

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

Daily Target Flow for 12/21/2021 to 12/27/2021 1806 cfs

Observed Stage Data

| Station | Variable | on 12/17/2021 | Value | Unit |
|---|---------------------|---------------|-------|-----------|
| WCA-3A (Average for Site 63, 64 and 65) | Average Daily Stage | | 10.21 | ft-NGVD29 |
| NESRS2 | Average Daily Stage | | 8.07 | ft-NGVD29 |
| Regulatory Stage WCA-3A | Average Daily Stage | | 10.50 | ft-NGVD29 |

Observed Flow Data

| Station | Variable | From 12/11/2021 | to 12/17/2021 | Value | Unit |
|----------------------------------|--------------------------|-----------------|---------------|-------|------|
| S-12A | 7-day Average Daily Flow | | | 0 | cfs |
| S-12B | 7-day Average Daily Flow | | | 0 | cfs |
| S-12C | 7-day Average Daily Flow | | | 0 | cfs |
| S-12D | 7-day Average Daily Flow | | | 703 | cfs |
| S-333 | 7-day Average Daily Flow | | | 660 | cfs |
| S-333N | 7-day Average Daily Flow | | | 666 | cfs |
| S-334 | 7-day Average Daily Flow | | | 0 | cfs |
| S-12s Total | 7-day Average Daily Flow | | | 703 | cfs |
| S333 + S333N - S334 ¹ | 7-day Average Daily Flow | | | 1326 | cfs |
| Total Flow to ENP | 7-day Average Daily Flow | | | 2029 | cfs |

Meteorological Data

| Forecasted | From 12/18/2021 | to 12/24/2021 | Value | Unit |
|--|-----------------|---------------|-------|------|
| WCA3 7-day Quantitative Precipitation Forecast (QPF) | | | 0.45 | in |
| 3AS3WX - 7-day Total Forecasted PET | | | 0.76 | in |

| Observed | From 12/11/2021 | to 12/17/2021 | Value | Unit |
|--|-----------------|---------------|-------|------|
| WCA-3 7-day Total Observed NEXRAD Rainfall | | | 0.10 | in |
| 3AS3WX 7-day Total Observed PET | | | 0.76 | in |

TTFF Application

| | | | |
|---|--|------|-----|
| 1 | Previous week target flow (calculated with forecasted 7-day QPF and PET) | 1837 | cfs |
| 2 | Previous week target flow (recalculated with observed rainfall and PET) | 1837 | cfs |
| 3 | Adjustment for forecast (2-1) | 0 | cfs |
| 4 | This week calculated target flow | 1806 | cfs |
| 5 | This week target flow with adjustment (3 + 4) | 1806 | cfs |

Average Daily Target Flow² 1806 cfs

| TTFF formula coefficients | | | | | |
|---------------------------|-------------------|----------------------------------|-----------------------------|-------------------|--------------------------------|
| WCA-3A Average Stage (β1) | NESRS2 Stage (β2) | Previous 7-day Average Flow (β3) | Forecast Precipitation (β4) | Forecast PET (β5) | Regulation Schedule Stage (β6) |
| 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.

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

²Actual 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

