



SETTLEMENT AGREEMENT QUARTERLY REPORT

January - March 2025

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Compliance Assessment & Reporting Section

Water Quality Bureau

Technical Oversight Committee

September 16, 2025



sfwmd.gov

SUMMARY

| Month | Mean Stage (ft NGVD29) | Long-Term Level (ppb) | Geometric Mean TP Concentration (ppb) | Number of Samples | |
|---|---------------------------|--------------------------|---|---|--------------|
| Arthur R. Marshall Loxahatchee National Wildlife Refuge | | | | | |
| Jan-25 | 16.65 | 9.0 | 6.8 | 14 | |
| Feb-25 | 16.61 | 9.1 | 9.4 | 13 | |
| Mar-25 | 16.40 | 10.2 | 8.6 | 12 | |
| 12-Month Period Ending | Total Flow (kac-ft) | Long-Term Limit (ppb) | 12-Month TP FWMC (ppb) | Percent of Sampling Events Greater than 10 ppb | |
| | | | | Guideline (%) | Observed (%) |
| Everglades National Park – Shark River Slough – <i>PROVISIONAL DATA and RESULTS</i> | | | | | |
| Jan-25 | 1444.4 | 7.6 | 8.0 | 40.1 | 15.4 |
| Feb-25 | 1375.3 | 7.6 | 8.3 | 40.1 | 20.0 |
| Mar-25 | 1294.9 | 7.6 | 8.7 | 40.1 | 28.0 |
| Everglades National Park – Taylor Slough and Coastal Basins – <i>PROVISIONAL DATA and RESULTS</i> | | | | | |
| Jan-25 | 432.9 | 11.0 | 5.3 | 53.1 | 0.0 |
| Feb-25 | 423.0 | 11.0 | 5.4 | 53.1 | 0.0 |
| Mar-25 | 403.9 | 11.0 | 5.4 | 53.1 | 0.0 |

FWMC for SRS - computed as $S12s + [S333 + S333N + S355A + S355B + \min(S356, S335) - S334]$.

S334 flow is not excluded from the total flow for long-term limit calculations.

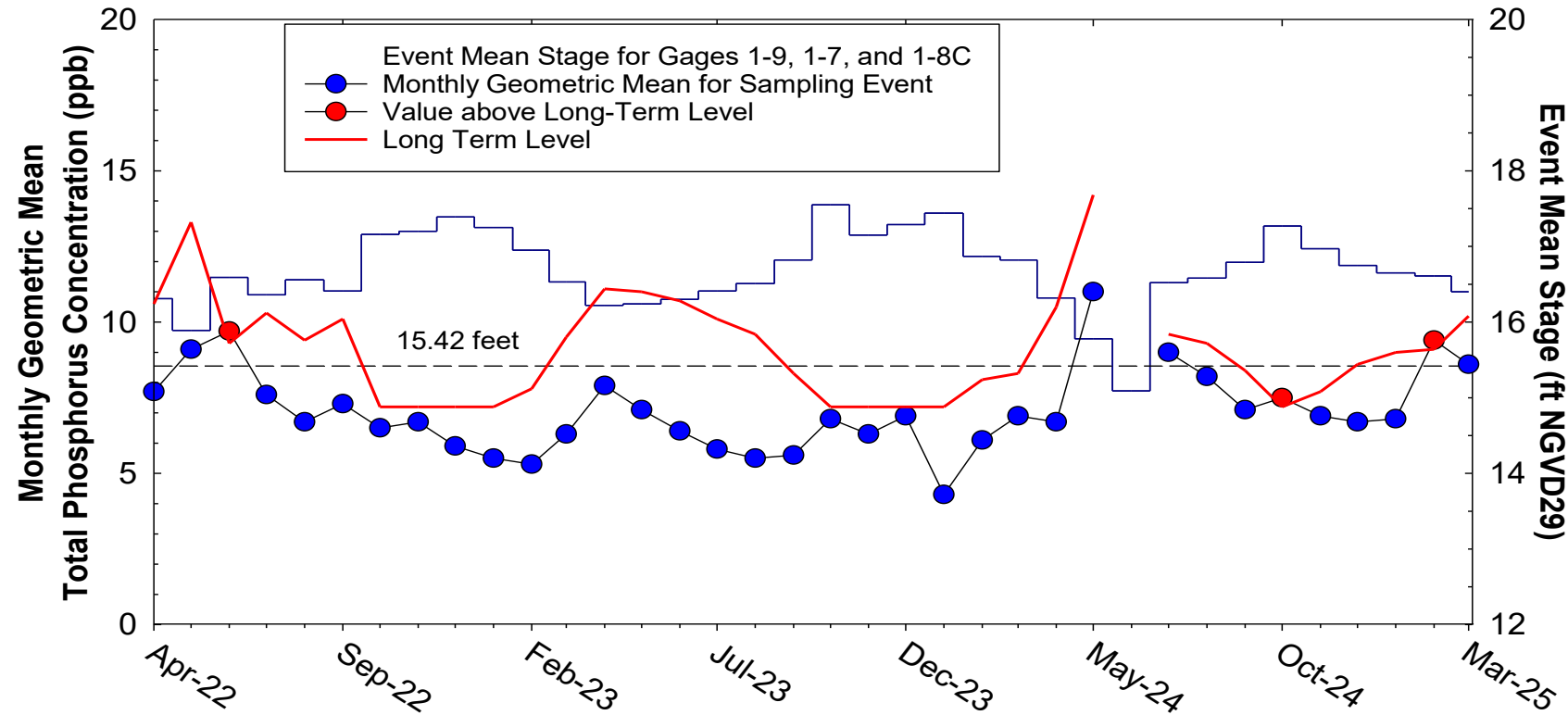
FWMC for TS and CB – computed as $(S332D - S332DX1 - S328) + S328 + G737 + S18C$.

Refuge TP Compliance Tracking with Outlook

| Month | Average Stage (feet NGVD29) | Long-Term Level (ppb) Effective 12/31/2006 | Geometric Mean TP Concentration (ppb) | Number of Samples |
|---|--------------------------------|---|---|----------------------|
| 1st Quarter 2025 Compliance Tracking | | | | |
| Jan-2025 | 16.65 | 9.0 | 6.8 | 14 |
| Feb-2025 | 16.61 | 9.1 | 9.4 | 13 |
| Mar-2025 | 16.40 | 10.2 | 8.6 | 12 |
| Preliminary Data Outlook | | | | |
| Apr-2025 | 16.13 | 11.6 | 8.8 | 11 |
| May-2025 | 15.55 | 16.1 | 9.2 | 4 |
| Jun-2025 | 15.57 | 16.0 | 9.4 | 4 |
| Jul-2025 | 15.41 | 17.5 | 11.2 | 4 |
| Aug-2025 | 15.61 | 15.6 | 11.6 | 5 |

A.R.M. Loxahatchee National Wildlife Refuge

Monthly Total Phosphorus Geometric Mean Concentrations



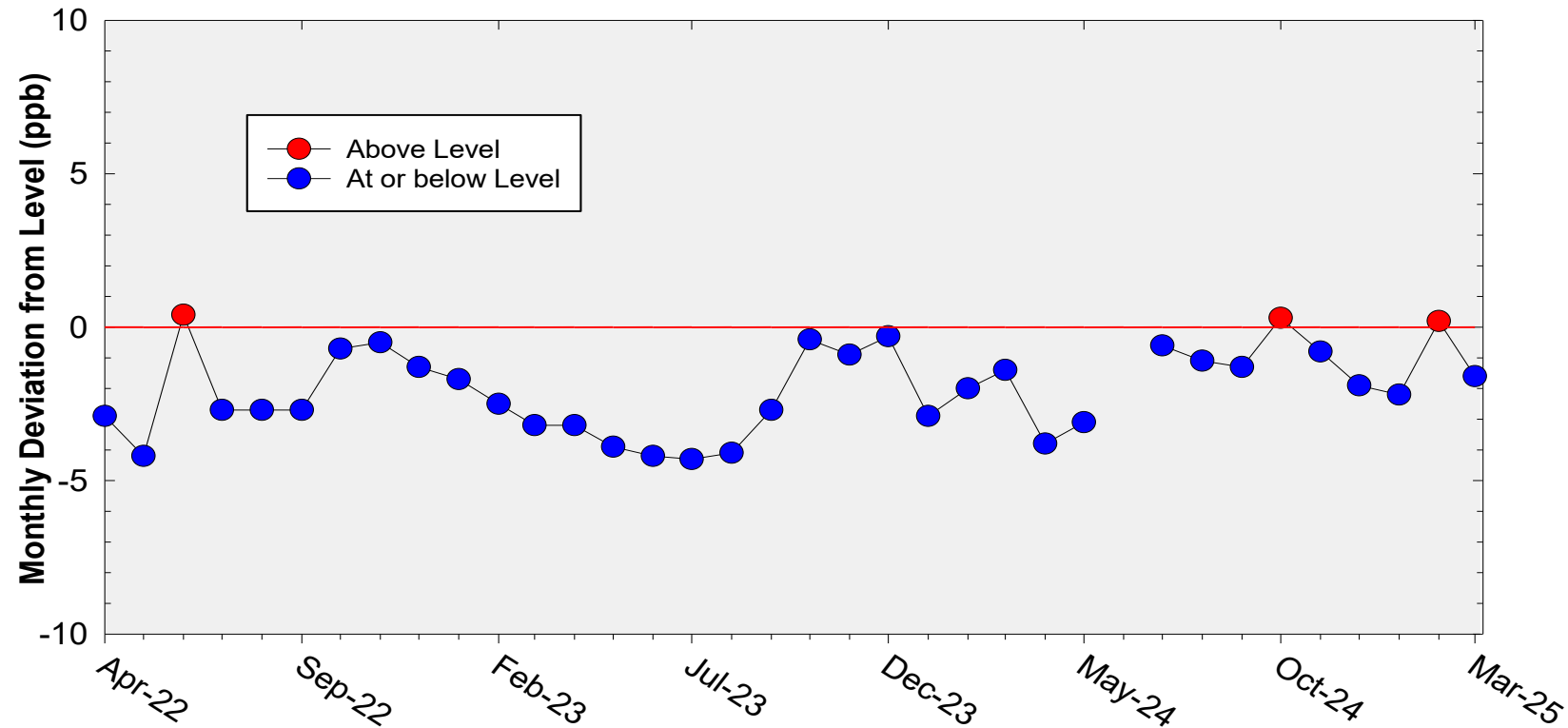
36-Month Average TP Geometric Mean = 7.1 ppb

36-Month Average TP Long-term Level is = 9.1 ppb

Note: There was no TP data for June 2024 because of the dry condition.

A.R.M. Loxahatchee National Wildlife Refuge

Deviation of monthly geometric mean total phosphorus concentrations with calculated long-term levels



36-Month Average TP geometric mean = 2.0 ppb below the Long-Term Level.

Shark River Slough

TP Concentration Compliance Tracking and Outlook

PROVISIONAL DATA and RESULTS

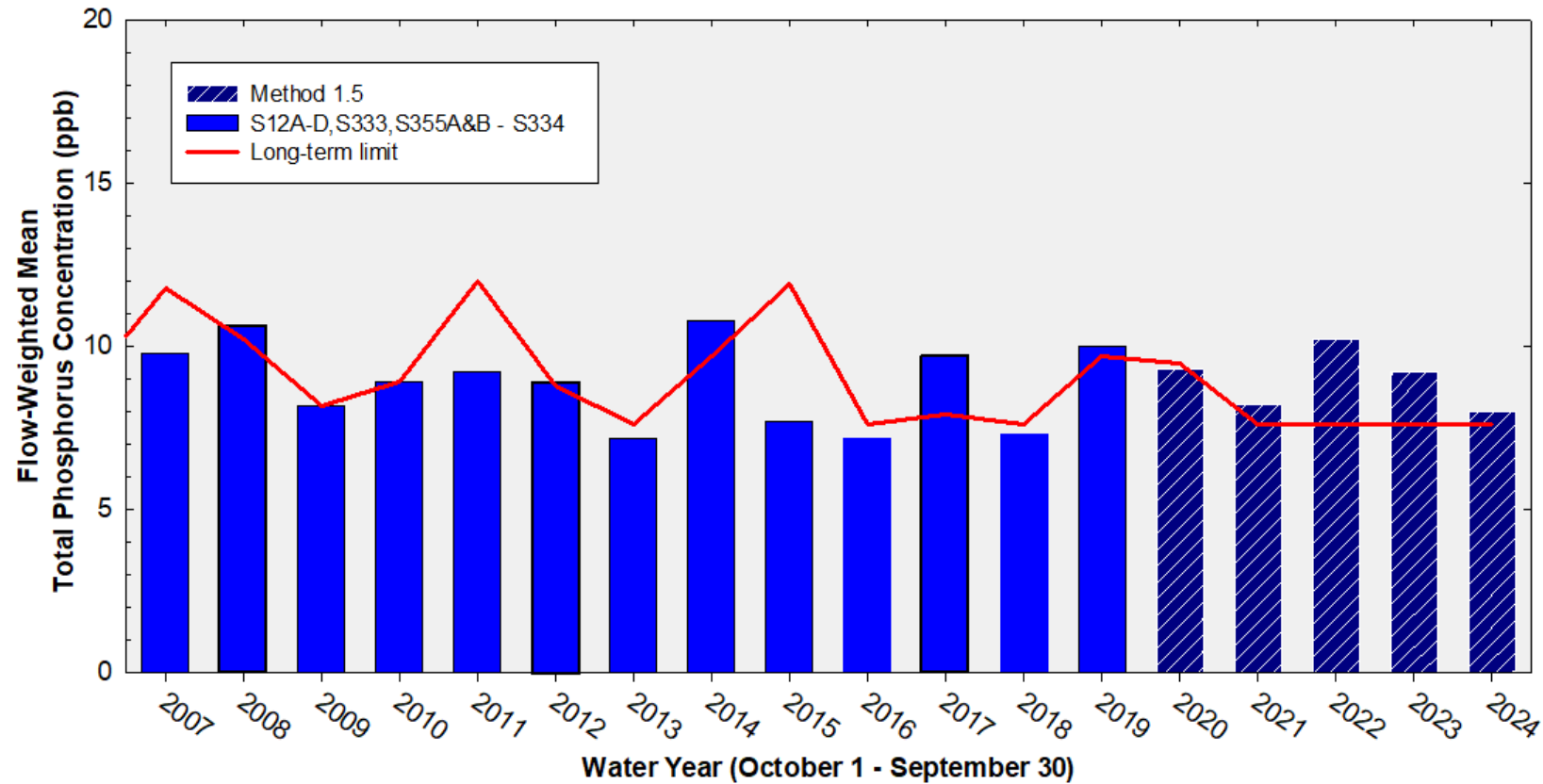
| 12-Month Period | Total Flow (kac-ft) | Long-Term Limit (ppb) <i>Effective 12/31/2006</i> | Flow-Weighted Mean TP Concentration (ppb) | Percent of Sampling Events Greater than 10 ppb | |
|--------------------------------------|------------------------|---|--|--|-----------------|
| | | | | Guideline (%) | Observed (%) |
| 1st Quarter 2025 Compliance Tracking | | | | | |
| Feb 2024 - Jan 2025 | 1,444.4 | 7.6 | 8.0 | 40.1 | 15.4 |
| Mar 2024 - Feb 2025 | 1,375.3 | 7.6 | 8.3 | 40.1 | 20.0 |
| Apr 2024 - Mar 2025 | 1,294.9 | 7.6 | 8.7 | 40.1 | 28.0 |
| Outlook | | | | | |
| May 2024 - Apr 2025 | 1,212.7 | 7.6 | 8.8 | 40.1 | 36.0 |
| Jun 2024 - May 2025 | 1,171.4 | 7.6 | 8.7 | 40.1 | 36.0 |
| Jul 2024 - Jun 2025 | 1,108.6 | 7.6 | 8.6 | 40.1 | 36.0 |
| Aug 2024 - Jul 2025 | 980.3 | 8.0 | 9.2 | 41.9 | 48.0 |

Shark River Slough PROVISIONAL RESULTS:

FWMC computed as $S12A + S12B + S12C + S12D + [S333 + S333N + S355A + S355B + \text{minimum of } (S356, S335) - S334]$ using all flow and TP grabs on bi-weekly compliance sampling dates.

S334 flow was not excluded from the flow for long-term limit calculations.

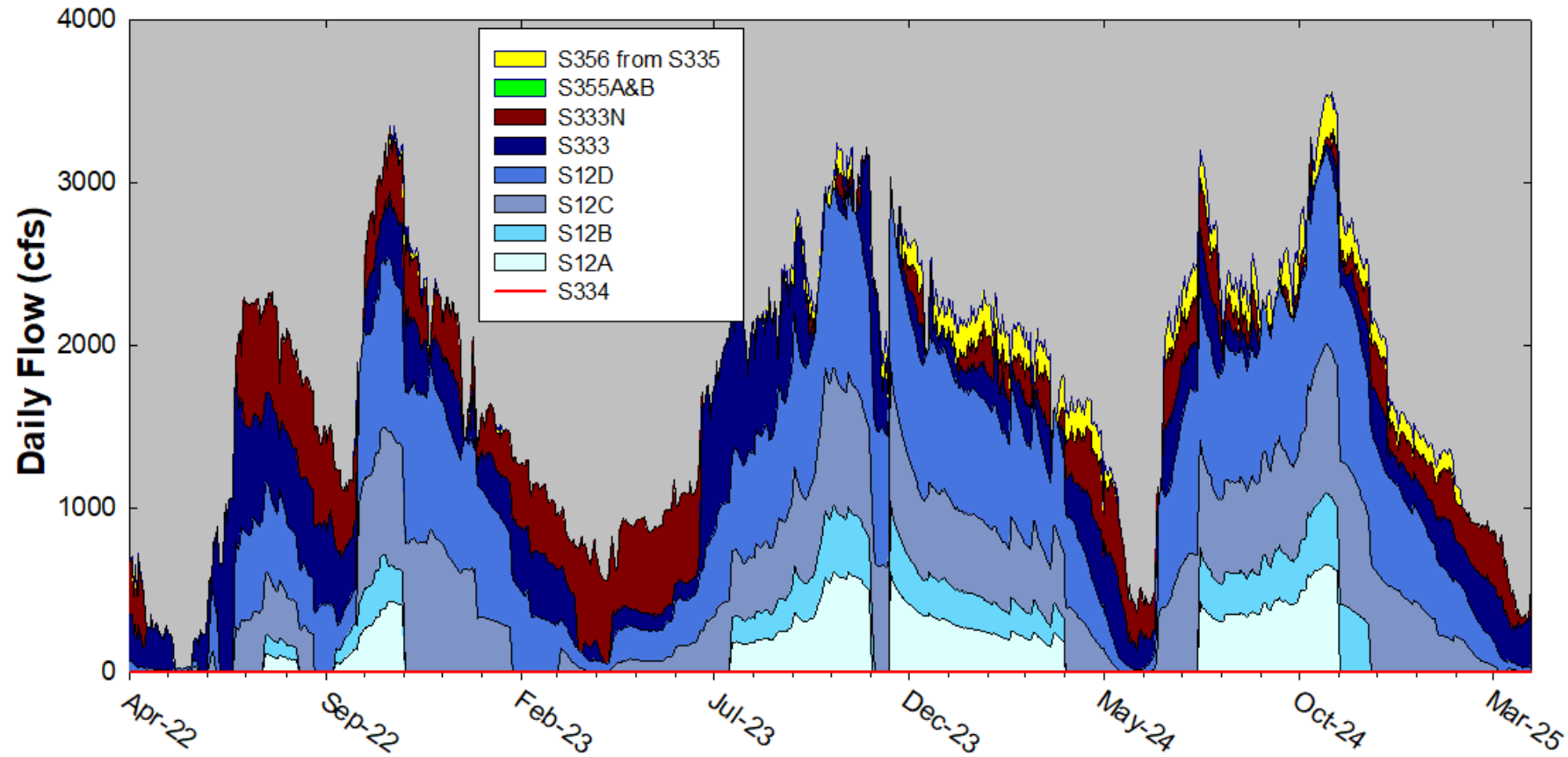
Annual Flow-Weighted Mean Concentrations of Inflows to ENP through Shark River Slough



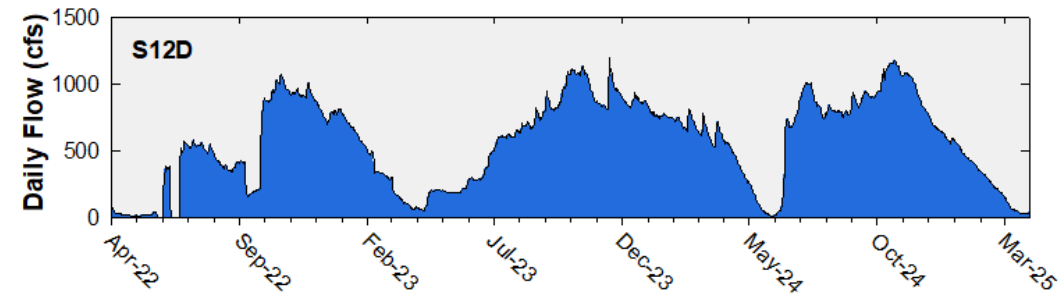
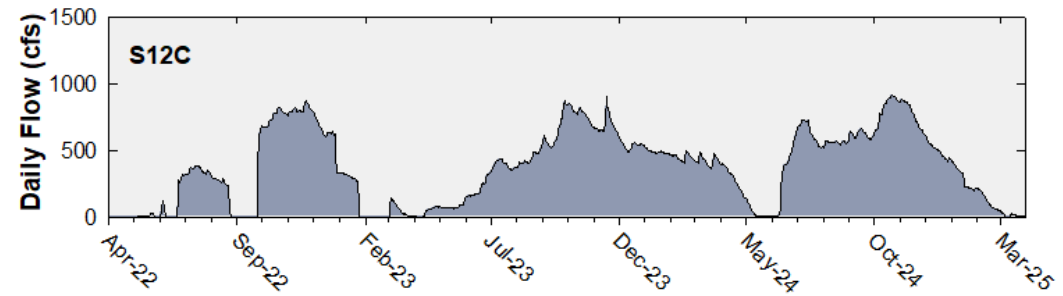
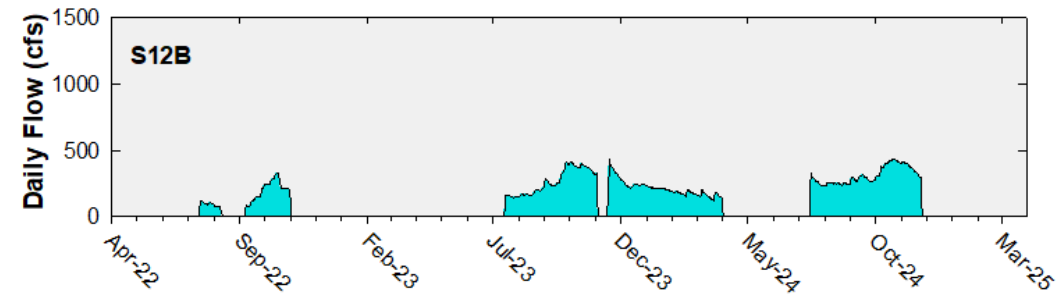
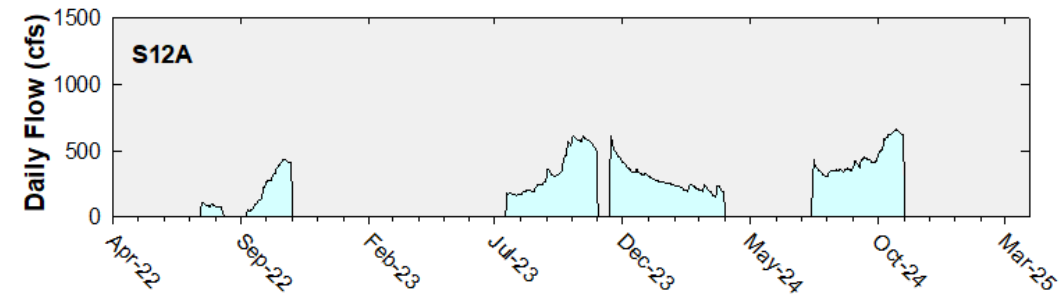
**12-month FWMC at the end of each water year
compared to the TP long-term limit**

Shark River Slough Structure Daily Flows

WY2025 Flow Data for S12s are Provisional.

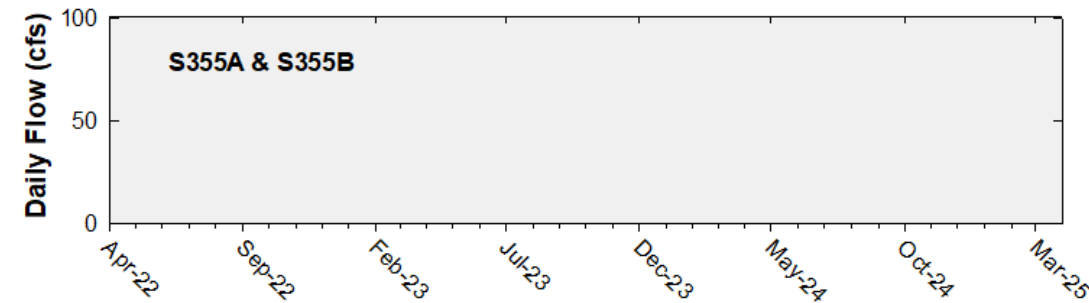
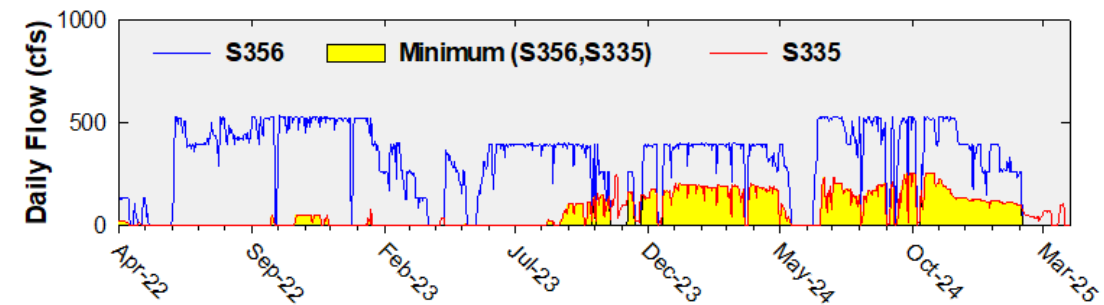
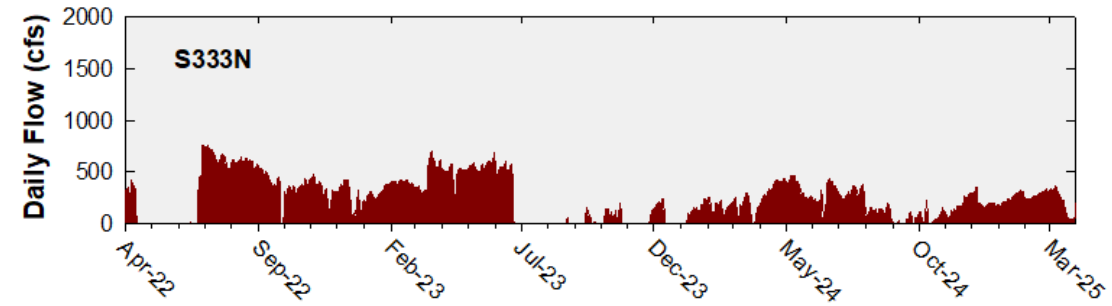
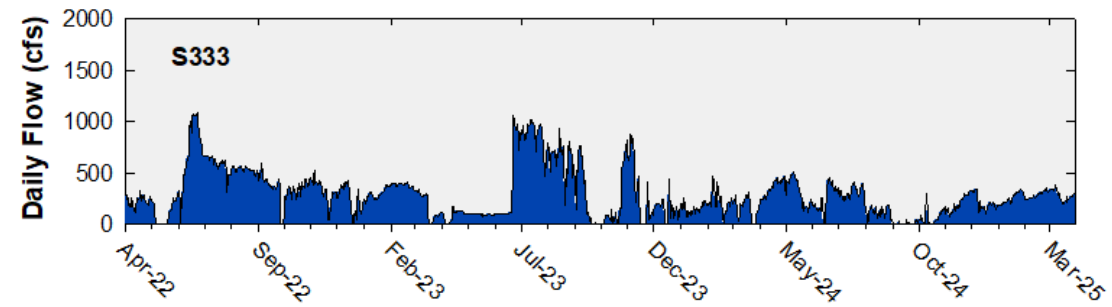


Daily Flows at S12 Structures to Shark River Slough

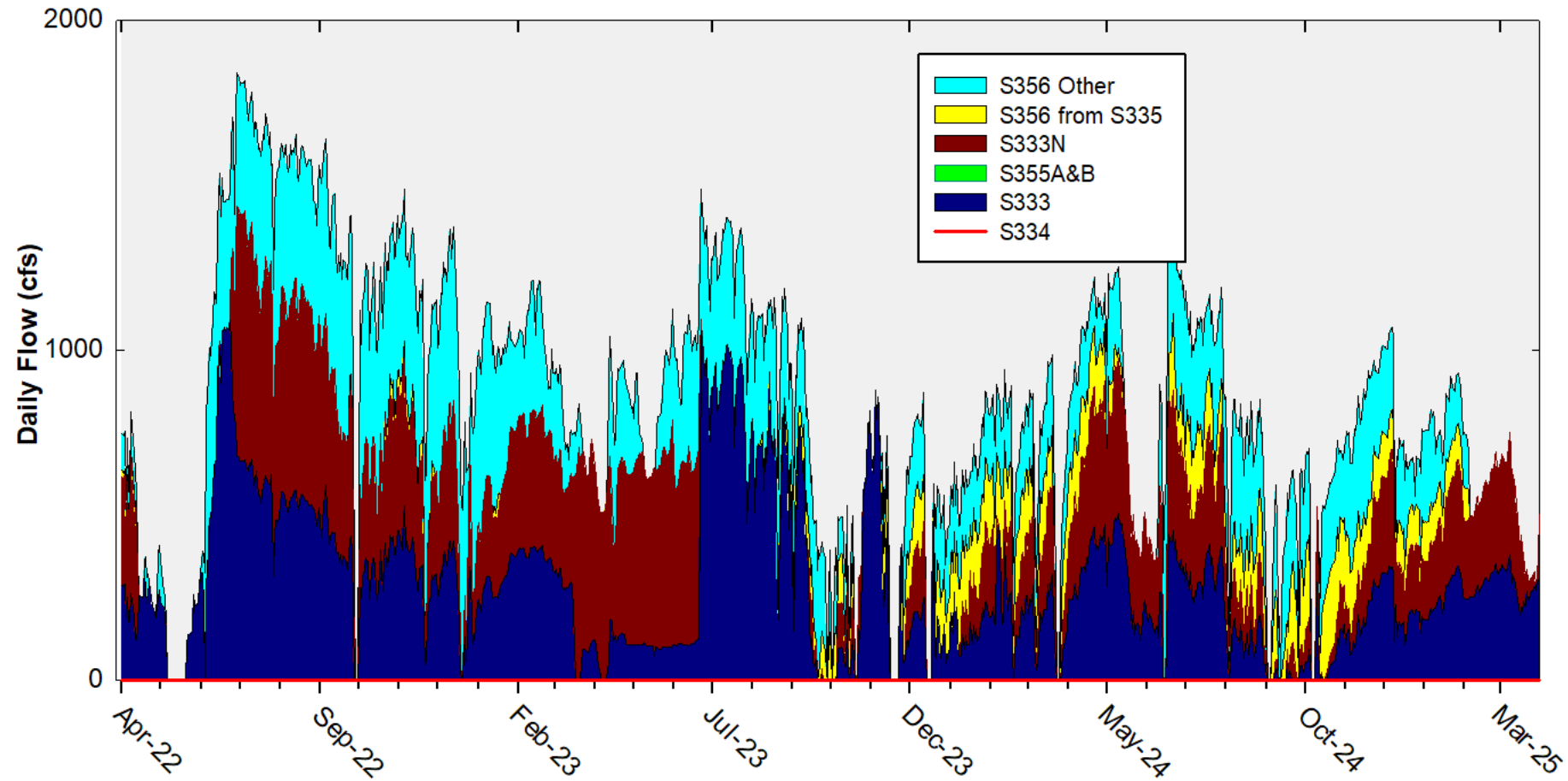


Daily Flows at Individual Inflow Structures to Shark River Slough

(Note: There was no flow at S355A or S355B during the period)

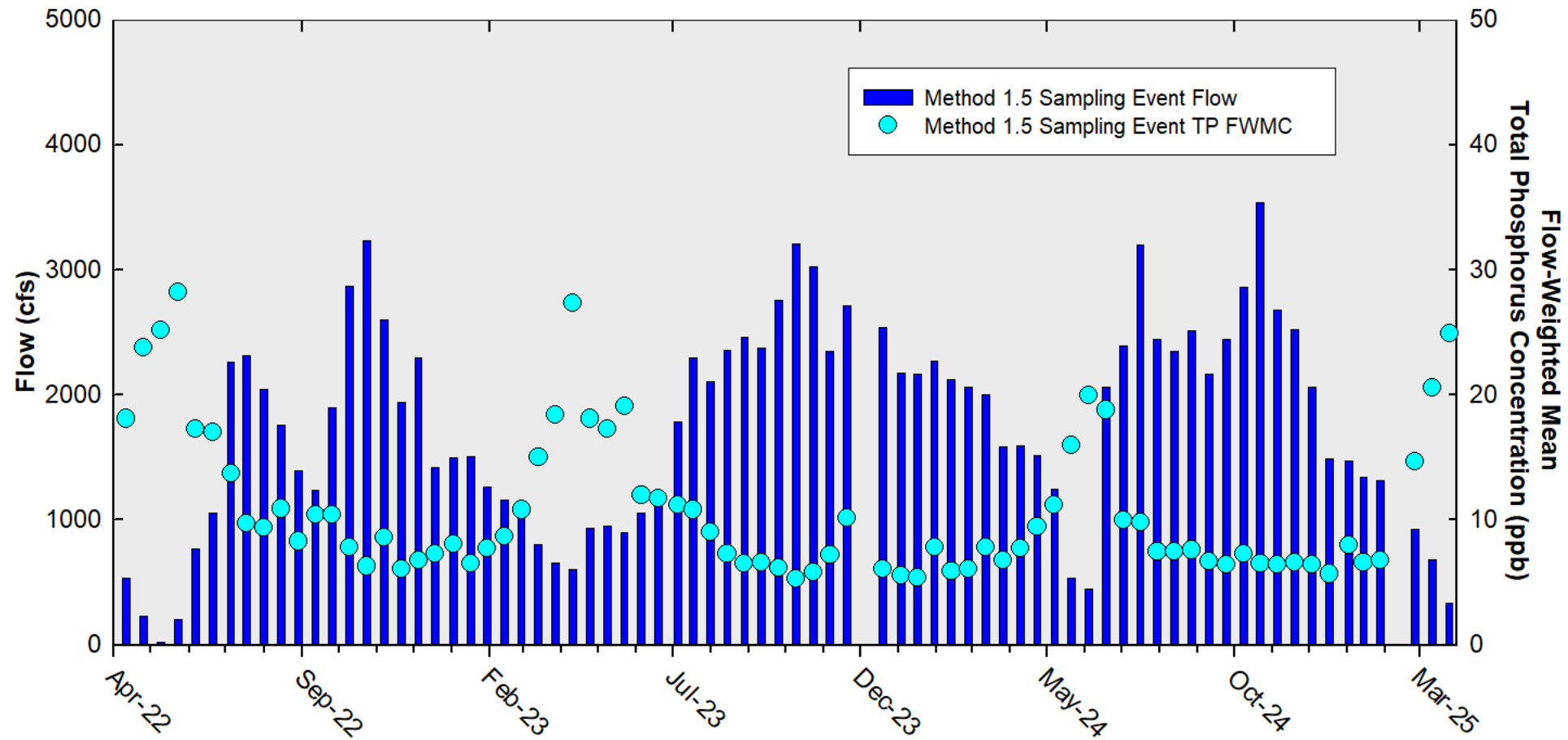


Daily Flows Into Shark River Slough through S333 & S333N, S355A&B, and S356 and Out through S334



Shark River Slough

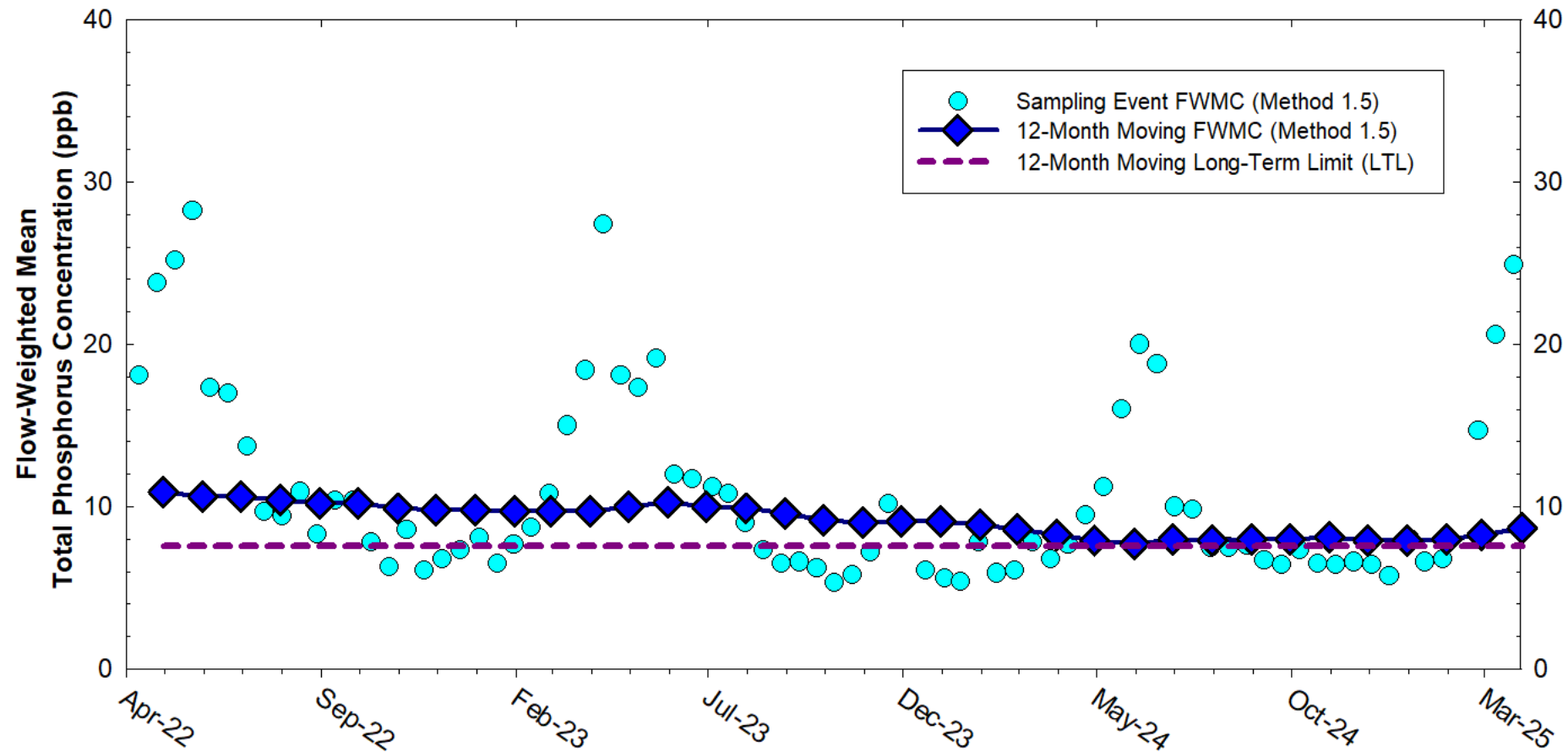
Sampling Event Flow and FWMC



**Flow to Shark River Slough and the corresponding TP FWMCs
for individual sampling events**

Shark River Slough

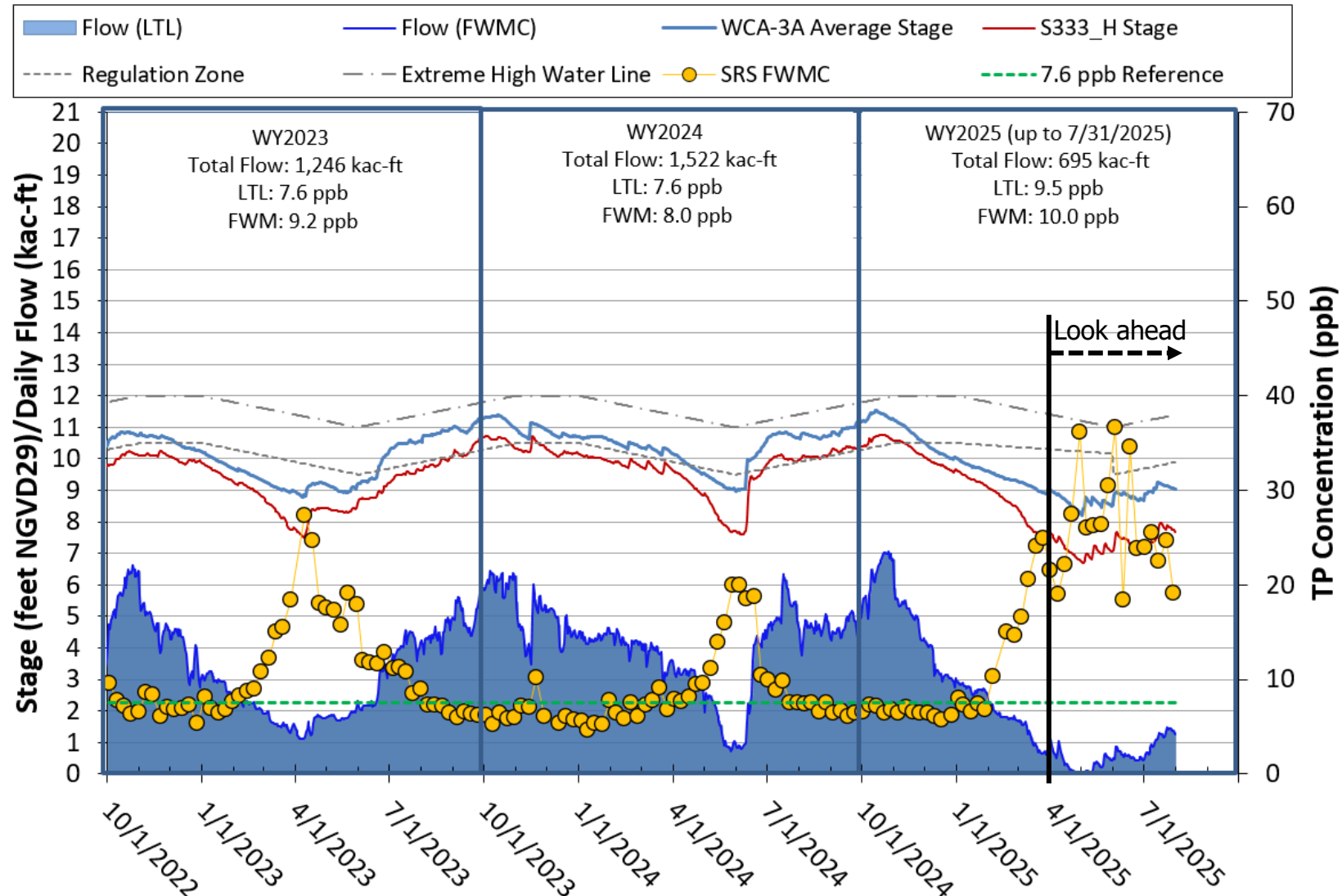
12-month Moving Flow-Weighted Mean TP and Long-Term Limit



The composite TP concentration and 12-month FWMC at the end of each month for each sampling event

Stage, Flow, and TP FWMC

Inflows to ENP through Shark River Slough



Taylor Slough and Coastal Basins

TP Concentration Compliance Tracking

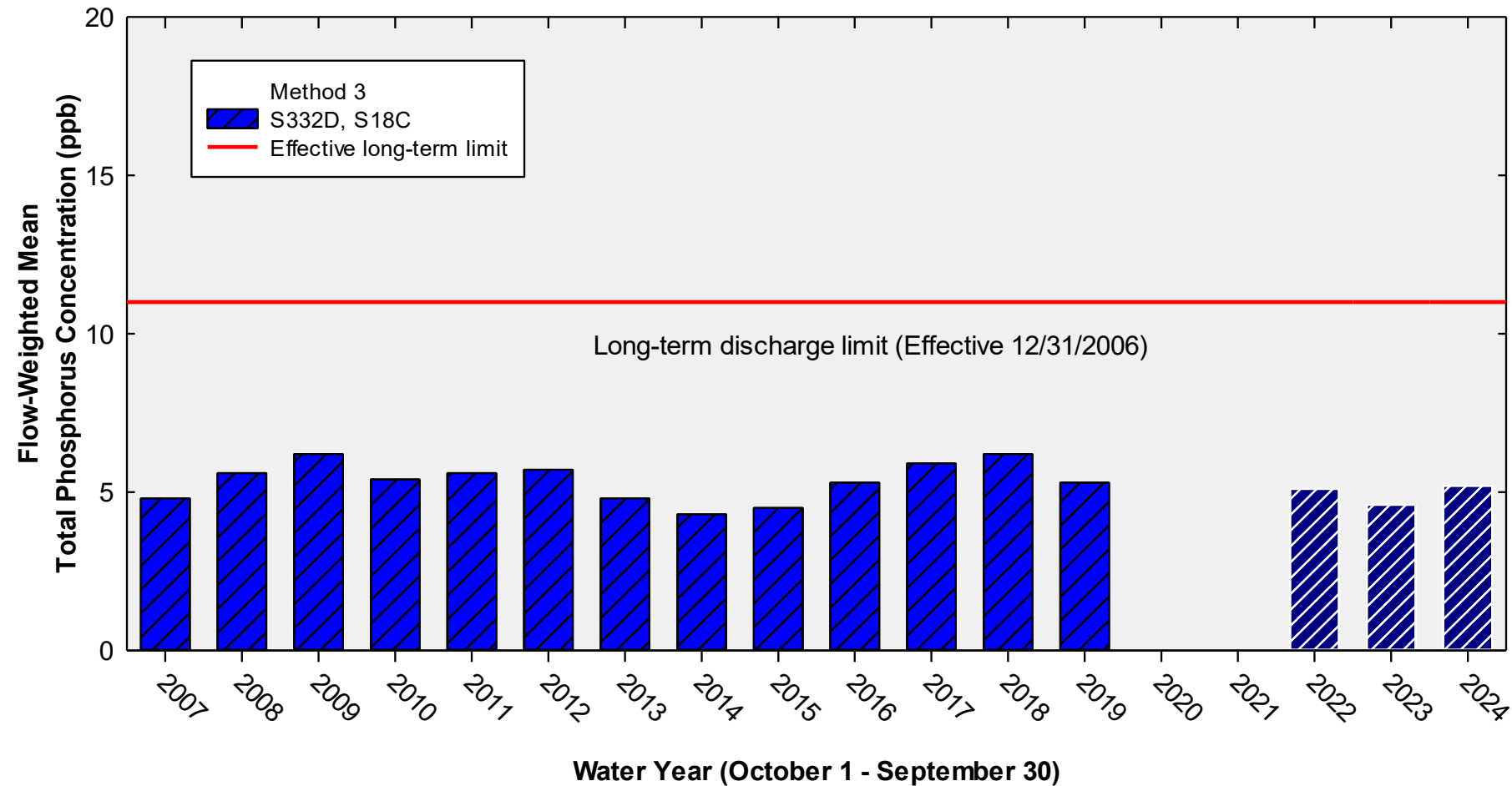
PROVISIONAL DATA and RESULTS

| 12-Month Period | Total Flow (kac-ft) | Flow-Weighted Mean TP Concentration in ppb LTL = 11.0 ppb Effective 12/31/2006 | Observed Percent of Sampling Events Greater than 10 ppb Guideline = 53.1% |
|----------------------------|---------------------|--|--|
| Feb 2024 - Jan 2025 | 432.9 | 5.3 | 0.0 |
| Mar 2024 - Feb 2025 | 423.0 | 5.4 | 0.0 |
| Apr 2024 - Mar 2025 | 403.9 | 5.4 | 0.0 |

FWMC computed as [(S332D-S332DX1-S328)+S328+G737+S18C] using all flow and TP grabs on weekly sampling.

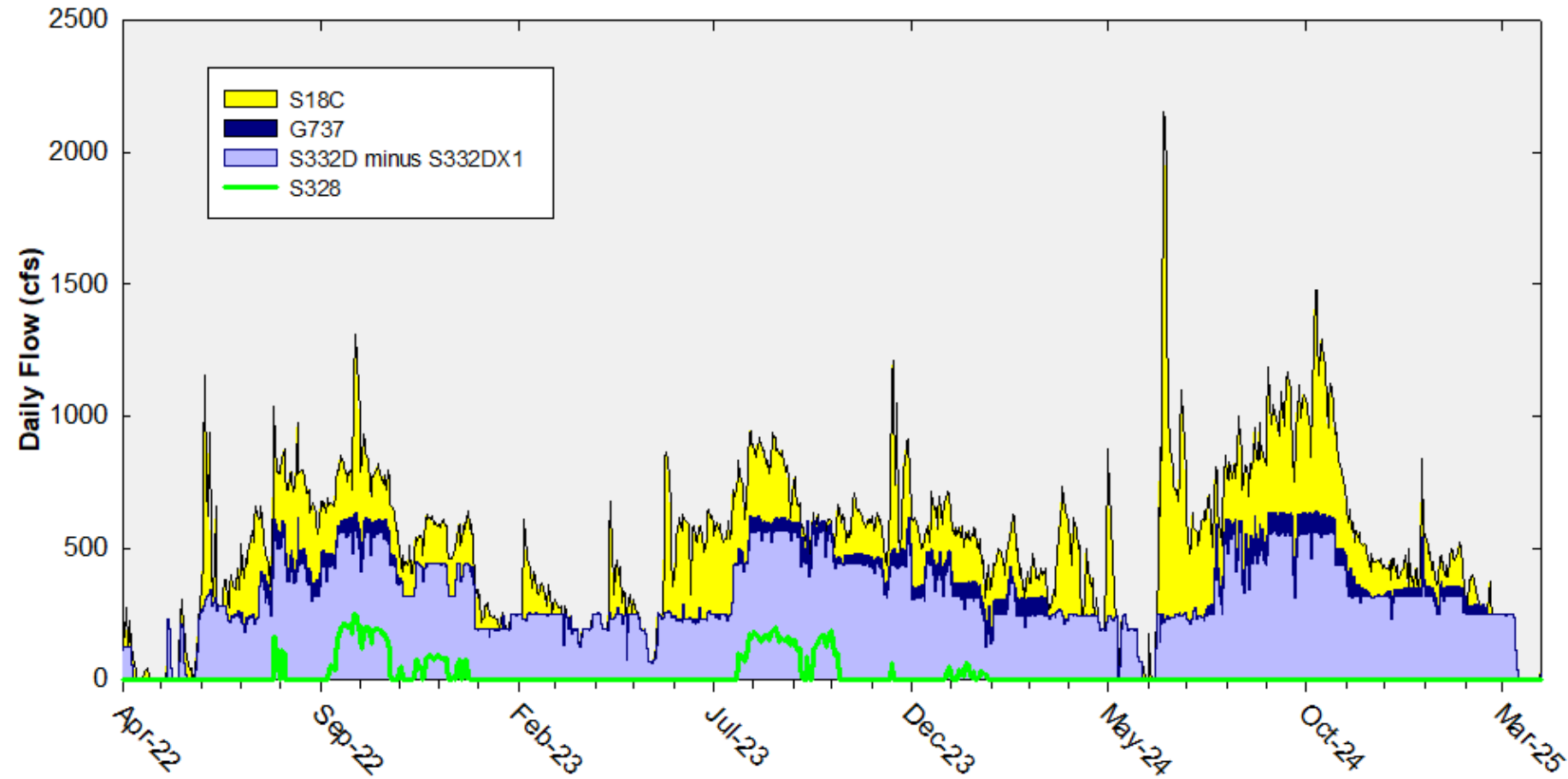
Total flow is [(S332D-S332DX1)+G737+S18C]

Annual Flow-Weighted Mean Concentrations of Inflows to the ENP through Taylor Slough and Coastal Basins

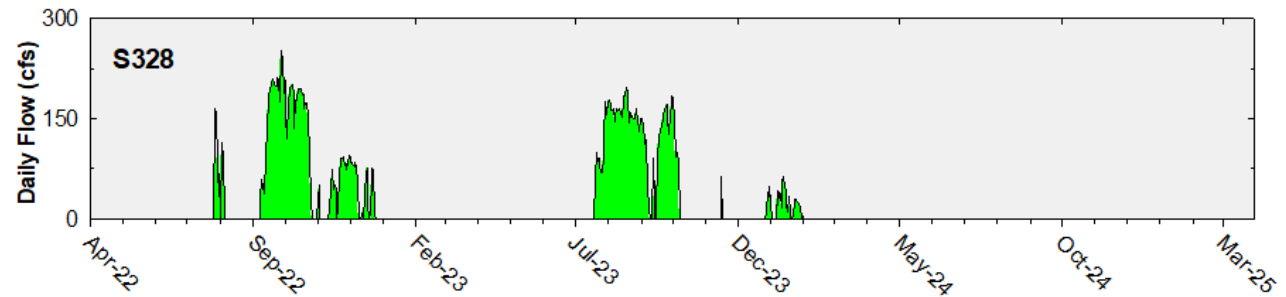
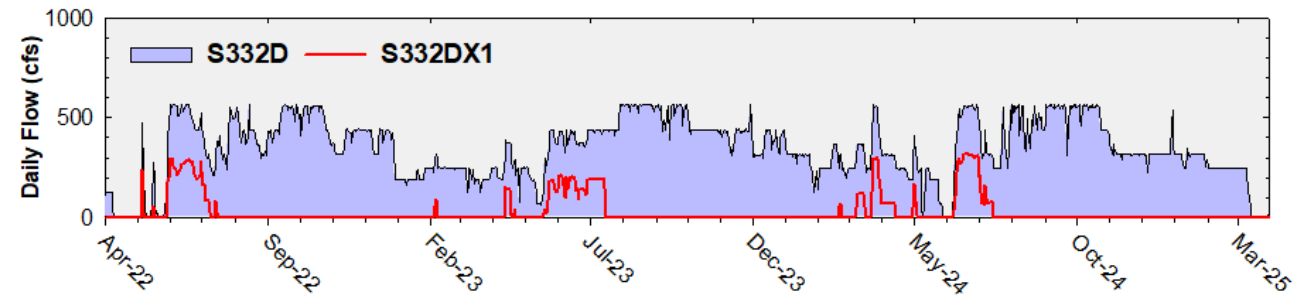
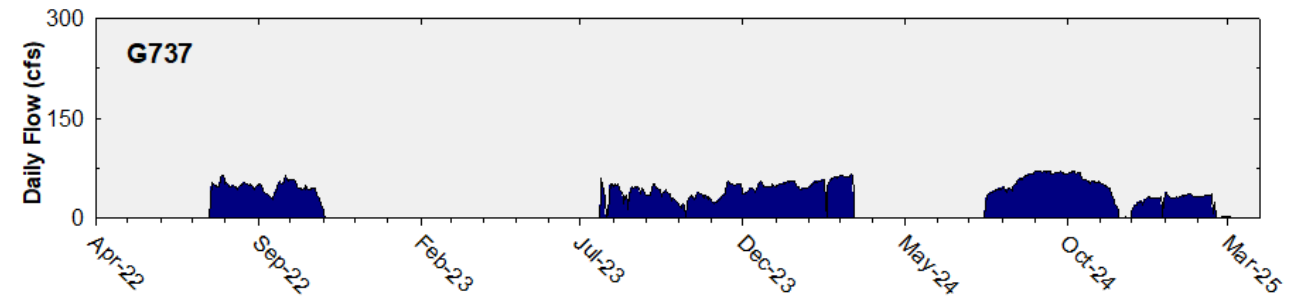
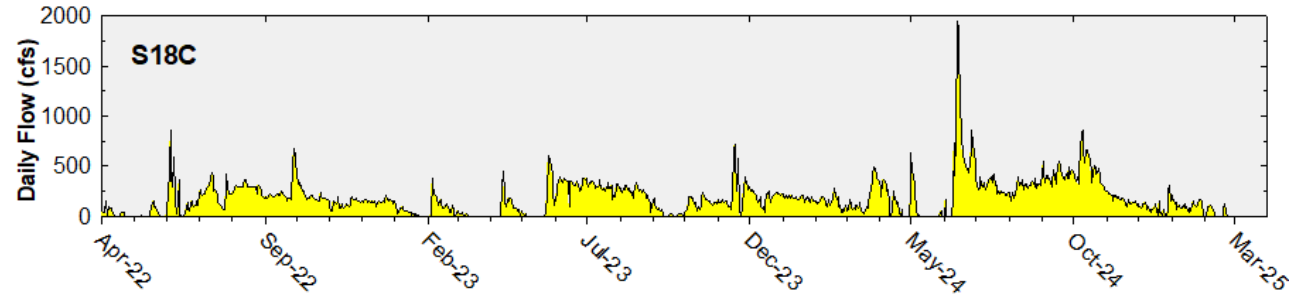


The 12-month FWMC at the end of each water year compared to the 11 ppb long-term TP limit

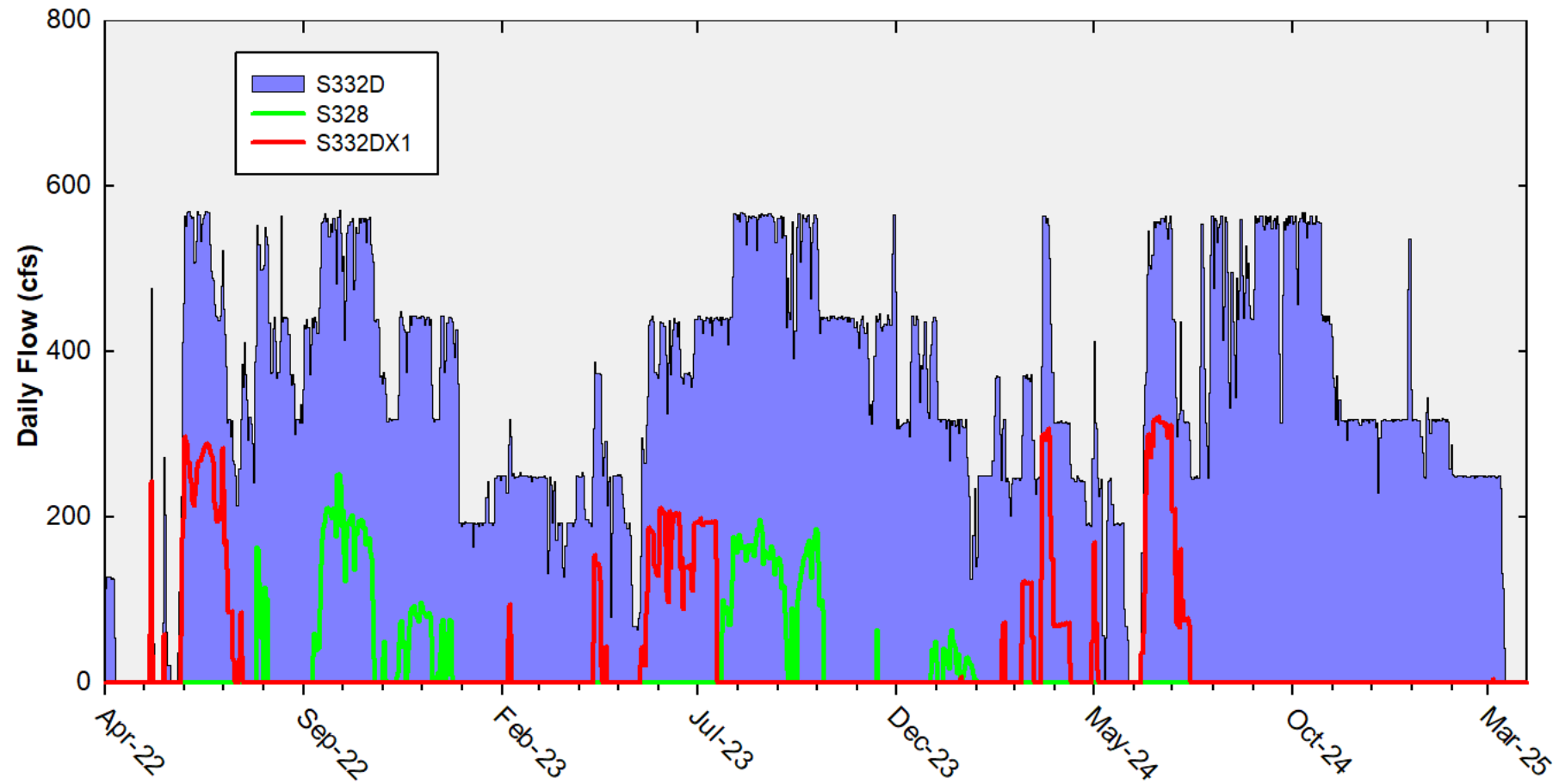
Daily Flows at Taylor Slough and Coastal Basins Structures into ENP



Daily Flows at Individual Taylor Slough and Coastal Basins Structures

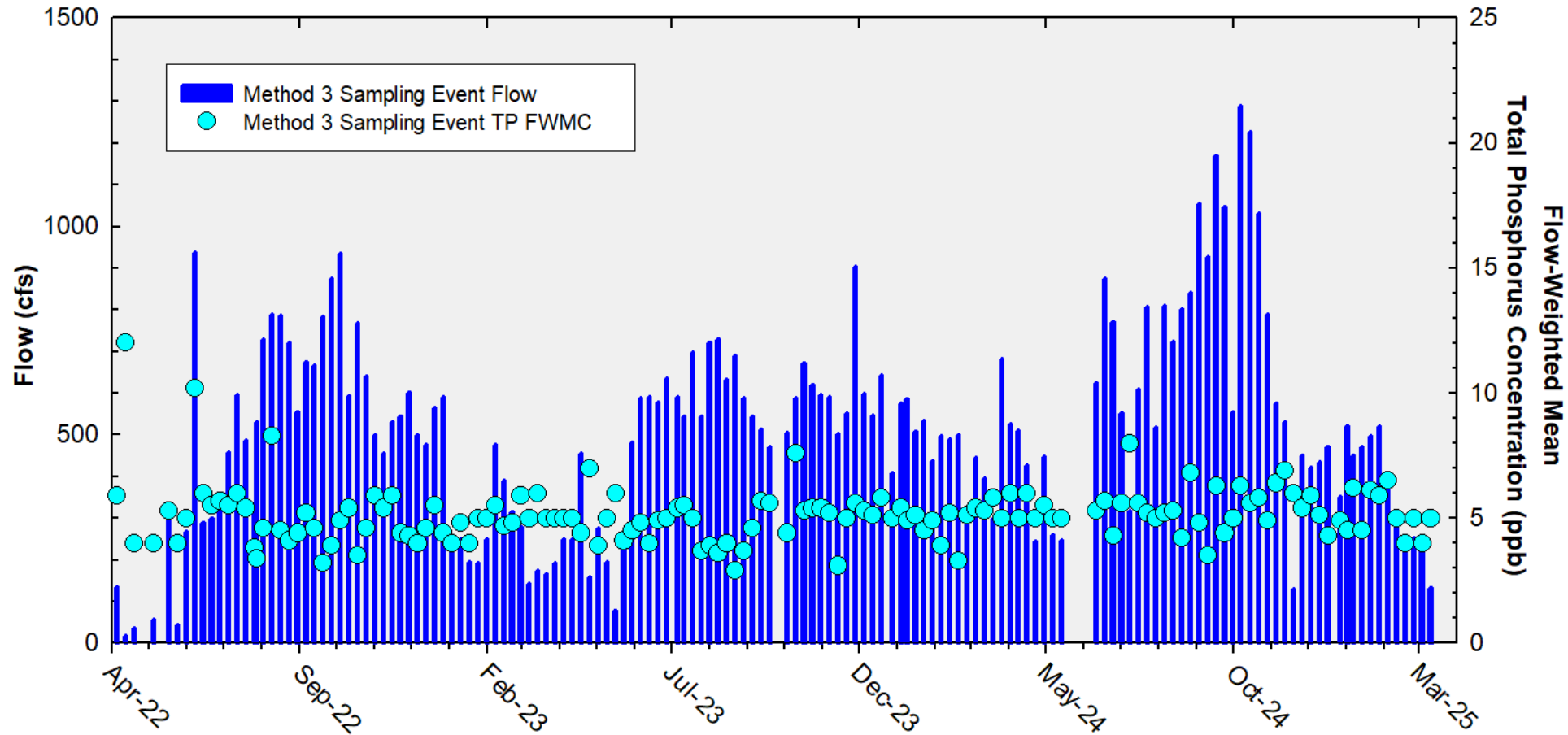


Daily Flows In and Out of S332D Flowway



Taylor Slough and Coastal Basins

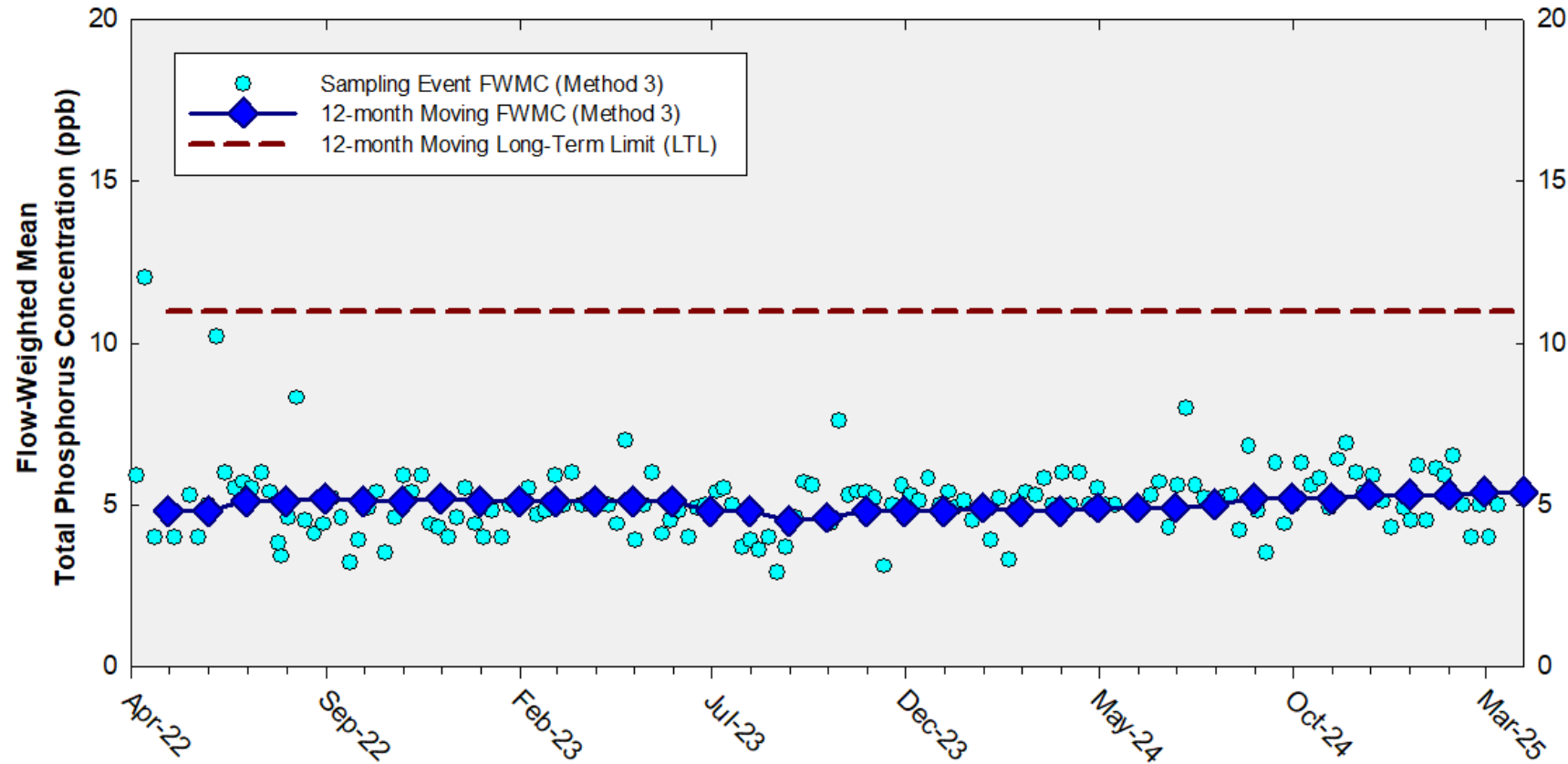
Sampling Event Flow and FWMC



Flow at Taylor Slough and Coastal Basins structures and the corresponding TP FWMCs for individual sampling events

Taylor Slough and Coastal Basins

12-month Moving Flow-Weighted Mean TP and Long-Term Limit



The 12-month FWMC at the end of each month and the composite TP concentration for each sampling event

Thank You

