

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

CHAPTER 40C-44, F.A.C.

**ENVIRONMENTAL RESOURCE PERMITS:
REGULATION OF AGRICULTURAL SURFACE
WATER MANAGEMENT SYSTEMS**

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CHAPTER 40C-44
ENVIRONMENTAL RESOURCE PERMITS: REGULATION OF AGRICULTURAL
SURFACE WATER MANAGEMENT SYSTEMS

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40C-44.011 Purpose and Scope.

(1) The purpose of Chapter 40C-44, F.A.C., is to implement portions of the permitting program contemplated in Part IV, Chapter 373, F.S., in a manner which is consistent with the objectives and policies of the St. Johns River Water Management District, and the declared water policy of the State of Florida.

(2) The District's goal under this chapter is to prevent discharges of agricultural stormwater and associated wastewater in a manner which is inconsistent with the objectives of the District or which may cause harm to the water resources of the District.

(3) This chapter provides an overall framework for agricultural permitting District-wide. The District may implement basin-specific criteria for agriculture or other land uses, when appropriate, in accordance with Surface Water Improvement and Management Plans, other basin-specific studies and Chapter 62-40, F.A.C.

(4) An environmental resource agricultural system permit under this chapter will be required for the maintenance and operation of certain existing agricultural surface water management systems as defined herein, and the construction of new agricultural surface water management systems which are below thresholds described in Chapter 40C-4, F.A.C.

(5) Agricultural operations which are required to obtain an environmental resource permit pursuant to Chapter 40C-4, F.A.C., shall satisfy the requirements of the District in terms of the quality of water discharged from the system, by implementing the performance standards and water quality practices described in this chapter.

Rulemaking Authority 373.044, 373.113, 373.171, 373.418 FS. Law Implemented 373.413, 373.416 FS. History—New 8-11-91, Amended 10-20-92, 10-3-95.

40C-44.021 Definitions.

(1) “Agriculture” means the commercial production of crops, animals or animal products, or farm commodities including but not limited to vegetables, citrus and other fruits, grain, forage, sod, livestock, poultry, and foliage plants. For the purposes of this chapter, agriculture also includes horticulture and floriculture.

(2) “Agricultural Operation” means a contiguous farm, grove, ranch, nursery or similar entity owned or controlled by one or more persons, engaged in, or proposing to engage in, the practice of agriculture.

(3) “Associated Wastewater” means the flow of water which directly results from agricultural activities such as irrigation, soil flooding for pest control or soil preservation, freeze protection or pre-storm event drainage and is mixed or conveyed with stormwater in the surface water management system.

(4) “Conservation Plan” means a document, which describes a system of management practices to control and reduce soil erosion and sediment loss, and improve the quality of discharged water for a specific parcel of property, and which has been either:

(a) Prepared by the U.S. Department of Agriculture Soil Conservation Service (SCS) in conjunction with a local Soil and Water Conservation District Board, organized pursuant to Chapter 582, F.S., which includes and applies the appropriate management practices consistent with the SCS Field Office Technical Guide – Section IV and the Best Management Practices Selector, incorporated by reference in Rule 40C-44.091, F.A.C., and which includes the following elements when appropriate for the proposed land use:

1. Reduction of the volume of water discharged off-site;
2. Water Table Control in Open Channels;
3. Irrigation Land Leveling;
4. Irrigation Water Management;
5. Nutrient Management Plan;
6. Pesticide Management Plan;
7. Reuse of the runoff from the agricultural site, using reservoir or canal storage already existing, proposed as part of the plan or otherwise required by permit, for uses such as freeze protection, soil flooding for pest control or soil preservation, or irrigation needs; and
8. Control of soil erosion.

(b) Prepared by a private consultant, who has professional expertise in the fields of hydrology, water pollution control, irrigation design and soil conservation, according to standards, specifications and guidelines developed by SCS. The plan must include and apply the appropriate management practices consistent with the SCS Field Office Technical Guide – Section IV and the Best Management Practices Selector, incorporated by reference in Rule 40C-44.091, F.A.C., and include the following elements when appropriate for the proposed land use:

1. Reduction of the volume of water discharged off-site;
2. Water Table Control in Open Channels;
3. Irrigation Land Leveling;
4. Irrigation Water Management;
5. Nutrient Management Plan;
6. Pesticide Management Plan;
7. Appropriate reuse of the annual stormwater runoff from the agricultural site for uses such as freeze protection, soil flooding for pest control or soil preservation, or irrigation needs;

8. Control of soil erosion; and

9. Reduction of suspended solids loading at points of discharge off-site.

(5) “Engineer” means a Professional Engineer registered in Florida, or other person exempted pursuant to the provisions of Chapter 471, F.S., who is competent in the fields of hydrology and water pollution control.

(6) “Existing agricultural surface water management system” means a system which was constructed or implemented on or before the effective date of this chapter.

(7) “Hayland” means a tract of land used for forage production, which has been planted with desirable forage plant species, listed by the Soil Conservation Service for Pasture and Hayland Management in the Field Office Technical Guide, and to which nitrogen or phosphorus is applied at an average annual application rate equal to or exceeding 50% of the medium fertilizer requirements recommended by the Soil Conservation Service for Pasture and Hayland Management in the Field Office Technical Guide.

(8) “Improved Pasture” means a tract of land used for livestock grazing, which has been planted with desirable forage plant species, listed by the Soil Conservation Service for Pasture and Hayland Management in the Field Office Technical Guide, and to which nitrogen or phosphorus is applied at an average annual application rate equal to or exceeding 50% of the medium fertilizer requirements recommended by the Soil Conservation Service for Pasture and Hayland Management in the Field Office Technical Guide.

(9) “Littoral zone” means, in reference to stormwater management systems, that portion of a wet detention pond which is designed to contain rooted aquatic plants.

(10) “NGVD” means national geodetic vertical datum.

(11) “Permanent Pool” means that portion of a wet detention pond, which normally holds water, between the pond bottom and control elevation, excluding any water volume claimed as treatment volume.

(12) “Stormwater” means the water which results from a rainfall event.

(13) “Stormwater Management System” means a system which is designed and constructed or implemented to control discharges which are necessitated by rainfall events, incorporating methods to collect, convey, store, absorb, inhibit, treat, use, or reuse water to prevent or reduce flooding, overdrainage, environmental degradation and water pollution or otherwise affect the quantity and quality of discharges from the system.

(14) “Surface Water Management System” or “System” means a stormwater management system, dam, impoundment, reservoir, appurtenant work, or works, or any combinations thereof. The terms “surface water management” or “system” include dredged or filled areas.

(15) “Treatment” means any method, technique, process or management practice which changes the physical, chemical, or biological character of water and thereby reduces its potential for polluting waters of the state.

(16) “Water” or “waters in the state” means any and all water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, lakes, ponds, or diffused surface of the ground, as well as all coastal waters within the jurisdiction of the state.

(17) “Waters of the State” are defined as “waters” in subsection 403.031(13), F.S.

(18) “Wet detention” for the purposes of this chapter, means the collection and temporary storage of water in a normally wet impoundment in such a manner as to provide for treatment through physical, chemical, and biological processes with subsequent gradual release of the water.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.019, 373.403,

373.416 FS. History—New 8-11-91, Amended 10-20-92, 7-4-93, 10-3-95.

40C-44.031 Implementation.

(1) This chapter shall become effective on 8-11-91.

(2) Permits and consent orders which authorize operation of agricultural operations, issued by the Department of Environmental Regulation, or pending on June 1, 1991, pursuant to the provisions of former Chapter 17-6, F.A.C., renumbered as Chapters 62-660 and 62-670, F.A.C., shall remain valid after 8-11-91, subject to all limiting conditions contained therein, until final District action on a timely filed permit application made pursuant to this chapter. Ninety days prior to the expiration date of the permit or consent order, an application for the modification of a permit issued pursuant to Chapter 40C-4, F.A.C., and prior to June 1, 1988, or for a general or individual permit, as appropriate, pursuant to this chapter, must be submitted to the District.

(3) Permits and consent orders which authorize operation of agricultural operations, issued by the District or executed by all parties to the consent order by 8-11-91, pursuant to the provisions of former Chapter 17-6, F.A.C., renumbered as Chapters 62-660 and 62-670, F.A.C., and pursuant to subparagraph 62-101.040(12)(a)3., F.A.C., and the Operating Agreement Concerning Stormwater Discharge Regulation and Dredge and Fill Regulation between the St. Johns River Water Management District and Department of Environmental Regulation dated January 4, 1988, shall remain valid after 8-11-91, subject to all limiting conditions therein, until final District action on a timely filed permit application made pursuant to this chapter. Ninety days prior to the expiration date of the permit or consent order, an application for the modification of a permit issued pursuant to Chapter 40C-4, F.A.C., and prior to June 1, 1988, for a general or individual permit, as appropriate, pursuant to this chapter must be submitted to the District.

(4) Any permit application received prior to 8-11-91, will be processed and evaluated pursuant to the provisions of the chapters and Operating Agreement referenced in subsection (2) above.

Rulemaking Authority 373.044, 373.113, 373.171, 373.429 FS. Law Implemented 373.416 FS. History—New 8-11-91, Amended 10-20-92, 11-11-03.

40C-44.041 Permits Required.

(1) Unless expressly exempt by Section 373.406, F.S., or Rule 40C-4.051 or 40C-44.051, F.A.C., a permit is required under this chapter for the maintenance and operation of existing agricultural surface water management systems which serve an agricultural operation as described in paragraph (a) or (b) below.

(a) An individual or standard general environmental resource agricultural system permit is required for the maintenance and operation of existing agricultural surface water management systems which incorporate pumped discharges from stationary or portable facilities as part of the surface water management system and which have pumps with a capacity, either individually or cumulatively, of 10,000 gallons per minute (GPM) or greater. The pump operator or person in control of the pump is required to obtain the maintenance and operation permit.

(b) Case by case designation. Notwithstanding any other provision of this section, the District shall require that an agricultural operation, including pumped or gravity-drained systems, obtain an individual environmental resource agricultural system permit pursuant to this chapter or modification of a permit issued pursuant to Chapter 40C-4, F.A.C., if it causes or contributes to a violation of state water quality standards within waters of the state. In determining whether

an individual permit is required under these circumstances, the District will consider the following information;

1. Water quality monitoring data collected by the District or other agency;
2. The size of the agricultural operation and the amount of stormwater and associated wastewater reaching waters of the state, relative to the size and nature of the immediate drainage basin;
3. The means of conveyance of stormwater and associated wastewater to waters of the state;
4. Characteristics of the site including the slope, vegetation, rainfall, and other factors relating to the likelihood or frequency of discharge of stormwater and associated wastewater to waters of the state;
5. The status, results and recommendations of available basin-specific studies, including those conducted as part of a Surface Water Improvement and Management Plan or pursuant to Chapter 62-40, F.A.C.;

6. The existence of mixing zones, variances or site specific alternative criteria granted by the Department of Environmental Protection pursuant to Chapters 62-4 and 62-302, F.A.C.; and

(2) Unless expressly exempt by Section 373.406, F.S., or Rule 40C-4.051 or 40C-44.051, F.A.C., an environmental resource agricultural system permit must be obtained for the construction, maintenance and operation of new agricultural surface water management systems, or alteration of existing systems, which drain an agricultural area greater than 2 acres and are not required to obtain a permit pursuant to Chapter 40C-4 or 40C-40, F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171, 373.406, 373.416, 373.418 FS. Law Implemented 373.409, 373.416 FS. History—New 8-11-91, Amended 10-20-92, 7-4-93, 10-3-95.

40C-44.051 Exemptions.

The following types of agricultural surface water management systems are exempt from the permit requirements of this chapter:

(1) Concentrated Animal Feeding Operations with a valid permit issued by the Department of Environmental Protection pursuant to Chapter 62-670, F.A.C., provided that:

(a) For dairy farms, the permitted design incorporates a high intensity use area, from which the stormwater runoff is centrally collected for storage and disposal by land application, or is treated prior to discharge.

(b) For egg production facilities, the permitted design prevents the discharge of process wastewater and stormwater runoff to surface waters, except in the event of a storm greater than a 25 year, 24 hour event.

(c) For any concentrated animal feeding operation which does not incorporate a high intensity use area, the permitted design includes provisions to treat stormwater and associated wastewater from adjacent animal loafing and feeding areas; manure pits; animal watering systems; washing, cleaning or flushing pens; or other pollutant sources, so that discharges through the surface water management system from the operation will not cause or contribute to a violation of water quality standards in waters of the state.

(2) Animal Feeding Operations, which do not discharge except in the event of a storm greater than a 25 year, 24 hour event and therefore are not Concentrated Animal Feeding Operations pursuant to Chapter 62-670, F.A.C.

(3) Privately owned or operated agricultural surface water management systems lying within the boundaries of an active water control district which has been formed and operated in

accordance with Chapter 298, F.S., or a special district or improvement district created under Florida law which has the power to construct, operate and maintain agricultural surface water management systems, and which district has obtained or elected to obtain a permit pursuant to the requirements of Chapter 40C-44, F.A.C., or has obtained a permit or consent order as stated in Rule 40C-44.031, F.A.C. No exemption is implied or expressed here for any permits required by any other rule within Chapter 40C, F.A.C., or the water control district or special district.

(4) Agricultural surface water management systems which are required to obtain a permit pursuant to subsection 40C-44.041(2), F.A.C., to implement one or more of the following practices under the District's Best Management Practices Cost-Sharing Program: SJ1 (Backflow Prevention), SJ5 (Pump Platform Fuel and Oil Containment) or SJ6 (Pesticide Mixing and Storage Area Containment).

(5) Minor alterations, as defined in subsection 40C-44.071(3), F.A.C., of new or existing agricultural surface water management systems permitted under this chapter, Chapter 40C-4 or 40C-40, F.A.C.

(6) Agricultural surface water management systems which are required to obtain a permit pursuant to subsection 40C-44.041(2), F.A.C., provided they have a valid permit issued pursuant to Chapter 40C-2, F.A.C., which requires that they obtain a Conservation Plan, as defined in subsection 40C-44.021(4), F.A.C., implement the Conservation Plan within 180 days of permit issuance, and maintain the Conservation Plan.

Rulemaking Authority 373.044, 373.113, 373.171, 373.418 FS. Law Implemented 373.406, 373.416 FS. History—New 8-11-91, Amended 10-20-92, 10-3-95.

40C-44.055 Standard General Environmental Resource Agricultural System Permits.

The following types of agricultural surface water management systems, should they require a permit pursuant to subsection 40C-44.041(1), F.A.C., will qualify for a standard general environmental resource agricultural system permit which shall be processed pursuant to the procedures set forth in Chapter 40C-40, F.A.C., provided they comply with the criteria specified in Rule 40C-44.301, F.A.C.:

(1) Agricultural surface water management systems which are required to obtain a permit pursuant to subsection 40C-44.041(1), F.A.C., provided that they have obtained a Conservation Plan, pursuant to subsection 40C-44.021(4), F.A.C., implement the Conservation Plan within 180 days of permit issuance, and maintain the Conservation Plan.

(2) Agricultural surface water management systems which are required to obtain a permit pursuant to subsection 40C-44.041(1), F.A.C., and which have been authorized pursuant to paragraph 40C-44.031(1)(a) or (b), F.A.C., provided they:

(a) Continue to maintain and operate the surface water management system, and associated treatment system, as previously permitted or authorized by consent order, and

(b) Demonstrate compliance with the performance standards described in Rule 40C-44.065, F.A.C., based upon data collected in compliance with monitoring conditions. If the District staff determines that the compliance monitoring data does not demonstrate compliance with the performance standards, staff will notify the applicant, in writing, of the specific pollutant or pollutants for which treatment will be required in order to obtain an individual permit.

(3) Minor alterations, as defined in subsection 40C-44.071(3), F.A.C., provided the applicant provides reasonable assurance, through plans, test results or other information, that the alteration complies with subsection 40C-44.071(2), F.A.C.

(4) Surface water management systems which drain an agricultural operation of less than 120 acres, which do not contain a concentrated animal feeding operation, which implement a Conservation Plan, pursuant to subsection 40C-44.021(4), F.A.C., within 180 days of permit issuance, and which maintain the Conservation Plan, provided the permittee satisfies the following monitoring conditions:

(a) The permittee must maintain hour meters, in operating order, on each drainage pump. If the hour meters are not installed at the time of permit issuance, they must be installed within 60 days of the issuance of the permit. Reports of pump operating hours for each pump must be submitted to the District quarterly, using forms provided in the Applicant's Handbook: Agricultural Surface Water Management Systems.

(b) The permittee must maintain a staff gauge, referenced to NGVD, in each detention pond. If the staff gauges are not installed at the time of permit issuance, they must be installed within 60 days of the issuance of the permit. Water levels must be recorded a minimum of 3 nonconsecutive days per week, or as an alternative, once a week and daily during pump operation. Reports of water levels for each pond must be submitted quarterly to the District using forms provided in the Applicant's Handbook: Agricultural Surface Water Management Systems.

(c) The permittee must monitor the water quality on a quarterly basis at each discharge point from pumps or pond outfalls to waters of the state. If no discharge has occurred during a particular quarter, no sampling is required. Water samples must be analyzed for the parameters listed in Table 1. Samples must be analyzed by a laboratory certified by the Florida Department of Health and Rehabilitative Services.

(d) If, after five years of water quality monitoring, the permittee demonstrates that the data collected represents steady state conditions and is adequate to project future compliance with state water quality standards, the District shall amend the monitoring conditions by reducing the frequency of monitoring or the number of parameters monitored, or eliminating such requirements.

(e) If, after five years of water quality monitoring, the District notifies the permittee in writing that discharges from the surface water management system have not complied with the performance standards described in subsections 40C-44.065(1) and (2), F.A.C., then the permittee must apply for an individual permit.

(5) Surface water management systems which drain an agricultural operation which do not contain a concentrated animal feeding operation, provided they have obtained a Conservation Plan, pursuant to subsection 40C-44.021(4), F.A.C., implement the Conservation Plan within 180 days of permit issuance, and maintain the Conservation Plan, and which have not been issued a permit or consent order which authorized operation as described in paragraph 40C-44.031(1)(a) or (b), F.A.C., provided the permittee satisfies the monitoring conditions described below:

(a) The permittee must maintain hour meters, in operating order, on each drainage pump. If the hour meters are not installed at the time of permit issuance, they must be installed within 60 days of the issuance of the permit. Reports of pump operating hours for each pump must be submitted to the District quarterly, using forms provided in the Applicant's Handbook: Agricultural Surface Water Management Systems.

(b) The permittee must maintain a staff gauge, referenced to NGVD, in each detention pond. If the staff gauges are not installed at the time of permit issuance, they must be installed within 60 days of the issuance of the permit. Water levels must be recorded a minimum of 3 nonconsecutive days per week, or as an alternative, once a week and daily during pump operation. Reports of water levels for each pond must be submitted quarterly to the District using

forms provided in the Applicant's Handbook: Agricultural Surface Water Management Systems.

(c) The permittee must monitor the water quality on a quarterly basis at each discharge point from pumps or pond outfalls to waters of the state following implementation of the Conservation Plan or within 180 days of permit issuance, whichever occurs sooner. If no discharge has occurred during a particular quarter, no sampling is required. Water samples must be analyzed for the parameters listed in Table 1. Samples must be analyzed by a laboratory certified by the Florida Department of Health and Rehabilitative Services.

(d) If, after five years of water quality monitoring, the permittee demonstrates that the data collected represents steady state conditions and is adequate to project future compliance with state water quality standards, the District shall amend the monitoring conditions by reducing the frequency of monitoring or the number of parameters monitored, or eliminating such requirements.

(e) If, after one year of water quality monitoring, the District notifies the permittee in writing that discharges from the surface water management system have not complied with the performance standards described in subsections 40C-44.065(1) and (2), F.A.C., then the permittee must apply for an individual permit.

Rulemaking Authority 373.044, 373.113, 373.118, 373.171, 373.406, 373.416, 373.418 FS. Law Implemented 373.406, 373.416 FS. History—New 8-11-91, Amended 10-20-92, 10-3-95.

40C-44.061 Individual Environmental Resource Agricultural System Permits.

(1) Agricultural surface water management systems which are required to obtain a permit pursuant to Rule 40C-44.041, F.A.C., and which do not qualify for a standard general environmental resource agricultural system permit, are required to obtain an individual environmental resource agricultural system permit.

(2) An individual environmental resource agricultural system permit may be issued to the applicant, upon such conditions as the District may direct, only if the applicant affirmatively provides the District with reasonable assurance based on plans, test results or other information, that the construction, expansion, alteration, modification, operation or activity of the surface water management system will comply with the performance standards described in Rule 40C-44.065, F.A.C., and the criteria specified in Rule 40C-44.301, F.A.C.

(3) For existing systems, incorporation of the appropriate water quality practices, as described in Rule 40C-44.066, F.A.C., shall be presumed to provide reasonable assurance of compliance with the performance standards as described in Rule 40C-44.065, F.A.C., provided that provisions have been made for maintenance and operation of the proposed surface water management system and water quality practices pursuant to Rule 40C-44.069, F.A.C.

(4) For new systems, incorporation of the appropriate water quality practices, as described in Rule 40C-44.066, F.A.C., and installation of a surface water management system designed to provide a level of treatment and pollutant reduction so that pollutant loads discharged to surface waters of the state on an average annual basis, from a particular agricultural operation are 80% less than those from a similar operation which did not incorporate a treatment system or water quality practices, shall be presumed to provide reasonable assurance of compliance with the performance standards as described in Rule 40C-44.065, F.A.C., provided that provisions have been made for maintenance and operation of the proposed surface water management system and water quality practices pursuant to Rule 40C-44.069, F.A.C.

(5) New and existing systems which discharge to Class I, Class II, or Outstanding Florida Waters shall be required to provide an additional level of treatment to provide reasonable

assurance pursuant to subsection (2) above.

Rulemaking Authority 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law Implemented 373.416 FS. History—New 8-11-91, Amended 10-20-92, 10-3-95.

40C-44.065 Performance Standards.

(1) Discharges from the agricultural surface water management system shall not cause or contribute to a violation of water quality standards in waters of the state, as set forth in Chapters 62-3, 62-302, 62-520, 62-522, 62-550 and 62-4, F.A.C., including any antidegradation provisions of paragraphs 62-4.242(1)(a) and (b), subsections 62-4.242(2) and (3), and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in subsections 62-4.242(2) and (3), F.A.C.

(2) The surface water management system shall be designed, operated, and maintained to provide a level of treatment so that discharges will not contain more than 20 mg/l BOD or 20 mg/l of total suspended solids.

(3) In addition to subsections (1) and (2), the applicant is advised that discharges from the agricultural surface water management system will be required to comply with a waste load allocation, or a pollutant load reduction goal pursuant to Chapter 17-40, F.A.C., when said allocation or goal is adopted by District rule, such that the operation is consistent with the objectives of the District as set forth in section 9.0 of the Applicant's Handbook: Agricultural Surface Water Management Systems. Nothing herein shall be construed to exempt discharges from meeting said allocation or goal.

(4) Agricultural surface water management systems requiring a permit, which will be located in the Lake Apopka Hydrologic Basin or will discharge water to Lake Apopka or its tributaries, must comply with the requirements of subsection 40C-41.063(8), F.A.C.

(5) Agricultural surface water management systems requiring a permit that will be located in the Wekiva Recharge Protection Basin must comply with the requirements of paragraph 40C-41.063(3)(a), F.A.C., and Section 11.3.1, Applicant's Handbook: Management and Storage of Surface Waters.

Rulemaking Authority 369.318, 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law Implemented 369.318, 373.016, 373.413, 373.416, 373.418, 373.426, 373.461 FS. History—New 8-11-91, Amended 10-20-92, 7-4-93, 10-3-95, 3-7-03, 12-3-06.

40C-44.066 Water Quality Practices.

The practices listed below are set forth in this rule for the purpose of evaluating compliance with this chapter. It is presumed the water quality practices implemented in accordance with this section will provide reasonable assurance that the system will comply with the performance standards described in Rule 40C-44.065, F.A.C. The water quality practices or other alternatives shall be implemented to the extent necessary to comply with the performance standards described in Rule 40C-44.065, F.A.C. In some cases, the implementation of these practices may not result in compliance with the performance standards for issuance of an individual environmental resource agricultural system permit. In those cases, the applicant shall provide for implementation of such additional water quality practices and/or treatment methodologies as necessary to provide reasonable assurance that the discharge will comply with the performance standards described in Rule 40C-44.065, F.A.C.

(1) Reduce the volume of stormwater and associated wastewater discharged to waters of the state by:

(a) Implementing management practices designed to reduce the volume of water discharged off-site, including Water Table Control in Open Channels, Irrigation Land Leveling and Irrigation Water Management, and

(b) Maximizing on-site recycling to satisfy irrigation, freeze protection and pest control needs. The applicant may demonstrate maximum reuse by using all the practically available water from reservoir storage prior to using groundwater.

(2) Implement and maintain a Conservation Plan, which includes a Nutrient Management Plan and Pesticide Management Plan.

(3) Provide treatment of the pollutants generated by the agricultural operation. The treatment method required depends on the intensity of land use and associated pollutants.

(a) Wet detention ponds, designed and operated in accordance with paragraph (b) or (c) below, are presumed to satisfy the requirements of paragraphs (1)(b) and (3) for those portions of an agricultural operation described below:

1. Citrus, row crop, sod, hayland or improved pasture which discharge to Class I, Class II, or Outstanding Florida Waters, or

2. Citrus, row crop, sod, hayland or improved pasture on predominantly organic soils.

(b) Detention ponds which are part of an existing surface water management system, and which comply with following design and performance criteria are presumed to provide treatment.

1. Wet detention treatment volume is equal to the first inch of runoff.

2. The permanent pool volume provides an average residence time of 21 days during the wet season (June through October). This volume may be determined by estimating 13.82% of the wet season average runoff. The permanent pool volume should be recycled, pursuant to paragraph 40C-44.066(1)(b), F.A.C.

3. No more than half the treatment volume is drawn down in the first 60 hours following a storm event, and the entire treatment volume is drawn down within 168 hours.

4. Pond depths below the water control elevation shall not exceed an average of 5 feet or a maximum of 10 feet, unless the applicant affirmatively demonstrates that the deeper depths will not cause anaerobic conditions in the water column.

5. For ponds where interior borrow canals are likely to result in short-circuiting of flows between the inlet and outlet, the effective flow path shall be increased by adding diversion structures such as canal plugs or baffles.

(c) Detention ponds proposed as part of a new surface water management system which are designed, constructed and operated in accordance with the following design and performance criteria are presumed to provide treatment.

1. Wet detention treatment volume is equal to the first inch of runoff.

2. The permanent pool volume provides an average residence time of 21 days during the wet season (June through October). This volume may be determined by estimating 13.82% of the wet season average runoff. The permanent pool volume should be recycled, pursuant to paragraph 40C-44.066(1)(b), F.A.C.

3. No more than half the treatment volume is discharged in the first 60 hours following a storm event, but at least half of the treatment volume is discharged within 72 hours following a storm event.

4. Pond depths below the water control elevation shall not exceed an average of 4 feet or a maximum of 10 feet, unless the applicant affirmatively demonstrates that the deeper depths will not cause anaerobic conditions in the water column.

5. The treatment volume should not cause the pond level to rise more than 18 inches above the control elevation unless it is demonstrated that the littoral zone vegetation can survive at greater depths and that the pond area ratio (drainage area/pond area) is still sufficient to provide adequate treatment.

6. The pond design shall incorporate a littoral zone or an alternate method to promote sedimentation. Littoral zone shall be gently sloped (6:1 or flatter) to a point 2-3 feet below the bleed-down or control elevation and extend to the top of the treatment volume. The littoral zone and vegetation should be concentrated at the inflow (adjacent to the sump, if required) and at the outfall.

7. The alignment and location of inlets and outlets shall be designed to maximize flow paths in the pond. The pond shall have a length to width ratio of a minimum of 2:1. If short flow paths are unavoidable, the effective flow path should be increased by adding diversion barriers such as islands, peninsulas or baffles to the pond. Inlet structures should be designed to dissipate the energy of water entering the pond. Pumped inflows must provide a sump to promote sedimentation and reduce water velocities.

8. Pond design must include permanent access for maintenance.

9. The bleed-down orifice invert elevation shall be at or above the estimated wet season water table elevation. If the orifice is proposed to be set below the wet season water table elevation, groundwater inflow must be considered in orifice drawdown calculations, calculation of average residence time, and estimated normal water level. For ponds with pumped inflows, the applicant must demonstrate that the water table of wetlands within the drainage area will not be significantly lowered.

(d) Other water quality practices in lieu of wet detention, such as overland flow, vegetative filters and detention in isolated wetlands, are presumed to satisfy the requirements in subsection (3) for low intensity agricultural operations such as rough or semi-improved pasture, when the practice(s) is designed, operated and maintained using accepted engineering principles.

(e) Agricultural surface water management systems may incorporate overland flow, vegetative filters and detention in isolated wetlands as water quality practices. Existing canals and conveyance systems may be incorporated into a wet detention treatment system, when appropriate. The applicant must provide reasonable assurance, through plans, test results or other information, that the practice will provide an adequate level of treatment to meet the performance standards above.

(4) Applicants who propose to satisfy the performance standards in Rule 40C-44.065, F.A.C., by employing a treatment methodology or device other than those described in subsections 40C-44.066(1) through 40C-44.066(3), F.A.C., may seek approval for an equivalent alternative through the District's individual permit process. The applicant must provide reasonable assurance, through plans, test results or other information, that the alternative will provide an adequate level of treatment to meet the performance standards above.

Rulemaking Authority 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law Implemented 373.016, 373.416 FS. History—New 8-11-91, Amended 10-20-92, 10-3-95.

40C-44.069 Maintenance and Operation Requirements.

(1) The permittee is required to provide for periodic inspections of the surface water management system to insure that the system is functioning as designed and permitted.

(2) The following operational maintenance activities shall be performed on all permitted systems on a regular basis or as needed:

- (a) Removal of trash and debris from the surface water management system;
- (b) Inspection of culverts, culvert risers, pipes and screwgates for damage, blockage, excessive leakage or deterioration;
- (c) Inspection of pipes for evidence of lateral seepage;
- (d) Inspection of flapgates for excessive backflow or deterioration;
- (e) Removal of sediments when the storage volume or conveyance capacity of the surface water management system is below design levels;
- (f) Stabilization and restoration of eroded areas;
- (g) Inspection of pump stations for structural integrity and leakage of fuel or oil to the ground or surface water; and
- (h) Inspection of monitoring equipment, including pump hour meters and staff gauges, for damage and operational status.

(3) The permittee shall maintain and operate the Conservation Practices contained in the Conservation Plan.

(4) In addition to the practices listed in subsection (2) above, specific operational maintenance activities are required depending on the type of permitted system as follows:

- (a) Overland flow systems shall include provisions for:
 1. Mowing and removal of clippings; and
 2. Maintenance of spreader swales and overland flow areas to prevent channelization.
- (b) Spray irrigation systems for reuse/disposal shall include provisions for:
 1. Inspection of the dispersal system, including the sprayheads or perforated pipe for damage or clogging; and
 2. Maintenance of the sprayfield to prevent channelization.
- (c) Treatment systems which incorporate isolated wetlands shall include provisions for:
 1. Stabilization and restoration of channelized areas; and
 2. Removal of sediments which interfere with the function of the wetland or treatment system.

(d) Systems in Class I waters shall include provisions for inspection and maintenance of valves for wells which discharge from an aquifer which contains greater than 250 mg/l of chloride.

(5) If the system is not functioning as designed and permitted, operational maintenance must be performed immediately to restore the system. If the operational maintenance measures are insufficient to enable the system to meet the performance standards of this chapter, the permittee must either replace the system or construct an alternative design. A permittee must apply for and obtain a modification prior to constructing such alternative design.

Rulemaking Authority 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law Implemented 373.416, 373.418 FS. History—New 10-20-92.

40C-44.071 Relationship to Other Permitting Requirements.

(1) In order to comply with the performance standards in this rule or implement water quality practices outlined in Rule 40C-44.066, F.A.C., some existing agricultural surface water management systems may require minor alterations.

(2) Alterations of existing agricultural surface water management systems, which would otherwise require permits pursuant to Rule 40C-4.041, F.A.C., will be considered minor alterations and will qualify for a standard general or individual environmental resource agricultural system permit, as appropriate, pursuant to this chapter, provided they do not increase

the peak discharge rate and total discharge volume, when applicable (Applicant's Handbook: Management and Storage of Surface Waters, Section 10.3 and 10.4), or alter off-site storage and conveyance capabilities of the water resource (Applicant's Handbook: Management and Storage of Surface Waters, Section 10.5), or adversely affect wetland functions, (Applicant's Handbook: Management and Storage of Surface Waters, Section 12.2.2) or increase the off-site pollutant loading (Applicant's Handbook: Management and Storage of Surface Waters, Section 10.7.2).

(3) The following activities, for the purposes of this rule, are presumed to be minor alterations:

(a) Regrading or reconfiguring of ditches and other conveyance systems necessary to implement a management practice recommended by a Conservation Plan, pursuant to subsection 40C-44.021(4), F.A.C., or listed in Rule 40C-44.066, F.A.C.,

(b) Installation of new internal ditches or other conveyance systems necessary to implement a management practice recommended by a Conservation Plan, pursuant to subsection 40C-44.021(4), F.A.C., or listed in Rule 40C-44.066, F.A.C.,

(c) Installation of internal water control structures necessary to implement a management practice recommended by a Conservation Plan, pursuant to subsection 40C-44.021(4), F.A.C., or listed in Rule 40C-44.066, F.A.C.,

(d) Modification or expansion of existing detention ponds within previously diked areas, provided that public safety concerns related to levee failure are addressed, no floodplain encroachment occurs, and impacts to wetlands do not require a permit pursuant to Rule 40C-4.041, F.A.C.,

(e) Construction of new detention ponds within previously diked areas, provided that public safety concerns related to levee failure are addressed, no floodplain encroachment occurs, and impacts to wetlands do not require a permit pursuant to Rule 40C-4.041, F.A.C.

(4) Whenever the alteration, modification or construction of a new or existing agricultural surface water management system requires that an environmental resource permit be secured pursuant to Chapter 40C-4 or 40C-40, F.A.C., the performance standards and water quality practices established in this chapter shall be reviewed as part of those permit applications. A separate permit application under this chapter shall not be required. However, the applicant must provide the required technical information as part of those applications to demonstrate compliance with this chapter.

(5) When a permit is required pursuant to this chapter and an individual environmental resource permit is required pursuant to Chapter 40C-4, F.A.C., for the same system, the time frames of Chapter 40C-4, F.A.C., shall apply to issuance of a permit under this chapter.

(6) If the District determines that site specific alternative criteria, as described in Rule 62-302.800, F.A.C., may be appropriate for a water body, based on the results of a basin specific study or Surface Water Improvement and Management Plan, the District will submit this documentation to the Department of Environmental Protection.

Rulemaking Authority 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law Implemented 373.416 FS. History—New 8-11-91, Amended 10-20-92, 10-3-95, 11-11-03.

40C-44.081 Permit Processing Fee.

There shall be a non-refundable permit processing fee, as specified by Rule 40C-1.603, F.A.C., payable to the District at the time that an application for a permit or for the modification or renewal of a permit is submitted.

Rulemaking Authority 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law Implemented

373.416 FS. History—New 8-11-91, Amended 10-20-92.

40C-44.091 Publications Incorporated by Reference.

(1) The Governing Board hereby adopts by reference Part I “Policy and Procedures” and Part II “Criteria for Evaluation,” of the document entitled “Applicant’s Handbook: Agricultural Surface Water Management Systems,” effective 12-27-10.

(a) The purpose of the document is to provide information regarding the environmental resource agricultural system permit program.

(b) The document may be obtained by contacting:

Director, Division of Permit Data Services
St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32177-2529.

(2) The Governing Board hereby adopts by reference the SCS Field Office Technical Guide – Section IV.

(a) The purpose of the document is to provide information regarding SCS standards, specifications and guidelines.

(b) The document may be obtained by contacting:

Director, Division of Permit Data Services,
St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32177-2529.

(3) The Governing Board hereby adopts by reference the Institute of Food and Agricultural Sciences, “Best Management Practices Selector”.

(a) The purpose of this document is to provide information regarding selecting agricultural water quality practices.

(b) The document may be obtained by contacting:

Director, Division of Permit Data Services,
St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32177-2529.

Rulemaking Authority 369.318, 373.044, 373.113, 373.118, 373.171, 373.406, 373.416, 373.418 FS. Law Implemented 369.318, 373.118, 373.406, 373.413, 373.416, 373.418, 373.426, 373.461, 373.603, 373.609, 373.613 FS. History—New 10-20-92, Amended 7-4-93, 10-3-95, 1-11-99, 4-10-02, 3-7-03, 12-3-06, 12-27-10.

40C-44.101 Content of the Application.

(1) All applications for environmental resource agricultural system maintenance and operation permits shall be processed in accordance with the procedures of Chapters 120 and 373, F.S., and Chapter 40C-1, F.A.C.

(2) Each application for an individual environmental resource agricultural system permit shall be filed on and contain the information required to be included on District form 40C-44.900(1), incorporated by reference in Rule 40C-44.900, F.A.C.

(3) Each application for a standard general environmental resource agricultural system permit shall be filed on and contain the information required to be included on District form 40C-44.900(2) or 40C-44.900(3), incorporated by reference in Rule 40C-44.900, F.A.C.

Rulemaking Authority 369.318, 373.044, 373.113, 373.171, 373.416, 373.418 FS. Law

Implemented 369.318, 373.146, 373.416, 373.461 FS. History–New 8-11-91, Amended 10-20-92, 10-3-95, 12-3-06.

40C-44.301 Conditions for Issuance of Permits.

(1)(a) To obtain a standard general or individual environmental resource agricultural system permit for operation, maintenance, removal or abandonment of a system each applicant must give reasonable assurance that such activity will not:

1. Endanger life, health, or property;
2. Be inconsistent with the maintenance of minimum flows and levels established pursuant to Chapter 40C-8, F.A.C.
3. Cause significant adverse affects to the availability of water for reasonable beneficial purposes;
4. Be incapable of being effectively operated;
5. Cause significant adverse affects to the operation of a Work of the District established pursuant to Section 373.086, F.S.;
6. Cause significant adverse affects to existing agricultural, commercial, industrial, or residential developments;
7. Cause significant adverse impacts to the quality of receiving waters;
8. Cause significant adverse affects to natural resources, fish and wildlife;
9. Increase the potential for damages to off-site property or the public caused by:
 - a. Floodplain development, encroachment or other alteration;
 - b. Retardance, acceleration, displacement or diversion of surface water;
 - c. Reduction of natural water storage areas;
 - d. Facility failure;
10. Increase the potential for flood damages to residences, public buildings, or proposed and existing streets and roadways; and
11. Otherwise be inconsistent with the overall objectives of the District as set forth in Section 9.0 of the Applicant’s Handbook: Agricultural Surface Water Management Systems.

(b) Because a system may result in both beneficial and harmful effects in terms of various individual objectives, in determining whether the applicant has provided evidence of reasonable assurance of compliance with paragraph (1)(a) above, the District shall consider a balancing of specific effects to show the system is not inconsistent with the overall objectives of the District.

(2)(a) To obtain a standard general or individual environmental resource agricultural system permit for construction, alteration, operation, or maintenance of a system, each applicant must give reasonable assurance that such activity is not harmful to the water resources by meeting the following standards:

1. Significant adverse water quantity impacts will not be caused to receiving waters and adjacent lands;
2. Surface and ground water levels and surface water flow will not be significantly adversely affected;
3. Existing surface water storage and conveyance capabilities will not be significantly adversely affected;
4. The system must be capable of being effectively operated;
5. The activity must not result in significant adverse impacts to the operation of Works of the District established pursuant to Section 373.086, F.S.; and
6. Hydrologically-related environmental functions will not be significantly adversely

affected;

(b) If the applicant has provided reasonable assurance that the design criteria specified in the Applicant's Handbook: Agricultural Surface Water Management Systems, Part II "Criteria for Evaluation" adopted by reference in subsection 40C-44.091(1), F.A.C., have been met, then it is presumed that the standards contained in paragraph (2)(a) above have been satisfied.

(3) Existing systems which are required to obtain a permit pursuant to this chapter are presumed to satisfy the conditions for issuance in subsections (1) and (2) above provided the information requested on the appropriate application form, pursuant to Rule 40C-44.900, F.A.C., is submitted and the applicant demonstrates compliance with the performance standards of Rule 40C-44.065, F.A.C. If available information indicates that the operation and maintenance of the system is inconsistent with the conditions for issuance in subsections (1) and (2) above, the District shall require additional information which demonstrates that the existing system is in compliance with the performance standards of Rule 40C-44.065, F.A.C.

Rulemaking Authority 373.016, 373.044, 373.113, 373.171, 373.406, 373.416, 373.418 FS. Law Implemented 373.016, 373.409, 373.416 FS. History— New 8-11-91, Amended 10-20-92, 7-4-93, 10-3-95.

40C-44.321 Duration of Permit.

Unless revoked or modified, the duration of a permit is permanent.

Rulemaking Authority 373.113, 373.406, 373.416, 373.418 FS. Law Implemented 373.416 FS. History—New 8-11-91, Amended 10-20-92.

40C-44.341 Revocation or Modification of Permits.

(1) The District may revoke or modify a permit in accordance with the provisions of Section 373.429, F.S., and Chapter 40C-1, F.A.C.

(2) The following shall constitute grounds for modification or revocation:

(a) Consistent noncompliance with permit conditions, or

(b) Consistent noncompliance with state water quality standards, or

(c) Noncompliance with waste load allocations, when adopted by District rule, such that the operation has become inconsistent with the objectives of the District, as set forth in section 9.0 of the Applicant's Handbook: Agricultural Surface Water Management Systems, or

(d) Noncompliance with a pollutant load reduction goal, when adopted by District rule, such that the operation has become inconsistent with the objectives of the District, as set forth in section 9.0 of the Applicant's Handbook: Agricultural Surface Water Management Systems.

Rulemaking Authority 373.044, 373.113, 373.171, 373.406, 373.416, 373.418 FS. Law Implemented 373.429 FS. History—New 8-11-91, Amended 10-20-92, 7-4-93, 12-27-10.

40C-44.900 Forms and Instructions.

The following forms and instructions are hereby incorporated by reference. They have been approved by the Governing Board and are available upon request from: District Headquarters, St. Johns River Water Management District, 4049 Reid Street, Palatka, Florida 32177-2529.

(1) Individual Environmental Resource Agricultural System Permit Application, form no. 40C-44.900(1), adopted 12-3-06.

(2) Standard General Environmental Resource Agricultural System Permit Application, form no. 40C-44.900(2), adopted 12-3-06.

(3) Standard General Environmental Resource Agricultural System Permit Application,

form no. 40C-44.900(3), adopted 10-3-95.

Rulemaking Authority 120.53(1), 369.318, 373.044, 373.113, 373.406, 373.416, 373.418 FS.

Law Implemented 120.52(16), 120.53(1), 369.318, 373.103, 373.413, 373.416, 373.461 FS.

History—New 8-11-91, Amended 10-20-92, 10-3-95, 12-3-06.