Tamiami Trail Flow Formula (TTFF) - Target Flow from WCA-3A to ENP

Daily Target Flow for			2/13/2024	to	2/19/2024	MAX	cfs

Observed Stage Data

Station	Variable		on	2/9/2024	Value	Unit
WCA-3A (Average for Site 63, 64 and 65)	Average Daily Stage				10.46	ft-NGVD29
NESRS2	Average Daily Stage				7.98	ft-NGVD29
Regulatory Stage WCA-3A	Average Daily Stage				10.24	ft-NGVD29

Observed Flow Data

Station	Variable	From	2/3/2024	to	2/9/2024	Value	Unit
S-12A	7-day Average Daily Flow					239	cfs
S-12B	7-day Average Daily Flow					187	cfs
S-12C	7-day Average Daily Flow					464	cfs
S-12D	7-day Average Daily Flow					729	cfs
S-333	7-day Average Daily Flow					297	cfs
S-333N	7-day Average Daily Flow					113	cfs
S-334	7-day Average Daily Flow					0	cfs
S-12s Total	7-day Average Daily Flow					1618	cfs
S333 + S333N - S334[1]	7-day Average Daily Flow					410	cfs
Total Flow to ENP	7-day Average Daily Flow					2028	cfs

Meteorological Data

Forecasted		From	2/10/2024	to	2/16/2024	Value	Unit
WCA3 7-day Quantitative Precipitation Forecast (QPF)						0.07	in
3AS3WX - 7-day Total Forecasted PET						0.83	in

Observed		From	2/3/2024	to	2/9/2024	Value	Unit
WCA-3 7-day Total Observed NEXRAD Rainfall						0.29	in
3AS3WX 7-day Total Observed PET						0.83	in

TTFF Application

1	Previous week target flow (calculated with forecasted 7-day QPF and PET)	MAX	cfs
2	Previous week target flow (recalculated with observed rainfall and PET)	MAX	cfs
3	Adjustment for forecast (2-1)	0	cfs
4	This week calculated target flow	MAX	cfs
5	This week target flow with adjustment (3 + 4)	MAX	cfs
Average Daily Target Flow[2]		MAX	cfs

TTFF formula coefficients					
WCA-3A Average Stage ($\beta 1$)	NESRS2 Stage ($\beta 2$)	Previous 7-day Average Flow ($\beta 3$)	Forecast Precipitation ($\beta 4$)	Forecast PET ($\beta 5$)	Regulation Schedule Stage ($\beta 6$)
318.42	-44.62	0.644	24.32	-96.31	-221.79

Target flow is distributed from east to west (S-333, S-12D, S-12C, S-12B, and S-12A) to prioritize water deliveries to NESRS first and WSRS second, subject to downstream constraints.

[1]S-333 + S333N - S-334 becomes zero if the sum of S-333 and S-333N is less than S-334 flow. Calculation is done daily.

[2]Actual discharges may vary from target discharges because of changing hydrologic conditions.

Flow from WCA-3A to Everglades National Park Using the Tamiami Trail Flow Formula