Proposed Method for Incorporating S-333N to Shark River Slough Long-Term Level Compliance Calculation

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Technical Oversight Committee

by:
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Objective

- To confirm the methodology update to the Appendix A Shark River Slough calculation for interim tracking and annual compliance, incorporating S-333N structure flows from WCA-3 to Shark River Slough.

S-333 and S-333N Operation

- Both are gated spillways from L-67A to L-29 (headwaters of Northeast Shark River Slough)

- S-333N operation authorized per FDEP permit (CERPRA) modified December 18, 2020.

- S-333N used in conjunction with S-333 to convey water from WCA-3A to ENP consistent with operational constraints and considerations identified in COP

S-333 and S-333N
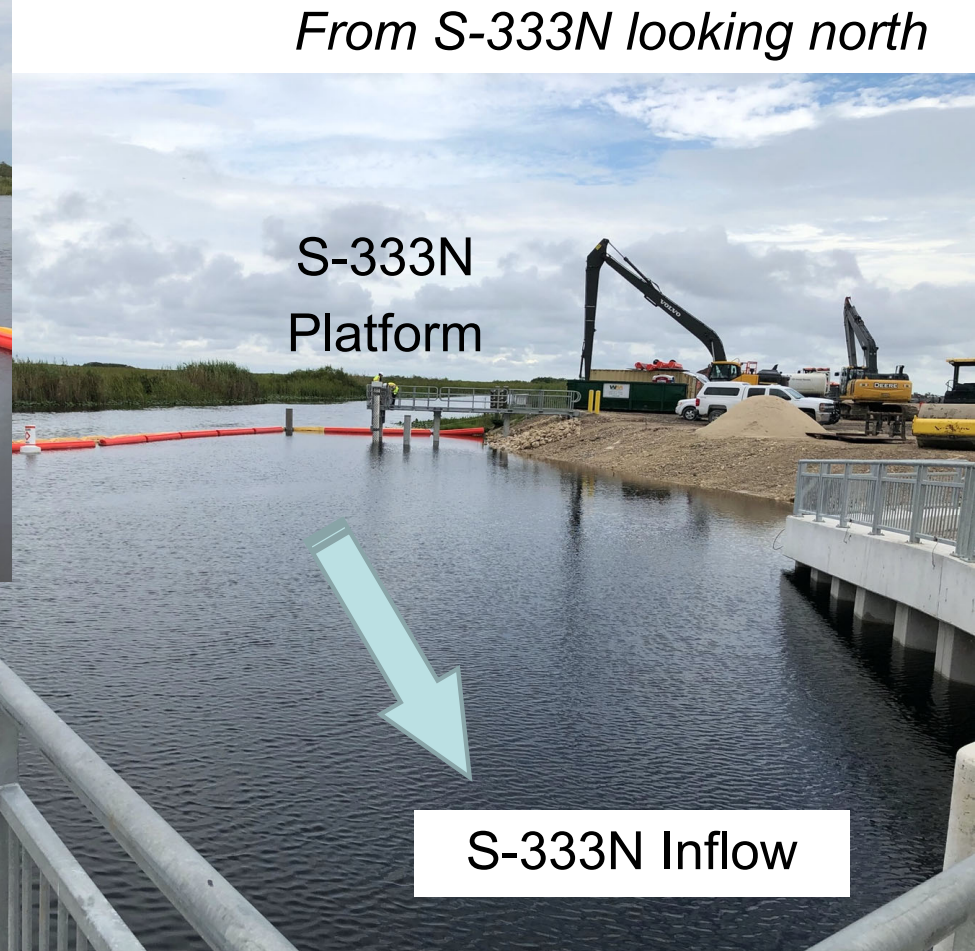From downstream L-29 Canal looking northwest to WCA-3A

S-333N Monitoring Location

S-333N

S-333

S-333N Platform

From L-67A looking south

From S-333N looking north

S-333N Platform

S-333N Inflow

Shark River Slough Compliance Proposed Method

Annual Long-term Limit (sum of all FWY days)

- Flow applied to Limit equation = S12s + S333 **+ S333N** + S355A + S355B + MIN(S356, S335)

TP FWMC calculation (bi-weekly compliance sampling events):

- Volume for FWMC = S12s + S333 **+ S333N** +S355A + S355B + MIN(S356, S335) - S334
- Sampling event TP FWMC = sum of the following divided by "Volume for FWMC"
  - S12A TP * S12A flow; S12B TP * S12B flow; S12C TP * S12C flow; S12D TP * S12D flow
  - S333 TP * S333 flow * fraction of L-29E inflows to SRS
  - **S333N TP * S333N flow * fraction of L-29E inflows to SRS**
  - S355A TP * S355A flow * fraction of L-29E inflows to SRS
  - S355B TP * S355B flow * fraction of L-29E inflows to SRS
  - S356 TP * MIN(S356, S335) * fraction of L-29E inflows to SRS

$$\Rightarrow \text{Fraction of L} - 29\text{E to SRS} = \frac{(S333 + \mathbf{S333N} + S355A + S355B + MIN(S356,S335) - S334)}{(S333 + \mathbf{S333N} + S355A + S355B + MIN(S356,S335))}$$

Discussion / Decision

- Flow at S-333N began November 2020 (WY2021)
- This methodology has already been incorporated to provisional reporting this quarter.
- WY2021 will be reported as final about a year from now.
- Questions about the proposed methodology?
- Are there any alternate methods under consideration?
- Ready for a vote to approve?