

Inflows to the Lake Worth Lagoon from the L-8 and C-51 basins, and from Lake Okeechobee

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H&H Bureau

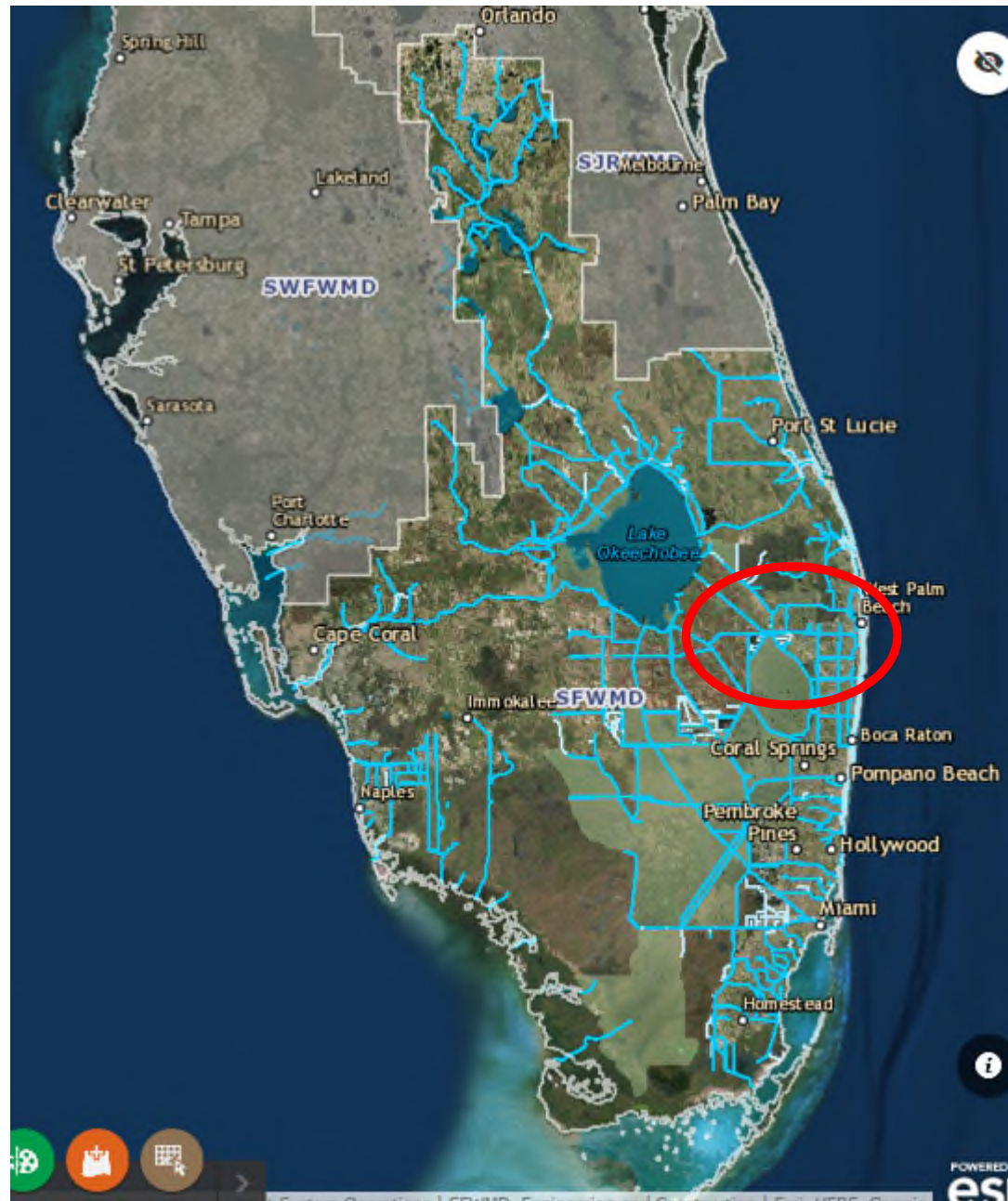
SFWMD

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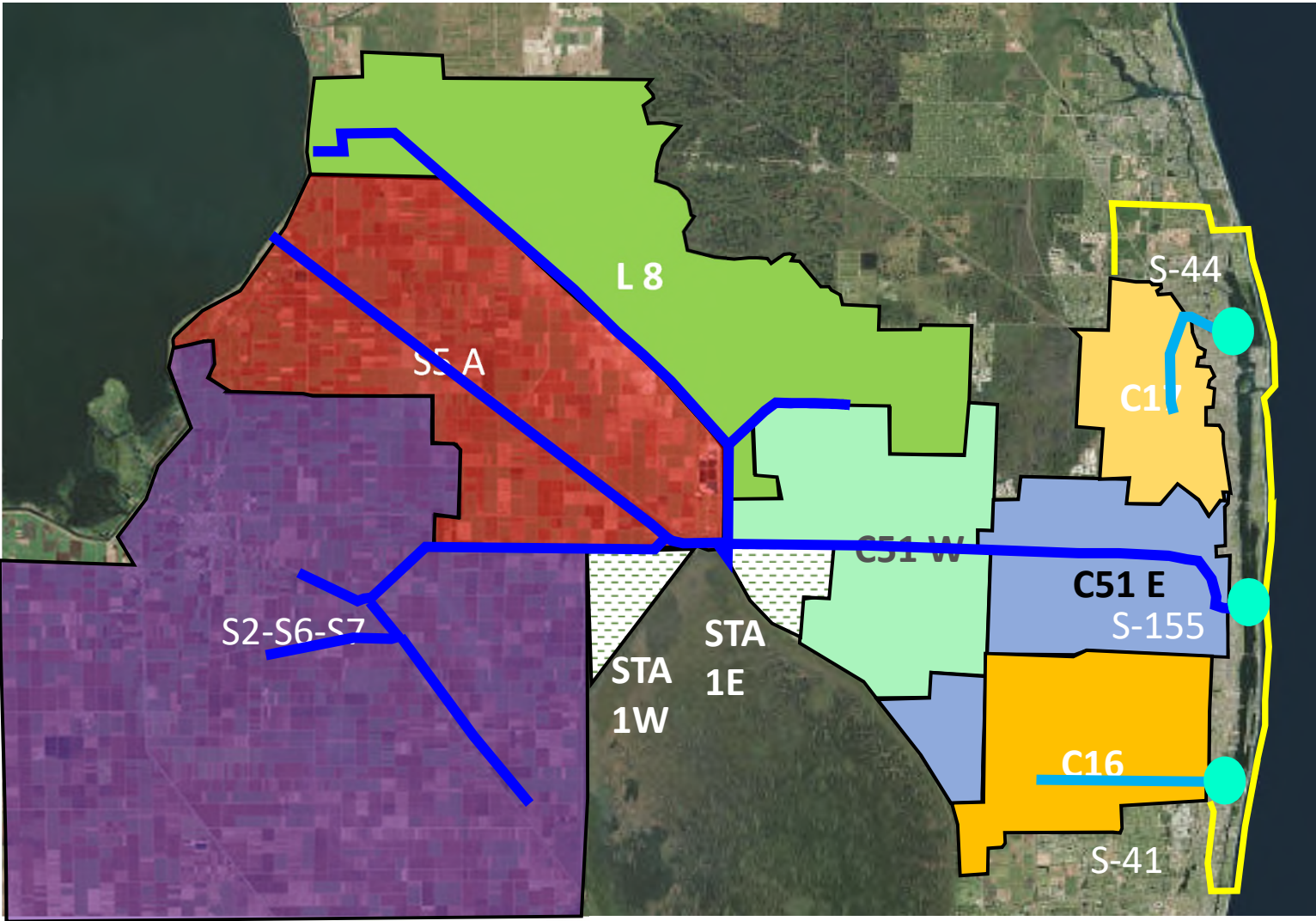
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SFWMD

- Describe water control operations that result in discharges into the Lake Worth Lagoon (LWL) through S-155



LWL Water Control Features



DRAFT

LWL Water Control Features

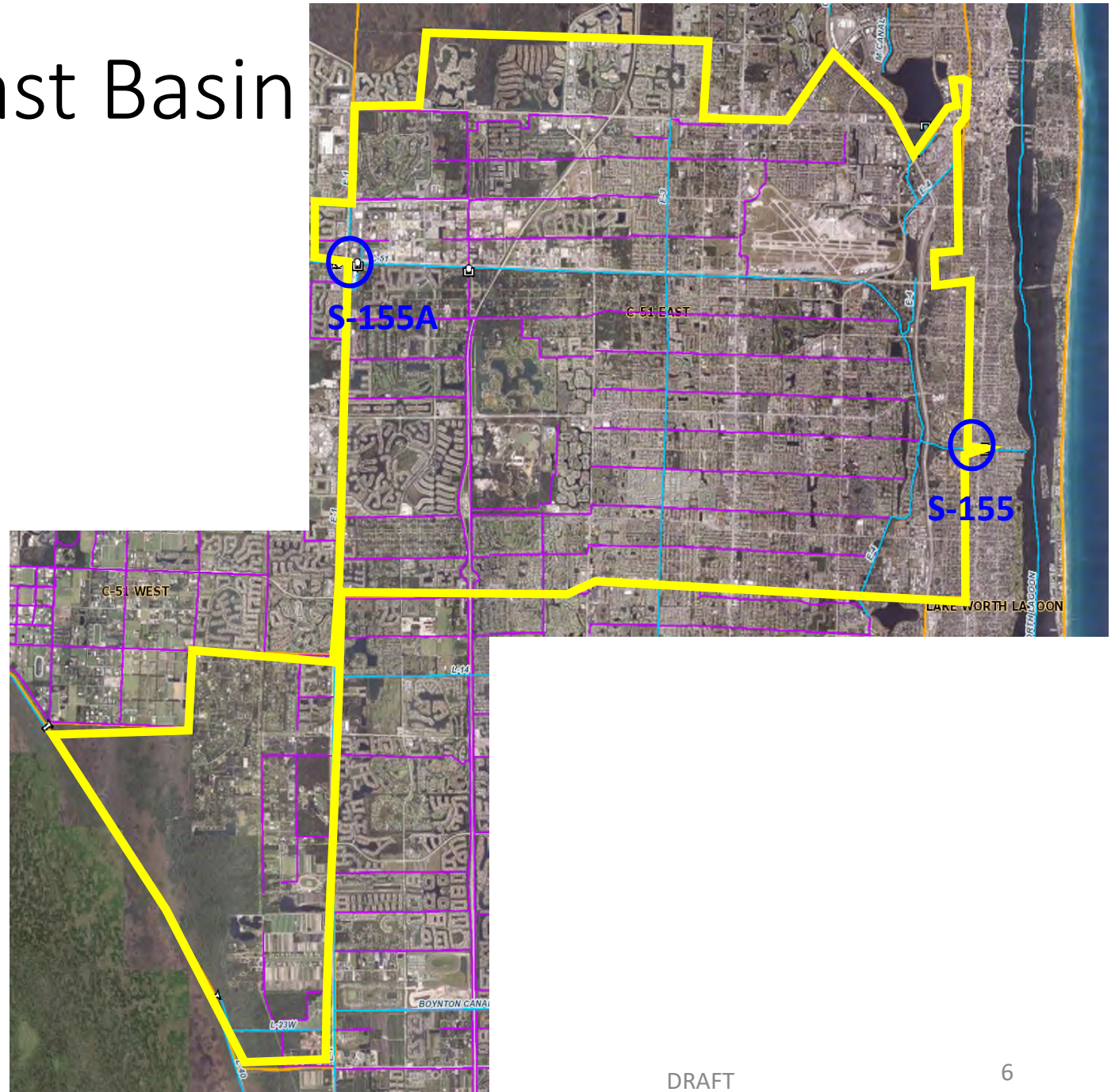
- Three SFWMD structures discharge into the LWL:
 - S-44 on the C-17 Canal
 - S-155 on the C-51 Canal
 - S-41 on the C-16 Canal
- This presentation will discuss discharges through S-155 (C-51 Canal)
- Sources for water discharged through S-155:
 - Urban runoff (C-51 East and West, L-8)
 - Agricultural runoff (C-51, EAA, L-8)
 - Runoff from natural areas (Corbett and Dupuis)
 - Lake Okeechobee Regulatory Releases under LORS 2008

LORS 2008

- The LORS 2008 WCP recognizes C-10A as one of the outlets to discharge regulatory releases from LOK.
- In the modeling to support the EIS for LORS 2008, regulatory releases through C-10A were considered in the same category as lake regulatory releases south to the WCAs
- Any time LORS 2008 calls for regulatory release south and releases to the estuaries, the possibility of sending releases to tide through C-10A and/or S-352 is examined.
- When capacity exists in the L-8 and the C-51 canals, release through C-10A could reach the LWL
- From LORS 2008 WCP:

4. Release up to maximum capacity from C-10A to the L-8 canal and, eventually, C-51. This flow shall be secondary to use of the L-8 canal and C-51 to first relieve flooding within the local drainage area. Lake releases will be made considering the peak inflow from the local drainage area.

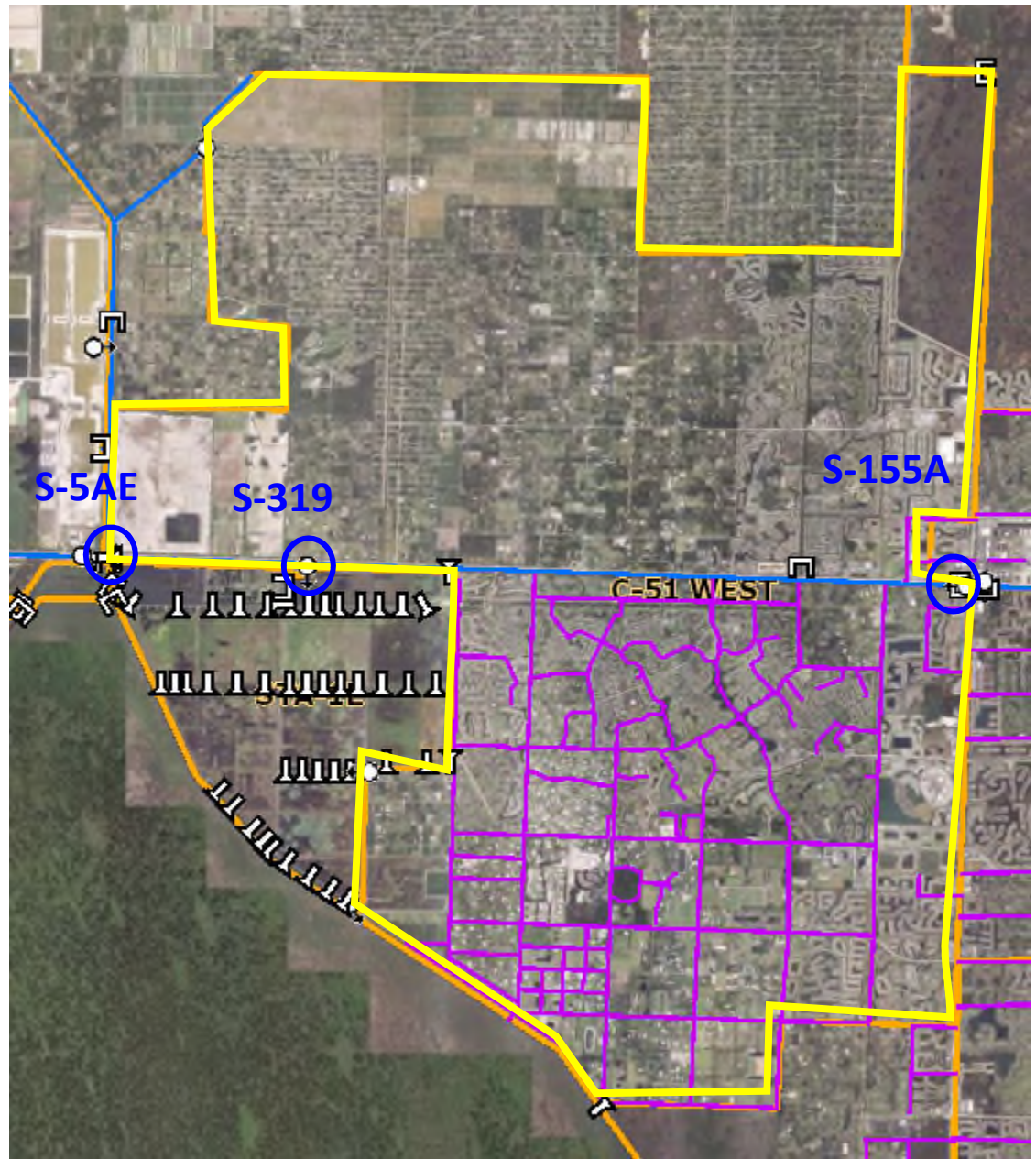
C-51 East Basin



C-51 East Basin

- East of S-155A at State Road 7
- Highly urbanized area
- Priority is to manage local runoff releasing through S-155 into the LWL

C-51 West Basin

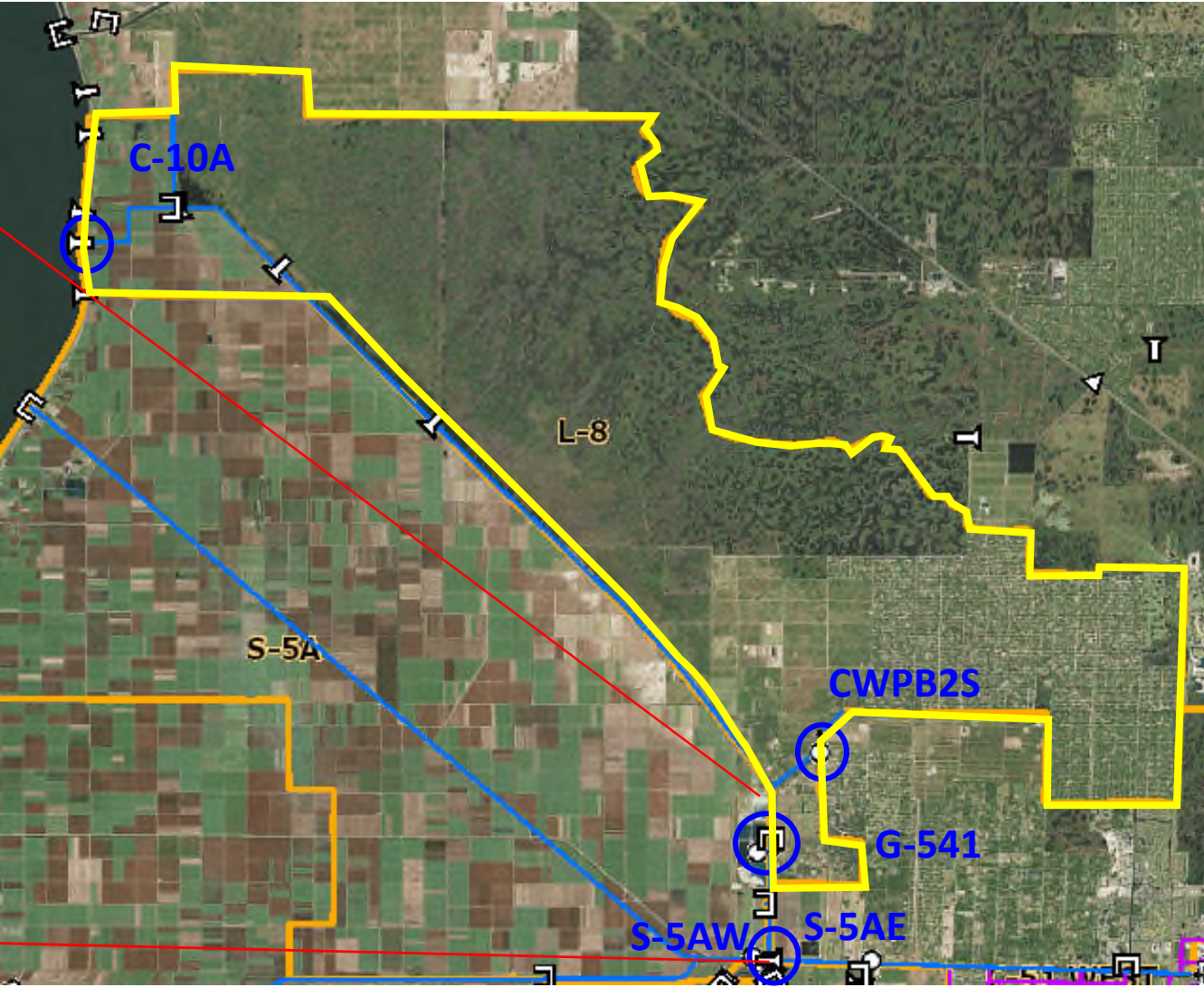


C-51 West Basin

- West of S-155A at State Road 7
- Highly urbanized area
- Priority is to manage C-51 West local runoff pumping into STA 1E through
- Second priority release to C-51 East canal through S-155A

L-8 Basin

L-8 FEB



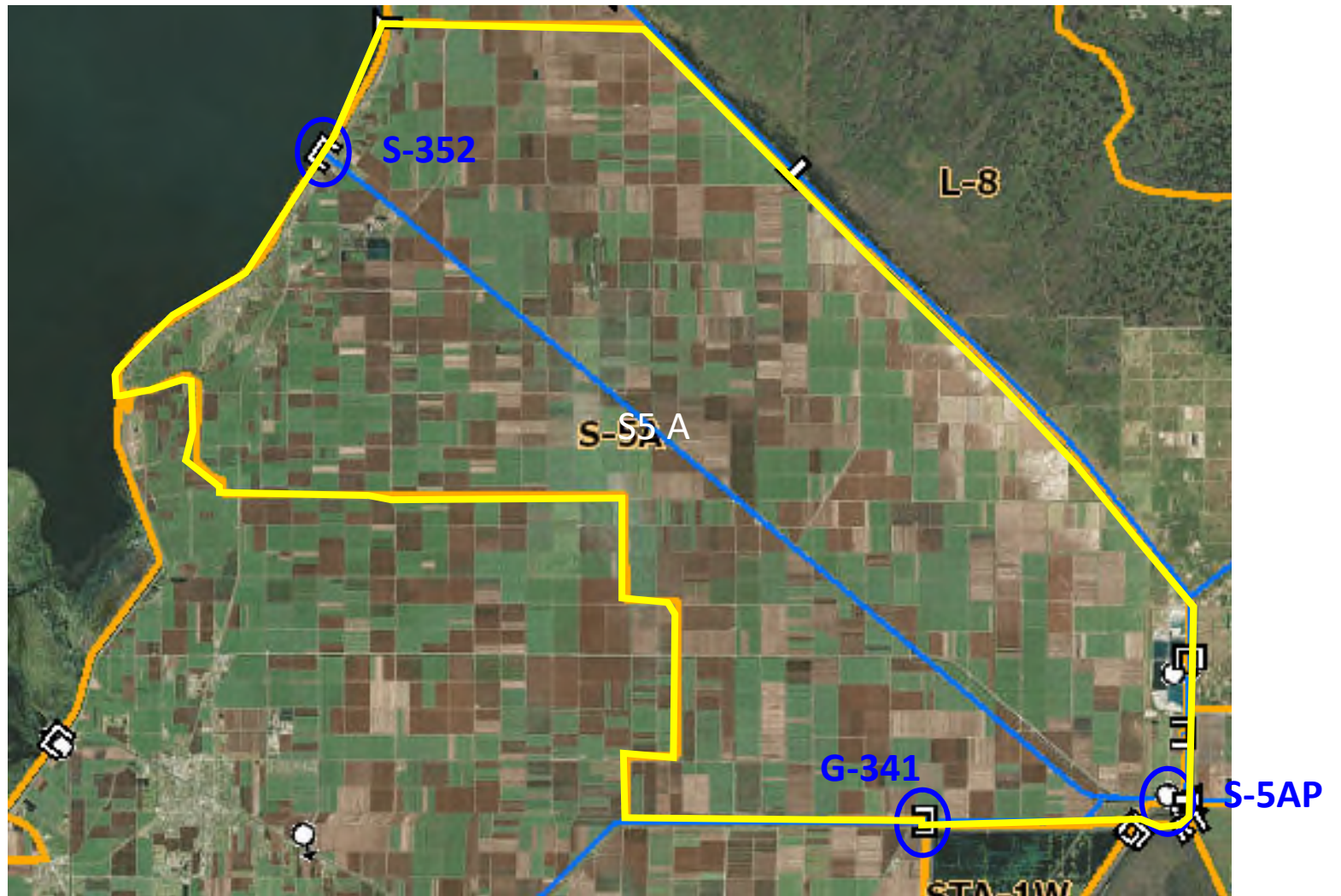
L-8 Basin

- Agricultural, urban and natural areas
- Priority is to manage local runoff
 - To C-51 canal and potentially to LWL
 - To Lake Okeechobee
- Water Supply deliveries to the City of WPB Grassy Waters Preserve
- Environmental deliveries to the Loxahatchee River Watershed Restoration Project (LRWRP)

L-8 FEB

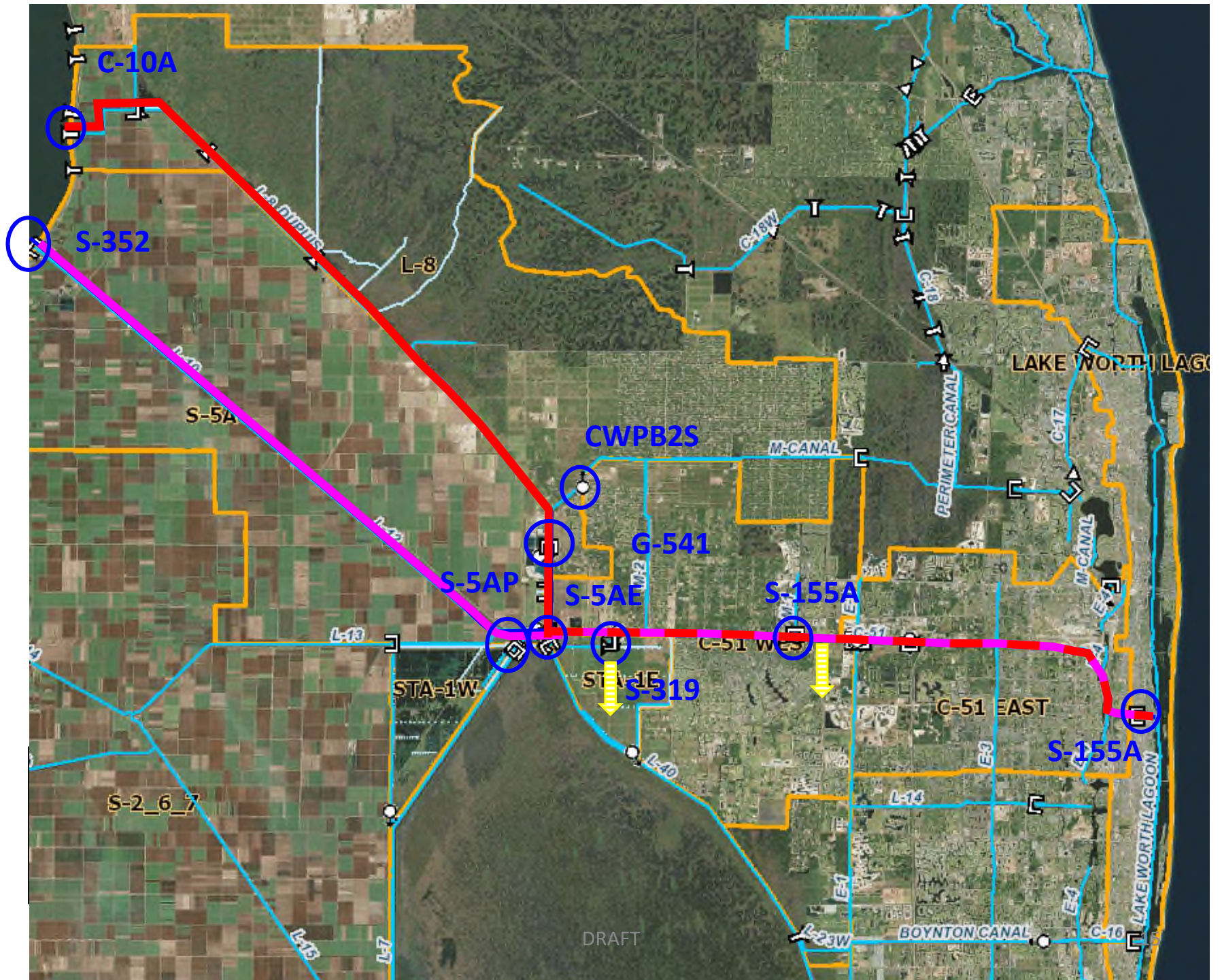
- Improve STA 1E/1W WQ performance by storing and attenuating untreated runoff from S-5A, and C-51 West basins directed into the L-8 Canal.
- Send discharges to STA-1E/1W.
- Supply water to the City of West Palm Beach's Grassy Waters Preserve.
- Provide interim benefits to the Loxahatchee Slough (G-161) and the Loxahatchee River (G-160) that are consistent with the goals of the LRWRP.
- Lake Okeechobee releases via Culvert C-10A may be directed into the L-8 FEB (infrequently).

S-5A Basin



S-5A Basin (West Palm Beach Canal)

- Mostly agricultural area, municipalities around Lake Okeechobee (298 Districts)
- Priority is to manage S-5A Basin local runoff pumping through S-5A Pump Station
- Receives discharges from Lake Okeechobee through S-352
- Possibility that regulatory releases through S-352 may end up in the LWL



Lake Regulatory Releases

- Step 1: Lake Okeechobee regulatory releases may reach the C-51 canal from either L-8 or WPB canals
- Step 2: Lake Okeechobee regulatory releases will reach the LWL if this volume is not pumped via S-319 to the STA-1E, or diverted to LWDD, and both S-155A and S-155 are open

L-8 and WPB Basin Runoff

- Runoff from the L-8 Basin or the WPB Basin could reach the LWL following the same flow path as regulatory releases from the lake.

Questions ?