

# A Pond Guide for Citizens

November 2009

This Pond Guide for Citizens is intended to provide both guidance and information to landowners in the State of Georgia who want to build a pond or improve an existing pond. This guide was developed in cooperation with representatives of the USDA-Natural Resources Conservation Service, the US Army Corps of Engineers, and the Georgia DNR-Environmental Protection Division.

## **Building or Renovating a Pond in Georgia**

### **Introduction**

This brochure is an informational guide to landowners who want to build a pond or improve an existing pond. Part One provides a basic explanation of the steps needed during the pond planning process. There are federal, state, and local government agencies that can assist and help with the requirements. Part Two provides information, links, and environmental explanations on why it is important to construct a pond using this technical guidance.

### **Part One**

Ponds for agricultural purposes (farm ponds) may qualify for certain exemptions. Farmers produce food for our nation and are given special exemptions if they use the pond water for food production, including livestock. A pond for aesthetic or recreational reasons, such as for a subdivision, or a fishing pond, or for an aquaculture operation, would not be considered an agricultural pond for the purposes of this guidance.

### **Farm Pond**

The Natural Resources Conservation Service (NRCS) and the United States Army Corps of Engineers (USACE) have a Field Level Agreement (FLA) between the agencies that helps clarify what ponds are exempt from obtaining a Section 404 Clean Water Act permit from the USACE for impacts to waters of the US. The exemption is only available to farm ponds for agricultural purposes if certain criteria are met.

Ponds for agricultural purposes may be exempt from the need for Corps authorization if they meet requirements described in the **GEORGIA FARM POND EXEMPTION GUIDE**. This guide describes when a pond would be exempt from obtaining a USACE Section 404 Clean Water Act permit for impacts to waters of the US. Activities exempt from USACE permit do not require mitigation. A copy of the **GEORGIA FARM POND EXEMPTION GUIDE** can be found on the web. (See Appendix A)

There are 2 types of farm ponds that may qualify for the exemption, ponds for ongoing agricultural operations and ponds for proposed agricultural operations. Under the field level agreement NRCS keeps a log of all Farm Pond Exemptions for all ongoing agricultural operation ponds under 10 acres in pool area which meet the criteria in the **GEORGIA FARM POND EXEMPTION GUIDE** (See Appendix A) NRCS submits the log to the USACE at the end of each year.

Proposed agricultural operation ponds must be reviewed by the USACE to make a final agricultural determination. The USACE provides written concurrence or denial of this agricultural exemption. If the USACE determines that the proposed pond does not meet the agricultural exemption, it is considered a "Recreational pond" and needs to be permitted.

#### Natural Resource Conservation Service (NRCS)

The United States Department of Agriculture's (USDA's) Natural Resource Conservation Service (NRCS) is a non-regulatory agency, which provides technical assistance to farmers who want to construct a pond.

The NRCS is available to help you the producer, plan and design the pond. The NRCS can assist landowners in determining if specific criteria will be met for this exemption. The Farm Pond Exemption assistance from the NRCS typically requires that three documents be completed. They are:

- q Farm Pond Exemption Information Paper (GA-ENG-378-EX1) completed and signed by the landowner, and the NRCS representative.
- q Water Budget
- q Site map with pond GPS coordinates

The **Farm Pond Exemption Information Paper** (GA-ENG-378-EX1) asks for basic information about the type of farming you do, what your water needs are, and how large the pond will be. On the bottom of this form you will be asked to sign a statement agreeing that if the pond is converted to non-agricultural use you may be required to obtain a permit from the USACE, which may include mitigation. The landowner might also be required to restore the site to its original condition. Part of the statement you will sign states that non-agricultural use ponds are not exempt from the Georgia Erosion and Sedimentation Act of 1975, as amended, or other State regulations. Additionally the statement you will be required to sign states "I understand that this exemption does not free me from obtaining any other federal, state or local permits for construction of the proposed pond.

The **Water Budget** is a calculation of the amount of water required for your agricultural needs. Your NRCS agent can help you calculate the water budget. The water budget will help you know what size pond is allowable under the Farm Pond Exemption. The exempted farm pond shall not exceed the need shown through the water budget. It should be noted that if the pond size will be based on water needs for livestock, the pond would likely be very small. The NRCS recommends alternatives to ponds for meeting livestock needs. While there is not a single approved form or worksheet for calculating the water budget, there is the “Georgia Farm Pond Exemption Guide” which has examples you can use as a reference for your water budget. It can be found on line. (See Appendix A) Both the NRCS and the USACE will follow the procedures outlined in the “Georgia Farm Pond Exemption Guide” when providing producers with technical assistance in farm pond development.

You will need to provide a **Site Map with Pond GPS Coordinates**. Appropriate map sources are many and not limited to USGS topographic, County, or DOT maps. The NRCS can also provide maps to landowners. Additionally you will need to record the GPS coordinates of your pond site.

**The landowner should retain copies of all the above documents to demonstrate compliance with all the required regulations.**

#### United States Army Corps of Engineers (USACE)

The USACE Regulatory is a federal agency that regulates impacts to wetlands, issues permits, and enforces the Clean Water Act (CWA). Ponds do not necessarily require authorization from the US Army Corps of Engineers (USACE). Impacts to jurisdictional waters of the US, including jurisdictional wetlands and streams, typically require authorization. It is common for ponds to impact wetlands and/or streams. Ponds, or most any activity, that would impact wetland or streams would therefore require authorization. A qualified environmental consultant could assist a landowner in determining the presence and boundaries of any waters of the US on a property and obtaining any necessary authorizations. Waters of the US may differ from waters of the State. More information about the USACE Regulatory permitting program can be found at <http://www.sas.usace.army.mil/Regulatory%201.htm>

All ponds that impact wetland, which do not qualify for a Farm Pond Exemption, will need to be permitted by the USACE (See the permitting regulations in the “Recreational Pond” section of this document). The USACE makes the wetland delineations/determinations for Clean Water Act purposes.

#### Environmental Protection Division (EPD)

The EPD is state agency under the Division of the Georgia Department of Natural Resources (DNR). The EPD enforces state laws, rules and policies to protect human health and the environment. EPD is charged with the regulatory duties associated with Erosion and Sedimentation (E&S). The Georgia Erosion and Sedimentation Act of 1975 established the rules and regulations for minimizing soil erosion and preventing sediment deposition onto lands and into waters. The Georgia Water Quality Control Act sets forth a General Permit for NPDES Storm Water Discharges Associated with Construction Activity. If you are constructing an approved NRCS/USACE Exempted

Farm Pond, then you are not required to obtain coverage and comply with the State General Permit. Nor would it be necessary to get a buffer variance if you have an approved NRCS/USACE Exempted Farm Pond.

The EPD also implements the Safe Dams Program and the Water Withdrawal Permit Programs. You may be required to categorize the dam with EPD's Safe Dams Program, and you may be required to get a surface water withdrawal permit with the Agricultural Permitting Unit. (See Appendix A) Water withdrawals of significant volume (over 100,000 gallons per day), either from surface waters or a groundwater source would require an Agriculture Water Withdrawal Permit from the EPD's Agricultural Permitting Unit. The EPD's Safe Dams Program inventories and categorizes the larger dam sites in the state. Dams at least 25 feet high or impounding 100 acre feet or more must be categorized. (See Appendix A for contact information) Ponds are not allowed in a primary trout stream with watersheds greater than 50 acres. Impoundments on trout streams must meet all the above restrictions and be approved by the Director of EPD.

In all instances regardless of exemptions you are required to use Best Management Practices (BMPs) 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. If there is a LIA for your area you will need to contact them about whether or not they will require a Land Disturbing Activity (LDA) Permit. They likely will not require the LDA if you have received the NRCS/USACE Farm Pond Exemption. Contact your local government or your EPD District office to find out if your area is under the jurisdiction of a Local Issuing Authority. (See Appendix A, LIA for contact information) Local Issuing Authorities (LIA's) adopt ordinances that are at least as restrictive as the state rules and laws. In some LIA areas the protected buffer zones may be extended beyond the 25 or 50 foot minimums required by the state. It is important to check with the LIA's regarding special buffer restrictions, zoning, codes, and storm water ordinances, which may affect your pond planning decisions.

### **Proposed Operations Farm Pond**

If a landowner is seeking an exemption and is not currently irrigating agricultural crops or using water to produce livestock, then the landowner is considered a "Proposed Operator".

#### Natural Resources Conservation Service (NRCS)

The NRCS will assist the landowner with the water budget. They can also help the landowner with maps and to determine the GPS coordinates. The NRCS will sign the Farm Pond Information Paper (GA-ENG-378-EX1) for a "Proposed Operations" pond when they assist with the supporting data, but the landowner will need to send the completed package to the USACE for evaluation and possible exemption of the USACE permit regulations.

## United States Army Corps of Engineers (USACE)

The USACE will evaluate the information sent to them from the landowner and the NRCS in order to determine whether or not an exemption will be granted. Supporting evidence and documentation of an agricultural operation could include, the water budget calculations, the AD-1026, and AD-1026A forms. If the USACE determines that a 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. If the appropriate paper work is submitted to the USACE, the landowner will get a letter from them stating whether or not the pond has been exempted from the need for a Section 404 permit.

## Environmental Protection Division (EPD)

The EPD is responsible for enforcing the Erosion and Sedimentation Control Act of 1975. All earth disturbing activity work, including any work on a pond must have adequate Best Management Practices (BMPs) to protect the soils and waters of the state. If you have received the letter from the USACE stating that your farm pond and the resultant impoundment is exempt from Department of the Army authorization, and will not require a USACE permit then the EPD will review and provide technical assistance to determine if coverage under the NPDES General Permit is needed. Please be reminded that the determination made by the USACE is specific to wetlands and the NPDES General Permit is based on a minimum of 1 acre of disturbed land.

Your letter from the USACE exempting you from the need for a USACE permit as well as your water budget, the completed and signed GA-ENG-378-EX1, and if applicable a buffer variance letter from the Watershed Protection Branch, should be available to regulatory inspectors.

If your pond is found to be non-agricultural in the future, you may be required to comply with all permitting requirements, be subject to penalties and buy compensatory mitigation credits, and restore the pond site to its original condition.

If you do not get the letter from the USACE exempting your pond from Department of Army authorization, you will not be considered an agricultural farm pond and must proceed under the guidelines for a "Recreational Pond" below.

## Local Issuing Authority (LIA)

If the proposed operations pond does not require a USACE permit then it is recommended that you contact the LIA (if there is one for your area) to determine if a Land Disturbing Activity Permit is needed.

## **Recreational Pond**

## United States Army Corps of Engineers (USACE)

Recreational ponds must be permitted by the USACE if wetlands or streams are involved. It is likely the landowner would need to retain a qualified environmental

consultant in the authorization of a recreational pond. It is also likely compensatory mitigation would be required for any impacts to any wetlands or streams.

**PRIVATE SINGLE-FAMILY RECREATIONAL PONDS:** A private single-family, non-commercial recreational pond, less than 5 acres in size that would impact less than two acres of wetlands and less than 500-linear feet of stream may be eligible for authorization under Regional Permit (RP) 90. A copy of RP 90 can be found on the web at <http://www.sas.usace.army.mil/RP90.pdf>.

**NATIONWIDE PERMITS:** Ponds for residential, commercial, or other purposes, that would impact less than 0.5 acre of wetlands or 300-linear feet of stream may qualify for authorization under any one of a number of Nationwide Permits (NWP) such as NWP 18, 29 or 39. (See Appendix A)

**INDIVIDUAL PERMITS:** A pond that would not fit into one of the three categories above may be authorized through an Individual Permit. The Individual Permit process requires an alternatives analysis that shows the preferred alternative is the least environmentally damaging, most practicable alternative that meets the applicant's purpose and need.

**MITIGATION:** Should impacts to wetlands exceed 0.1 acre or impacts to stream exceed 100-linear feet, all impacts to wetland and/or stream would need to be mitigated. Mitigation can be accomplished by 1) purchasing wetland mitigation credits from an approved wetland/stream mitigation bank within the same 8 digit Hydraulic Unit Code (HUC) as the pond site, 2) Participating in the in-lieu-fee mitigation program and 3) creating, restoring, enhancing or preserving wetlands/streams on or near the project site and would need to meet stringent requirements to assure success including base-line impairment data, protection under a Restrictive Covenant and a minimum 7-year monitoring and contingency plan. Often, it is not practicable for a landowner to provide his or her own mitigation. As an alternative, it is preferred that the applicant mitigate through the purchase of mitigation credits from a mitigation bank. A qualified environmental consultant could assist the landowner in developing an acceptable mitigation plan. Mitigation is often the most expensive part of doing work under a USACE permit.

#### Environmental Protection Division (EPD)

If the disturbed area for a recreational pond construction is 1 acre or more in size EPD will require the following documents in order to obtain General Permit coverage:

- q Notice of Intent
- q Construction Land Disturbance Fees
- q Erosion Sedimentation and Pollution Control Plan (ES&PCP)

In addition to the General Permit coverage, anyone planning to do work in the buffer zone and not otherwise exempted must first apply for and be granted a buffer variance.

- q Buffer Variance Application **[Buffer Variance Applications are required regardless of the acreage disturbed.]**

## **Notice of Intent**

The **NOI** is an application to bring your land disturbing activity under NPDES General Permit coverage. Most recreational ponds would be considered a “Stand Alone” project and landowners should apply for the GAR 100001 permit unless it is part of a common development, then the application for a GAR 100003 should be used. (See Appendix A for Permit applications) The NOI must be submitted 14 days prior to land disturbing activities. Submitting the NOI to the EPD District Office in your area grants you coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for your construction activity. A copy of the NOI should be sent to the LIA if there is one for your area. If there is not an LIA serving your area, then the Local Soil and Water Conservation Commission District office should also get a copy of the NOI. (See Appendix A for LIA and GASWCC information)

## **Construction Land Disturbance Fees**

Proper **Land Disturbance Fees** must be paid to the EPD and the LIA of your area. If there is not an LIA for your area, then \$80/disturbed acre is paid to EPD. If your County or City is its own LIA, then \$40/acre is paid to the LIA and \$40/acre is paid to EPD. Some LIAs charge additional fees in excess of the \$40/acre. (See Appendix A - EPD for Fee Forms)

## **Erosion Sedimentation and Pollution Control Plan (ES&PCP)**

A Georgia Soil Water Conservation Commission (GASWCC) Level II certified Design Professional would be able to draw up the necessary ES&PCP. The ES&PCP must be submitted to the LIA for areas that have LIA service. For areas not serviced by a LIA, the ES&PCP should be submitted to the EPD Watershed Protection Office in Atlanta and the GASWCC office for their area. If the total planned disturbance is 50 acres or greater then the local EPD District office should also receive the ES&PCP. This ES&PCP shows the BMP placements, gives timelines for vegetative measures and shows monitoring points for sampling, etc. (See Appendix A for an ES&PCP checklist)

## **State Water Buffer**

A Buffer (or Buffer Zone) is the area of land immediately adjacent to the banks for state waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat. The vegetated buffer is 25-foot on warm water streams and 50-foot on trout streams, as measured horizontally on each side from where vegetation has been “wrested” by normal stream flow or wave action. Buffers must remain in a natural vegetated state unless they qualify for a specific exemption or a buffer variance is applied for by the landowner and granted by EPD. Therefore, if the pond is to be built in “state waters” requiring buffer protection (a perennial stream or an intermittent stream), then you must also acquire a stream buffer variance. The LIA in your area, or the EPD can make a state waters determination for your proposed pond site. A Buffer Variance Application must be submitted to the Watershed Protection Branch office in Atlanta. (See Appendix A for Buffer Variance Applications) Due to the time restraints you may have on your project, it is suggested that this step be done first, as it may take a few months to complete the review process. You are reminded that no land disturbing activity may be done in the protective Buffer Zone without an approved Buffer Variance for a recreational pond.

Local Issuing Authority (LIA)

If your area is served by an LIA, they will require a Land Disturbing Activity Permit (LDA) for a recreational pond if the disturbed acreage is 1 acre or greater and/or the pond will be placed within 200 feet of state waters. They also would require at least \$40.00/acre fee, a copy of the ESPCP, and the NOI.

#### Natural Resources Conservation Service (NRCS)

If the landowner meets all of the required agencies regulations the NRCS may be able to provide assistance with the design and construction details for the Recreational Pond. The availability of NRCS's time and resources will be individually evaluated on request.

## **Pond Maintenance**

Established ponds meet the definition of “State Waters” unless there is neither an inlet nor an outlet and the pond is totally contained on property under single ownership. Most ponds in Georgia are “State Waters”. Weed control is a concern to landowners when their ponds receive more nutrients than appropriate. Landowners should be aware that all or some of the regulations regarding pond construction might also apply to pond maintenance or weed removal projects. To do work in the protected buffer zone of state waters, a buffer variance first needs to be approved by the EPD. However, Farm Ponds again would qualify for an exemption from this buffer variance requirement provided all exemption requirements are met and documented. Pond owners wishing to increase the size of their existing pond would be required to first procure all the necessary permits, variances, and mitigation credit purchases that would apply through the USACE and EPD. Work to repair an existing dam would require a buffer variance in most instances.

It is possible to get an exemption from the Section 404 permit requirement under CWA Section 404(f)(1) for dam maintenance activities provided that certain conditions are met. It is recommended that you contact the USACE. Additionally, contact the EPD and the LIA for their guidance and regulations. (See Part 2 for ecological explanations). The USACE will evaluate your pond individually to determine whether you will or will not need a permit to do 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. Please see Appendix A for the USACE contact information.

A buffer variance from the EPD is required if land disturbance in the buffer is anticipated. If the planned disturbance is over 1 acre, General Permit coverage, and possibly a LDA from the LIA, would be required.

## **Trout Streams**

Trout Streams are granted special protections above and beyond the normal protections granted warm water state waters. Trout streams normally have the 50-foot buffer zone although the LIA can and may require more protection. Impoundments of streams designated as trout streams have some additional stipulations. You may not construct an impoundment on a primary trout stream which has a drainage basin (watershed) that is 50 acres or larger. A primary trout stream is a stream that has sustainable natural trout reproduction. A secondary trout stream is one in which there is no evidence of a self sustaining population but the waters are capable of supporting trout throughout the year. The Division must approve all impoundments of a trout stream on both primary and secondary streams. 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 which pond type you will be constructing (farm pond, proposed farm pond, or recreational pond) and follow all the requirements for such.
- In addition to the guidelines for your pond type, you must contact the Wildlife Resources Division (WRD). (See Appendix A for contact information.) WRD will conduct a field site investigation and provide you with the WRD Pond Evaluation Form.

## Glossary

### **Acre-foot (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 1 foot (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 the production of food and have irrigation equipment or livestock in place on the site. These farm ponds may be exempt from the need of a Section 404 permit from the USACE, and from a buffer variance or permitting normally required by the EPD.

### **Buffer Variance**

A buffer variance is permission to work in the protected buffer zone. An application must be submitted to and approved by the Watershed Protection Office of the EPD.

**CWA**            **Clean Water Act**

**DNR**            **Department of Natural Resources**

**EPD**            **Environmental Protection Division**

### **Ephemeral Stream**

This is a stream that typically has no well-defined channel, and which flows only in direct response to precipitation with runoff.

**ES&PCP**    **Erosion Sedimentation & Pollution Control Plan**

### **Farm Pond**

Farm ponds for agricultural purposes are ponds that are utilized for the production of food and have irrigation equipment or livestock in place on the site. These farm ponds may be exempt from the need of a Section 404 permit from the USACE and from a buffer variance or permitting normally required by the EPD.

### **FLA - Field Level Agreement.**

An agreement between the USACE and the NRCS that allows a landowner engaged in food production to be exempt from obtaining a 404 permit for the construction of a pond.

**GASWCC**    **Georgia Soil and Water Conservation Commission**

**GPS**    **Global Positioning System**

This is the position of Latitude and Longitude of your pond site. Often taken off a map, website (like Goggle Earth), or by utilizing a handheld GPS unit.

### **Intermittent Stream**

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

### **Jurisdictional Determinations**

Telling which part of your land is considered a wetland. An Environmental Engineer, or a USACE staff, can make this determination.

**LIA**    **Local Issuing Authority**

Local governments at the City or County levels who adopt ordinances as strict or stricter than the State regulations can be approved as an LIA. LIAs can enforce their ordinances, inspect sites, collect fees, require bonds, and issue Land Disturbing Activity permits (LDAs). If the LIA determines that the landowner

needs an LDA, the EPD will also need General Permit coverage and an approved stream buffer variance for any work in a state waters buffer zone.

**Mitigation**

Mitigation is the action that replaces the function and values of wetland and stream impacts through the purchases of mitigation credits, in-lieu-fee banking or on-site restoration, enhancement or preservation activities which result in a “No Net Loss” of wetlands and other waters of the US.

**NOI Notice of Intent** (to disturb land)

The EPD requires that an NOI be submitted to bring the development under the coverage of the NPDES General Permit. For all work of one acre or greater disturbed area, unless exempt, the Landowner must submit the NOI and Fees to the EPD, and the LIA if appropriate.

**NPDES National Pollution Discharge Elimination System**

**NRCS Natural Resource Conservation Service**

**Perennial Stream**

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

**Proposed Operations Farm Pond**

This is a pond that the landowner intends to use for agricultural purposes, but who is not currently irrigating approved agricultural crops or producing livestock. This type of pond may or may not be exempted from the requirements of the various agencies involved. The landowner should not proceed in construction of this pond until he/she has satisfied all the requirements of the USACE, and the EPD.

**Protected Buffer Zone**

There is a protected zone along the edge of all “state waters” in Georgia, which is supposed to remain in canopy producing native vegetation. It is measured horizontally 25 feet out from the wretched vegetation. Protected buffer zones are increased to 50 feet in trout waters.

**State Waters**

State Waters means 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 or 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(7).

**Trout Streams**

Trout waters are of two designations, primary and secondary. A primary trout stream is water including the whole watershed in which there is 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 reproduction, but are capable of supporting trout throughout the year.

**USACE**

The United States Army Corps of Engineers is a federal agency in charge of enforcing the Clean Water Act (CWA). They have an agreement with NRCS about agricultural farm ponds, which allow farmers who qualify to be exempt from the 404 Clean Water Act permits.

**Verified Wetland Delineations**

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

**Wetland Delineations**

Wetland Delineations depict the boundaries of waters of the US, such as wetlands and streams.

**WRD Wildlife Resources Division****Wrested vegetation**

Wrested vegetation is the line of vegetation between water and land. This is the place where wave action or flowing water has disallowed plants to grow. Wrested vegetation is the plant/no plant interface on the edge of a "state water". This is the line the buffer zone is measured from, extending horizontally either 25 feet for warm waters, or 50 feet for cooler trout waters.

## **Check List for Pond Construction Existing Operations Farm Pond**

- q Contact your NRCS representative and ask for their assistance. 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 to find your NRCS district office phone number. They can give you technical assistance and help you acquire and fill out the necessary forms.
- q To get the **Farm Pond Exemption Information Paper (GA-ENG-378EX1)** online go to <ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/GA-ENG-378EX1.doc> Sign and date the document and get the NRCS agent to sign it.
- q Complete a **Water Budget**. The guidance you need for the **Water Budget** is called the Farm Pond Exemption Guide. [ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/farm\\_pond\\_exemption\\_guide.doc](ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/farm_pond_exemption_guide.doc)
- q
- q Submit the documents listed above and a map of your site with the GPS coordinates to your District NRCS office. <http://offices.sc.egov.usda.gov/locator/app>
- q Follow the Best Management Practices as outlined in the Manual for Erosion and Sediment Control in Georgia. This manual can be viewed or downloaded at [http://gaswcc.georgia.gov/00/article/0,2086,28110777\\_28115483\\_29165205,00.html](http://gaswcc.georgia.gov/00/article/0,2086,28110777_28115483_29165205,00.html)
- q Contact the District EPD office for LIA applicability. <http://www.gaepd.org/>
- q Contact the Agricultural Permitting Unit office.
- q Contact the EPD Safe Dams Program to see if your pond will require this categorization.

## **Check List for Pond Construction Recreational Pond**

- q Contact the USACE and apply for the appropriate permit. Less than 5 acres will require the RP 90 permit. Ponds greater than 5 acres will require an individual permit. Follow the website to “How do I find a Local office” at <http://www.sad.usace.army.mil/> Purchase the appropriate amount of compensatory mitigation credits as calculated by the USACE.
- q Apply for a buffer variance. Go to [www.gaepd.org](http://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)
- q Submit an NOI (See the instructions above in Recreational Pond, EPD).
- q Submit the land disturbing activity fees to State and LIA if appropriate. (See instructions above in Recreational Pond EPD)
- q Develop an Erosion Sedimentation and Pollution Control Plan (ES&PCP). And submit (See instructions above in Recreational Pond EPD).
- q Contact EPD’s Agricultural Permitting Unit
- q Contact the EPD Safe Dams Program to see if your pond will require this categorization.

## **Check List for Pond Construction Proposed Operations Farm Pond**

- q Contact your NRCS representative and ask for their assistance. 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 to find your NRCS district office phone number. They can give you with technical assistance and help you acquire and fill out the necessary forms.
- q To get the **Farm Pond Exemption Information Paper (GA-ENG-378EX1)** online go to <ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/GA-ENG-378EX1.doc> Complete, sign, and date the document.
- q Complete a Water Budget, the guidance you need for the water budget is called the Farm Pond Exemption Guide. [ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/farm\\_pond\\_exemption\\_guide.doc](ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/farm_pond_exemption_guide.doc)
- q Submit the documents listed above and a map of your site with the GPS coordinates to your District NRCS office.  
<http://offices.sc.egov.usda.gov/locator/app>
- q Follow the Best Management Practices as outlined in the Manual for Erosion and Sediment Control in Georgia. This manual can be viewed or downloaded at [http://gaswcc.georgia.gov/00/article/0,2086,28110777\\_28115483\\_29165205,00.html](http://gaswcc.georgia.gov/00/article/0,2086,28110777_28115483_29165205,00.html)

All the above applicable documents will be submitted to the USACE by the landowner for USACE review. If the letter from the USACE does not grant you an agricultural exemption, your project would be considered a recreational pond and must follow the checklist listed above for "Recreational Pond ". Additionally the USACE will require a permit and mitigation.

## 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's and animal's aquatic habitat, 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 stream outwards on both sides. In Georgia's coldwater 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 (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 would 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. 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 stream identification guide has been developed to help you determine what type of stream occurs on your site. (See Appendix A "Field Guide for Determining The Presence of State Waters That Require a Buffer")

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

### NRCS

To contact your NRCS 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 find your NRCS district office address and phone number.

Farm Pond Exemption Guide [ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/farm\\_pond\\_exemption\\_guide.doc](ftp://ftp-fc.sc.egov.usda.gov/GA/gaeng/Ponds/farm_pond_exemption_guide.doc)

### USACE

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

Coastal Branch  
U.S. Army Corps of Engineers  
ATTN CESAS-RD  
Post Office Box 889  
100 West Oglethorpe Ave  
Savannah GA 31402  
1-(800)-448-2402

Piedmont Branch  
U.S. Army Corps of Engineers  
The Plaza Suite 2000  
1590 Adamson Pkwy  
Morrow GA 30260-1777  
(678)-422-2720 ext. 27

Albany Field Office  
1104 N. Westover Blvd, Unit 9  
Albany, Georgia 31707  
229-430-8566

Click on the links below to get to the USACE permit information page.  
[http://www.sas.usace.army.mil/Regulatory\\_1.htm](http://www.sas.usace.army.mil/Regulatory_1.htm)

### EPD

Safe Dams Program 4244 International Parkway Suite 110 Atlanta GA 30354	404-362-2678
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Water Withdrawal Permit	229-391-2400
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To see if you will be required to have this permit and to get more information or forms, go to <http://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  
531 Main Street, Suite D  
Tifton, GA 31794-4898

#### EPD Local District Office

Go to [www.gaepd.org](http://www.gaepd.org), there is a horizontal bar near the top of the page click on "EPD Offices" you should see "click here for a map that shows the counties covered by each district office", locate your county and you will get the phone number of your District EPD Offices.

#### Notice of Intent (NOI)

Go to [www.gaepd.org](http://www.gaepd.org) >> Documents, Publications, and Forms >> Under "Regulatory Forms" – Watershed Protection Branch >> Stormwater >> Notice of Intent for Primary Permittees].  
[http://www.gaepd.org/Files\\_DOC/forms/wpb/NPDES\\_NOI\\_StormWater\\_Primary\\_Permittee\\_Y2008.doc](http://www.gaepd.org/Files_DOC/forms/wpb/NPDES_NOI_StormWater_Primary_Permittee_Y2008.doc)

#### NPDES Permit GAR 100001 (36 pgs)

Click on the following link to download or print the GAR 100001 stand-alone permit.

[http://www.gaepd.org/Files\\_PDF/techguide/wpb/FINAL\\_StormWater\\_NPDES\\_Permit\\_StandAlone\\_GAR100001\\_Y2008.pdf](http://www.gaepd.org/Files_PDF/techguide/wpb/FINAL_StormWater_NPDES_Permit_StandAlone_GAR100001_Y2008.pdf)

#### Land Disturbing Activity Fee Form

Go to [www.gaepd.org](http://www.gaepd.org) >> Documents, Publications, and Forms >> Under "Regulatory Forms" – Watershed Protection Branch >> Stormwater >> EPD-Construction Land Disturbance Fees]  
[http://www.gaepd.org/Files\\_DOC/forms/wpb/GAEPD\\_NPDES\\_Construction\\_Land\\_Disturbance\\_Fee\\_Form\\_Y2008.doc](http://www.gaepd.org/Files_DOC/forms/wpb/GAEPD_NPDES_Construction_Land_Disturbance_Fee_Form_Y2008.doc)

#### Buffer Variance Application

Go to [www.gaepd.org](http://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)

[http://www.gaepd.org/Files\\_DOC/forms/wpb/SIX\\_PAGE\\_REVISED\\_25FT\\_APP\\_2004\\_1.doc](http://www.gaepd.org/Files_DOC/forms/wpb/SIX_PAGE_REVISED_25FT_APP_2004_1.doc)

For Trout Streams (50 foot)

[http://www.gaepd.org/Files\\_DOC/forms/wpb/SIX\\_PAGE\\_REVISED\\_50FT\\_APP\\_2004.doc](http://www.gaepd.org/Files_DOC/forms/wpb/SIX_PAGE_REVISED_50FT_APP_2004.doc)

#### ESPCP Checklist

For an ESPCP checklist go to:

[http://www.gaepd.org/Files\\_PDF/techguide/wpb/ES\\_Pollution\\_Control\\_Plan\\_Review\\_Checklist\\_Stand\\_Alone\\_Y2009.pdf](http://www.gaepd.org/Files_PDF/techguide/wpb/ES_Pollution_Control_Plan_Review_Checklist_Stand_Alone_Y2009.pdf)

## Identification of Trout Waters

The EPD website can identify trout waters in some of the northern counties in Georgia. To determine which streams are considered “Trout Waters” go to [www.gaepd.org/](http://www.gaepd.org/) on the left side of the screen click on [Rules and Laws], then click on [Existing Rules and Corresponding Laws], then scroll down to and click [391-3-6 Water Quality Control] then click on [Water Use Classifications and Water Quality Standards], scroll down many pages to (15) Trout Streams...(b) Designations by County. Stream and that stream’s entire watershed are the trout waters.

Field Guide for Determining The Presence of State Waters That Require a Buffer  
[http://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)

### **WRD**

WRD Fisheries Contact WRD Fisheries for a pond site evaluation on potential impoundments on trout waters.

Northwest Region  
Attn: Gary Beisser  
Box 519  
Calhoun, GA. 30703-0519  
(706)-624-1161

Northeast Region  
Attn: Lee Keefer  
3695 Hwy. 197N  
Clarksville, GA. 30523  
(706)-947-3112

Wildlife Resources Division Fisheries Management Section for Fish Stocking Information. Go to <http://www.gofishgeorgia.com>

### **LIA**

LIA Determination (Is there an LIA servicing your area?)

Go to [www.gaepd.org](http://www.gaepd.org), there is a horizontal bar near the top of the page click on “EPD Offices” you should see “click here for a map that shows the counties covered by each district office”, locate your county and you will get the phone number of your District EPD Offices. Call this number and ask whether or not your area is covered by a LIA.

### **GASWCC**

See which GASWCC office serves your area by clicking on the following link.  
[http://gaswcc.georgia.gov/00/channel\\_title/0,2094,28110777\\_28407756,00.html](http://gaswcc.georgia.gov/00/channel_title/0,2094,28110777_28407756,00.html)

*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.*