during the construction process.

In an area with a certified LIA, multiple copies of the Plan (as specified by the LIA) must be submitted to the LIA for review and **approval** or **disapproval**. In an area with no certified LIA regulating the construction of a Recreational Pond, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch in Atlanta for review and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to or concurrent to the NOI submittal. For Recreational Ponds with areas of land disturbances equal to or greater than 50 acres, regardless of the existence of a certified LIA in the area, a single copy of the Plan must be submitted to the appropriate EPD District Office.

Buffer Variance Application

In addition to the NPDES General Permit requirements, land disturbing activities conducted within the State buffer - **regardless of the acreage disturbed** - may require a **Buffer Variance**. The GESA establishes a 25-ft buffer along the banks of all perennial and intermittent State Waters classified as **warm water streams** and a 50-ft buffer along the banks of all perennial, intermittent and ephemeral State waters classified as **trout streams**, as measured horizontally on each side from where vegetation has been “wrested” by normal stream flow or wave action. A Buffer or Buffer Zone is the area of land immediately adjacent to the banks of State Waters in its natural state of vegetation, which facilitates, when properly vegetated, the protection of water quality and aquatic habitat.

In areas with a certified LIA, State Waters determinations are made by the Local Issuing Authority. In areas where there is not a certified LIA, the EPD will confirm State Water determinations and buffer delineations. The “**Field Guide for Determining The Presence of State Waters That Require a Buffer**” is available on the EPD website, www.gaepd.org (Appendix A).

A Buffer must remain in its natural, undisturbed state of vegetation, unless the land disturbing activity is specifically exempt or a Buffer Variance has been approved by the EPD. Therefore, if a Recreational Pond will be constructed in State Waters that require a buffer, you must submit a **Buffer Variance Application** to the EPD Watershed Protection Branch for review and approval or disapproval (Appendix A). It is recommended that the Buffer Variance Application be submitted as soon as possible, as it will take at least three months to complete the review process.

You may **not** construct a Recreational Pond on Primary Trout Waters **except** on streams with drainage basins (i.e., watersheds) less than 50 acres upstream of the impoundment. Recreational Ponds on Primary Trout Waters on streams with drainage basins less than 50 acres and all Recreational Ponds on Secondary Trout Waters must be approved by EPD.

The construction of a pond for **aquaculture operations** is **exempt** from the NPDES General Permit and the State buffer requirements.

The EPD also implements the **Safe Dams Program** and the **Water Withdrawal Permitting Program** (Appendix A). The EPD Safe Dams Program inventories all existing and proposed dams over 25 feet tall or with a 100 acre-feet of storage at the top of the dam. Water withdrawals of significant volume (i.e., over 100,000 gallons per day), either from surface waters or from groundwater sources, require a **Water Withdrawal Permit** from the EPD.

■ Local Issuing Authority (LIA)

In a area with a certified LIA, local Land Disturbing Activity (LDA) permits are required for the construction of Recreational Ponds that result in land disturbances equal to or greater than one acre OR for the construction of Recreational Ponds that result in land disturbances less than one acres and are located within 200 feet of any **perennial** State Waters. In addition to the NPDES General Permit Fees, the LIA may assess local permitting fees. A copy of the NOI and multiple copies of the Plan must be submitted to the LIA for review and **approval** or **disapproval**. A certified LIA may also incorporate more stringent buffer requirements in the local Soil Erosion and Sedimentation Control Ordinance or other related ordinances.

A Local Issuing Authority may also require a permit applicant to post a **bond** in the form of a government security, cash or an irrevocable letter of credit up to **\$3,000 per acre** of proposed land disturbing activity prior to issuing a LDA permit. If the permit applicant does not comply with the conditions of the local LDA permit, the LIA may call the bond to hire a contractor to stabilize the site of the land disturbing activity and bring it into compliance.

The construction of a pond for **aquaculture operations** as defined in GESA (O.C.G.A. 12-7-17(5)), is exempt from local Land-Disturbing Activity (LDA) permitting and buffer requirements.

■ Natural Resources Conservation Service (NRCS)

If the landowner meets all of the required regulations, the NRCS may be able to provide assistance with the design and construction details for a Recreational Pond. However, resources are limited; therefore, the NRCS will evaluate requests for assistance when received.

Pond Maintenance

Most established ponds in Georgia are classified **State Waters** - unless there is neither an inlet nor an outlet and the pond is totally confined and retained completely on the property of single individual, partnership or corporation. Landowners should be aware that some or all of the regulations applicable to pond construction may be applicable to **pond maintenance** (e.g., weed removal). Weed control is a concern to many landowners when their ponds receive more nutrients than appropriate.

The repair and/or maintenance of an **agricultural pond** with a Farm Pond Exemption is **exempt** from the NPDES General Permit, local LDA permits and the

State and local buffer requirements. In addition, the repair and/or maintenance of a pond for **aquaculture operations** as defined in GESA (O.C.G.A. 12-7-17(5)), is **exempt** from the NPDES General Permit, local LDA permits and the State and local buffer requirements.

The repair and/or maintenance of a **Recreational Pond** - **regardless of the acreage disturbed** - may require a **Buffer Variance** from EPD. It is recommended that the Buffer Variance Application be submitted as soon as possible, as it will take at least three months to complete the review process. Coverage under the **NPDES General Permit for Storm Water Discharges Associated with Construction Activity** is also required for the repair and/or maintenance of Recreational Ponds that result in land disturbances equal to or greater than one acre. In an area with a certified LIA, local Land Disturbing Activity (LDA) permits are required for the repair and/or maintenance of Recreational Ponds that result in land disturbances equal to or greater than one acre OR for the repair and/or maintenance of Recreational Ponds that result in land disturbances less than one acres and are located within 200 feet of any **perennial** State Waters.

NOTE: Landowners wishing to increase the size of their existing ponds would be required to procure all the necessary permits, exemptions, buffer variances, bonds and mitigation credits from the NRCS, USACE, EPD and Local Issuing Authorities, as applicable.

Under CWA Section 404(f)(1), it maybe possible to get an exemption from the USACE permitting requirements for **dam maintenance** activities provided that certain conditions are met. It is recommended that you contact the USACE, EPD and the Local Issuing Authorities for copies of their rules and regulations (*Part Two – Additional Pond Information*). The USACE will evaluate your pond individually to determine if you need a permit for the proposed pond maintenance. When discharging sediment from or through a dam or breaching a dam, reasonable measures should be implemented to reduce potential harm to downstream waters. Reasonable measures include, but are not limited to, prior dewatering by pumping or by releasing water from the upper control structures on a reservoir; mechanical dredging or excavation of sediments and appropriate disposal; timing releases to coincide with high water periods for better dilution; more frequent flushing to keep the discharges small; releasing a sediment amount that is dependent on the amount of water flow; and installing temporary barriers to prevent exposed sediments from being transported by runoff from subsequent storm events.

Trout Streams

Trout Streams means all streams or portion of streams within the watershed designated by the EPD under the provisions of the Georgia Water Quality Control Act, O.C.G.A. 12-5-20, et seq. Trout Streams are granted special protections above and beyond the normal protections granted to non-trout State Waters (i.e., warm water streams). GESA establishes a 50-ft buffer along the banks of all perennial, intermittent and ephemeral State waters classified as Trout Streams, as measured horizontally on each side from where vegetation has been “wrested” by normal stream flow or wave action. A certified LIA may also incorporate more stringent buffer requirements in the local Soil Erosion and Sedimentation Control Ordinance or other related ordinances.

Streams designated as **Primary Trout Waters** are defined as water supporting a self-sustaining population of rainbow, brown or brook trout. You may **not** construct an impoundment on Primary Trout Waters **except** on streams with drainage basins (i.e., watersheds) less than 50 acres upstream of the impoundment. Impoundments of Primary Trout Waters on streams with drainage basins less than 50 acres must be approved by EPD.

Streams designated as **Secondary Trout Waters** are those in which there is no evidence of natural trout production, but the streams are capable of supporting trout throughout the year. Impoundment of Secondary Trout Waters must be approved by EPD. There shall be no elevation of natural stream temperatures for Primary Trout Waters and only as much as a 2°F or less elevation of temperature for Secondary Trout Waters.

A brief outline of the approval process procedures for impoundments in trout waters is as follows:

- Decide what type of pond that you will be constructing (i.e., Existing Operation Farm Pond, Proposed Operation Farm Pond or Recreational Pond) and follow all the requirements for such.
- In addition, you must contact the Georgia Department of Natural Resources, Wildlife Resources Division (WRD), Fisheries Management Section to request a field site investigation (Appendix A). The **WRD Fisheries Management Section** conducts field site investigations and completes pond evaluations for the **approval** or **disapproval** of proposed impoundments of Trout Streams.

Check List for Pond Construction Existing Operation Farm Pond

- Contact your NRCS representative for assistance with planning and designing an **Existing Operation Farm Pond**.
- Submit the completed **Farm Pond Exemption Information Paper (GA-ENG-378-EX1)** with the **Water Budget** and a **Site Map with Pond GPS Coordinates** to NRCS to determine if the **Farm Pond Exemption** is applicable. These documents must also be submitted to the USACE for a written concurrence.
- Contact the EPD Watershed Protection Program if you're constructing a pond on a **Trout Stream**. Impoundments of Trout Streams in Georgia require the written approval of the EPD.
- Provide adequate erosion control measures (i.e., Best Management Practices) to protect the State's soils and waters. The "**Manual for Erosion and Sediment Control in Georgia**" is available on the GSWCC website, gaswcc.georgia.gov.
- Contact the EPD Safe Dams Program if your dam is over 25 feet tall or your pond has 100 acre-feet storage at the top of the dam.
- Contact the EPD Water Withdrawal Permitting Program for an **Agricultural Water Withdrawal Permit**, if applicable.
- Contact the Local Issuing Authority, if applicable. Local ordinances may impact the construction of your Farm Pond.

Check List for Pond Construction Proposed Operation Farm Pond

- Contact your NRCS representative for assistance with planning and designing a **Proposed Operation Farm Pond**.
- Submit the completed **Farm Pond Exemption Information Paper (GA-ENG-378-EX1)** with the **Water Budget** and a **Site Map with Pond GPS Coordinates** to NRCS to determine if the **Farm Pond Exemption** is applicable. These documents must also be submitted to the USACE for a written **concurrence** or **denial** of the Farm Pond Exemption.
- Do **not** begin clearing or construction until you have received an approval letter from the USACE.
- Contact the EPD Watershed Protection Program if you're constructing a pond on a **Trout Stream**. Impoundments of Trout Streams in Georgia require the written approval of the EPD.
- Provide adequate erosion control measures (i.e., Best Management Practices) to protect the State's soils and waters. The "**Manual for Erosion and Sediment Control in Georgia**" is available on the GSWCC website, gaswcc.georgia.gov.
- Contact the EPD Safe Dams Program if your dam is over 25 feet tall or your pond has 100 acre-feet storage at the top of the dam.
- Contact the EPD Water Withdrawal Permitting Program for an **Agricultural Water Withdrawal Permit**, if applicable.
- Contact the Local Issuing Authority, if applicable. Local ordinances may impact the construction of your Farm Pond.

Check List for Pond Construction Recreational Pond

- Submit the appropriate permit application (i.e., Regional, Nationwide or Individual) to the USACE with an acceptable **Compensatory Mitigation Plan** (if applicable). NOTE: **Recreational Ponds** greater than 5 acres in size require an Individual Permit.
- Submit the completed **Notice of Intent (NOI)** with the **NPDES General Permit – Fee Form** and the **Erosion, Sedimentation and Pollution Control Plan** to the appropriate EPD office and/or Local Issuing Authority (as applicable).
- Submit the **Buffer Variance Application** to the EPD Watershed Protection Branch for review and approval or disapproval.
- Contact the EPD Watershed Protection Program if you're constructing a pond on a **Trout Stream**. Impoundments of Trout Streams in Georgia require the written approval of the EPD.
- Contact the EPD Safe Dams Program if your dam is over 25 feet tall or your pond has 100 acre-feet storage at the top of the dam.
- Contact the EPD Water Withdrawal Permitting Program for a **Water Withdrawal Permit**, if applicable.
- Contact the Local Issuing Authority, if applicable. Local ordinances may impact the construction of your Recreational Pond (e.g., more stringent buffer requirements, bonding).
- Submit the local Land Disturbing Activity (LDA) permit application with the appropriate fees to the LIA, if applicable.

PART TWO

Additional Pond Information

The soils in Georgia are subject to erosion. Bare soils are moved by water (rainfall) and less importantly by wind. The soils on top of the ground's surface are the first to erode; it is this "top soil" that is essential for food production and natural habitat maintenance. Unprotected soils under cotton production have been known to erode at a rate as high as 31 tons per acre per year. Water has the ability to transport surprising amounts of soil because it buoys up or in fact lightens the particles. Particles of soil weigh less in the water and even if they are under the water and not technically floating, they are lighter and are more easily transported. Think of floating soil particles moving downhill in and on the rainwater flow.

When soils enter our creeks and streams they reduce the amount of light available to aquatic vegetation, fill in lakes, ponds and reservoirs, capture excessive heat energy from the sun, damage or destroy both plant and animal aquatic habitats, make water treatment more difficult and expensive for downstream users, clog the gills of, and ruin the spawning areas for fish, and allows for unnatural pesticide and nutrient transport, further affecting the ecology of the stream.

Clean water is essential to human health and the health of a sustainable natural ecosystem. The cleaner the water, the less it will cost to process for human use either as drinking water or for industries and cooling towers. Cloudy water or silt-laden water is turbid. Erosion results in turbid water as the soil particles are buoyed up. Turbid water absorbs more sunlight and heat, which then affects the oxygen content of the water. The hotter the water the less oxygen can be dissolved in it and less oxygen is available to animals like fish. Certain fish like Carp and Bowfin can survive in low oxygenated waters but if a diversity of fish and insect species are desired, and for good environmental stream health, oxygen levels need to remain high.

Wetlands have a very high natural ecological value, and have proven to be a great value to people as well. Wetlands are productive and diverse ecosystems supporting a large variety of plant and animal species. When located along streams and rivers they act like a sponge absorbing then slowly re-releasing potentially damaging floodwaters. Wetlands provide important habitat for wildlife including rare plants and animals on the endangered species list. Wetlands filter runoff from the land and purify water that courses through it. They provide spawning grounds for fish and support recreation in the form of bird watching, outdoor photography, hunting and fishing. There is a nationwide rule that regulates the transformation of wetland areas to other uses. The USACE is the

agency, which sees to it that there is “no net loss” of wetlands. Wetlands may not always be wet and the determination of wetlands is decided after looking at three different parameters: soils, plant species and hydrology.

Stream Buffer Zones are the area of land immediately adjacent to the stream itself, and in Georgia this means the land 25 feet from the wretched vegetation of the warm water stream outwards on both sides. In Georgia’s cold water trout streams, this buffer zone is 50 feet measured horizontally from the edge of the wretched vegetation. Buffer Zones provide shade, wildlife habitat and wildlife corridors, flood control, filtering capacity, erosion control and manages these tasks best when in undisturbed natural vegetation.

It is possible but rare; to have a Recreational Pond that does not require a **Buffer Variance**. For example if you dug a hole in the middle of a dry field (i.e., no wetlands or streams), and if you filled it with water from a well, or an outside source, and if the pond had no inlet or outlet, you may not be required to get a Buffer Variance. Ponds made by damming up a stream will almost assuredly require a Buffer Variance. Streams and rivers in Georgia are designated either warm water or cold water (i.e., Trout Stream). A warm water ephemeral stream does not require buffer protections, however if it truly is an ephemeral stream it would not likely be able to supply the necessary water to keep a pond full. A “**Field Guide for Determining The Presence of State Waters That Require a Buffer**” has been developed to help you determine what type of stream occurs on your site (Appendix A).

Pond maintenance when done improperly can cause environmental damage. Streams normally carry sediments during high flow times like during spring storm events. The pattern of deposition is more or less seasonal and predictable. When a pond is introduced into a stream system this natural movement of sediments is stopped at the pond. When the water slows down as it enters the pond the sediments settle out, sink to the bottom, and build up over time. When a dam is suddenly breached or the lower dam gates removed the sediments are reintroduced into the stream in an unnatural and often damaging rush. This discharge of water and sediment load can have detrimental downstream effects. Aquatic habitat degradation, filling in fish spawning beds and invertebrate niches, fish die offs due to the impairment of their oxygen processing ability, and disruption of the stream channel geomorphology are some of the possible results of the rapid release of impounded waters.

APPENDIX A

Contacts and Links



**US Army Corps
of Engineers**
Savannah District

The USACE has several offices in Georgia. For further contact information, please contact one of the offices below:

Piedmont Branch

U.S Army Corps of Engineers
The Plaza Suite 200
1590 Adamson Pkwy
Morrow, GA 30260

(678) 422-2720 ext. 2721

Coastal Branch

U.S. Army Corps of Engineers
ATTN CESAS-RD
Post Office Box 889
100 West Oglethorpe Ave
Savannah, GA 31402
(800) 448-2402

Albany Field Office

1104 N. Westover Blvd, Unit 9
Albany, GA 31707
(229) 430-8566

Additional information about permitting, compensatory mitigation and jurisdictional determinations is available on the USACE website: www.sas.usace.army.mil/Regulatory_1.htm.



To contact your NRCS field agent, go to <http://offices.sc.egov.usda.gov/locator/app>, where you will find a map of the United States. Click on either “North Georgia” or “South Georgia,” and then click on your county to locate your NRCS district office.

The “Georgia Farm Pond Exemption Guide” is available on the NRCS website, www.ga.nrcs.usda.gov.



Notice of Intent (NOI)

Go to www.gaepd.org >> Documents, Publications, and Forms >> Under “Regulatory Forms” – Watershed Protection Branch >> Storm Water >> Notice of Intent for Primary Permittees:

www.gaepd.org/Files_DOC/forms/wpb/NPDES_NOI_StormWater_Primary_Permitee_Y2008.doc

NPDES General Permit No. GAR100001 (33 pgs)

Go to www.gaepd.org >> Technical Guidance >> Under “Watershed Protection Branch” – Storm Water >> General NPDES General Permits for Storm Water Discharges Associated with Construction Activity. Click on the following link to download or print the NPDES General Permit No. GAR100001 (Stand Alone Construction Project):

www.gaepd.org/Files_PDF/techguide/wpb/FINAL_StormWater_NPDES_Permit_StandAlone_GAR100001_Y2008.pdf

NPDES General Permit No. GAR100003 (40 pgs)

Go to www.gaepd.org >> Technical Guidance >> Under “Watershed Protection Branch” – Storm Water >> General NPDES General Permits for Storm Water Discharges Associated with Construction Activity. Click on the following link to

download or print the NPDES General Permit No. GAR100003 (Common Development):

www.gaepd.org/Files_PDF/techguide/wpb/FINAL_StormWater_NPDES_Permit_CommonDevelopment_GAR100003_Y2008.pdf

NPDES General Permits - Fee Form

Go to www.gaepd.org >> Documents, Publications, and Forms >> Under “Regulatory Forms” – Watershed Protection Branch >> Storm Water >> GAEPD-Construction Land Disturbance Fee Form:

www.gaepd.org/Files_DOC/forms/wpb/GAEPD_NPDES_Construction_Land_Disturbance_Fee_Form_Y2008.doc

Buffer Variance Application

Go to www.gaepd.org >> Documents, Publications, and Forms >> Under “Regulatory Forms” – Watershed Protection Branch >> Erosion and Sedimentation>> Variance Application for 25-foot Vegetative Buffer Encroachment or Variance Application for 50-foot Vegetative Buffer Encroachment.

For Warm Water (Non-Trout) Streams (25-foot):

www.gaepd.org/Files_DOC/forms/wpb/SIX_PAGE_REVISIED_25FTAPP_2004_1.doc

For Trout Streams (50-foot):

www.gaepd.org/Files_DOC/forms/wpb/SIX_PAGE_REVISIED_50FTAPP_2004.doc

Erosion, Sedimentation and Pollution Control Plan Checklist

Go to www.gaepd.org >> Technical Guidance >> Under “Watershed Protection Branch” – Storm Water >> General NPDES General Permits for Storm Water Discharges Associated with Construction Activity >> Links to Erosion, Sedimentation and Pollution Control Plan Checklists:

Stand Alone Construction Project:

www.gaepd.org/Files_PDF/techguide/wpb/ES_Pollution_Control_Plan_Review_Checklist_Stand_Alone_Y2009.pdf

Common Development:

www.gaepd.org/Files_PDF/techguide/wpb/ES_Pollution_Control_Plan_Review_Checklist_Common_Development_Y2009.pdf

Identification of Trout Streams

To determine which streams which have been designated as Trout Streams, go to www.gaepd.org >> Rules and Laws >> Existing Rules and Corresponding Laws >> Water Quality Control (391-3-6) >> Water Use Classifications and Water Quality Standards >> Water Use Classifications and Water Quality Standards (391-3-6-.03). Scroll down to Section (15) “Trout Streams” for trout stream designations by county.

Field Guide for Determining The Presence of State Waters That Require a Buffer

Go to www.gaepd.org >> Technical Guidance >> Under “Watershed Protection Branch – Erosion and Sedimentation >> Field Guide for Determining The Presence of State Waters That Require a Buffer:

[www.gaepd.org/Files_PDF/techguide/wpb/GAEPD_STREAM_GUIDELINES LetterSize_2006.pdf](http://www.gaepd.org/Files_PDF/techguide/wpb/GAEPD_STREAM_GUIDELINES_LetterSize_2006.pdf)



The EPD Safe Dams Program inventories all existing and proposed dams over 25 feet tall or with a 100 acre-feet of storage at the top of the dam.

Safe Dams Program

EPD Watershed Protection Branch
4244 International Parkway, Suite 110
Atlanta GA 30354

(404) 362-2678

Water withdrawals of significant volume (i.e., over 100,000 gallons per day), either from surface waters or from groundwater sources, require a **Water Withdrawal Permit**. To see if you will be required to have this permit, go to the EPD website, www.gaepd.org, under Browse click on “Documents, Publications, and Forms,” under “Regulatory Forms” click on “Watershed Protection Branch,” then click “Water Withdrawal Permitting.” Here you will find the relevant forms and information.

Agricultural Permitting Unit
Water Withdrawal Permitting Program
EPD Watershed Protection Branch
531 Main Street, Suite D
Tifton, GA 31794-4898

(229) 391-2400

Surface Water Unit
Water Withdrawal Permitting Program
4220 International Parkway, Suite 101
Atlanta, GA 30354

(404) 675-6236

To contact your local EPD District Office, go to www.gaepd.org and follow the “EPD Offices” link and click for the map that show the counties covered by each of the following EPD District Offices:

Coastal District (912) 264-7284
(Brunswick)

Coastal District (912) 353-3225
(Savannah)

Northeast District (706) 792-7744
(Augusta)

Mountain District (404) 362-2671
(Atlanta)

Mountain District (770) 387-4900
(Cartersville)

Northeast District (706) 369-6376
(Athens)

Southwest District (229) 430-4144
(Albany)

West Central District (478) 751-6612
(Macon)

West Central District (706) 562-1571
(Columbus)

If applicable, you must submit the **Buffer Variance Application** to the EPD Watershed Protection Branch for review and approval or disapproval. It is recommended that the Buffer Variance Application be submitted as soon as possible, as it will take at least three months to complete the review process.

NonPoint Source Program

EPD Watershed Protection Branch
4220 International Parkway, Suite 101
Atlanta, GA 30354

(404) 675-6240



The WRD Fisheries Management Section conducts field site investigations and completes pond evaluations for proposed impoundments of Trout Streams.

WRD Region 1 (NW Georgia)

Fisheries Management Section
P.O. Box 519
Calhoun, GA 30703

(706) 624-1161

(770) 387-4821

WRD Region 2 (NE Georgia)

Fisheries Management Section
2150 Dawsonville Highway
Gainesville, GA 30501

(770) 535-5498

WRD District Office (NE Georgia)

Burton Trout Hatchery
3695 Highway 197 N
Clarksville, GA 30523

(706) 947-3112

For additional information about **fishing stocking**, go to the Fisheries Management Sections of the WRD websites, www.georgiawildlife.com or www.gofishgeorgia.com.

Local Issuing Authorities

Contact your local EPD District Office or the EPD Watershed Protection Branch, NonPoint Source Program to determine if your project is located in an area with a certified Local Issuing Authority.



Go the GSWCC website, gaswcc.georgia.gov, and follow the “Regional Offices” link and click on your county to visit the corresponding GSWCC Regional Office’s website. In addition, the “Manual for Erosion and Sediment Control in Georgia” is available on the GSWCC website.

GLOSSARY

Acre-feet (ac-ft)

An acre-foot is a unit to measure volumes of water, typically for use in irrigation. One acre-foot is the volume of water sufficient to cover an acre of land to a depth of one foot (i.e., 43,560 cubic feet or 325,851 gallons).

Agricultural Pond

An Agricultural Pond is also referred to as a **Farm Pond** in this guidance document. Farm ponds for agricultural purposes are ponds that are utilized for food production such as irrigating crops or watering livestock. These farm ponds may be exempt from the USACE permitting requirements, the EPD NPDES General Permit and buffer requirements, and the local LDA permit and buffer requirements.

Buffer Variance

A buffer variance is permission to conduct land disturbing activities within the protected **Buffer Zone**. A Buffer Variance Application must be submitted the EPD Watershed Protection Branch for review and approval or disapproval.

Buffer (Buffer Zone)

A Buffer or Buffer Zone is the area of land immediately adjacent to the banks of State Waters in its natural state of vegetation, which facilitates, when properly vegetated, the protection of water quality and aquatic habitat. The GESA establishes a 25-ft buffer along the banks of all perennial and intermittent State Waters classified as **warm water streams** and a 50-ft buffer along the banks of all perennial, intermittent and ephemeral State waters classified as **trout streams**, as measured horizontally on each side from where vegetation has been “wrested” by normal stream flow or wave action.

Clean Water Act (CWA)

The Clean Water Act, commonly abbreviated as the CWA, is the primary Federal law in the United States governing water pollution.

EPD

Georgia Department of Natural Resources, Environmental Protection Division

Ephemeral Stream

An ephemeral stream typically has no well-defined channel, and which flows only in direct response to precipitation with runoff.

Existing Operation Farm Pond

Existing Operation Farm Ponds for agricultural purposes are ponds that are utilized for food production such as irrigating crops or watering livestock, which are in-place and on-site. These farm ponds may be exempt from the USACE permitting requirements, the EPD NPDES General Permit and buffer requirements, and the local LDA permit and buffer requirements.

Field Level Agreement (FLA)

An agreement between the USACE and the NRCS that identifies what Farm Ponds are exempt from obtaining a Clean Water Act Section 404 permit from the USACE for impacts to waters of the United States (including wetlands).

GSWCC

Georgia Soil and Water Conservation Commission

Global Positioning System (GPS)

The latitude and longitude coordinates or position of your pond site. Sources include USGS topographic, county and DOT maps or other map sources, websites such as *Google Earth*, or from a GPS unit.

Intermittent Stream

An intermittent stream flows in a well-defined channel during wet seasons of the year but not for the entire year.

Jurisdictional Determinations

Jurisdictional Determinations made by the NRCS or the USACE identify the areas and/or activities subject to jurisdiction under the provisions of FSA or CWA, respectively. Landowners may also use a qualified environmental consultant to determine the presence and boundaries of any Waters of the United States and to obtain any necessary authorizations from the USACE.

Local Issuing Authority (LIA)

Certified governing authority of any county or municipality that has enacted a local Soil Erosion and Sedimentation Control Ordinance which

meets or exceeds the standards, requirements and provisions of GESA and NPDES General Permit. A certified LIA is responsible for inspection of land disturbing activities and the issuance, compliance and enforcement of a local LDA permit. In addition, a certified LIA is responsible for the determinations of State Waters and compliance with stream buffer variances.

Mitigation

Mitigation is the action that replaces the function and values of wetland and stream impacts through the purchases of mitigation credits from a commercial mitigation bank or in-lieu banking, or on-site restoration, enhancement or preservation activities resulting in a “no net loss” of wetlands or other Waters of the United States.

Notice of Intent (NOI)

The EPD requires that a NOI be submitted for coverage under the NPDES General Permit – unless exempt - for construction activities resulting in land disturbances equal to or greater than one acre. The NOI and permit fees must be submitted to the EPD and, if applicable, to the certified LIA.

NPDES

National Pollution Discharge Elimination System

Natural Resource Conservation Service (NRCS)

The NRCS is a non-regulatory agency that provides technical assistance with planning and designing Farm Ponds.

Perennial Stream

A perennial stream flows in a well-defined channel throughout most of the year under normal climatic conditions.

Plan

Erosion, Sedimentation and Pollution Control Plan

Proposed Operation Farm Pond

If a landowner is seeking a **Farm Pond Exemption** but is **not** currently irrigating agricultural crops or using water to produce livestock, then the landowner would be constructing a Proposed Operation Farm Pond. You should **not** begin clearing or construction until you have received an approval letter from the USACE. Landowners should retain copies of all documents to demonstrate compliance with the Farm Pond Exemption

State Waters

State Waters include any and all rivers, streams, creeks, branches, lakes, reservoirs, **ponds**, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely on the property of a single individual, partnership, or corporation, except as may be defined in O.C.G.A. 12-7-17(8).

Trout Streams

All streams or portion of streams within the watershed designated by the EPD under the provisions of the Georgia Water Quality Control Act, O.C.G.A.12-5-20, et seq. Streams designated as **Primary Trout Waters** are defined as water supporting a self-sustaining population of rainbow, brown or brook trout. Streams designated as **Secondary Trout Waters** are those in which there is no evidence of natural trout production, but the streams are capable of supporting trout throughout the year. **First Order Trout Waters** are streams into which no other streams flow except springs.

United States Army Corps of Engineers (USACE)

The USACE Regulatory Division is a Federal agency that regulates impacts to Waters of the United States (including wetlands), issues permits and enforces the Clean Water Act (CWA). Impacts to Waters of the United States, including jurisdictional wetlands and streams, typically require authorization from the USACE Regulatory Division.

Verified Wetland Delineations

Verified Wetland Delineations depicts the boundaries of Waters of the United States, such as wetlands and streams, and have been determined as accurate in writing from the NRCS or the USACE for FSA or CWA purposes, respectively.

Wetland Delineations

Wetland Delineations depict the boundaries of Waters of the United States, such as wetlands and streams.

WRD

Georgia Department of Natural Resources, Wildlife Resources Division

Wrested Vegetation

Wrested vegetation means the movement of water that removes soil, debris and vegetation, creating a clear demarcation (i.e., separation) between water flow and vegetative growth. The buffer along the banks of State Waters is measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action. The GESA establishes a 25-ft buffer along the banks of all perennial and intermittent State Waters classified as **warm water streams** and a 50-ft buffer along the banks of all perennial, intermittent and ephemeral State waters classified as **trout streams**.



Although this document is meant as a guide there may be gaps of information, regulations, or accuracy when addressing all instances and situations. Rules and laws can change and it is up to the landowner to keep abreast of these changes. It is the responsibility of the landowner to thoroughly research, keep current with, and comply with all regulations. Multiple agencies have an interest in pond development and environmental protection. It is the responsibility of the landowner to know and respond to the requirements of these agencies including those agencies not listed in this guidance document.