

# **Rule Development Workshop Amendments to C-51 Basin Rules 40E-41.223, 40E-41.233, and 40E-41.263, F.A.C.**

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**May 21, 2015  
B-1 Auditorium  
South Florida Water Management District**

## C-51 Basin Rulemaking Timetable

- May 21 – rule development workshop
- June 4 – end of public comment period
- August 13 – Governing Board authorization to publish Notice of Rule Proposed Rule (if there are no significant changes after workshop)
- October 8 – public hearing to adopt proposed rules
- November 22 – rule becomes effective (provided no changes to proposed rules)



# Background

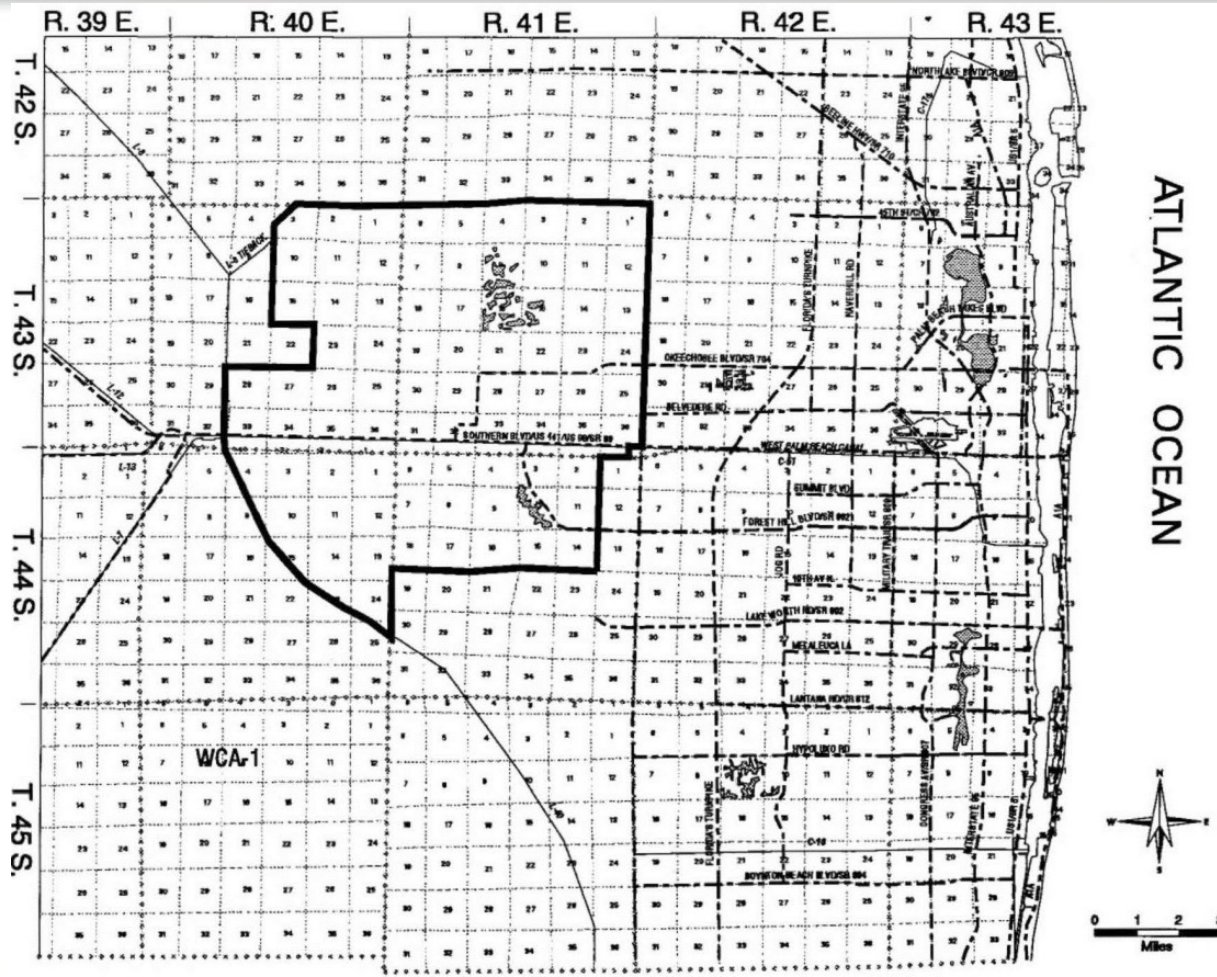
- 1987: current rule adopted
  - Established basin & sub-basin boundaries
  - 10-year, 3-day discharge coefficients
  - 100-year, 3-day peak stages
    - Used to establish finished floor elevations (FFE) and compensating storage requirements







# Background, cont'd

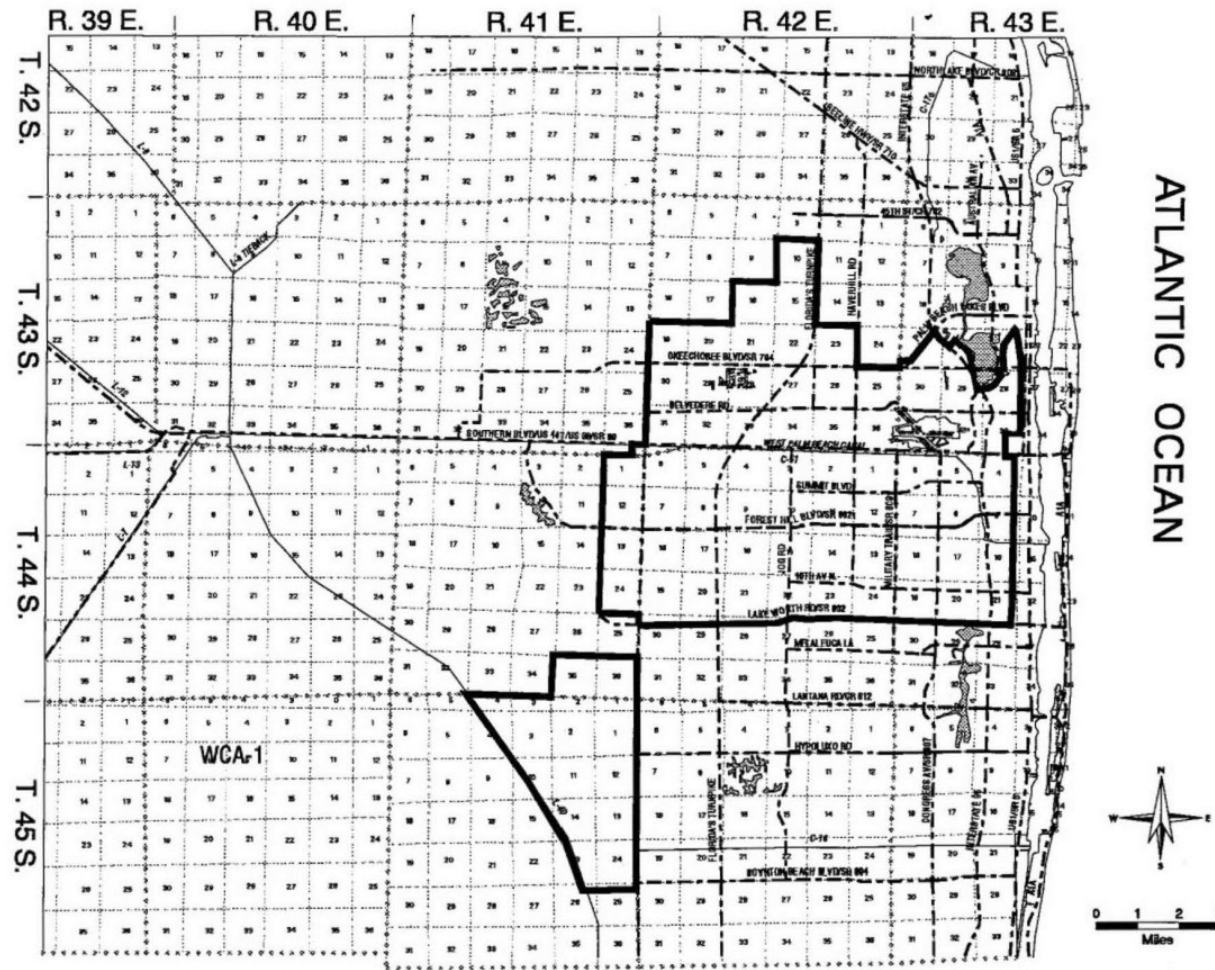


40E-41.223, Fig. 41-6: C-51 West Boundary (1987)





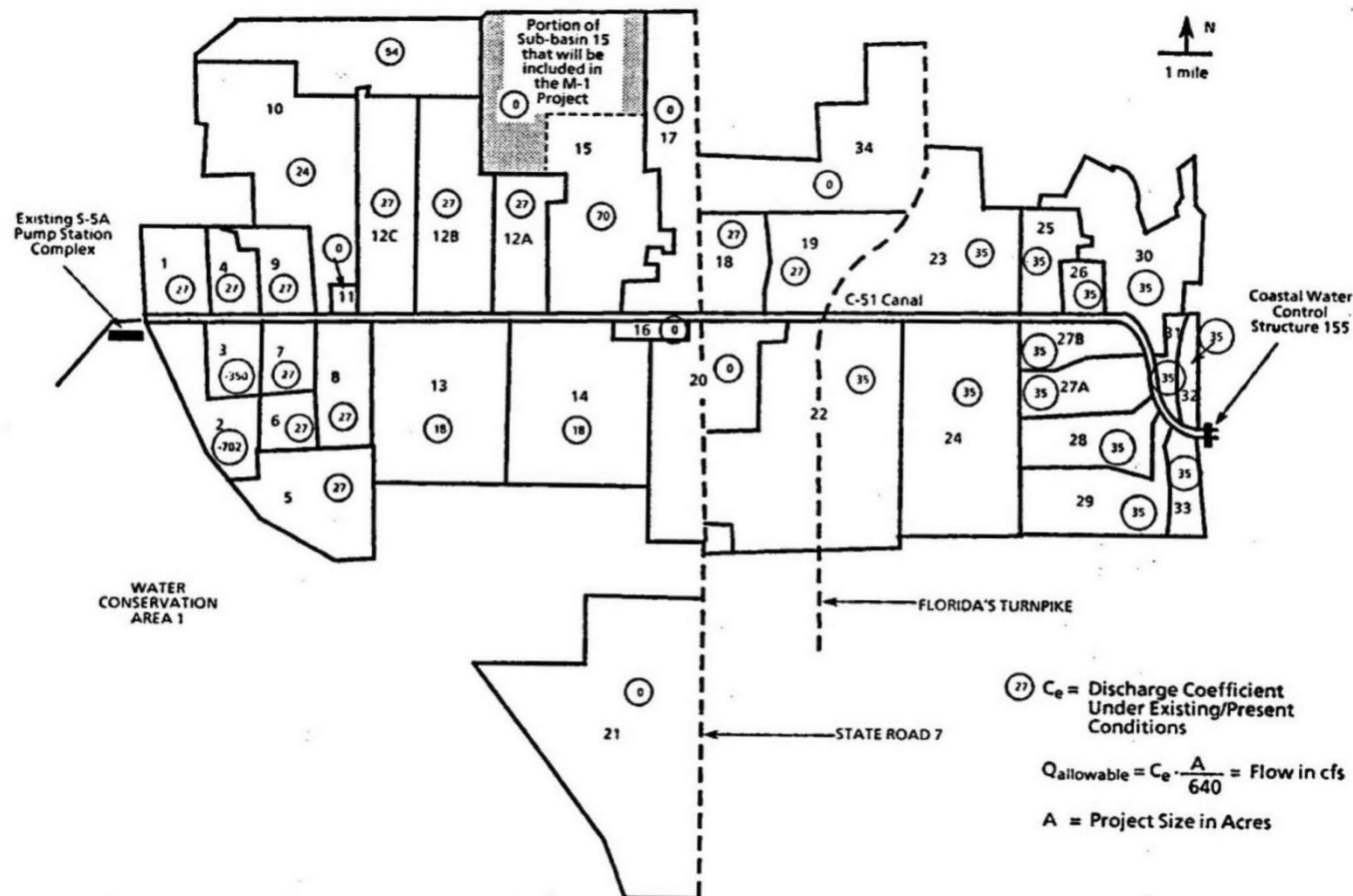
# Background, cont'd



40E-41.223, Fig. 41-7: C-51 East Boundary (1987)



# Background, cont'd

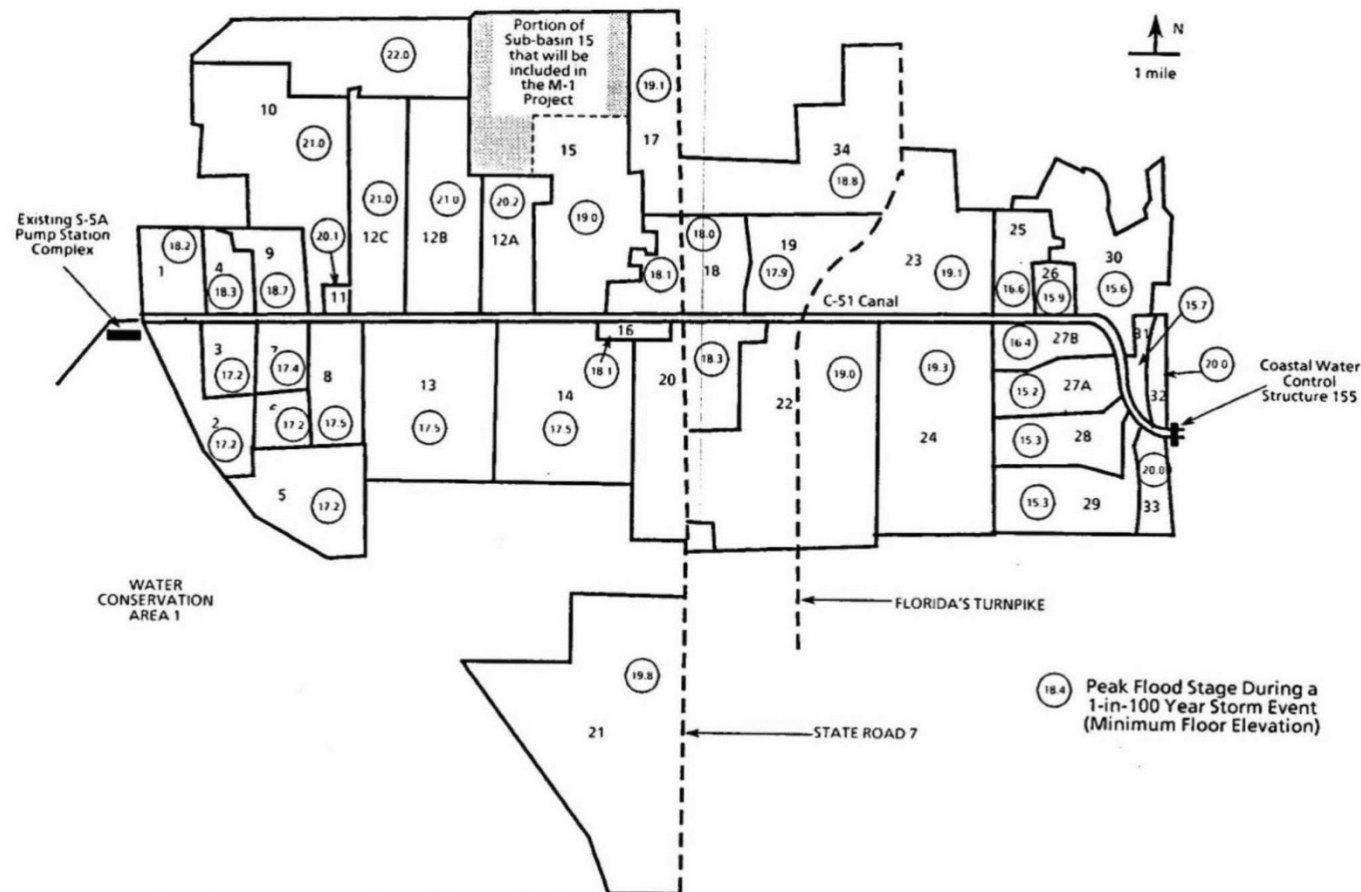


Discharge Coefficients for the Sub-basins of the C-51 Basin in Palm Beach County, Florida.

40E-41.263(1)(a), Fig. 41-8: C-51 Discharge Coefficients (1987)



# Background, cont'd



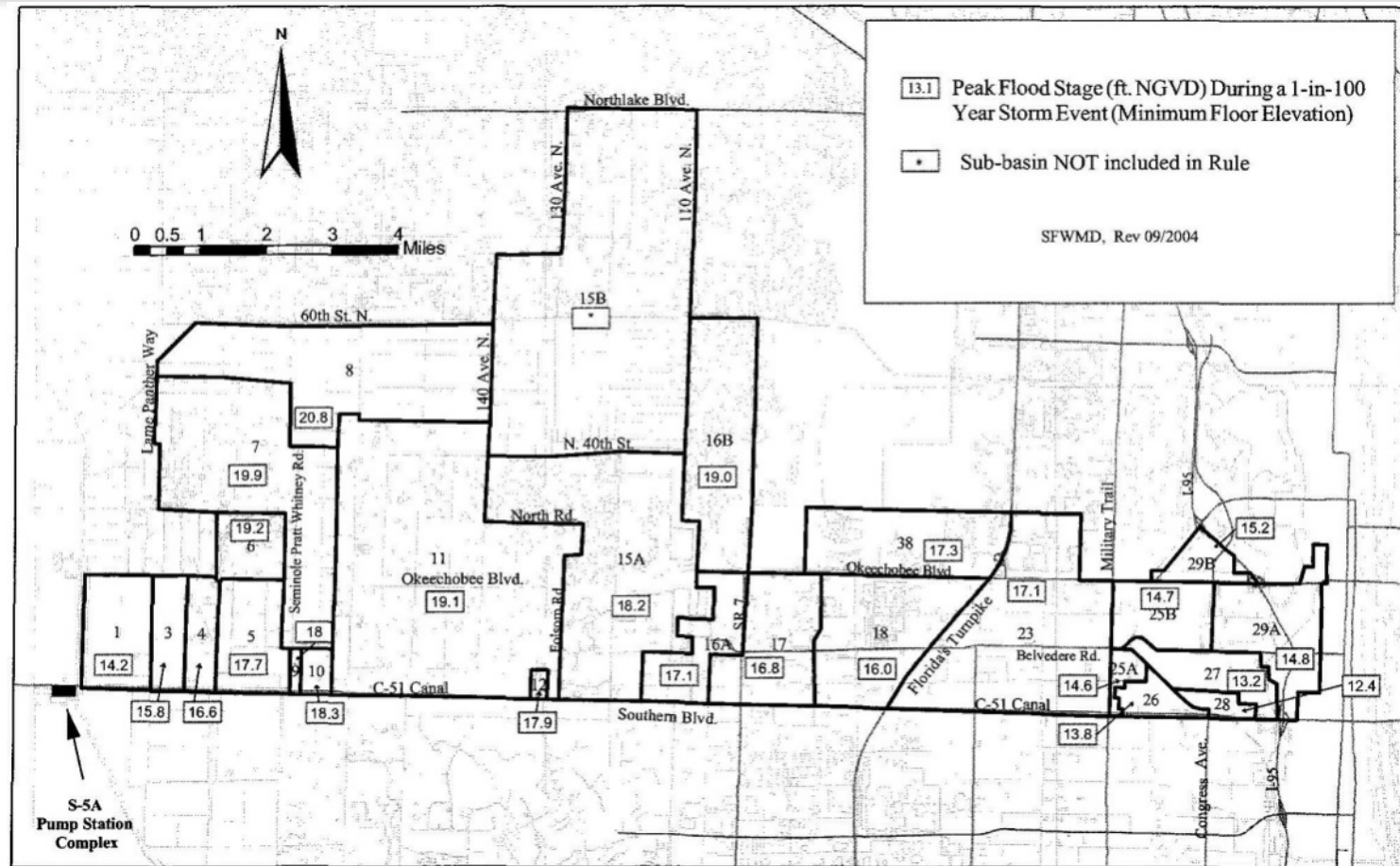


# Background, cont'd

- 2004: first rule reevaluation/redevelopment
  - Undertaken to account for C-51 West infrastructure modifications
    - STA-1E, S-319 PS, S-155A “Divide” Structure
  - Revised topography, sub-basin boundaries
  - New models developed
  - Rule redevelopment halted due to water quality concerns within STA-1E & discrepancies in topographic data
  - Interim Guidance developed based on Palm Beach County efforts
    - 10-year, 3-day discharge coefficients unchanged
    - 100-year, 3-day stages updated



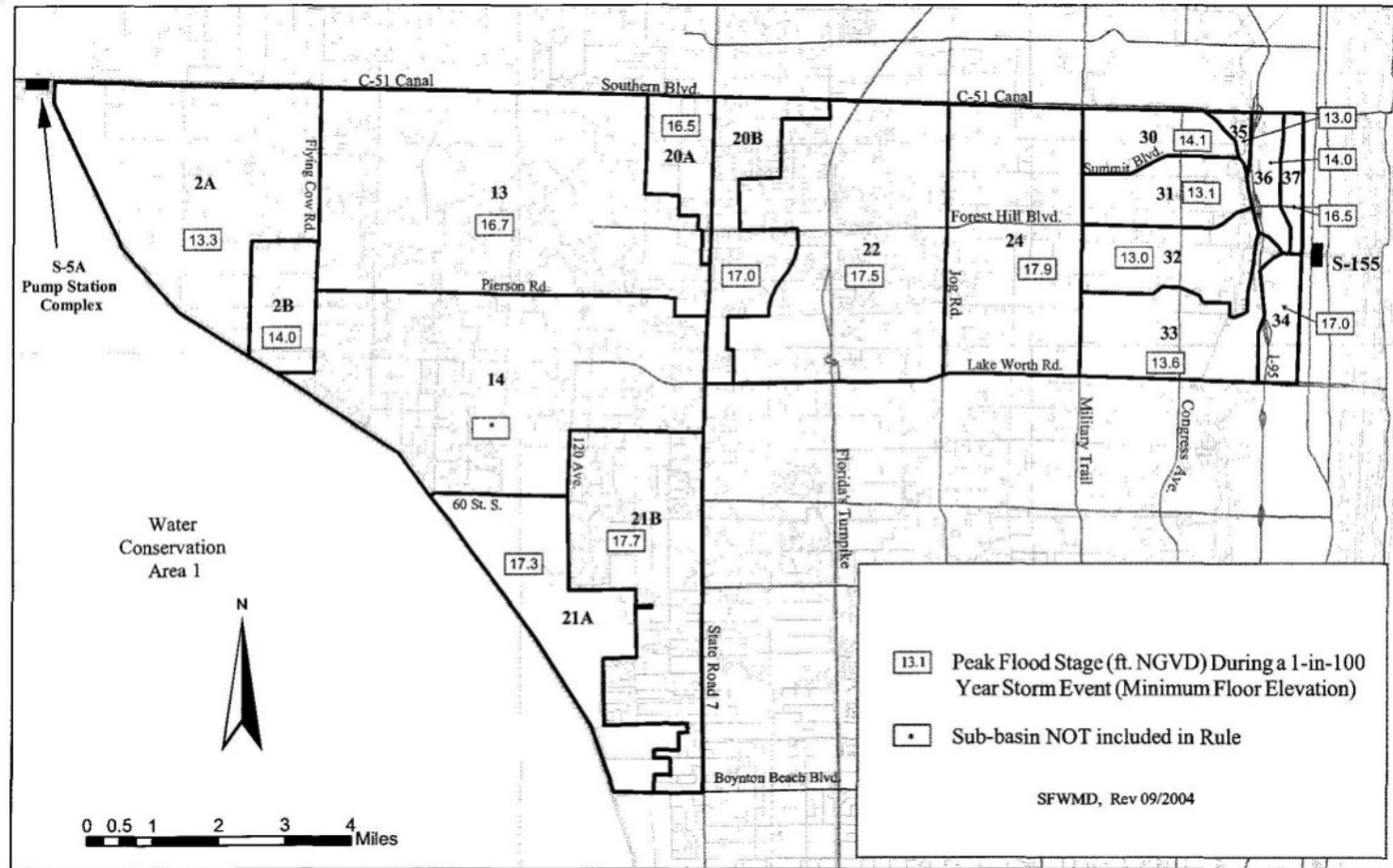
# Background, cont'd



Interim Guidance Memo, Fig. 1, Plate 1 of 2: C-51 Peak Flood Stages (2004)



# Background, cont'd



Interim Guidance Memo, Fig. 1, Plate 2 of 2: C-51 Peak Flood Stages (2004)





# Reevaluation

- Nov. 2012: Reevaluation of the C-51 model
  - Built on the 2004 effort
  - Occurred concurrent with FEMA remapping
  - Revised models developed
    - Calibrated to Tropical Storm Isaac
    - Revised topography, sub-basins
    - “Actual” sub-basin conditions/“Real world” connections
- Feb. 2014: Draft report
  - Subsequently reviewed by stakeholder group with recommendations/requests for further revisions



# Reevaluation, cont'd

- Nov. 2014: Final draft report
  - Subsequent review indicated sub-basin refinement required
- May 2015: Final revisions
  - Report made available via the District Rules, Statutes and Criteria website:
    - [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/c51\\_basin\\_rule\\_model\\_report\\_may\\_2015.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/c51_basin_rule_model_report_may_2015.pdf)



# 40E-41.223 C-51 Basin Boundary

- Revised sub-basin boundaries
  - Figures 41-5, 41-6, and 41-7: revised to reflect updated sub-basin boundaries

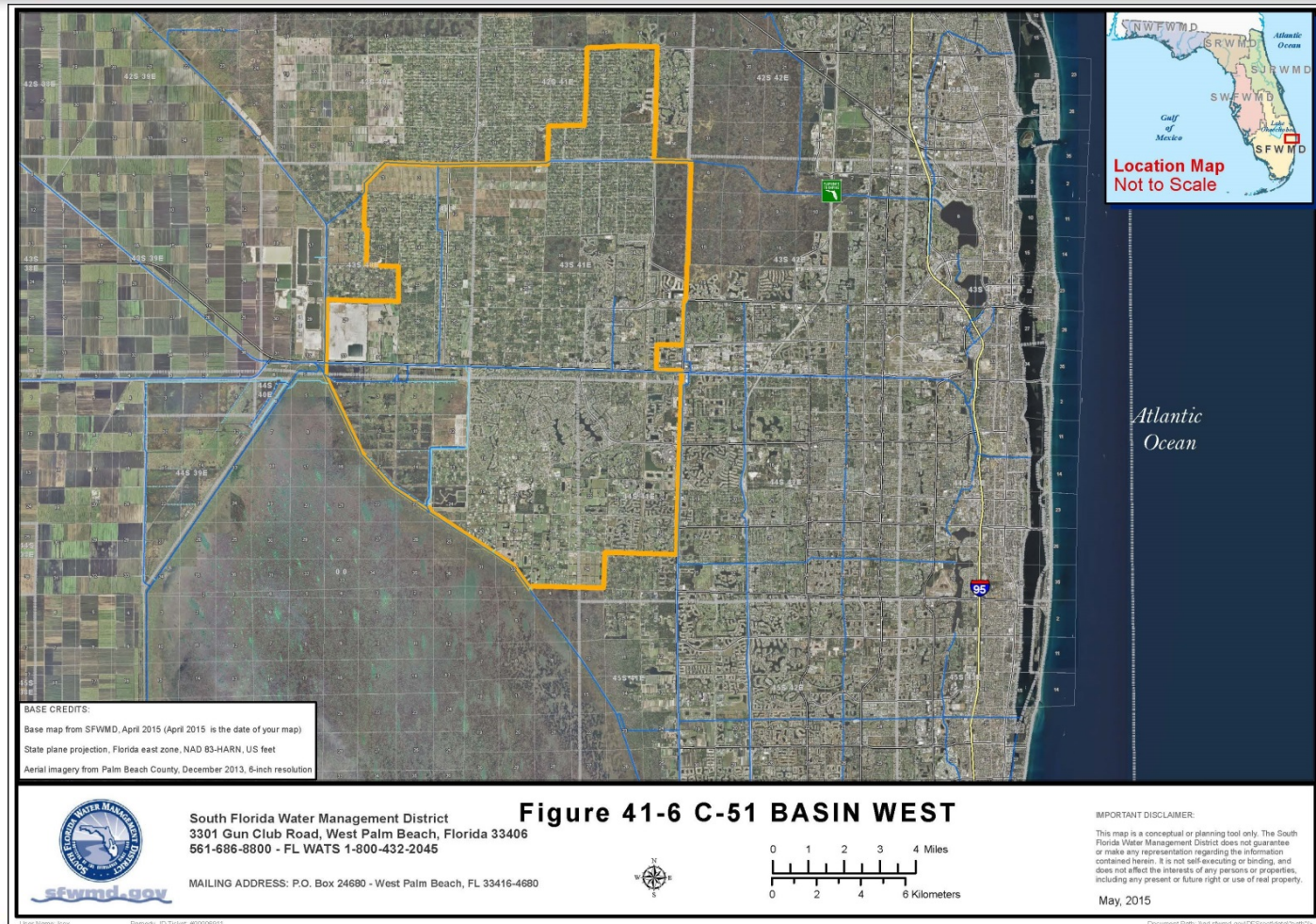








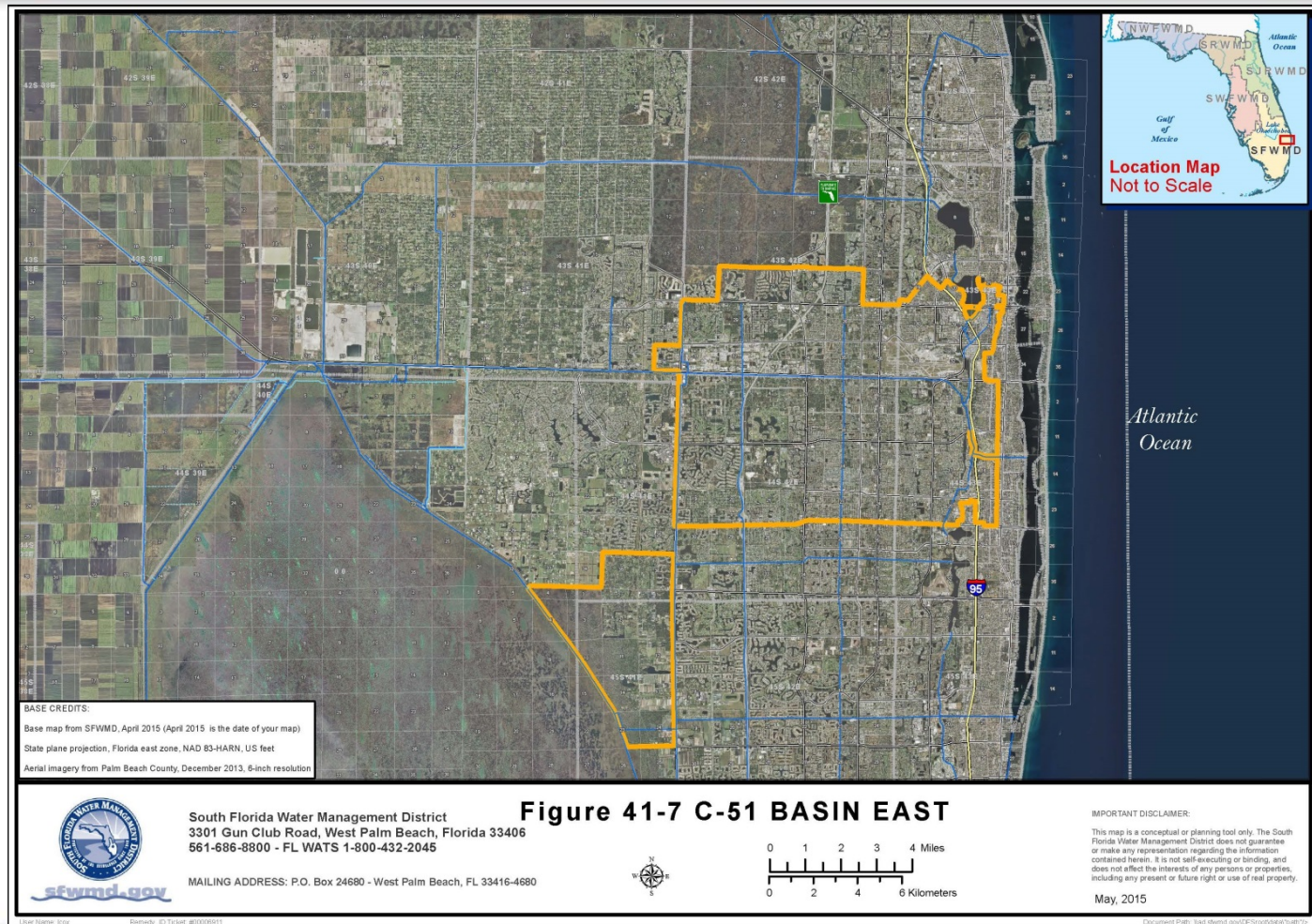
# 40E-41.223 C-51 Basin Boundary



40E-41.223, Fig. 41-6: C-51 West Boundary (Proposed)



# 40E-41.223 C-51 Basin Boundary



40E-41.223, Fig. 41-7: C-51 East Boundary (Proposed)



# 40E-41.263, F.A.C. Conditions for Issuance of Permits in the C-51 Basin

- 40E-41.263(1)(a), F.A.C.: Revise 10-year, 3-day design discharge coefficients
- Figure 41-8: added table with new coefficients

C-51 West				C-51 East			
Sub-Basin	Stage (ft NGVD)	Sub-Basin	Stage (ft NGVD)	Sub-Basin	Stage (ft NGVD)	Sub-Basin	Stage (ft NGVD)
1	27.0	11	27.0	17	27.0	28	35.0
2A		12	27.0	18	27.0	29A	35.0
2B	27.0	13	29.0	20A	27.0	29B	35.0
3	27.0	14	29.0	20B	35.0	30	35.0
4	27.0	15A	70.0	21A		31	35.0
5	27.0	15B*		21B	27.0	32	35.0
6	63.5	16A	27.0	22	35.0	33	35.0
7	41.5	16B-1	27.0	23	35.0	34	35.0
8	54.0	16B-2	27.0	24	35.0	35	35.0
9	27.0	16B-3	27.0	25A	35.0	36	35.0
10	27.0	Sect 24		25B	35.0	37	35.0
				26	35.0	38	27.0
				27	35.0	39	35.0

\*Sub-basin not included in rule

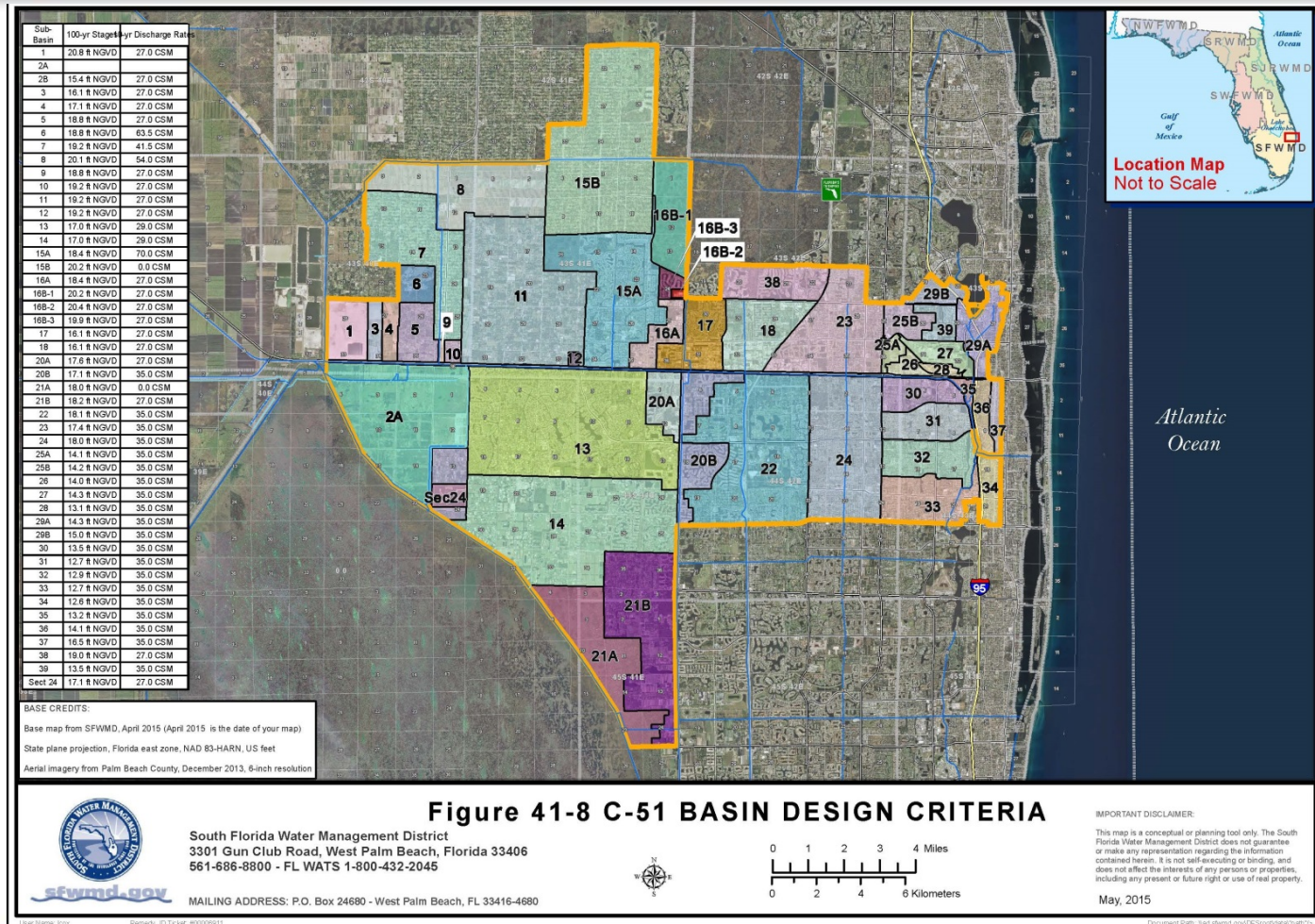
# 40E-41.263, F.A.C. Conditions for Issuance of Permits in the C-51 Basin

- 40E-41.263(2)(a), 40E-41.263(3), F.A.C.: Revised 100-year, 3-day design stages
- Figure 41-9: deleted/consolidated with Figure 41-8

C-51 West				C-51 East			
Sub-Basin	Stage (ft NGVD)	Sub-Basin	Stage (ft NGVD)	Sub-Basin	Stage (ft NGVD)	Sub-Basin	Stage (ft NGVD)
1	20.8	11	19.2	17	16.1	28	13.1
2A		12	19.2	18	16.1	29A	14.3
2B	15.4	13	17.0	20A	17.6	29B	15.0
3	16.1	14	17.0	20B	17.1	30	13.5
4	17.1	15A	18.4	21A		31	12.7
5	18.8	15B*		21B	18.2	32	12.9
6	18.8	16A	18.4	22	18.1	33	12.7
7	19.2	16B-1	20.2	23	17.4	34	12.6
8	20.1	16B-2	20.4	24	18.0	35	13.2
9	18.8	16B-3	19.9	25A	14.1	36	14.1
10	19.2	Sect 24	17.1	25B	14.2	37	16.5
				26	14.0	38	19.0
				27	14.3	39	13.5

\*Sub-basin not included in rule

# 40E-41.263 Conditions for Issuance of Permits in the C-51 Basin



40E-41.263(1)(a), (2)(a), Fig. 41-8: C-51 Discharge Coefficients & Peak Flood Stages (Proposed)

\*Sub-basin 15B not included in rule



## 40E-41.263, F.A.C. Conditions for Issuance of Permits in the C-51 Basin

- 40E-41.263(5), F.A.C.: Eliminate requirement to provide ½” of dry pretreatment for non-industrial/non-commercial in the C-51 West
  - Appendix E of ERP Applicant's Handbook Vol. II (August 10, 2014)
    - Requires that additional water quality treatment be provided by projects discharging to an impaired waterbody;
    - C-51 West is identified by the FDEP as an impaired basin (WBID 3245G);
    - Industrial/commercial projects in all portions of the C-51 Basin still required to provide ½” of dry retention/detention pretreatment per Paragraph 4.2.2(a), ERP Applicant's Handbook Vol. II.



# Draft Rule Text

- Draft rule text made available via the District Rules, Statutes and Criteria website:
  - [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/draft\\_c51\\_40e\\_41\\_20150514.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/draft_c51_40e_41_20150514.pdf)



# Submit Written Comments To:

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3800 NW 16th Boulevard, Suite A,  
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# Questions

