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

### Observed Stage Data

<table>
<thead>
<tr>
<th>Station</th>
<th>Variable</th>
<th>From 9/17/2022 to 9/23/2022</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCA-3A (Average for Site 63, 64 and 65)</td>
<td>Average Daily Stage</td>
<td>9.79</td>
<td>ft-NGVD29</td>
<td></td>
</tr>
<tr>
<td>NESRS2</td>
<td>Average Daily Stage</td>
<td>8.21</td>
<td>ft-NGVD29</td>
<td></td>
</tr>
<tr>
<td>Regulatory Stage WCA-3A</td>
<td>Average Daily Stage</td>
<td>10.25</td>
<td>ft-NGVD29</td>
<td></td>
</tr>
</tbody>
</table>

### Observed Flow Data

<table>
<thead>
<tr>
<th>Station</th>
<th>Variable</th>
<th>From 9/17/2022 to 9/23/2022</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-12A</td>
<td>7-day Average Daily Flow</td>
<td>88</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-12B</td>
<td>7-day Average Daily Flow</td>
<td>137</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-12C</td>
<td>7-day Average Daily Flow</td>
<td>0</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-12D</td>
<td>7-day Average Daily Flow</td>
<td>223</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-333</td>
<td>7-day Average Daily Flow</td>
<td>362</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-333N</td>
<td>7-day Average Daily Flow</td>
<td>367</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-334</td>
<td>7-day Average Daily Flow</td>
<td>0</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S-12s Total</td>
<td>7-day Average Daily Flow</td>
<td>449</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>S333 + S333N - S334</td>
<td>7-day Average Daily Flow</td>
<td>730</td>
<td>cfs</td>
<td></td>
</tr>
<tr>
<td>Total Flow to ENP</td>
<td>7-day Average Daily Flow</td>
<td>1178</td>
<td>cfs</td>
<td></td>
</tr>
</tbody>
</table>

### Meteorological Data

<table>
<thead>
<tr>
<th>Forecasts</th>
<th>From 9/24/2022 to 9/30/2022</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCA3 7-day Quantitative Precipitation Forecast (QPF)</td>
<td></td>
<td>4.70</td>
<td>in</td>
</tr>
<tr>
<td>3AS3WX - 7-day Total Forecasted PET</td>
<td></td>
<td>1.11</td>
<td>in</td>
</tr>
</tbody>
</table>

### TTFF Application

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Previous week target flow (calculated with forecasted 7-day QPF and PET)</td>
<td>1144</td>
<td>cfs</td>
</tr>
<tr>
<td>2 Previous week target flow (recalculated with observed rainfall and PET)</td>
<td>1145</td>
<td>cfs</td>
</tr>
<tr>
<td>3 Adjustment for forecast (2-1)</td>
<td>1</td>
<td>cfs</td>
</tr>
<tr>
<td>4 This week calculated target flow</td>
<td>1244</td>
<td>cfs</td>
</tr>
<tr>
<td>5 This week target flow with adjustment (3 + 4)</td>
<td>1245</td>
<td>cfs</td>
</tr>
</tbody>
</table>

**Average Daily Target Flow** | **1245** cfs

### TTFF Formula coefficients

<table>
<thead>
<tr>
<th>WCA-3A Average Stage (β1)</th>
<th>NESRS2 Stage (β2)</th>
<th>Previous 7-day Average Flow (β3)</th>
<th>Forecast Precipitation (β4)</th>
<th>Forecast PET (β5)</th>
<th>Regulation Schedule Stage (β6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>318.42</td>
<td>-44.62</td>
<td>0.644</td>
<td>24.32</td>
<td>-96.31</td>
<td>-221.79</td>
</tr>
</tbody>
</table>

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 + 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.

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

![Flow from WCA-3A to Everglades National Park Using the Tamiami Trail Flow Formula](chart)

**Flow (cfs)**

- **Flow from WCA-3 to Everglades National Park Using the Tamiami Trail Flow Formula**
  - **Daily Observed Flow**
  - **Daily TTFF Target Flow**