

Interim Structural and Operational Plan Modeling Assumptions

The South Florida Water Management Model (SFWMM) version 3.8 was used in continuous simulation mode (31 year simulation using 1965 to 1995 climatic data set) to simulate and compare the following:

- 95 Base: Current normal structure operations and demands. Test 7 phase I operations in South Dade Conveyance System (SDCS).
- 83 Base: Authorized canal levels and operations prior to the Experimental Water Deliveries Program. This is different from 83BSSTA simulated as part of the Modified Water Deliveries Project. It does not have STA's and does not include the Big Cypress Seminole Entitlement.

Specific operations that were differ from those of the 95 Base and operations for the South Dade Conveyance System are give in Table 1 below.

Table 1. Definition of differences in operational assumptions as used in the SFWMM v3.8.

	95 Base	83BASE
Regulation Schedule	Current C&SF regulation schedules throughout system	Current C&SF regulation schedules in WCA-1 and 2A. Zone-A/Zone-E regulation schedule 9.5/10.5 ft used in WCA-3A
S-343 A/B and S-344	Per current WCA-3A regulation schedule.	Zone-A/Zone-E regulation schedule 9.5/10.5 ft.
S-12 A/B/C/D	Operated according to current regulation schedule which includes rainfall plan target. Split 10/20/30/40 percent west to east.	Zone-A/Zone-E regulation schedule 9.5/10.5 ft. S-12 flow target dictated by minimum delivery schedule.
S-333: G-3273 < 6.8'	S-333 open to deliver 55% of Shark Slough target flows as per rainfall plan target (rainfall formula + WCA-3A regulatory discharge).	Water supply deliveries only
S-333: G-3273 > 6.8'	S-333 closed	Water supply deliveries only
L-29 constraint	8.0 ft	8.0 ft
S-337	Water supply only	Water supply only
S-151	Per current WCA-3A regulation schedule.	Zone-A/Zone-E regulation schedule 9.5/10.5 ft.
S-335	Start opening 7.2, full open 7.5	Start opening 7.0, full open 7.3
S-334	closed	Water supply only
S-338	Test 7 Phase I Start opening 5.5, full open 5.8	Start opening 4.8, full open 5.2
G-211	Start opening 5.5, full open 6.0	Non-existent
S-331	Start pumping 4.8, pumps down to 4.3	Water supply only
S-332B	Non-existent	Non-existent
S-332D	Non-existent	Non-existent
S-332	Operated according to Taylor Slough Rainfall plan with 465 cfs capacity, subject to 165 cfs limitations from Mar 1 to Jul 15.	165 cfs design capacity Operated according to minimum delivery schedule
S-175	Start opening 4.3, full open 4.7	Start opening 4.5, full open 5.2
S-194 and S-196	Start opening 4.8 full open 5.3	Water supply only
S-176	Start opening 4.75 full open 5.0	Start opening 5.3 full open 5.7
S-177	Start opening 3.6 full open 4.2	Start opening 4.3 full open 5.2
S-18C	Start opening 2.3 full open 2.6	Start opening 1.6 full open 2.4
S-197	Open - see footnote ¹ Close at 2.3	Open - see footnote ² Close at 1.9

¹ S197: 95 Base criteria: Uses same as Test 7 phase I criteria, namely: Open 3 gates if S177 open and S177 > 4.1 ft or S18C > 2.8 ft. Open 7 gates if S177 > 4.2 ft or S18C > 3.1ft. Open 13 gates if S177 > 4.3 ft or S18C > 3.3 ft. Close when all following conditions are met: 1) S-176 < 5.2 and S-177 < 4.2, 2) Storm moved away from basin, and 3) after 1 and 2 are met, keep the number of S-197 culverts open necessary only to match residual flow through S-176. All culverts closed if S-177 < 4.1 after all conditions satisfied. . In SFWMM flow is limited to keep stage above the gate closed levels specified above.

² S197: 83 Base criteria: S177/S18C open full and S177>4.3, open 3 gates and pull earth plug. In SFWMM flow is limited to keep stage above the gate closed levels specified above.