

~~bureau or agency, and each county, municipality, or other political subdivision of the state utilizing volunteer firefighters which is subject to Section 112.191, Florida Statutes.~~

(4) through (6) renumbered (3) through (5) No change.

Specific Authority 112.191 FS. Law Implemented 112.191 FS. History--New _____.

4A-64.003 Ability to Pay of Benefits.

No change.

Specific Authority 112.191 FS. Law Implemented 112.191 FS. History--New _____.

DEPARTMENT OF REVENUE

RULE NOS.:	RULE TITLES:
12-25.031	Definitions
12-25.033	Eligibility and Qualifications
12-25.035	Responsibility for Program Training, Certification Procedures, and Program Availability
12-25.037	Applying for Participation in the Program
12-25.042	Withdrawal from the Certified Audit Program
12-25.047	Development of Agreed Upon Procedures
12-25.048	Submission of the Certified Audit Report
12-25.049	Review of Certified Audit Reports

NOTICE OF WITHDRAWAL

Notice is hereby given that the proposed amendments, as noticed in Vol. 28, No. 27, pp. 2875-2879, July 5, 2001, Florida Administrative Weekly, have been withdrawn.

DEPARTMENT OF REVENUE

Division of Ad Valorem Tax

RULE NO.:	RULE TITLE:
12D-10.0044	Uniform Procedures for Hearings; Procedures for Information and Evidence Exchange Between the Petitioner and Property Appraiser, Consistent with s. 194.032, F.S.; Organizational Meeting; Uniform Procedures to be Available to Petitioners

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to this proposed rule, as published in Vol. 28, No. 48, pp. 5351-5352, November 27, 2002, issue of the Florida Administrative Weekly. These changes are in accordance with s. 120.54(3)(d)1., F.S.

Paragraph (c) of subsection (5) of Rule 12D-10.0044, F.A.C., will be changed so that, when adopted, this paragraph will read:

(5)(c) In computing any period of time prescribed or allowed by these rules, the day of the act, event, or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, Sunday, or legal holiday, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday, or legal holiday. When the period of time prescribed or allowed in subsection (3) ~~or (4)~~ is less than 7 days, intermediate Saturdays, Sundays, and legal holidays shall be excluded in the computation. See Rule 1.090(a), Florida Rules of Civil Procedure, entitled Time. If the tenth day before a hearing is a Saturday, Sunday, or legal holiday, the information under subsection (2) shall be provided no later than the previous business day.

PUBLIC SERVICE COMMISSION

DOCKET NO. 020398-EQ

RULE NO.: RULE TITLE:
25-22.082 Selection of Generating Capacity

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rules in accordance with subparagraph 120.54(3)(d)1., F.S., published in Vol. 28, No. 50, December 13, 2002, issue of the Florida Administrative Weekly:

25-22.082 Selection of Generating Capacity.

(1) Scope and Intent. ~~A Public Utility is required to provide reasonably sufficient, adequate, and efficient service to the public at fair and reasonable rates. In order to assure an adequate and reliable source of energy, a public utility must plan and construct or purchase sufficient generating capacity. To assure fair and reasonable rates and to avoid the further uneconomic duplication of generation, transmission, and distribution facilities in Florida, a public utility must select the most economical and cost effective mix of supply side and demand side resources to meet the demand and energy requirements of its end use consumers.~~ The intent of this rule is to provide the Commission information to evaluate a public utility's decision regarding the addition of generating capacity pursuant to Section Chapter 403.519, Florida Statutes. The use of a Request for Proposals (RFP) process is an appropriate means to ensure that a public utility's selection of a proposed generation addition is the most cost-effective alternative available.

(2) through (a) No change.

(b) Next Planned Generating Unit: the next generating unit addition planned for construction by a public an investor-owned utility that will require certification pursuant to Section 403.519, Florida Statutes.

(c) through (e) No change.

(3) Prior to filing a petition for determination of need for an electrical power plant pursuant to Section 403.519, Florida Statutes, each ~~public investor-owned electric~~ utility shall evaluate supply-side alternatives to its next planned generating unit by issuing a Request for Proposals (RFP).

(4) through (c) No change.

(5) No term of the RFP shall be unfair, unduly discriminatory, onerous, or commercially infeasible. Each public utility's RFP shall include, at a minimum:

(a) through 13. No change.

(b) A copy of the public utility's most recent Ten-Year Site Plan Detailed information regarding the public utility's ten year historical and ten year projected net energy for load;

(c) through 8. No change.

(e) A detailed description of the criteria and the methodology, including any weighting and ranking factors, to be used to evaluate alternative generating proposals on the basis of price and non-price attributes;-

(f) All criteria, including all weighting and ranking factors that will be applied to select the finalists. Such criteria may include price and non-price considerations, but no criterion shall be employed that is not expressly identified in the RFP absent a showing of good cause;

~~(f)(g)~~ Any application fees that will be required of a participant. Any such fees or deposits shall be cost-based;

~~(g)(h)~~ Best available Any information regarding system-specific conditions which may include, but not be limited to, preferred locations proximate to load centers, transmission constraints, the need for voltage support in particular areas, and/or the public utility's need or desire for greater diversity of fuel sources.

(6) No attribute, criterion, or methodology shall be employed that is not identified in the RFP absent a showing of good cause;

(6) through (10) renumbered (7) through (11) No change.

~~(12)(11)~~ A potential participant who attended the public utility's post-issuance meeting may file with the Commission specific objections to any terms of the RFP limited to specific allegations of violations of this rule within 10 days of the post-issuance of the RFP meeting. The public utility may file a written response within 5 days. Within 30 days from the date of the objection, the Commission panel assigned shall determine whether the objection as stated would demonstrate that a rule violation has occurred, based on the written submission and oral argument by the objector and the public utility, without discovery or an evidentiary hearing. The RFP process will not be abated pending the resolution of such objections. Failure to file objections within 10 days shall constitute a waiver of those objections. The Commission will address any objections to the terms of the RFP on an expedited basis.

~~(13)(12)~~ No change.

~~(14)(13)~~ The public utility shall evaluate the proposals received in response to the RFP in a fair comparison with the public utility's next planned generating unit identified in the RFP. The public utility may modify the construction costs and/or performance parameters affecting revenue requirements in its next planned generating unit that it included in the RFP. However, if it chooses to do so, it must inform participants of its intent, provide the participants (limited to the remaining finalists) a corresponding opportunity to revise their bids.

~~(15)(14)~~ If the Commission approves a purchase power agreement as a result of the RFP, the public utility shall be authorized to recover the prudently incurred costs of the agreement through the public utility's capacity, and fuel and purchased power cost recovery clauses absent evidence of fraud, mistake, or similar grounds sufficient to disturb the finality of the approval under governing law. If the public utility selects a self-build option, any costs in addition to those identified in the need determination proceeding shall not be recoverable unless the utility can demonstrate that such costs were prudently incurred and due to extraordinary circumstances unforeseen and beyond its control.

~~(16)(15)~~ No change.

(17) In implementing an RFP under this rule, the public utility may use or incorporate an auction process.

~~(18)(16)~~ No change.

Specific Authority 350.127(2), 366.05(1), 366.05(7), 366.06(2), 366.07, 366.051 FS. Law Implemented 403.519, 366.04(1), 366.04(2), 366.04(5), 366.06(1), 366.06(2), 366.07, 366.041, 366.051 FS. History--New 1-20-94, Amended.

WATER MANAGEMENT DISTRICTS

St. Johns River Water Management District

RULE NO.: 40C-4.091
 RULE TITLE: Publications Incorporated by Reference

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rule in accordance with subparagraph 120.54(3)(d)1., F.S., published in Vol. 28, No. 16, of the Florida Administrative Weekly, on April 19, 2002. These changes are being made to address testimony and evidence received at public hearings held on the rule and to establish and effective date of March 7, 2003. Section 11.7 and Appendix K of the Applicant's Handbook: Management and Storage of Surface Waters, are incorporated by reference in Section 40C-4.091, F.A.C.

40C-4.091 Publications Incorporated by Reference.

Proposed effective date 3-07-03.

11.7 Lake Apopka Hydrologic Basin

(a) Pursuant to section 373.461(3)(a), ~~F.S.~~ F.A.C., the total phosphorus criterion for Lake Apopka is 55 parts per billion. To meet this total phosphorus criterion, the applicant must provide reasonable assurance of compliance with the following

total phosphorus discharge limitations and comply with the relevant monitoring requirements in sections 11.7(b) through 11.7(e) and relevant inspection requirements of section 11.7(c):

(1) Sites Within Lake Apopka Hydrologic Basin.

Applicants required to obtain a permit pursuant to Chapters 40C-4, 40C-40, 40C-42, or 40C-44, F.A.C., for a surface water management system located within the Lake Apopka Hydrologic Basin shall demonstrate: (i) that the system provides stormwater treatment equivalent to or greater than any of the applicable stormwater treatment options contained in Table 11.7-1 for the removal of total phosphorus; (ii) that the post-development total phosphorus load discharged from the project area will not exceed the pre-development total phosphorus load discharged from the project area; or (iii) that the system, under the soil moisture conditions described in section 10.3.8(a), will not discharge water to Lake Apopka or its tributaries for the 100-year, 24-hour storm event. Systems described under section 11.7(a)(1)iii. shall be considered to discharge to a land-locked lake that must meet the criteria in sections 10.4.1 and 10.4.2. Any alteration of a system originally permitted pursuant to section 11.7(a)(1)iii. which results in an increase in discharge of water to Lake Apopka or its tributaries shall be considered an interbasin diversion that must meet the criteria in sections 11.7(a)(2) and 11.7(b)(4)(e).

(2) Interbasin Diversion of Water to Lake Apopka Hydrologic Basin.

Applicants required to obtain a permit pursuant to Chapters 40C-4, 40C-40, 40C-42, or 40C-44, F.A.C., for a surface water management system that will cause the importation of water from another hydrologic basin into the Lake Apopka Hydrologic Basin shall not discharge any phosphorus from the project area to Lake Apopka or its tributaries, unless the applicant implements measures to reduce the existing total phosphorus load to Lake Apopka or its tributaries from another existing source by at least an equivalent amount of total phosphorus. The imported water shall consist only of stormwater runoff. The imported water shall not be discharged to Lake Apopka or its tributaries when the water level of Lake Apopka is in Zone A of the Lake Apopka Regulation Schedule set forth in Figure Table 11.7-2. All measures to reduce existing phosphorous loads to Lake Apopka or its tributaries must be constructed and operating in compliance with the environmental resource permit prior to any importation of water into the Lake Apopka Hydrologic Basin. Measures that reduce existing phosphorous loads to Lake Apopka or its tributaries shall not include those measures taken on the District's land.

(3) Methodology for Determining Total Phosphorus Loads

Determination of Pre-Development Total Phosphorus Loads. Pre-development total phosphorus loads shall be based upon the land uses in place as of (effective date). For systems which have been constructed in accordance with a permit issued

pursuant to chapters 40C-4, 40C-40, 40C-42, or 40C-44, F.A.C., at the permit applicant's option, the pre-development total phosphorus loads shall be based upon the land uses in place at the time the prior permit was issued. Pre-development total phosphorus loads shall be determined by: monitoring the total phosphorus loads from the project area for a period of one year prior to construction, alteration, abandonment, or removal of the proposed or existing system; calculating total phosphorus loads using the appropriate mean annual total phosphorus loadings in Table 11.7-3, or calculating total phosphorus loads for pre-development land uses not listed in Table 11.7-3 using mean annual total phosphorus loadings from the scientific literature. When the pre-development total phosphorus loads are determined by monitoring, the calculation of pre-development total phosphorus loads shall be adjusted by interpolation or extrapolation to reflect mean annual rainfall conditions.

Determination of Post-Development Total Phosphorus Loads.

Post-development total phosphorus loads shall be based upon the land uses proposed in the permit application and shall be determined by: calculating total phosphorus loads using the appropriate mean annual total phosphorus loadings in Table 11.7-3 and then reducing the total phosphorus load according to the appropriate total phosphorus removal efficiency values for systems listed in Tables 11.7-4 through 11.7-33. For purposes of Tables 11.7-4 and 11.7-6 through 11.7-33, the term "retention" includes stormwater reuse and underdrain and underground exfiltration trench systems as those terms are defined in section 2.0 of the Applicant's Handbook: Regulation of Stormwater Management Systems, Chapter 40C-42, F.A.C., which is adopted by reference in section 40C-42.091(1), F.A.C. The calculation of total phosphorus loads for post-development land uses not listed in Table 11.7-3 or total phosphorus removal efficiency values for systems not listed in Tables 11.7-4 through 11.7-33 may be calculated using mean annual total phosphorus loadings and total phosphorus removal efficiency values from the scientific literature.

(b) Monitoring.

(1) Monitoring for Retention Systems.

A surface water management system to be permitted under section 11.7(a)(1)i which utilizes only retention, shall be monitored as set forth in this paragraph. Water elevations in such a system shall be monitored from the date that construction of the system is completed or any part of the system is used for its intended purpose, whichever is sooner. The monitoring shall continue for three years following completion of construction of the entire system, including all associated residential, commercial, transportation, or agricultural improvements. If the results of the monitoring indicate that the system is not recovering the treatment volume in accordance with the permitted design, then the permittee shall either perform maintenance on the system, or obtain a

modification to the permit and implement measures, to bring the system into compliance, and in either event the monitoring shall continue for three years after the date the system is brought into compliance.

(2)(~~e~~) Monitoring for Systems Permitted Under Section 11.7(a)(1)iii.

A surface water management system to be permitted under section 11.7(a)(1)iii, shall be monitored as set forth in this paragraph. Water elevations in such a system shall be monitored from the date that construction of the system is completed or any part of the system is used for its intended purpose, whichever is sooner. The monitoring in such a system shall continue for ten years following completion of construction of the entire system, including all associated residential, commercial, transportation, or agricultural improvements. If the results of the monitoring indicate that either the system is not recovering storage in accordance with the permitted design or causes water to be discharged to Lake Apopka or its tributaries for events less than the 100-year, 24-hour storm event, then the permittee shall either perform maintenance that brings the system into compliance or obtain a modification to the permit and implement measures to bring the system into compliance, and in either event the monitoring shall continue for ten ~~three~~ years after the date the system is brought into compliance.

(3)(~~d~~) Monitoring for Other Systems.

A surface water management system to be permitted, other than a system described in sections 11.7(b)(1), 11.7(b)(2)(~~e~~) or 11.7(b)(4)(~~e~~), shall be monitored as set forth in this paragraph. Except as provided below, ~~t~~The total phosphorus load from the project area shall be monitored from the date that construction of such a system is completed or any part of the system is used for its intended purpose, whichever is sooner. The monitoring shall continue for three years following completion of construction of the entire system, including all associated residential, commercial, transportation, or agricultural improvements. If the results of the monitoring indicate that post-development total phosphorus loads exceed pre-development total phosphorus loads, then the permittee shall either perform maintenance on the system, or obtain a modification to the permit and implement measures, to reduce the total phosphorus loads to no more than pre-development levels, and in either event the monitoring shall continue for three years after the date the system is maintained or modified as described herein.

No monitoring shall be required under section 11.7(b)(3) when an applicant demonstrates that the system provides stormwater treatment equivalent to or greater than any of the applicable stormwater treatment options contained in Table 11.7-1 for the removal of total phosphorus. Alternatively, no monitoring shall be required under section 11.7(b)(3) when an applicant demonstrates that the post-development total phosphorus load discharged from the project area will not exceed the pre-development total phosphorus load discharged from the project area when determined using the appropriate mean annual total phosphorus loadings and total phosphorus removal efficiency values from Tables 11.7-3 through 11.7-33.

(4)(~~e~~) Monitoring for Interbasin Diversion of Water to Lake Apopka Hydrologic Basin.

A surface water management system to be permitted under described in Section 11.7(a)(2) shall be monitored as set forth in this paragraph. The total phosphorus load shall be monitored from: (i) any system designed to reduce the existing total phosphorus load to Lake Apopka or its tributaries, and (ii) the system that is importing water to the Lake Apopka Hydrologic Basin. Monitoring of the system that is importing water to the Lake Apopka Hydrologic Basin shall commence from the date that construction of such system is completed or any part of the system is used for its intended purpose, whichever is sooner. Monitoring of systems designed to reduce the existing total phosphorus load to Lake Apopka or its tributaries shall commence from the date that construction of such system is completed. Monitoring shall continue for as long as water is imported from the system to the Lake Apopka Hydrologic Basin. If monitoring results indicate that the reductions in total phosphorus load are less than that in the imported water, then the permittee shall either perform maintenance or obtain a permit modification to bring the system(s) into compliance.

~~(f) Determination of Pre-development Total Phosphorus Loads~~

~~Pre-development total phosphorus loads shall be based upon the land uses in place as of (effective date) and shall be calculated by: monitoring the total phosphorus loads from the project area for a period of one year prior to construction, alteration, abandonment, or removal of the proposed or existing system; or calculating total phosphorus loads for the same land uses from the scientific literature. That calculation of pre-development total phosphorus loads shall be adjusted by interpolation or extrapolation to reflect average annual rainfall conditions.~~

(c)(g) Inspecting Systems.

No change.

TABLE 11.7-1
 STORMWATER TREATMENT CRITERIA TO ACHIEVE NO NET INCREASE IN POST- DEVELOPMENT LOADINGS
 WITHIN THE LAKE APOPKA HYDROLOGIC BASIN

LAND USE CATEGORY	HYDROLOGIC DOMINANT	RETENTION ¹	RETENTION ¹ / WET DETENTION
	SOIL GROUP	ONLY ²⁺	OPTION ^{3±}
Low-Density Residential (max. 15% impervious)	A	2.75"	1.00"/14 days
	B	1.75"	0.50"/14 days
	C	1.25"	0.50"/14 days
	D	1.00"	0.25"/14 days
Single-Family Residential (max. 25% impervious)	A	2.75 2.50"	1.00"/14 days
	B	2.00"	0.75"/14 days
	C	1.75"	0.75"/14 days
	D	1.50"	0.50 0.75"/14 days
Single-Family Residential (max. 40% impervious)	A	3.75"	1.25"/14 days
	B	3.00 2.50"	1.00 0.75"/14 days
	C	2.00"	0.75"/14 days
	D	1.50 1.75"	0.50"/14 days
Multi-Family Residential (max. 65% impervious)	A	4.00"	2.50"/14 days
	B	3.75"	2.00"/14 days
	C	3.25 3.00"	1.75 1.50"/14 days
	D	2.75"	1.50"/14 days
Commercial (max. 80% impervious)	A	4.00"	2.75"/14 days
	B	3.75 3.00"	2.25 1.75"/14 days
	C	2.75 2.50"	1.50"/14 days
	D	2.25"	1.25"/14 days
Highway (max. 50% impervious)	A	4.00"	2.00"/14 days
	B	3.00"	1.50"/14 days
	C	2.50"	1.25"/14 days
	D	2.25"	1.00"/14 days
Highway (max. 75% impervious)	A	4.00"	2.75"/14 days
	B	3.75"	2.25"/14 days
	C	2.75"	1.75"/14 days
	D	2.25"	1.25"/14 days

1. For purposes of this Table, the term "retention" includes stormwater reuse and underdrain and underground exfiltration trench systems as those terms are defined in section 2.0 of the Applicant's Handbook: Regulation of Stormwater Management Systems, Chapter 40C-42, F.A.C., which is adopted by reference in subsection 40C-42.091(1), F.A.C.

~~2.1~~ Required dry retention volume (inches of runoff over project area)

~~3.2~~ Required dry retention volume (inches of runoff over project area) followed by wet detention with listed minimum residence time

TABLE 11.7-3
MEAN ANNUAL LOADINGS OF TOTAL PHOSPHORUS FOR LAND USE TYPES IN THE
LAKE AOPKA HYDROLOGIC BASIN

LAND USE CATEGORY	MEAN ANNUAL TOTAL PHOSPHORUS LOAD (kg/ac-yr)			
	HSG A	HSG B	HSG C	HSG D
<u>Low-Density Residential (max. 15% impervious)</u>	<u>0.069</u>	<u>0.135</u>	<u>0.215</u>	<u>0.284</u>
<u>Single-Family Residential (max. 25% impervious)</u>	<u>0.227</u>	<u>0.286</u>	<u>0.383</u>	<u>0.465</u>
<u>Single-Family Residential (max. 40% impervious)</u>	<u>0.250</u>	<u>0.333</u>	<u>0.446</u>	<u>0.536</u>
<u>Multi-Family Residential (max. 65% impervious)</u>	<u>1.082</u>	<u>1.156</u>	<u>1.257</u>	<u>1.336</u>
<u>Commercial (max. 80% impervious)</u>	<u>0.899</u>	<u>0.916</u>	<u>0.943</u>	<u>0.964</u>
<u>Highway – max. 50% impervious</u>	<u>0.710</u>	<u>0.756</u>	<u>0.817</u>	<u>0.871</u>
<u>Highway – max. 75% impervious</u>	<u>1.053</u>	<u>1.076</u>	<u>1.106</u>	<u>1.133</u>
<u>Agriculture – Pasture</u>	<u>0.026</u>	<u>0.118</u>	<u>0.239</u>	<u>0.347</u>
<u>Agriculture – Crops, Ornamentals, Nurseries</u>	<u>0.040</u>	<u>0.180</u>	<u>0.366</u>	<u>0.531</u>
<u>Agriculture – Groves</u>	<u>0.007</u>	<u>0.036</u>	<u>0.079</u>	<u>0.123</u>
<u>Open Land/Recreational/Fallow Groves and Cropland</u>	<u>0.004</u>	<u>0.017</u>	<u>0.035</u>	<u>0.051</u>
<u>Forests/Abandoned Tree Crops</u>	<u>0.004</u>	<u>0.021</u>	<u>0.045</u>	<u>0.070</u>

HSG = Hydrologic Soil Group

TABLE 11.7-4
REMOVAL EFFICIENCIES FOR TOTAL PHOSPHORUS IN DRY RETENTION SYSTEMS THAT MEET THE
DESIGN AND PERFORMANCE CRITERIA IN RULE 40C-42.026, F.A.C.

LAND USE	HSG A		HSG B		HSG C		HSG D	
	STANDARD	OFW	STANDARD	OFW	STANDARD	OFW	STANDARD	OFW
<u>Low-Density Residential (max. 15% impervious)</u>	<u>78%</u>	<u>82%</u>	<u>67%</u>	<u>74%</u>	<u>63%</u>	<u>72%</u>	<u>60%</u>	<u>71%</u>
<u>Single-Family Residential (max. 25% impervious)</u>	<u>90%</u>	<u>92%</u>	<u>78%</u>	<u>83%</u>	<u>69%</u>	<u>77%</u>	<u>65%</u>	<u>74%</u>
<u>Single-Family Residential (max. 40% impervious)</u>	<u>84%</u>	<u>88%</u>	<u>72%</u>	<u>80%</u>	<u>65%</u>	<u>75%</u>	<u>63%</u>	<u>73%</u>
<u>Multi-Family Residential (max. 65% impervious)</u>	<u>74%</u>	<u>83%</u>	<u>69%</u>	<u>79%</u>	<u>64%</u>	<u>75%</u>	<u>62%</u>	<u>74%</u>
<u>Commercial (max. 80% impervious)</u>	<u>65%</u>	<u>76%</u>	<u>63%</u>	<u>74%</u>	<u>62%</u>	<u>72%</u>	<u>61%</u>	<u>71%</u>
<u>Highway (max. 50% impervious)</u>	<u>75%</u>	<u>85%</u>	<u>70%</u>	<u>80%</u>	<u>65%</u>	<u>76%</u>	<u>63%</u>	<u>74%</u>
<u>Highway (max. 75% impervious)</u>	<u>65%</u>	<u>76%</u>	<u>63%</u>	<u>74%</u>	<u>62%</u>	<u>72%</u>	<u>61%</u>	<u>71%</u>

Standard Meets design and performance criteria in Rule 40C-42.026, F.A.C., for discharges to Class III waters

OFW Meets design and performance criteria in Rule 40C-42.026, F.A.C., for discharges to Class I, Class II, or Outstanding Florida Waters

TABLE 11.7-5
REMOVAL EFFICIENCIES FOR TOTAL PHOSPHORUS IN WET DETENTION SYSTEMS THAT MEET THE DESIGN AND PERFORMANCE CRITERIA IN RULE 40C-42.026, F.A.C.

<u>Residence Time (days)</u>	<u>Phosphorus Removal Efficiency (%)</u>
<u>14</u>	<u>61.5</u>
<u>21</u>	<u>64.5</u>

TABLE 11.7-6
Removal Efficiencies for Total Phosphorus Using Various Treatment Options in Low-density Residential (Max. 15% Impervious)
For Hydrologic Soil Group A

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	70	86	88	89
0.50	78	90	92	92
0.75	82	92	93	94
1.00	85	93	94	95
1.25	88	94	95	96
1.50	90	95	96	96
1.75	91	96	96	97
2.00	92	96	97	97
2.25	93	97	97	97
2.50	93	97	97	98
2.75	94	97	98	98
3.00	95	98	98	98
3.25	96	98	98	99
3.50	97	98	99	99
3.75	97	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-7
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Low-Density Residential (max. 15% impervious)
For Hydrologic Soil Group B

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	53	78	82	83
0.50	67	85	87	88
0.75	74	88	90	91
1.00	79	91	92	93
1.25	83	92	93	94
1.50	85	93	94	95
1.75	88	94	95	96
2.00	89	95	96	96
2.25	90	96	96	97
2.50	92	96	97	97
2.75	93	97	97	97
3.00	93	97	97	98
3.25	94	97	98	98
3.50	94	97	98	98
3.75	95	98	98	98
4.00	95	98	98	98

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-8
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Low-Density Residential (max. 15% impervious)
For Hydrologic Soil Group C

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	46	75	79	81
0.50	63	83	86	87
0.75	72	87	89	90
1.00	78	90	91	92
1.25	82	92	93	94
1.50	85	93	94	95
1.75	87	94	95	96
2.00	89	95	96	96
2.25	91	96	96	97
2.50	92	96	97	97
2.75	93	97	97	97
3.00	94	97	97	98
3.25	94	97	98	98
3.50	95	98	98	98
3.75	95	98	98	98
4.00	96	98	98	98

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-9
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Low-Density Residential (max. 15% impervious)
For Hydrologic Soil Group D

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	42	74	78	79
0.50	60	82	85	86
0.75	71	87	89	90
1.00	78	90	91	92
1.25	82	92	93	94
1.50	85	93	94	95
1.75	88	94	95	96
2.00	90	95	96	96
2.25	91	96	97	97
2.50	92	96	97	97
2.75	93	97	97	98
3.00	94	97	98	98
3.25	95	98	98	98
3.50	95	98	98	98
3.75	96	98	98	98
4.00	96	98	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-10
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Single-Family Residential (max. 25% impervious)
For Hydrologic Soil Group A

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	82	92	93	94
0.50	90	95	96	96
0.75	92	96	97	97
1.00	94	97	98	98
1.25	95	98	98	98
1.50	96	98	98	98
1.75	96	98	99	99
2.00	97	98	99	99
2.25	97	99	99	99
2.50	98	99	99	99
2.75	98	99	99	99
3.00	98	99	99	99
3.25	99	99	99	99
3.50	99	99	100	100
3.75	99	100	100	100
4.00	99	100	100	100

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-11
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Single-Family Residential (max. 25% impervious)
For Hydrologic Soil Group B

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	65	84	87	88
0.50	78	90	91	92
0.75	83	92	94	94
1.00	87	94	95	95
1.25	89	95	96	96
1.50	91	96	96	97
1.75	92	96	97	97
2.00	93	97	97	98
2.25	94	97	98	98
2.50	95	98	98	98
2.75	95	98	98	98
3.00	96	98	98	98
3.25	96	98	99	99
3.50	96	98	99	99
3.75	97	99	99	99
4.00	97	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-12
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Single-Family Residential (max. 25% impervious)
For Hydrologic Soil Group C

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	54	79	82	84
0.50	69	86	88	89
0.75	77	90	91	92
1.00	82	92	93	94
1.25	85	93	94	95
1.50	88	95	95	96
1.75	90	95	96	96
2.00	91	96	97	97
2.25	92	97	97	97
2.50	93	97	97	98
2.75	94	97	98	98
3.00	95	98	98	98
3.25	96	98	98	98
3.50	96	98	98	99
3.75	96	98	99	99
4.00	97	98	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-13
 Estimated Total P Removal Efficiencies for Various
 Treatment Options in Single-Family Residential (max. 25% impervious)
 For Hydrologic Soil Group C

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	48	76	80	81
0.50	65	84	86	87
0.75	74	88	90	91
1.00	81	91	93	93
1.25	84	93	94	94
1.50	87	94	95	95
1.75	89	95	96	96
2.00	91	96	96	97
2.25	92	96	97	97
2.50	93	97	97	98
2.75	94	97	98	98
3.00	95	98	98	98
3.25	95	98	98	98
3.50	96	98	98	98
3.75	96	98	99	99
4.00	97	98	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-14
 Removal Efficiencies for Total Phosphorus Using Various
 Treatment Options in Single-Family Residential (max. 40% impervious)
 for Hydrologic Soil Group A

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	71	90	93	94
0.50	86	95	96	97
0.75	90	97	98	98
1.00	93	97	98	99
1.25	94	98	99	99
1.50	95	98	99	99
1.75	96	99	99	99
2.00	97	99	99	99
2.25	97	99	99	99
2.50	97	99	99	99
2.75	98	99	99	100
3.00	98	99	99	100
3.25	98	99	100	100
3.50	98	99	100	100
3.75	99	100	100	100
4.00	99	100	100	100

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-15
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Single-Family Residential (max. 40% impervious)
for Hydrologic Soil Group B

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	61	86	90	92
0.50	77	92	94	95
0.75	83	94	95	97
1.00	87	95	97	97
1.25	89	96	97	98
1.50	91	97	98	98
1.75	93	97	98	99
2.00	94	98	98	99
2.25	94	98	99	99
2.50	95	98	99	99
2.75	95	99	99	99
3.00	96	99	99	99
3.25	97	99	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	97	99	99	99

1. Dry retention alone.
2. Dry retention followed by wet detention with various residence times.

Table 11.7-16
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Single-Family Residential (max. 40% impervious)
for Hydrologic Soil Group C

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	51	82	87	90
0.50	68	88	91	93
0.75	77	92	94	95
1.00	83	94	95	96
1.25	86	95	96	97
1.50	89	96	97	97
1.75	91	96	97	98
2.00	92	97	98	98
2.25	93	97	98	98
2.50	94	97	98	98
2.75	95	98	98	98
3.00	95	98	98	99
3.25	96	98	98	99
3.50	96	98	99	99
3.75	97	98	99	99
4.00	97	98	99	99

1. Dry retention alone.
2. Dry retention followed by wet detention with various residence times.

Table 11.7-17
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Single-Family Residential (max. 40% impervious)
for Hydrologic Soil Group D

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	48	82	87	90
0.50	65	88	91	93
0.75	75	91	94	95
1.00	81	93	95	96
1.25	85	95	96	97
1.50	88	96	97	98
1.75	90	96	97	98
2.00	92	97	98	98
2.25	93	97	98	99
2.50	94	98	98	99
2.75	94	98	99	99
3.00	95	98	99	99
3.25	96	98	99	99
3.50	96	99	99	99
3.75	97	99	99	99
4.00	97	99	99	99

1. Dry retention alone.
2. Dry retention followed by wet detention with various residence times.

Table 11.7-18
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Multi-Family Residential (max. 65% impervious)
for Hydrologic Soil Group B

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	53	78	82	83
0.50	74	88	90	91
0.75	83	92	94	94
1.00	88	95	96	96
1.25	91	96	97	97
1.50	93	97	97	98
1.75	95	98	98	98
2.00	95	98	98	98
2.25	96	98	98	99
2.50	97	98	99	99
2.75	97	99	99	99
3.00	97	99	99	99
3.25	98	99	99	99
3.50	98	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

1. Dry retention alone.
2. Dry retention followed by wet detention with various residence times.

Table 11.7-18
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Multi-Family Residential (max. 65% impervious)
for Hydrologic Soil Group B

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	49	77	81	82
0.50	69	86	88	89
0.75	79	90	92	92
1.00	85	93	94	95
1.25	89	95	96	96
1.50	91	96	96	97
1.75	92	97	97	97
2.00	94	97	98	98
2.25	95	98	98	98
2.50	95	98	98	98
2.75	96	98	98	99
3.00	96	98	99	99
3.25	97	99	99	99
3.50	97	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-20
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Multi-Family Residential (max. 65% impervious)
for Hydrologic Soil Group C

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	45	75	79	81
0.50	64	84	86	87
0.75	75	89	90	91
1.00	82	92	93	94
1.25	86	94	95	95
1.50	89	95	96	96
1.75	91	96	97	97
2.00	93	97	97	97
2.25	94	97	98	98
2.50	95	98	98	98
2.75	95	98	98	98
3.00	96	98	98	99
3.25	96	98	99	99
3.50	97	98	99	99
3.75	97	98	99	99
4.00	97	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-21
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Multi-Family Residential (max. 65% impervious)
for Hydrologic Soil Group D

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	43	74	78	80
0.50	62	83	85	86
0.75	74	88	90	91
1.00	80	91	92	93
1.25	85	93	94	95
1.50	88	95	95	96
1.75	90	96	96	97
2.00	92	96	97	97
2.25	93	97	97	98
2.50	94	97	98	98
2.75	95	98	98	98
3.00	96	98	98	98
3.25	96	98	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	97	99	99	99

Table 11.7-22
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Commercial (max. 80% impervious)
for Hydrologic Soil Group A

<u>Retention Depth (inches)</u>	<u>Annual Total P Removal (%)</u>			
	<u>Dry Retention¹</u>	<u>Retention / Wet Detention²</u>		
		<u>t_d=7 days</u>	<u>t_d=14 days</u>	<u>t_d=21 days</u>
0.25	41	73	77	79
0.50	65	84	86	87
0.75	76	89	91	91
1.00	83	92	93	94
1.25	88	95	95	96
1.50	91	96	96	97
1.75	93	97	97	97
2.00	94	97	98	98
2.25	95	98	98	98
2.50	96	98	98	99
2.75	97	98	99	99
3.00	97	99	99	99
3.25	97	99	99	99
3.50	98	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

1. Dry retention alone.
2. Dry retention followed by wet detention with various residence times.

Table 11.7-23
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Commercial (max. 80% impervious)
for Hydrologic Soil Group B

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		$t_d=7$ days	$t_d=14$ days	$t_d=21$ days
0.25	41	73	77	79
0.50	63	83	86	87
0.75	74	88	90	91
1.00	81	92	93	93
1.25	87	94	95	95
1.50	89	95	96	96
1.75	92	96	97	97
2.00	93	97	97	98
2.25	94	97	98	98
2.50	95	98	98	98
2.75	96	98	98	99
3.00	97	98	99	99
3.25	97	99	99	99
3.50	97	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-24
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Commercial (max. 80% impervious)
for Hydrologic Soil Group C

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		$t_d=7$ days	$t_d=14$ days	$t_d=21$ days
0.25	39	72	77	78
0.50	62	83	85	86
0.75	72	87	89	90
1.00	80	91	92	93
1.25	85	93	94	95
1.50	88	95	96	96
1.75	91	96	97	97
2.00	92	97	97	97
2.25	94	97	98	98
2.50	95	98	98	98
2.75	96	98	98	98
3.00	96	98	99	99
3.25	97	98	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-25
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Commercial (max. 80% impervious)
for Hydrologic Soil Group D

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	39	72	76	78
0.50	61	82	85	86
0.75	71	87	89	90
1.00	79	90	92	93
1.25	84	93	94	94
1.50	88	94	95	96
1.75	90	96	96	97
2.00	92	96	97	97
2.25	94	97	98	98
2.50	94	97	98	98
2.75	95	98	98	98
3.00	96	98	98	99
3.25	97	98	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-26
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 50% impervious)
for Hydrologic Soil Group A

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	54	79	82	83
0.50	75	88	90	91
0.75	85	93	94	95
1.00	90	95	96	96
1.25	92	97	97	97
1.50	94	97	98	98
1.75	95	98	98	98
2.00	96	98	99	99
2.25	97	99	99	99
2.50	97	99	99	99
2.75	98	99	99	99
3.00	98	99	99	99
3.25	98	99	99	99
3.50	98	99	99	99
3.75	98	99	99	99
4.00	99	99	99	100

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-27
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 50% impervious)
for Hydrologic Soil Group B

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	50	77	81	82
0.50	70	86	89	89
0.75	80	91	92	93
1.00	86	93	94	95
1.25	89	95	96	96
1.50	91	96	97	97
1.75	93	97	97	97
2.00	94	97	98	98
2.25	95	98	98	98
2.50	96	98	98	98
2.75	96	98	99	99
3.00	97	98	99	99
3.25	97	99	99	99
3.50	97	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-28
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 50% impervious)
for Hydrologic Soil Group C

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	47	76	79	81
0.50	65	84	87	88
0.75	76	89	91	91
1.00	83	92	93	94
1.25	87	94	95	95
1.50	89	95	96	96
1.75	91	96	97	97
2.00	93	97	97	97
2.25	94	97	98	98
2.50	95	98	98	98
2.75	96	98	98	98
3.00	96	98	98	99
3.25	97	98	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-29
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 50% impervious)
for Hydrologic Soil Group D

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	44	74	78	80
0.50	63	83	86	87
0.75	74	88	90	91
1.00	81	91	93	93
1.25	85	93	94	95
1.50	89	95	96	96
1.75	91	96	96	97
2.00	92	96	97	97
2.25	93	97	97	98
2.50	94	97	98	98
2.75	95	98	98	98
3.00	96	98	98	99
3.25	96	98	99	99
3.50	97	98	99	99
3.75	97	99	99	99
4.00	97	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-30
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 75% impervious)
for Hydrologic Soil Group A

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	41	73	77	79
0.50	65	84	86	87
0.75	76	89	91	91
1.00	83	92	93	94
1.25	88	95	95	96
1.50	91	96	96	97
1.75	93	97	97	97
2.00	94	97	98	98
2.25	95	98	98	98
2.50	96	98	98	99
2.75	97	98	99	99
3.00	97	99	99	99
3.25	97	99	99	99
3.50	98	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-31
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 75% impervious)
for Hydrologic Soil Group B

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		$t_d=7$ days	$t_d=14$ days	$t_d=21$ days
0.25	41	73	77	79
0.50	63	83	86	87
0.75	74	88	90	91
1.00	81	91	93	93
1.25	87	94	95	95
1.50	89	95	96	96
1.75	92	96	97	97
2.00	93	97	97	98
2.25	94	97	98	98
2.50	95	98	98	98
2.75	96	98	98	99
3.00	97	98	99	99
3.25	97	99	99	99
3.50	97	99	99	99
3.75	98	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-32
Removal Efficiencies for Total Phosphorus Using Various
Treatment Options in Highway (max. 75% impervious)
for Hydrologic Soil Group C

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		$t_d=7$ days	$t_d=14$ days	$t_d=21$ days
0.25	39	72	77	78
0.50	62	82	85	86
0.75	72	87	89	90
1.00	80	91	92	93
1.25	85	93	94	95
1.50	88	95	95	96
1.75	91	96	97	97
2.00	92	97	97	97
2.25	94	97	98	98
2.50	95	98	98	98
2.75	96	98	98	98
3.00	96	98	99	99
3.25	97	98	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	98	99	99	99

- 1. Dry retention alone.
- 2. Dry retention followed by wet detention with various residence times.

Table 11.7-33
Removal Efficiencies for Total Phosphorus Using Various
 Treatment Options in Highway (max. 75% impervious)
 for Hydrologic Soil Group D

Retention Depth (inches)	Annual Total P Removal (%)			
	Dry Retention ¹	Retention / Wet Detention ²		
		t _d =7 days	t _d =14 days	t _d =21 days
0.25	38	72	76	78
0.50	61	82	85	86
0.75	71	87	89	90
1.00	79	90	92	93
1.25	84	93	94	94
1.50	88	94	95	96
1.75	90	96	96	97
2.00	92	96	97	97
2.25	94	97	98	98
2.50	94	97	98	98
2.75	95	98	98	98
3.00	96	98	98	99
3.25	97	98	99	99
3.50	97	99	99	99
3.75	97	99	99	99
4.00	98	99	99	99

1. Dry retention alone.

2. Dry retention followed by wet detention with various residence times.

Complete Rewording of Appendix K

APPENDIX K

LEGAL DESCRIPTION

LAKE APOPKA HYDROLOGIC BASIN

Begin at the Northeast corner of Section 29, Township 22 South, Range 28 East; thence South along the Section lines to the Southeast corner of the Northeast quarter of Section 32, Township 22 South, Range 28 East; thence west along the quarter section line to the Southeast corner of the Northwest quarter of Section 31, Township 22 South, Range 28 East; thence South along the quarter section line to the Southeast corner of the Southwest quarter of Section 31, Township 22 South, Range 28 East; thence West along the Section lines to the Southwest corner of the Southeast quarter of Section 36, Township 22 South, Range 27 East; thence South along the quarter section line to the Southeast corner of the Southwest quarter of Section 1, Township 23 South, Range 27 East; thence West along the Section line to the Southeast corner of Section 2, Township 23 South, Range 27 East; thence South along the Section line to the Southeast corner of Section 11, Township 23 South, Range 27 East; thence West along the Section lines to the Southeast corner of the Southwest quarter of Section 7, Township 23 South, Range 27 East; thence South along the quarter section line to the Southeast corner of the Northeast quarter of the Northwest quarter of Section 18, Township 23 South, Range 27 East; thence West along the south line of the Northeast quarter of the Northwest quarter and along the south line of the Northwest quarter of the Northwest quarter, to the Southwest corner of the Northwest quarter of the Northwest quarter of Section 18, Township 23 South, Range 27 East; thence North along the Section line to the Southwest corner of Section 7, Township 23 South, Range 27 East; thence West along the Section line to the Southwest corner of the Southeast quarter of Section 12, Township 23 South, Range 26 East; thence North along the quarter section line to the Southeast corner of the Southwest quarter of Section 1, Township 23 South, Range 26 East; thence West along the Section lines to the Southwest corner of the Southeast quarter of Section 6, Township 23 South, Range 26 East; thence North along the quarter section line to the Northwest corner of the Northeast quarter of Section 6, Township 23 South, Range 26 East; thence East along the Section line to the Southwest corner of Section 32, Township 22 South, Range 26 East; thence North along the Section line to the Northwest corner of Section 32, Township 22 South, Range 26 East; thence East along the Section line to the Southwest corner of Section 28, Township 22 South, Range 26 East; thence North along the Section line to the Southeast corner of the Northeast Quarter of Section 5, Township 22 South, Range 26 East; thence West along the quarter section line to the Southwest corner of the Northwest Quarter of Section 5, Township 22 South, Range 26 East; thence North along the Section lines to the Northwest corner of Section 32, Township 21 South, Range 26 East;

thence East along the Section line to the Northeast corner of the Northwest quarter of Section 32, Township 21 South, Range 26 East; thence North along the quarter section lines to the Northwest corner of the Northeast quarter of Section 20, Township 21 South, Range 26 East; thence East along the Section line to the Southwest corner of Section 16, Township 21 South, Range 26 East; thence North along the Section line to the Northwest corner of Section 16, Township 21 South, Range 26 East; thence East along the Section line to the Southwest corner of the Southeast quarter of Section 9, Township 21 South, Range 26 East; thence North along the quarter section line to the Northwest corner of the Southeast quarter of Section 4, Township 21 South, Range 26 East; thence West along the quarter section line to the Southwest corner of the Northwest quarter of Section 4, Township 21 South, Range 26 East; thence North along the Section line to the Northwest corner of Section 4, Township 21 South, Range 26 East and the South line of Section 33, Township 20 South, Range 26 East; thence West along said South line to the Southwest corner of said Section 33, Township 20 South, Range 26 East; thence North along the section lines to the Northwest corner of Section 28, Township 20 South, Range 26 East; thence East along the section lines to the Southwest corner of the Southeast quarter of Section 24, Township 20 South, Range 26 East; thence North along the quarter section line to the Northwest corner of the Southeast quarter of Section 24, Township 20 South, Range 26 East; thence East along the quarter section line to the Northeast corner of the Southeast quarter of Section 24, Township 20 South, Range 26 East; thence North along the Section line to the Northwest corner of Section 19, Township 20 South, Range 27 East; thence East along the Section lines to the Northwest corner of Section 21, Township 20 South, Range 27 East; thence North along the Section line to the Northwest corner of the Southwest quarter of Section 16, Township 20 South, Range 27 East; thence East along the quarter section line to the Northeast corner of the Southeast quarter of Section 16, Township 20 South, Range 27 East; thence North along the Section line to the Northwest corner of Section 15, Township 20 South, Range 27 East; thence East along the Section line to the Northeast corner of Section 14, Township 20 South, Range 27 East; thence South along the Section lines to the Southeast corner of Section 23, Township 20 South, Range 27 East; thence West along the Section line to the Southwest corner of the Southeast quarter of Section 23, Township 20 South, Range 27 East; thence South along the quarter section line to the Northwest corner of the Northeast quarter of Section 35, Township 20 South, Range 27 East; thence East along the Section line to the Northeast corner of Section 35, Township 20 South, Range 27 East; thence South along the Section line to the Southeast corner of Section 35, Township 20 South, Range 27 East; thence East along the Section line to the Southwest corner of the Southeast quarter of Section 36, Township 20 South, Range 27 East; thence North along the quarter section line to the Northwest corner of the

Southeast quarter of Section 36, Township 20 South, Range 27 East; thence East along the quarter section line to the Northeast corner of the Southeast quarter of Section 36, Township 20 South, Range 27 East; thence North along the Section line to the Northwest corner of Section 31, Township 20 South, Range 28 East; thence East along the Section lines to the Northeast corner of the Northwest quarter of Section 33, Township 20 South, Range 28 East; thence South along the quarter section lines to the Southeast corner of the Southwest quarter of Section 9, Township 21 South, Range 28 East; thence East along the Section line to the Northwest corner of the Northeast quarter of the Northeast quarter of Section 16, Township 21 South, Range 28 East; thence South along the quarter-quarter Section lines to the Southwest corner of the Southeast quarter of the Southeast quarter of Section 16, Township 21 South, Range 28 East; thence West along the Section line to the Southwest corner of the Southeast quarter of Section 16, Township 21 South, Range 28 East; thence South along the quarter section line to the Southeast corner of the Southwest quarter of Section 21, Township 21 South, Range 28 East; thence West along the Section line to the Southeast corner of Section 20, Township 21 South, Range 28 East; thence South along the Section line to the Southeast corner of Section 32, Township 21 South, Range 28 East; thence West along the Section line to the Southwest corner of the Southeast quarter of Section 32, Township 21 South, Range 28 East; thence South along the quarter section line to the Southwest corner of the Northeast quarter of Section 8, Township 22 South, Range 28 East; thence East along the quarter section line to the Southeast corner of the Northeast quarter of Section 8, Township 22 South, Range 28 East; thence South along the Section line to the Southeast corner of Section 8, Township 22 South, Range 28 East; thence West along the Section line to the Southeast corner of Section 7, Township 22 South, Range 28 East; thence South along the Section line to the Southeast corner of the Northeast quarter of Section 18, Township 22 South, Range 28 East; thence West along the quarter section line to the Northeast corner of the Southeast quarter of Section 13, Township 22 South, Range 27 East; thence South along the Section line to the Southeast corner of Section 13, Township 22 South, Range 27 East; thence West along the Section line to the Southwest corner of the Southeast quarter of Section 13, Township 22 South, Range 27 East; thence South along the quarter section line to the Northwest corner of the Northeast quarter of Section 25, Township 22 South, Range 27 East; thence East along the Section lines to the Northeast corner of Section 29, Township 22 South, Range 28 East, and the Point of Beginning.

NOTE: This description is based on U.S. Geological Survey 7.5 minute series quadrangle maps and St. Johns River Water Management District Hydrologic Basin maps.

WATER MANAGEMENT DISTRICTS

St. Johns River Water Management District

RULE NOS.:	RULE TITLES:
40C-41.011	Policy and Purpose
40C-41.023	Basin Boundaries
40C-41.033	Implementation
40C-41.043	Application of Chapter
40C-41.051	Exemptions
40C-41.063	Conditions for Issuance of Permits

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rule in accordance with subparagraph 120.54(3)(d)1, F.S., published in Vol. 28, No. 16, of the Florida Administrative Weekly on April 19, 2002.

This Notice of Change is being submitted to establish an effective date of March 7, 2003, for the following rule sections.

40C-41.011 Policy and Purpose.

PROPOSED EFFECTIVE DATE: March 7, 2003.

40C-41.023 Basin Boundaries.

PROPOSED EFFECTIVE DATE: March 7, 2003.

40C-41.033 Implementation

PROPOSED EFFECTIVE DATE: March 7, 2003.

40C-41.043 Application of Chapter.

PROPOSED EFFECTIVE DATE: March 7, 2003.

40C-41.051 Exemptions.

PROPOSED EFFECTIVE DATE: March 7, 2003.

40C-41.063 Conditions for Issuance of Permits.

PROPOSED EFFECTIVE DATE: March 7, 2003.

WATER MANAGEMENT DISTRICTS

St. Johns River Water Management District

RULE NO.:	RULE TITLE:
40C-42.023	Requirements for Issuance

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rule in accordance with subparagraph 120.54(3)(d)1., F.S., published in Vol. 28, No. 16, of the Florida Administrative Weekly on April 19, 2002.

This Notice of Change is being submitted to establish an effective date of March 7, 2003, for the following rule section.

40C-42.023 Requirements for Issuance.

PROPOSED EFFECTIVE DATE: March 7, 2003.

WATER MANAGEMENT DISTRICTS

St. Johns River Water Management District

RULE NOS.:	RULE TITLES:
40C-44.065	Performance Standards
40C-44.091	Publications Incorporated by Reference

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rule in accordance with subparagraph 120.54(3)(d)1., F.S., published in Vol. 28, No. 16, of the Florida Administrative Weekly on April 19, 2002.

This Notice of Change is being submitted to establish an effective date of March 7, 2003, for the following rule sections.

40C-44.065 Performance Standards.

PROPOSED EFFECTIVE DATE: March 7, 2003.

40C-44.091 Publications Incorporated by Reference.

PROPOSED EFFECTIVE DATE: March 7, 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Water Resource Management

DOCKET NO.: 02-17R

RULE CHAPTER NO.: 62B-34
 RULE CHAPTER TITLE: General Permit for Activities Seaward of the Coastal Construction Control Line

RULE NO.: 62B-34.070
 RULE TITLE: General Permit for Single Family Dwellings and Associated Minor Structures or Activities

NOTICE OF CHANGE

Pursuant to subparagraph 120.54(3)(d)1., F.S., notice is hereby given that the following changes have been made to the proposed rule published in Vol. 28, No. 48, (November 27, 2002), issue of the Florida Administrative Weekly. These changes are made in response to written and oral comments from the Joint Administrative Procedures Committee and staff recommendations.

The full text of this notice, showing changes to the proposed rulemaking language, is published on the Internet at the Department of Environmental Protection’s home page at <http://www.dep.state.fl.us/> under the link or button entitled “Official Notices.” If you have additional questions please contact Rosaline Beckham, (850)488-3181.

DEPARTMENT OF HEALTH

Division of Medical Quality Assurance

RULE NO.: 64B-1.016
 RULE TITLE: Fees: Examination and Post-Examination Review

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rule in accordance with subparagraph 120.54(3)(d)1., F.S., published in Vol. 28, No. 52, December 27, 2002, issue of the Florida Administrative Weekly. The changes are in response to comments received from the public on January 7, 2003.

Section (1)(a) of the rule shall now read as follows:

64B-1.016 Fees: Examination and Post-Examination Review.

(1)(a) The following fees shall be assessed by the department to cover administrative costs, actual per-applicant costs, and costs incurred to develop, purchase, validate, administer, and defend the following department developed, administered, or managed examinations:

Profession	Exam	Exam Fee
Acupuncture Chiropractic Medicine	National Written	\$1,091.00
	Physical Diagnosis	\$610.00
	Technique	\$250.00
	X-Ray	\$180.00
	Laws & Rules	\$60.00
	Acupuncture	\$220.00
Dental	CBT Laws & Rules	\$35.00
	CBT Acupuncture	\$135.00
	Clinical	\$950.00
Dental Hygiene	Laws & Rules	\$95.00
	CBT Laws & Rules	\$30.00
	Clinical	\$325.00
Electrolysis	Laws & Rules	\$60.00
	CBT Laws & Rules	\$20.00
	Written Exam	\$505.00
Hearing Aid Specialist	National Written	\$300.00
	Massage	\$595.00
Nursing Home Administrator	Colonics	\$385.00
	CBT Colonics	\$385.00
	Laws & Rules	\$240.00
Opticianry	CBT Laws & Rules	\$155.00
	Practical	\$385.00
	Neutralization	\$190.00
Optometry	Laws & Rules	\$115.00
	Clinical	\$590.00
	Pharmacology	\$370.00
Osteopathic Medicine	CBT Laws & Rules	\$30.00
	National Written	\$2,500.00
	<u>Physical Therapy</u>	<u>CBT Laws & Rules</u> <u>\$25.00</u>
Psychology	<u>Physical Therapist Assistant</u>	<u>CBT Laws & Rules</u> <u>\$25.00</u>
	National Exam	\$458.00
	Laws & Rules	\$120.00
	CBT Laws & Rules	\$80.00

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Christie Brown, Division of Medical Quality Assurance, 4052 Bald Cypress Way, Bin #C90, Tallahassee, Florida 32399-3290

DEPARTMENT OF HEALTH

Board of Massage Therapy

RULE NO.: 64B7-32.003
 RULE TITLE: Minimum Requirements for Board of Massage Therapy Approval

NOTICE OF ADDITIONAL PUBLIC HEARING

The Board of Massage Therapy hereby gives notice of an additional public hearing on the above-referenced rule to be held on:

TIME AND DATE: 9:00 a.m., Thursday, January 30, 2003

PLACE: Tampa Airport Marriott, Tampa International Airport, Tampa, Florida (813)879-5151

The rule was originally published in Vol. 28, No. 31, of the August 2, 2002, Florida Administrative Weekly.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Pamela King, Executive Director, Board of Massage Therapy, Department of Health, 4052 Bald Cypress Way, Bin #C06, Tallahassee, Florida 32399-3256.

Any person requiring a special accommodation at this hearing because of a disability or physical impairment should contact the Board’s Executive Director at least five calendar days prior to the hearing. If you are hearing or speech impaired, please contact the Board office using the Florida Dual Party Relay System which can be reached at 1(800)955-8770 (Voice) and 1(800)955-8771 (TDD).

Section IV
Emergency Rules

DEPARTMENT OF THE LOTTERY

RULE TITLE: Instant Game Number 462, \$1,000,000 CASH SPECTACULAR
RULE NO.: 53ER03-1

SUMMARY OF THE RULE: This emergency rule describes Instant Game Number 448, “\$1,000,000 CASH SPECTACULAR,” for which the Department of the Lottery will start selling tickets on a date to be determined by the Secretary of the Department. The rule sets forth the specifics of the game; determination of prizewinners; and the estimated odds of winning, value, number and size of prizes in the game.

THE PERSON TO BE CONTACTED REGARDING THE EMERGENCY RULE IS: Diane D. Schmidt, Legal Analyst, Department of the Lottery, 250 Marriott Drive, Tallahassee, Florida 32399-4011

THE FULL TEXT OF THE EMERGENCY RULE IS:

53ER03-1 Instant Game Number 462, \$1,000,000 CASH SPECTACULAR.

(1) Name of Game. Instant Game Number 462, “\$1,000,000 CASH SPECTACULAR” (referred to herein as \$1,000,000 CASH SPECTACULAR).

(2) Price. \$1,000,000 CASH SPECTACULAR lottery tickets sell for \$10.00 per ticket.

(3) \$1,000,000 CASH SPECTACULAR lottery tickets shall have a series of numbers in Machine Readable Code (or bar code) on the back of the ticket, along with a Void If Removed Number under the latex area on the ticket. To be a valid winning \$1,000,000 CASH SPECTACULAR lottery ticket, a combination of essential elements sufficient to validate the ticket must be present as set forth in paragraph 53ER92-63(1)(a), Florida Administrative Code. In the event a dispute arises as to the validity of any \$1,000,000 CASH SPECTACULAR lottery ticket, or as to the prize amount, the Void If Removed Number under the latex shall prevail over the bar code.

(4) The “YOUR NUMBERS” play symbols and play symbol captions are as follows:

INSERT SYMBOLS

(5) The “WINNING NUMBERS” play symbols and play symbol captions are as follows:

INSERT SYMBOLS

(6) The prize symbols and prize symbol captions are as follows:

INSERT SYMBOLS

(7) The legends are as follows:

INSERT SYMBOLS

(8) Determination of Prize Winners.

(a) A ticket having a number in the “YOUR NUMBERS” play area that matches any number in the “WINNING NUMBERS” play area shall entitle the claimant to the corresponding prize shown for that number. A ticket may have up to twenty sets of matching numbers. The prizes are: \$5.00, \$10.00, \$15.00, \$20.00, \$25.00, \$40.00, \$50.00, \$100, \$200, \$500, \$1,000, and \$10,000.



(b) A ticket having a “WIN” symbol in the “YOUR NUMBERS” play area shall entitle the claimant to a prize of \$50,000 a year for twenty years.