Section I
Notice of Development of Proposed Rules and Negotiated Rulemaking

NONE

Section II
Proposed Rules

WATER MANAGEMENT DISTRICTS

South Florida Water Management District

RULE NO.: RULE TITLE:
40E-63.091 Publications Incorporated by Reference
40E-63.104 EAA Basin Boundaries
40E-63.106 Works of the District within the Everglades

PURPOSE AND EFFECT: The purpose of this rulemaking is to update methods used to assess compliance with a requirement for best management practice (BMP) implementation to achieve a reduction in phosphorus load in discharges from the Everglades Agricultural Area (EAA). The update is necessary to account for completed projects that affect EAA Basin boundary data used in the calculations.

SUMMARY: These rules establish the methods used to calculate the phosphorous in discharges from the Everglades Agricultural Area (EAA) Basin, as required by the Everglades Forever Act (EFA), Section 373.4592, Florida Statutes. The EFA directs the District to assess compliance with a requirement for a 25% reduction in phosphorus load in discharges in comparison with the phosphorus levels measured during an established period prior to the BMP program being implemented. Since the rules were last amended the District has completed several construction projects, such as STA-3/4, the STA-2 expansion, the A-1 Flow Equalization Basin, and the Lake Okeechobee Diversion Project structures. These projects have resulted in new data, and basin boundary inflow and outflow points, that must be considered in these calculations. Amendments to Rules 40E-63.091, 40E-63.104, and 40E-63.106, F.A.C., will account for these projects and include hyperlinks to incorporated materials in accordance with Section 120.54(1)(i)3., F.S., and Rule 1-1.013, F.A.C.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS (SERC) AND LEGISLATIVE RATIFICATION:

The Agency has determined that this will not have an adverse impact on small business or likely increase, directly or indirectly, regulatory costs in excess of $200,000 in the aggregate within one year after the implementation of the rule. A SERC has not been prepared by the Agency.

This determination is based on the proposed amendments incorporating new data into existing statutorily mandated regulatory activities. The use of new data in the existing compliance calculations, including acreage and phosphorus loads from monitored inflow and outflow stations, are necessary because of the completion of associated construction projects. No additional regulatory costs are expected as a result of the amendments, because the permittee and District activities and requirements previously established in the rules are unchanged. The proposed changes relate to the presentation and use of data or information already required to be collected under other programs.

The Agency has determined that the proposed rule is not expected to require legislative ratification based on the statement of estimated regulatory costs or if no SERC is required, the information expressly relied upon and described herein: The District has completed the Governor's Office of Fiscal Accountability and Regulatory Reform (OFARR) the "Is a SERC Required?" form, which is available upon request. Based on the completed "Is a SERC Required?" form, the proposed rule amendments are not expected to require legislative ratification pursuant to the subsection 120.541(3), F.S.

Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RULEMAKING AUTHORITY: 373.044, 373.113, FS.

LAW IMPLEMENTED: 373.016, 373.085, 373.086, 373.451, 373.453, 373.4592, FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE DATE, TIME AND PLACE SHOWN BELOW (IF NOT REQUESTED, THIS HEARING WILL NOT BE HELD):

DATE AND TIME: March 8, 2018, beginning at 9:00 a.m.

PLACE: South Florida Water Management District, B-1 Auditorium, 3301 Gun Club Road, West Palm Beach, FL 33406

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: South Florida Water Management District Clerk's Office (800) 432-2045, ext. 6805, or (561)682-6805. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Carmela Bedregal, P.E., Section Lead, Bureau of Everglades Technical Support, Everglades Policy and Coordination Division, South Florida Water Management

District, 3301 Gun Club Road, West Palm Beach, FL 33406, telephone: (561)682-2737, email: cbedrega@sfwmd.gov. For procedures regarding the rulemaking process, contact Jan Sluth, CP, FRP, Sr. Paralegal, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33406, telephone: (561)682-6299, email: jsluth@sfwmd.gov.

THE FULL TEXT OF THE PROPOSED RULE IS:

40E-63.091 Publications Incorporated by Reference.

(1) "Appendix A1 – Description: Regulated Portion of Everglades Agricultural Area ~~S-5A, S-6, S-7 and S-8~~ Basins Palm Beach, Broward and Hendry Counties", dated [to be determined] ~~January 2001,~~ [HYPERLINK].

(2) "Appendix A2 – No Change.

(3) "Appendix A3 – EAA Basin Compliance", dated [to be determined] ~~January 2001~~, [HYPERLINK], and setting forth the procedures the District will follow to determine whether the entire EAA Basin has met the applicable total Phosphorus reduction goals based upon mathematical data analysis.

(4) "Appendix A3.1 – FORTRAN Program for Calculating EAA Basin Flows and Phosphorus Loads", dated [to be determined] ~~January 2001,~~ [HYPERLINK].

(5) "Appendix A3.2 – Flow Computation Methods Used to Calculate EAA Basin Flows", dated [to be determined] ~~January 2001~~, [HYPERLINK], providing applicable mathematical formulas for calculating flow rates through water management structures.

(6) "Appendix A4 – EAA Basin Farm Scale Allocation", dated [to be determined] ~~January 2001~~, [HYPERLINK], setting forth the procedure the District will follow to regulate total Phosphorus loads from individual farms when the EAA Basin has been determined to be not in compliance with applicable requirements.

(7) "Appendix A5" – No Change.

(8) "Appendix A6" – No Change.

(9) South Florida Water Management District Form 0779, dated January 2001, entitled "Application for a Works of the District Permit".

(10) "South Florida Water Management District Guidance for Preparing an application for "A Works of the District" Permit in the Everglades Pursuant to Chapter 40E-63, F.A.C." – No Change.

(11) The documents listed in subsections (1) through (10) are ~~hereby~~ incorporated by reference herein~~, are published by the District~~ and are available at no cost by contacting the South Florida Water Management District Clerk, ~~on the District's website (sfwmd.gov) or from the District at~~ 3301 Gun Club Road, West Palm Beach, FL 33406, (800) 432-2045, ext. 6805 or (561) 682-6805 ~~686-8800, upon request~~.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.016, 373.451, 373.453, 373.4592 FS. History–New 7-3-01, Amended _____.

40E-63.104 EAA Basin Boundaries.

(1) The Everglades Protection Area is generally described as: Water Conservation Areas 1, 2A, 2B, 3A and 3B, the Arthur R. Marshall Loxahatchee National Wildlife Refuge, and the Everglades National Park. It is depicted on maps and legally described in "Appendix A1," which is incorporated by reference in Rule 40E-63.091, F.A.C. ~~of Chapter 40E-63, F.A.C., which is published by reference and incorporated into this chapter~~.

(2) The EAA is generally described as:

(a) the area including, but not limited to, the drainage basins of S-2, S-3, S-5A, S-6, S-7, S-8 and S-150. The EAA is depicted on maps and legally described in "Appendix A1," which is incorporated by reference in Rule 40E-63.091, F.A.C.; and ~~of Chapter 40E-63, F.A.C.~~

(b) The Everglades Construction Project diversion basins, consisting of the areas within the boundaries of the South Florida Conservancy District, South Shore Drainage District, East Shore Water Control District, East Beach Water Control District, and Closter Farms (also known as 715 Farms or the lessee of agricultural lease number 3420). These basins previously released stormwater to Lake Okeechobee, but stormwater was redirected as new releases to Works of the District within the Everglades under Rule 40E-63.108, F.A.C., when the diversion projects were completed. The Everglades Construction Project Diversion Basins are depicted on maps and described in "Appendix A1," which is incorporated by reference in Rule 40E-63.091, F.A.C.

(3) The areas described in subparagraphs (2) (a) and (b) are regulated under Part I of this Chapter and are included in calculating phosphorus load reductions as set forth in "Appendix A3" and "Appendix A4," which are incorporated by reference in Rule 40E-63.091, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.016, 373.085, 373.086, 373.451, 373.453, 373.4592 FS. History–New 1-22-92, Amended 7-3-01, _____.

40E-63.106 Works of the District within the Everglades.

The ~~following~~ Works of The District within the Everglades Agricultural Area Basin include ~~are or have been used for calculating compliance with the phosphorus load reduction objectives of the Everglades program~~: S-2, S-3, S-5A, S-6, S-7, S-8, S-150, G-88, G-136, G-200, G-344A, G-344B, G-344C, G-344D, G-349B, G-350B, G-357, G-404, G-410, G-402-A, G-402-B, G-402-C, G-402-D, G-605, G-606, Miami Canal, North New River Canal, Hillsboro Canal, C-51 (at both current and ultimate discharge locations into the Everglades Protection

Area), and their open channel connections. The Works of the District and other structures which are or have been used for calculating compliance with the phosphorus load reduction objectives of the Everglades program are set forth in "Appendix A3," which is incorporated by reference in Rule 40E-63.091, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.016, 373.085, 373.086, 373.451, 373.453, 373.4592 FS. History–New 1-22-92, Amended 7-3-01, _____.

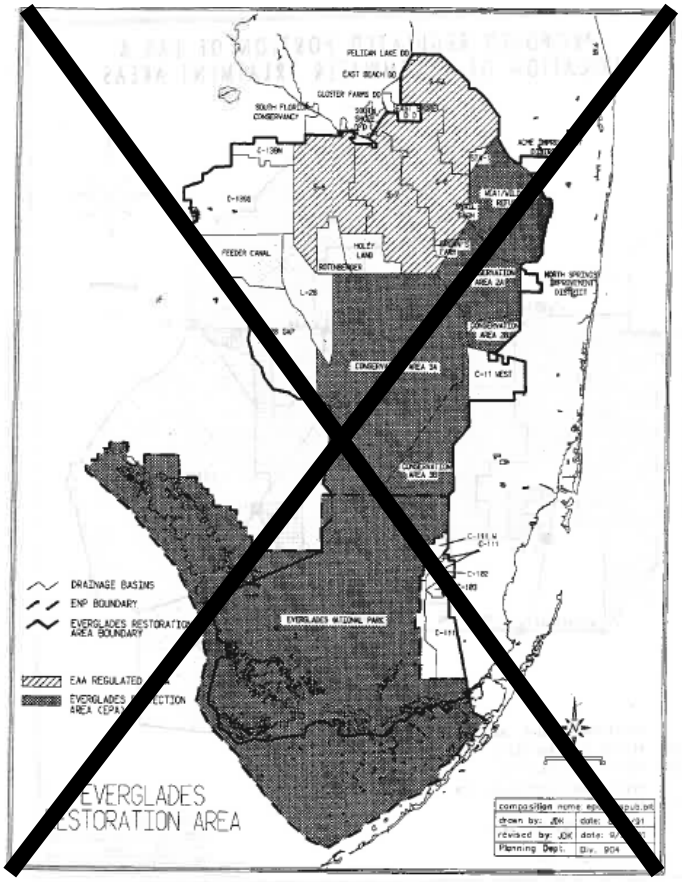


FIGURE 40E-63-1

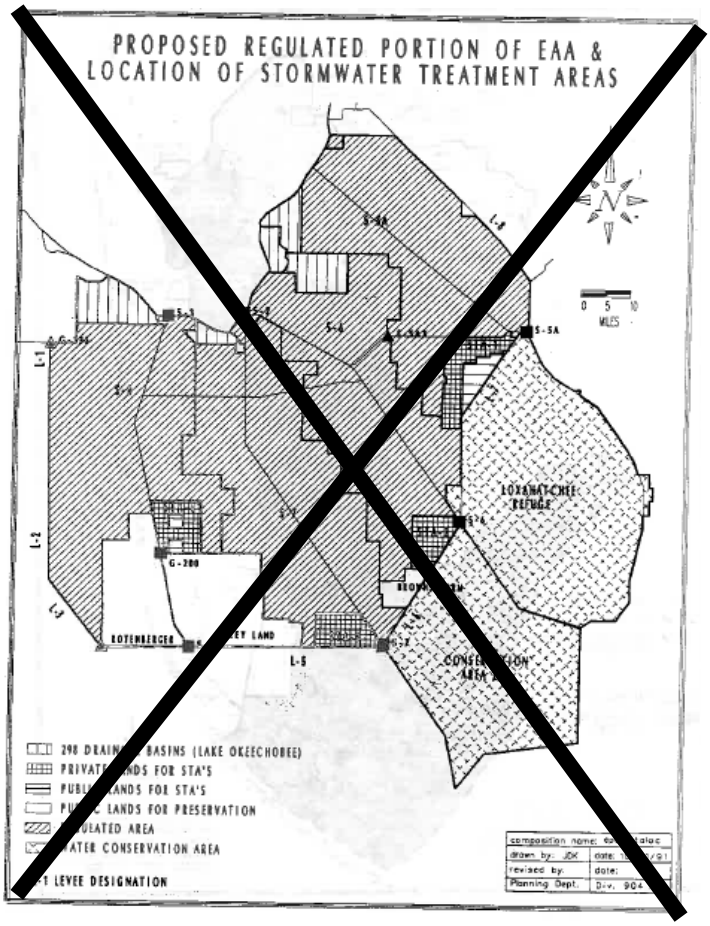


FIGURE 40E-63-2

APPENDIX 40E-63-3
BASIN COMPLIANCE

INTRODUCTION

This Appendix sets forth the procedures the District will follow in the future to determine whether the entire EAA Basin has met the goal of reducing total phosphorus (TP) discharges by 25 percent, under any set of hydrologic conditions that could arise, after installation of farm-level BMPs. The determination requires calculation of future TP load leaving the structures bordering the EAA (location shown in Figure 40E-63-4 and listed in Table 40E-63-1). The load will also include phosphorus carried into Lake Okeechobee through any pumping when this occurs. It also requires the adjustment for bypass-through flows released from Lake Okeechobee to the Everglades Water Conservation Areas and the Lower East Coast.

Load is the amount of phosphorus carried past a monitoring point by the movement of water. Data on water quality concentration and water quantity (flow) are required to calculate the phosphorus load discharged from a monitoring point. Data on water quality and quantity at the EAA structures are available from several sources — the District, the U.S. Army Corps of Engineers, and the U.S. Geological Service. Several methods of collecting the data are also used. Accordingly, the best method of data collection and source of data to use in a load calculation must be identified.

The water quality and quantity collection sources and methods currently available are described below. These methods are improved continuously as new equipment becomes available and technology improves. However, existing methods of data collection are continued concurrently with the new methods for a substantial period of time. When the District reports the results of its determination of whether the EAA Basin has reduced total phosphorus load by 25% for the period of May 1 — April 30, annually beginning in 1996, the sources and methods of data collection used in the calculation will be described and available for inspection. Any changes in methods from the prior year will be specified. Substantially affected persons will have an opportunity to request an administrative hearing. The District shall incorporate permanent changes in methods into this Appendix periodically through Chapter 120, Florida Statutes, rulemaking proceedings.

The load calculations involve detailed procedures, which have been automated by a computer program in FORTRAN language. A flow chart of the program is shown in Figure 40E-63-3. The methods and equations used in the program are outlined in Appendix 40E-63-3A, which is published by reference and incorporated into this Chapter. They are also available on diskette.

DATA COLLECTION SOURCES AND METHODS

Water Quantity Flows

The South Florida Water Management District and the U.S. Geological Survey compute flow at all the major water control structures in the Everglades Agricultural Area. Water control structures include pumps, gated spillways, and gated culverts. Pump stations S-2, S-3, and S-6 allow water to flow in the opposite direction of pumping by siphoning. All pump stations except S-6 have an adjacent gated spillway.

SFWMD uses various methods to compute flow at control structures. Flow at pump stations is calculated using discharge rating equations provided by the pump manufacturer and calibrated by discharge measurements. Flow at gated spillways is calculated using formulas derived by the Corps of Engineers from the Bernoulli equation. Discharge through culverts is calculated using standard equations for weir flow, orifice flow, pipe flow, and open channel flow. Flow computation methods are outlined in Appendix 40E-63-3B, which is published by reference and incorporated into this Chapter.

The SFWMD obtains field measurements of stage and control operations through various means. Real-time stage and control operations data are collected via the telemetry system. Analog data is obtained from chart recorders. Digital data are provided by punch tapes and solid state data loggers. Pump station operators log readings of stage and control operations hourly during pumping operations. In addition, staff gauge readings, gate opening measurements, and flashboard elevation measurements are conducted by field personnel who routinely visit unmanned structures.

The SFWMD's hydrologic database stores multiple flow data sets at each structure. Each flow data set is created using a unique combination of sources of stage and control operations data. The USGS publishes one set of flow data for each structure. If convenient, the USGS presents combined flow data from different locations. The SFWMD uses the USGS's data as well as its own data to perform water budget analyses and estimation techniques to obtain a "preferred" flow data set at each structure. Table 40E-63-1 shows all the flow data sets available in the SFWMD's hydrologic database (DBHYDRO).

Water Quality

A water sample collected in the field is called a "raw water sample", in differentiation with a "water sample" used in the chemistry laboratory. Current raw water sample collecting methods at different structures are listed in Table 40E-63. All raw water samples collected in EAA in the future for compliance will be collected by automatic sampler. Automatic samplers will be programmed to take flow proportional composite samples. Where on-site real-time flow computation is impossible, time proportional composite samples will be taken. Grab samples will also be continued until relationships between results from automatic and manual methods has been sufficiently established. After that time, grab samples will be taken when autosamplers are not functioning, or when necessary for other purposes.

Only a portion of a well-mixed raw water sample is used as a water sample in actual quantitative analysis of a given water quality parameter. The chemical analysis is performed by a certified laboratory using accepted standard methods. In case of change of laboratories or analytical methods, concurrent analyses shall be done until correlation between them can be established. Water quality parameters are identified by structure and collection source, project code, sample date, and serial number of the sample. The data are stored in data base WQDMAIN.

Data Upgrades

There are three ways in which the quality and reliability of District flow data are being improved: (1) establishment of single time series of flow for each station from multiple sources of stage and control operations data, (2) verification and calibration of flow equations through intensified discharge measurements at all major EAA structures, and (3) operation of AVM systems for future use as an additional source of flow data.

Efforts are currently under way to establish a single time series of flow data calculated at each flow station. A prioritization of sources of stage and control operations data will be established for each flow station. Flow will be computed from the highest ranking sources. When the highest ranking source of data is missing, the next highest source will be used and so on. This method will ensure the calculation of the best flow values from all sources and will minimize missing data.

Stream gauging is being intensified to provide discharge measurements at all major EAA structures. Statistical analysis are under way to verify or calibrate the discharge rating equations. The upgrading of stream gauging equipment, including a portable acoustic low velocity meter, as well as improved measuring techniques will ensure valuable field measurements. Statistical analysis and calibration of rating equations will continue to increase the accuracy of the calculated flow values.

AVM systems are in place at most major EAA structures. Calibration of these systems is being performed by the USGS. When these systems are satisfactorily calibrated, the data will be used to verify the District's flow computations. If these systems prove to be highly reliable and accurate, they may provide the highest ranking source of flow data for the prioritization of single time series.

If any upgrades in water quality sampling are undertaken in the future, concurrent samples will be taken by the existing methods to maintain data continuity, at least until the upgraded methods have been tested and documented reliable.

DETERMINATION OF COMPLIANCE WITH 25% REDUCTION OF TOTAL PHOSPHORUS LOAD

The future TP load will be evaluated for compliance with the 25% TP load reduction requirement years as of April 30, a date which corresponds generally with the change from the dry to the wet rainfall periods. Hydrology, that is discharge and rainfall, are dominant factors when computing TP loads. Because rainfall and stream flow are subject to large temporal and spatial variations in south Florida, the evaluation for compliance adjusts the TP load for hydrologic variability. Otherwise, the hydrologic variability could be large enough to obscure the effectiveness of BMPs to reduce TP loadings.

The adjustment for hydrologic variability includes two components:

1. A model to estimate future TP loads. The model estimates a future TP load of the EAA Basin by substituting future hydrologic conditions for the conditions that occurred during a base period (water years 1978—1988). The estimation is based on hydrologic data collected from any future time period of May 1 — April 30. The estimation incorporates a calculation for the required 25% TP load reduction.

2. Accommodation for possible statistical error in the model by specifying a required level of statistical confidence in the prediction of the long-term average TP load. The 90th percentile confidence level was selected as reasonable.

Evaluation of the EAA Basin for compliance with the 25% TP load reduction requirement will be based upon the following:

1. If the actual measured TP loading from the EAA Basin in a future May 1 — April 30 period is less than the model TP load estimate (Target), then the EAA Basin will be determined to be "In Compliance", that is, have met the 25% TP load reduction requirement. After completion of the STAs, the actual percentage of the base period TP load which must be met to be determined "In Compliance" will be reduced to reflect land taken out of agricultural production. However, the average unit area reduction required will be the same, with pre- and post-STA completion.

2. If the actual measured loading from the EAA Basin exceeds the model TP load estimate (Target) in 3 or more consecutive May 1 — April 30 periods, then the EAA Basin will be determined to be "Not In Compliance" — that is it will not have met the 25% load reduction requirement. If the Target is exceeded in a May 1 — April 30 period, and the District determines that the adjusted rainfall for the period exceeds 63.76 inches, the Target will be suspended and the EAA Basin will not be determined to be "Not In Compliance" for that period only. Any periods in which the Target is suspended will be excluded from the determination of whether the Target has been exceeded in 3 or more consecutive May 1 — April 30 periods, that is, the EAA Basin will be determined to be "Not In Compliance" when the Target is exceeded for 3 May 1 — April 30 periods, without an intervening May 1 — April 30 period in which the EAA Basin has been determined to be "In Compliance", even though the three periods may be interrupted by periods of suspension.

3. If the actual measured TP loading from the EAA Basin exceeds the upper 90% confidence limit of the Target (Limit) in any May 1 — April 30 period, the EAA Basin will be determined to be "Not In Compliance", that is it will not have met the 25% load reduction requirement. If the Limit is exceeded in a May 1 — April 30 period, and the District determines that the adjusted rainfall for the period exceeds 63.76 inches, the Limit will be suspended and the EAA Basin will not be determined to be "Not In Compliance" for that period only.

4. A determination of suspension under paragraphs 2. and 3. above and a Notice of Rights to petition for a hearing under Section 120.57, Florida Statutes, and Section 373.114, Florida Statutes, shall be published in the Florida Administrative Weekly.

5. The Target and Limit will be calculated according to the following equations and explanation:

To reflect the required 25% reduction, TP loads are multiplied by 0.75 before performing the following regression:

$$\ln(L) = -7.998 + 2.868\,X + 3.020\,C - 0.3355\,S$$

[Explained Variance = 90.8%, Standard Error of Estimate = .183]

Predictors (X, C, S) are calculated from the first three moments (m_1, m_2, m_3) of the 12 monthly rainfall totals (r_i, i = 1, 12, inches) for the current year:

m_1 = Sum $[r_i]/12$

m_2 = Sum $[r_i - m_1]^2/12$

m_3 = Sum $[r_i - m_1]^3/12$

$X = \ln(m_1)$

$C = [(12/11) m_2]/m_1$

$S = (12/11)\, m_3/m_2$

where,

L = 12-month load attributed to EAA Runoff, reduced by 25% (metric tons)

X = natural logarithm of 12-month total rainfall (inches)

C = coefficient of variation calculated from 12 monthly rainfall totals

S = skewness coefficient calculated from 12 monthly rainfall totals

The first predictor (X) indicates that load increases approximately with the cube of total annual rainfall. The second and third predictors (C & S) indicate that the load resulting from a given annual rainfall is higher when the distribution of monthly rainfall has greater variance or lower skewness. For a given annual rainfall, the lowest load occurs when rainfall is evenly distributed across months and the highest load occurs when all of the rain falls in one month. Real cases fall in between.

Compliance will be tracked by comparing the measured EAA Load with:

Target = exp [−7.998 + 2.868 X + 3.020 C − 0.3355 S]

Limit = Target exp (1.476 SE F)

SE = .1833 [1 + 1/9 + S_m^2/6 + (X − X_m)² + 17.613 (C − C_m)² + 0.5309 (X − X_m)(C − C_m) + 8.439 (X − X_m)² + 8.439 (X − X_m) (C − C_m) − 1.28 (X − X_m) (S − S_m) − 3.058 (C − C_m) (S − S_m) + S_m^2)]$^{1/2}$

where,

m = subscript denoting average value of predictor in base period (X_m = 3.866, C_m = 0.7205, S_m = 0.7339)

Target = predicted load for future rainfall conditions (metric tons/yr)

Limit = upper 90% confidence limit for Target (metric tons/yr)

SE = standard error of predicted ln(L) for May — April interval

F = factor to adjust variations in model standard error as a function of month (last in 12-month interval), calculated from base period:

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1.975	1.609	1.346	1.000	1.440	1.238	1.321	2.045	2.669	2.474	2.420	2.2

Figure 40E-63-3

Flowchart - Calculation of EAA Basin Phosphorus Loads

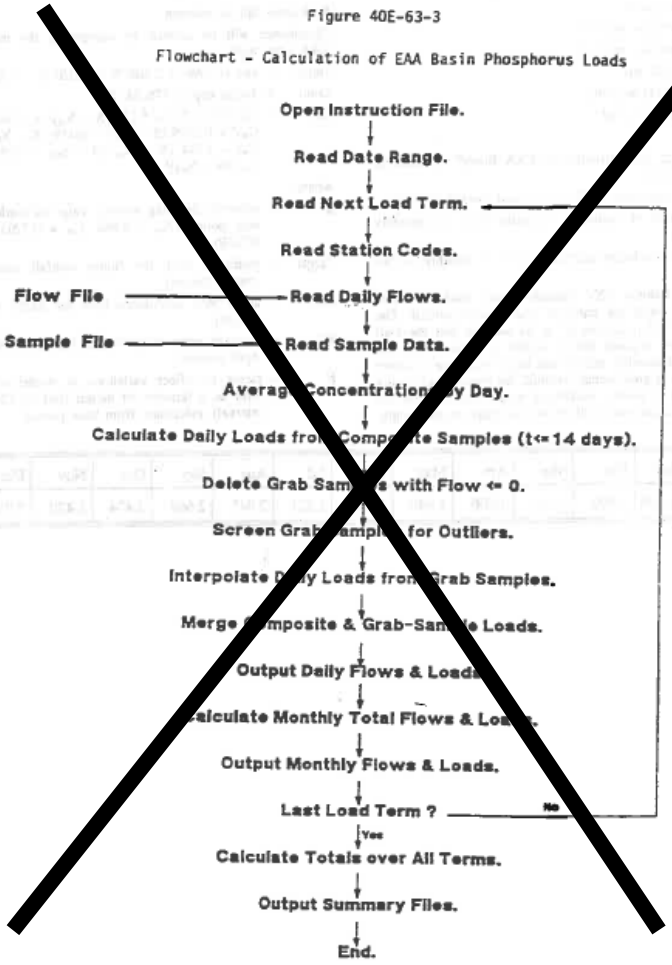
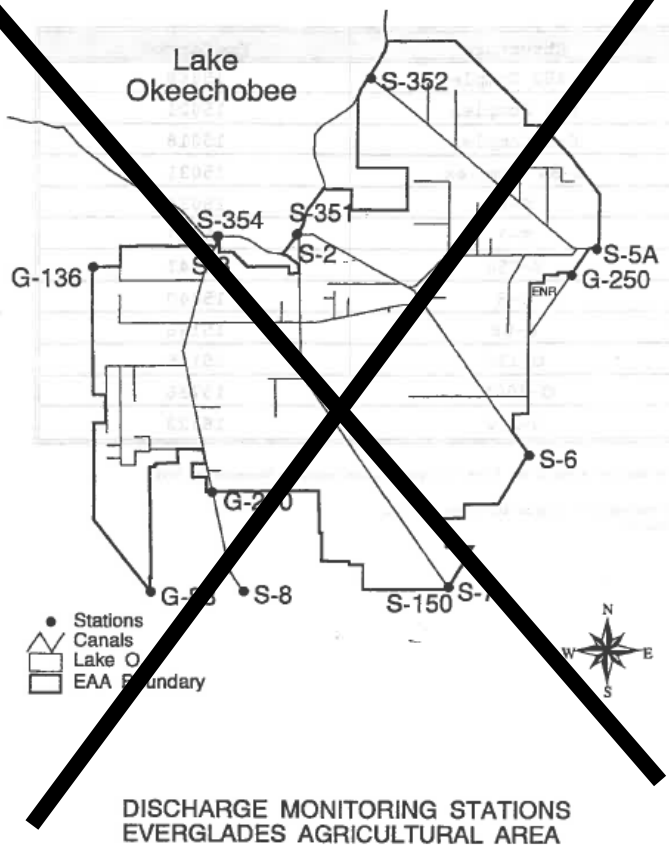


Figure 40E-63-4



DISCHARGE MONITORING STATIONS
EVERGLADES AGRICULTURAL AREA

TABLE 40E-63-1. DATABASE KEYS TO FLOW DATA TIME SERIES

Structure	Preferred
-352 Complex	15068
S- Complex	1502
S-3 Complex	818
S-5A Compl	15031
S-6	15034
S-7	15037
S-150	15041
S-8	15040
G-88	15196
G- 6	15 5
-200A[a]	15736
G-250	16222

[a] New, data time series for the Holey Land pump station begins on November 25, 1991

The reference numbers in the table are keys to the data sets, known as "dbkeys".

TABLE 40E-63-2 CURRENT WATER QUALITY SAMPLING METHODS

Structure	Collection Site	Instrument
S-352	GRAVITY	G
S-2	PUMP	A
	GRAVITY	G
S-3	PUMP	
	GRAVITY	A
S-5A Complex	PUMP	A
	GRAVITY	G
S-6	PUMP	A
	GRAVITY	G
S-7	PUMP	A
	GRAVITY	G
S-150	GRAVITY	G
S-8	PUMP	A
	GRAVITY	G
G-[illegible]	GRAVITY	G
G136	GRAVITY	A
G-200A	GRAVITY	
G-250	PUMP	A

G = grab sample primary method
A = automatic sampler primary method, grab sample back-up

APPENDIX 40E-63-4
FARM SCALE ALLOCATION

This appendix sets forth the procedure the District will follow in the future to regulate total phosphorus (TP) loads from individual farms when the EAA Basin has been determined to be Not In Compliance with the Target or Limit according to the procedures set forth in Appendix 40E-63-3.

1. Individual permittees may participate in an Early Baseline Option to establish a base-year data set by monitoring the farm-level water quality and quantity discharge for a period of one year beginning January 1, 1993. The permittee who elects this option will be required to have approved BMPs in place by January 1, 1994. These permittees will be required to reduce their rainfall-adjusted phosphorus loading by at least 25 percent as compared to the rainfall-adjusted base-year loading. The procedure outlined in Appendix C will be used for rainfall adjustment.

2. The base year data will be verified for reasonableness. The determination will be based on an analysis of outliers, an analysis of consistency with existing total phosphorus data, rainfall data, and other relevant information. Permitted structures for which monitoring data are determined to be unreasonable shall be excluded from further participation in the Early Baseline Option.

3. In determining compliance in any future year, the measured EAA total basin load for the specified May 1 — April 30 period will be compared to the Target for the EAA Basin for the specified May 1 — April 30 period, calculated according to Appendix 40E-63-3. The comparison is represented by the following ratio:

Y = Target/Measured

4. The Unit Area Loading (UAL) for each permitted structure and acreage tributary to it will be calculated. The calculation will be based on concentration and flow data reported by the permittee pursuant to the approved monitoring plan for the specified May 1 — April 30 period.

The UAL will be calculated according to the following equation:

$UAL_i = L_i/A_i$

where,

UAL_i = Unit Area Load for Farm i (lbs/acre-year)

L_i = Load calculated by SFWMD from flow and concentration data supplied by Farm i, plus other data obtained by SFWMD, as necessary (lbs/year)

A_i = Area of Farm i (acres)

5. The UAL will be adjusted to reflect average rainfall conditions observed in the 1979—1988 base period and to reflect spatial variations in rainfall among EAA subbasins in the current year. The adjusted Unit Area Load ($AUAL_i$) will be based on observed rainfall in the corresponding EAA subbasin (S5A, S6, S7, or S8) in the specified May 1 — April 30 period. It will be calculated according to the following:

$AUAL_i = UAL_i(R_m/R_a)^{1.88}$

$R_a = \exp[X + 1.053 (C - C_m) - 0.1170 (S - S_m)]$

where,

m = subscript denoting average value of rainfall statistic in base period for EAA Subbasin containing Farm i (see attached Table)

a = base period log-mean adjusted rainfall for EAA Subbasin containing Farm i (inches, see attached Table)

R_a = Adjusted subbasin rainfall in current year (inches)

X, C, S = Values as defined in Appendix 40E-63-3 computed for each subbasin

Basin	X_m	C_m	S_m	R_{am}
EAA Total	3.866	0.7205	0.7339	47.73
S5A	3.918	0.7636	0.9999	[illegible]
S6	3.907	0.7302	0.7476	49.7[illegible]
S7	3.835	0.7198	0.6112	46.27
[illegible]	3.822	0.8409	0.8409	45.68

6. The AUAL for the entire EAA Basin (ALOAD, lbs/yr) will be calculated according to the following:

ALOAD = SUM AUAL $_i$ * A $_i$]

7. The Farm-Level Target Load (FTLOAD, lbs/yr) will be calculated based on the assumption that the percentage reduction in total load required at the Farm scale equals the percentage reduction required at the Basin scale. The calculation will be based on the following:

FTLOAD = ALOAD * Y

8. For those permittees who elected to participate in the Early Baseline Option, compliance will be determined by adjusting both current and base year measured loads to average rainfall conditions using the procedure given in paragraph 5 above. Permittees who have achieved the 25 percent load reduction will be identified by comparing the adjusted load for the base year with the adjusted load for the current year.

9. Permittees who did not elect to participate in the Early Baseline Option are subject to a Maximum Unit Area Loading (MUAL, lbs/acre-yr) discharge limit, which is computed by solving the following equation:

FTLOAD = SUM MUAL * A $_j$] +
SUM AUAL $_j$ * A $_j$]

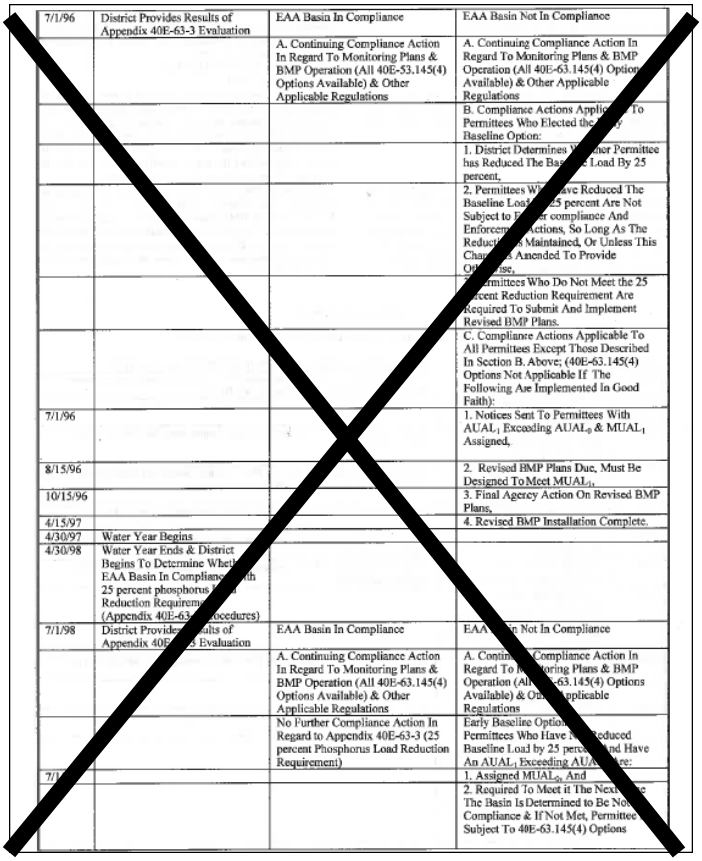
The first summation (j) is over all farms with AUAL$_j$ greater than MUAL$_j$ excluding those who have taken the Early Baseline Option and achieved a minimum 25 percent load reduction. The second summation is over all remaining farms, which include (a) farms with AUAL$_j$ below MUAL$_j$ and (b) farms which elected the Early Baseline Option and met the minimum 25 percent load reduction requirement.

10. Revised BMP plans will be required for all permitted structures and tributary acreages whose AUAL$_j$ exceed MUAL. Revised BMP plans will also be required from all permittees who elected the Early Baseline Option, but did not achieve at least a 25 percent load reduction. Compliance and enforcement procedures are set forth in Rule 40E-63.145(3), (4), & (5), F.A.C.

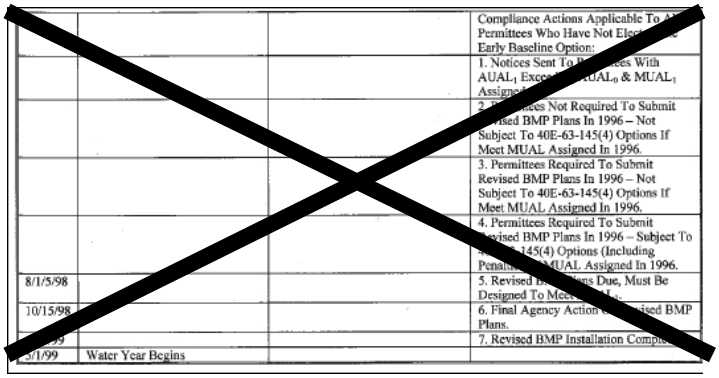
APPENDIX 40E-63-5

OUTLINE OF COMPLIANCE AND ENFORCEMENT PROCEDURES

DATE	ACTIVITY	ASSOCIATED COMPLIANCE AND ENFORCEMENT ACTION
Present		SFWMD & Other Agencies Authorized To Enforce Existing Regulations & Permit Programs Applicable to EAA Basin
9/92 10/92	Due Date For Permit Applications	
12/92	Early Baseline Option – Final Agency Action On Monitoring Plans	Begin Enforcement For Failure To Submit Application (All 40E-63.145(4) Options Available)
1/1/93	Early Baseline Option – Permittees Begin Monitoring Water Quality & Quantity	Begin Enforcement of Monitoring Plan – Water Quality & Quantity (All 40E-63.145(4) Options Available)
7/93	Final Agency Action On Permit Applications	Begin Enforcement of Installation of BMPs According To Plan (All 40E-63.145(4) Options Available)
10/93	Permittees Begin Monitoring Water Quality	Begin Enforcement of Monitoring Plan – Water Quality (All 40E-63.145(4) Options Available)
1/94	Early Baseline Option – BMP Installation Complete	Begin Enforcement of BMP Operation & Maintenance (All 40E-63.145(4) Options Available)
1/94	Early Baseline Option Baseline For Determining 25 percent Reduction Is Based On Data For May 1, 1993 – April 30, 1994	
1/94	Permittees Begin Monitoring Water Quality	Begin Enforcement of Monitoring Plan – Water Quality (All 40E-63.145(4) Options Available)
7/1/94	District Provides Results of Early Baseline Calculations	
1/95	BMP Installation Complete	Begin Enforcement of BMP Operation & Maintenance (All 40E-63.145(4) Options Available)
4/30/96	Water Year Ends & District Begins Determination of Whether EAA Basin Is In Compliance With 25 percent Phosphorus Load Reduction Requirement (Appendix 40E-63-3 Procedures)	



7/1/96	District Provides Results of Appendix 40E-63-3 Evaluation	EAA Basin In Compliance	EAA Basin Not In Compliance
		A. Continuing Compliance Action In Regard To Monitoring Plans & BMP Operation (All 40E-53.145(4) Options Available) & Other Applicable Regulations	A. Continuing Compliance Action In Regard To Monitoring Plans & BMP Operation (All 40E-63.145(4) Options Available) & Other Applicable Regulations
			B. Compliance Actions Applicable To Permittees Who Elected the Early Baseline Option:
			1. District Determines Whether Permittee has Reduced The Baseline Load By 25 percent,
			2. Permittees Who Have Reduced The Baseline Load By 25 percent Are Not Subject to Further compliance And Enforcement Actions, So Long As The Reductions Maintained, Or Unless This Chapter Is Amended To Provide Otherwise,
			Permittees Who Do Not Meet the 25 Percent Reduction Requirement Are Required To Submit And Implement Revised BMP Plans.
			C. Compliance Actions Applicable To All Permittees Except Those Described In Section B. Above; (40E-63.145(4) Options Not Applicable If The Following Are Implemented In Good Faith):
7/1/96			1. Notices Sent To Permittees With $AUAL_1$ Exceeding $AUAL_0$ & $MUAL_1$ Assigned,
8/15/96			2. Revised BMP Plans Due, Must Be Designed To Meet $MUAL_1$,
10/15/96			3. Final Agency Action On Revised BMP Plans,
4/15/97			4. Revised BMP Installation Complete.
4/30/97	Water Year Begins		
4/30/98	Water Year Ends & District Begins To Determine Whether EAA Basin In Compliance With 25 percent phosphorus Load Reduction Requirement (Appendix 40E-63 Procedures)		
7/1/98	District Provides Results of Appendix 40E-63-3 Evaluation	EAA Basin In Compliance	EAA Basin Not In Compliance
		A. Continuing Compliance Action In Regard To Monitoring Plans & BMP Operation (All 40E-63.145(4) Options Available) & Other Applicable Regulations	A. Continuing Compliance Action In Regard To Monitoring Plans & BMP Operation (All 40E-63.145(4) Options Available) & Other Applicable Regulations
		No Further Compliance Action In Regard to Appendix 40E-63-3 (25 percent Phosphorus Load Reduction Requirement)	Early Baseline Option: Permittees Who Have Reduced Baseline Load by 25 percent And Have An $AUAL_1$ Exceeding $AUAL_0$ Are:
7/1			1. Assigned $MUAL_0$, And
			2. Required To Meet it The Next Time The Basin Is Determined to Be Not In Compliance & If Not Met, Permittee Subject To 40E-63.145(4) Options



			Compliance Actions Applicable To Permittees Who Have Not Elected The Early Baseline Option:
			1. Notices Sent To Permittees With $AUAL_1$ Exceeding $AUAL_0$ & $MUAL_1$ Assigned,
			2. Permittees Not Required To Submit Revised BMP Plans In 1996 – Not Subject To 40E-63-145(4) Options If Meet MUAL Assigned In 1996.
			3. Permittees Required To Submit Revised BMP Plans In 1996 – Not Subject To 40E-63-145(4) Options If Meet MUAL Assigned In 1996.
			4. Permittees Required To Submit Revised BMP Plans In 1996 – Subject To 40E-63-145(4) Options (Including Penalties) If MUAL Assigned In 1996.
8/1/5/98			5. Revised BMP Plans Due, Must Be Designed To Meet $MUAL_1$,
10/15/98			6. Final Agency Action On Revised BMP Plans.
[illegible]/99			7. Revised BMP Installation Complete.
5/1/99	Water Year Begins		

Amendments to Appendices A1, A3, A3.1, A3.2 and A.4 are available online at https://www.sfwmd.gov/sites/default/files/documents/draft_40E_63_draft_rev_appendices_20171214.pdf, or may be requested by contacting Carmela Bedregal or Jan Sluth at the phone numbers provided in this notice.

NAME OF PERSON ORIGINATING PROPOSED RULE: Eva Velez, Division Director, Everglades Policy and Coordination Division

NAME OF AGENCY HEAD WHO APPROVED THE PROPOSED RULE: South Florida Water Management District Governing Board

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: December 14, 2017

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAR: July 28, 2017

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

Board of Pilot Commissioners

RULE NO.: RULE TITLE:

61G14-11.008: Cross Licensing

PURPOSE AND EFFECT: The Board proposes the rule amendment to clarify language regarding cross licensed deputy pilots.

SUMMARY: Language regarding cross licensed deputy pilots will be clarified.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS AND LEGISLATIVE RATIFICATION:

The Agency has determined that this will not have an adverse impact on small business or likely increase directly or indirectly regulatory costs in excess of $200,000 in the aggregate within one year after the implementation of the rule. A SERC has not been prepared by the Agency.

The Agency has determined that the proposed rule is not expected to require legislative ratification based on the statement of estimated regulatory costs or if no SERC is required, the information expressly relied upon and described herein: During discussion of the economic impact of this rule at its Board meeting, the Board determined that there was no reason to believe the amendment would increase costs and that a Statement of Estimated Regulatory Costs (SERC) was not necessary and that the rule will not require ratification by the Legislature. No person or interested party submitted additional information regarding the economic impact at that time.

Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RULEMAKING AUTHORITY: 310.061, 310.185 FS.

LAW IMPLEMENTED: 310.061, 310.081 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE SCHEDULED AND ANNOUNCED IN THE FAR.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Krista Woodard, Executive Director, Board of Pilot Commissioners, 2601 Blair Stone Road, Tallahassee, FL 32399-0790.

THE FULL TEXT OF THE PROPOSED RULE IS:

61G14-11.008 Cross Licensing.