This is an Appendix-A Subteam work product with equal contribution from agency representatives to outline advantages and disadvantages between the various compliance methodologies used to estimate Settlement Agreement Appendix A compliance for Shark River Slough (SRS) and Taylor Slough and Coastal Basins (TSCB).

Shark River Slough (SRS)

Pros	Cons
Method 1: S12s + [(S333 +S355A + S355B) - S334]	
• Accounts for total discharge to SRS S12s+S333 as originally envisioned in the Settlement Agreement Appendix A.	• No accounting for any inflow via S356 (in COP S356 will be used to maintain operational phase of L29).
• Simplest monitoring scheme to account for discharges and total phosphorus.	• Not accounting for "additional inflows from WCAs" as envisioned in the original Settlement Agreement Appendix A.
Method 1.5: S12s + [(S333 +S355A + S355B + min(S356,S335) - S334]	
• Parses discharges from WCAs (WCA3B) and seepage.	• Not tested explicitly as to parsing of WCA surface flow, WCA seepage and return seepage from south.
• Sticking closer to original SA Appendix A.	• Not accounting for seepage from WCA3B downstream of S335 (south of S335 between S335 and S356). Also, potentially water supply computation issues.
• Provides an option to approximate the Settlement Agreement Appendix A direction to include future inflows from WCAs with data currently collected.	• Does not explicitly include all monitoring to account for seepage or exactly compute total phosphorus sources to the level of precision historically required by the TOC.
• Leverages the existing infrastructure currently installed to monitoring discharge and total phosphorus.	• Potentially introduces additional uncertainty for continuity with base period assumptions at 0.1 ppb level of precision currently applied for annual compliance.
	• Uncertainty as to whether this flow route, not included in the derivation of the Long-Term Limit, should be included in the Long-Term Limit annual calculation.

[1] WCA = Water Conservation Area; COP = Combined Operational Plan; TOC = Technical Oversight Committee; ppb = part per billion (micrograms per liter); ENP = Everglades National Park

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Shark River Slough (SRS) – Continued

Pros	Cons
Method 2: S12s + [(S333 +S355A + S355B + S356) - S334]	
• Accounts for all discharge to SRS (recycled or otherwise). • Leverages the existing infrastructure currently installed to monitoring discharge and total phosphorus.	• S356 has a potential mix of seepage and additional flows from upstream WCAs (in COP some increases ENP seepage). • Potential for double counting discharge with respect to compliance limit (due to recycled seepage). • Does not explicitly include all monitoring to account for seepage or exactly compute total phosphorus sources to the level of precision historically required by the TOC. • Potentially introduces additional uncertainty for continuity with base period assumptions at 0.1 ppb level of precision currently applied for annual compliance. • Uncertainty as to whether this flow route, not included in the derivation of the Long-Term Limit, should be included in the Long-Term Limit annual calculation.

Taylor Slough and Coastal Basins (TSCB)

Pros	Cons
Method 1: S332D + S18C	
• Simpler method and fewer structures and associated monitoring. • Consistent with recent historical reporting.	• Considered obsolete, does not account for all discharge into TSCB (2 monitoring locations). • Excludes direct ENP inflows via G737 and S328.
Method 2: S332D + G737 + S18C	
• Includes surface water discharge from C-111 basin via G737.	• Does not include S328 and S322DX1 explicitly (S328 which may be used more in COP)
Method 3: [S332D – S332DX1 – S328] + S328 +G737 + S18C	
• Better approximation while leveraging existing monitoring network of the surface water inflows into TSCB/ENP. • S332D provides a robust water balance. • Closest Method to using the spirit of the App A… "direct inflows to the Park".	• Increased monitoring effort for this area historically far below the fixed TP Limit (6 monitoring locations). Increased potential for temporary data gaps.