SFWMD Program & Project Update

Joint Working Group and Science Coordination Group Meeting
July 7, 2022

Mindy Parrott
Principal Federal Policy Analyst
Restoration Planning Bureau
Ecosystem Restoration & Capital Projects
SFWMD CERP & Restoration Strategies Projects

Planning
- Lake Okeechobee Watershed Restoration Project (LOWRP)
- Western Everglades Restoration Project (WERP)
- Biscayne Bay & Southeastern Everglades Ecosystem Restoration (BBSEER)

Design
- IRL-S C-23 to C-44 Interconnect
- IRL-S C-25 Reservoir and STA
- LOWRP ASR Wells and Treatment
- BBCW Phase 1 Cutler Flowway
- LRWRP Loxahatchee River – Flowway 3
- CEPP EAA Conveyance Improvements
- CEPP North: S-620
- CEPP New Water Seepage Cutoff Wall
- RS Bolles East Canal Conveyance Segment 5
- WERP L-28S Culverts & Conveyance

Construction
- C-44 Reservoir & STA- OTMP
- C-43 Reservoir
- EAA A2 STA & I/O Canal
- STA-1W Expansion #2
- C-139 FEB
- STA-1W Refurbishments
- STA-2 Refurbishments
- 8.5 SMA Cutoff Wall

Presenter: Mindy Parrott
➢ Operational Testing & Monitoring Phase
  ▪ STA complete – January 2021
  ▪ Reservoir complete – September 2021
  ▪ Start reservoir filling – January 2022
  ▪ Operational Testing Start – May 2022
  ▪ Reservoir turnover to SFWMD – November 2023
IRL-S C-23 to C-44 Interconnect

- Diverts harmful C-23 Canal discharges away from the middle St. Lucie Estuary to C-44 Reservoir and STA
- Brings flows to estuary closer to natural patterns
- Improves water quality in the estuary

Schedule:
- Final Design - August 2022
- Construction Award – November 2022
**C-43 West Basin Storage Reservoir**

**Features**
- 2-Cell Reservoir
- 10,500 Acres
- 170,000 ac-ft of storage
- Depth ranging from 15’ – 25’
- 40% Complete
- Completion - September 2024

**Presenter:** Mindy Parrott
C-43 West Basin Storage Reservoir

Dam embankment up to elevation 47 feet

S-477 Western Perimeter Canal Structure
C-43 West Basin Storage Reservoir - Inflow Pump Station

S-470 Nearing Completion – 2022

Presenter: Mindy Parrott
Feasibility Study and Siting Evaluation December 2020:

- In-reservoir alum treatment was the most cost-effective and could be applied at reservoir inflow pump station

- **Design & Construction**
  - Design kicked-off April 2021
  - Anticipate USACE 408 authorization and RTA Design Plans by the end of 2022
  - Procurement and installation in 2023
  - Obtain operations permit in 2024 concurrent with the C-43 reservoir operations permit

- **Northern Everglades & Estuaries Project** separate from CERP

Presenter: Mindy Parrott
Phased implementation and Science Plan to address ASR uncertainties:

- Reactivate existing wells
- Exploratory and test wells
- Treatment technology evaluation and design
- Build out of well clusters and treatment facilities
LOWRP - Aquifer Storage and Recovery

Continuous Cores

Treatment Technology - Proof of Concept Testing
Test/Exploratory Wells at C38N and C38S
2022 ASR Science Plan

- ASR Peer Review Technical Panel Workshop held June 15, 2022
- Workshop materials and recording available at www.sfwmd.gov/asr
- Next Steps:
  - Peer Review Panel Report due July 15
  - Revised Draft Science Plan August 30
  - Reconvene with Peer Review Technical Panel
  - Science Plan Public Review in mid-September
  - Final 2022 ASR Science Plan expected in November
CEPP EAA: A-2 Reservoir & STA

- Construction Began April 2020
- Stormwater Treatment Area (STA) Inflow/Outflow Canal - 55% Complete
- STA Construction
  - Completion December 2023
- Canal Conveyance Improvements
  - Design Advancing
- Reservoir (USACE Lead)
  - Design Advancing
CEPP EAA: A-2 Reservoir & STA

Inflow/Outflow Canal and Levee Construction

S647 Spillway Structure & S648 Seepage Pump Station

Presenter: Mindy Parrott
CEPP North

- Improves distribution of water to WCA 3A
- Features:
  - **S-620 500 cfs gated culvert**
  - S-621 2500 cfs gated spillway
  - S-622 500 cfs gated spillway
  - S-8A gated culvert and canal
  - S-630 360 cfs pump station
  - L-4 Levee Removal
  - Miami Canal Backfill with Tree Island Mounds
  - L-5 Remnant Canal
  - L-5 Canal

S-620: • Construction Award 2022

Presenter: Mindy Parrott
8.5 SMA Limited Curtain Wall

- Reduces seepage to 8.5 Square Mile Area (SMA)
- Same or Increased stages in Everglades National Park
- 2.3 miles
- Construction April 2021
- Complete Summer 2022

Next Phase - CEPP New Water Seepage Barrier
- 5 Miles
- 2022
Contract 6A - Award September 2022
- S-701: 400 CFS Pump Station

Contract 6B - 2023
- C-701: At-grade, concrete lined channel
- S-701A: Culvert under SW 97th Ave
- S-701B: Microtunnel under SW 87th Ave
- C-702: Spreader canal
- Berm breaches
- Drainage ditch blocks
- Recreation features
Restoration Strategies

Legend
- Existing STAs (57,000 acres)
- New STAs (6,200 acres)
- STA Repairs (2,152 acres)
- New FEBs (116,000 ac-ft)
- Restoration Strategies Flow Path

Central Flow Path
- G-341 Related Conveyance Improvements
- STA-5/6 Earthwork -1,162 acres

Eastern Flow Path
- L-8 FEB -45,000 ac-ft
- L-8 Divide Structure (G-541)
- B-5A5 Modifications
- B-375 Expansion (G-716)
- STA-1W Exp. #1 -4,600 acres
- STA-1W Exp. #2 -1,600 acres

Western Flow Path
- C-139 FEB -11,000 ac-ft
- L-26
- L-21
- L-16

WCA-1
- Loxahatchee National Wildlife Refuge
- STA-1W
- STA-1E
- STA-5/6
- STA-2
- STA-3/4
- STA-1W Exp. #1 -4,600 acres
- STA-1W Exp. #2 -1,600 acres
- A-1 FEB -60,000 ac-ft

Presenter: Mindy Parrott
# Restoration Strategies

## Eastern Flow Path

### STA-1W Expansion #2 (100864)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Complete land acquisition</td>
<td>3/31/2018</td>
<td>✓</td>
</tr>
<tr>
<td>Initiate design</td>
<td>10/1/2018</td>
<td>✓</td>
</tr>
<tr>
<td>Submit state and federal permit applications</td>
<td>8/1/2021</td>
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<tr>
<td>Complete design</td>
<td>9/30/2021</td>
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<tr>
<td>Complete design</td>
<td>7/31/2021</td>
<td>✓</td>
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<tr>
<td>Initiate construction</td>
<td>11/30/2020</td>
<td>✓</td>
</tr>
<tr>
<td>Construction status report</td>
<td>3/1/2021</td>
<td>✓</td>
</tr>
<tr>
<td>Construction status report</td>
<td>9/31/2021</td>
<td>✓</td>
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<tr>
<td>Complete construction</td>
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### STA-1W Expansion #1 (100818)

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<td>Complete land acquisition</td>
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<tr>
<td>Initiate design</td>
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<td>Submit state and federal permit applications</td>
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<tr>
<td>Complete design</td>
<td>7/30/2015</td>
<td>✓</td>
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<tr>
<td>Initiate construction</td>
<td>1/31/2016</td>
<td>✓</td>
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<tr>
<td>Construction status report</td>
<td>3/1/2017</td>
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<td>Construction status report</td>
<td>3/1/2018</td>
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</tr>
<tr>
<td>Complete construction</td>
<td>12/31/2018</td>
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### STA-16 Repairs and Modifications

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<tr>
<td>PSTA Decommissioning complete</td>
<td>12/31/2022</td>
<td>✓</td>
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<tr>
<td>Culvert repairs complete</td>
<td>12/31/2022</td>
<td>✓</td>
</tr>
<tr>
<td>Cell 5 and 7 improvements complete</td>
<td>12/31/2022</td>
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### L-8 FEB (100813)

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<td>Submit state and federal permit applications</td>
<td>1/31/2014</td>
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<tr>
<td>Construction status report</td>
<td>3/1/2014</td>
<td>✓</td>
</tr>
<tr>
<td>Construction status report</td>
<td>3/1/2015</td>
<td>✓</td>
</tr>
<tr>
<td>Complete construction (begin multi-purpose ops)</td>
<td>12/31/2016</td>
<td>✓</td>
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<tr>
<td>Long term operations commence</td>
<td>12/31/2022</td>
<td>✓</td>
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## Central Flow Path

### G-341 Related Conveyance Improvements (100802)

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<td>Initiate design</td>
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<tr>
<td>Submit state and federal permit applications</td>
<td>8/1/2021</td>
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<tr>
<td>Complete design</td>
<td>7/31/2021</td>
<td>✓</td>
</tr>
<tr>
<td>Initiate construction</td>
<td>11/30/2022</td>
<td>✓</td>
</tr>
<tr>
<td>Construction status report</td>
<td>3/1/2023</td>
<td>✓</td>
</tr>
<tr>
<td>Construction status report</td>
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<tr>
<td>Complete construction</td>
<td>12/31/2024</td>
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### L-8 Divide Structure (100817)

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<th>Deadline</th>
<th>Complete</th>
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<tbody>
<tr>
<td>Initiate design</td>
<td>10/1/2012</td>
<td>✓</td>
</tr>
<tr>
<td>Complete design</td>
<td>9/30/2013</td>
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<tr>
<td>Initiate construction</td>
<td>10/1/2016</td>
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<tr>
<td>Complete construction</td>
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### S-375 Expansion (100819)

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<td>Initiate design</td>
<td>10/1/2012</td>
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<tr>
<td>Complete design</td>
<td>9/30/2013</td>
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<tr>
<td>Initiate construction</td>
<td>10/1/2014</td>
<td>✓</td>
</tr>
<tr>
<td>Complete construction</td>
<td>9/30/2016</td>
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## Western Flow Path

### STA-5/6 Internal Improvements (100868)

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<th>Deadline</th>
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<tr>
<td>Initiate design</td>
<td>10/31/2019</td>
<td>✓</td>
</tr>
<tr>
<td>Submit state and federal permit applications</td>
<td>8/30/2020</td>
<td>✓</td>
</tr>
<tr>
<td>Complete design</td>
<td>10/31/2021</td>
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<tr>
<td>Initiate construction</td>
<td>1/31/2022</td>
<td>✓</td>
</tr>
<tr>
<td>Construction status report</td>
<td>3/1/2023</td>
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<tr>
<td>Construction status report</td>
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<td>✓</td>
</tr>
<tr>
<td>Complete construction</td>
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### STA-5/6 Expansion: Compartment C

<table>
<thead>
<tr>
<th>Activity</th>
<th>Deadline</th>
<th>Complete</th>
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<tbody>
<tr>
<td>Initial flooding and optimization period complete</td>
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### L-8 Divide Structure (100817)

<table>
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<tr>
<th>Activity</th>
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<tbody>
<tr>
<td>Initiate design</td>
<td>10/1/2012</td>
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</tr>
<tr>
<td>Complete design</td>
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<tr>
<td>Initiate construction</td>
<td>10/1/2014</td>
<td>✓</td>
</tr>
<tr>
<td>Complete construction</td>
<td>9/30/2016</td>
<td>✓</td>
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</table>

## Projects Complete = 8 of 13 Activities Complete = 66 of 74 % Activities Complete = 89 % % Time Complete = 72 %
STA-1W Expansion No. 2

Northern Section of Concrete Conveyance Canal

North Inflow Canal and Levee

G-310
STA-1W Expansion No. 2 - Outflow Pump Station

G-782 Base Slab Rebar Placement

G-782 Base Slab Concrete Placement
Bolles East Canal - Segment 4

Slab Beam Installation

Completed Boca Chica Bridge and Canal
C-139 Flow Equalization Basin

- Construction began February 2021
- Completion July 2023
Questions?

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