

# Winter 2013 Rainfall and STA 34 Behavior

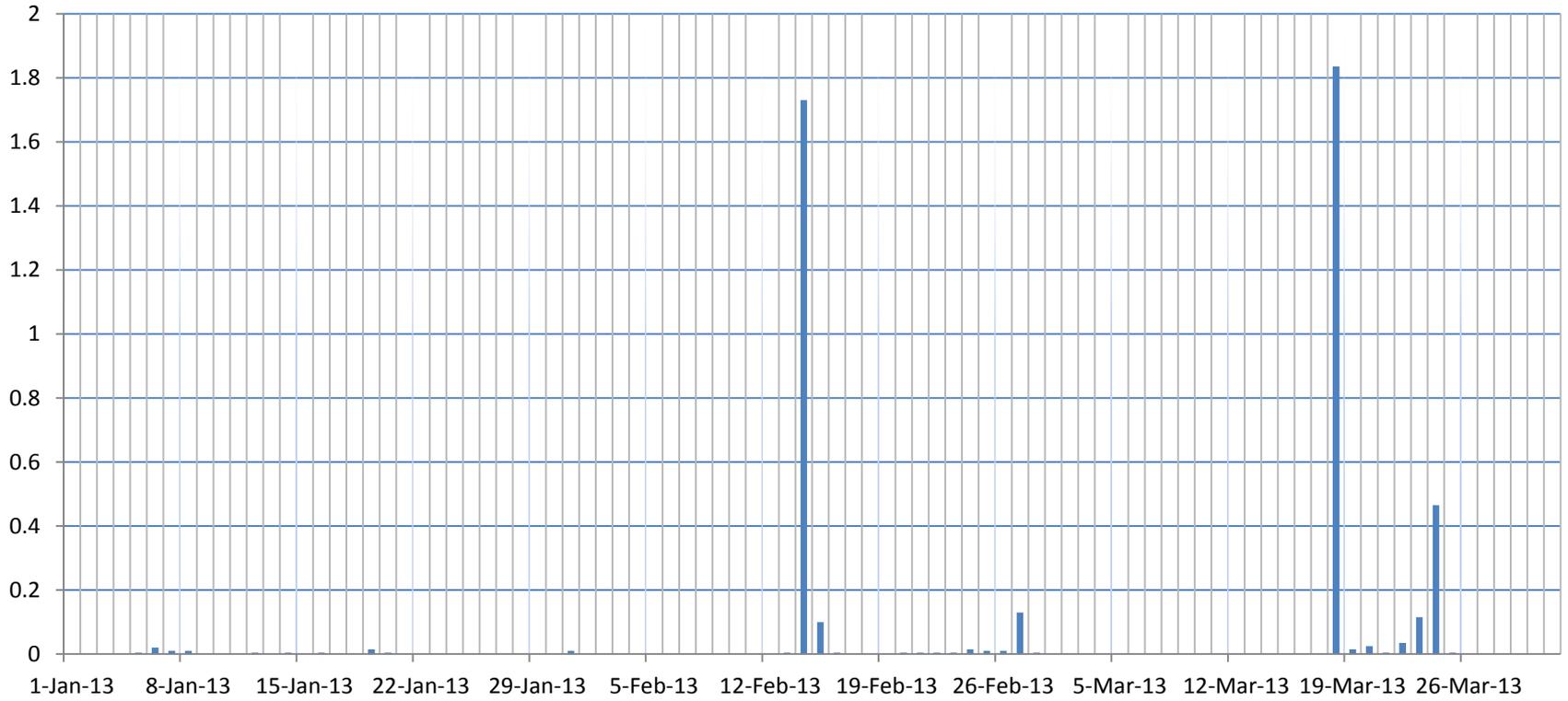
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# SFWMD Draft August 2013 Report

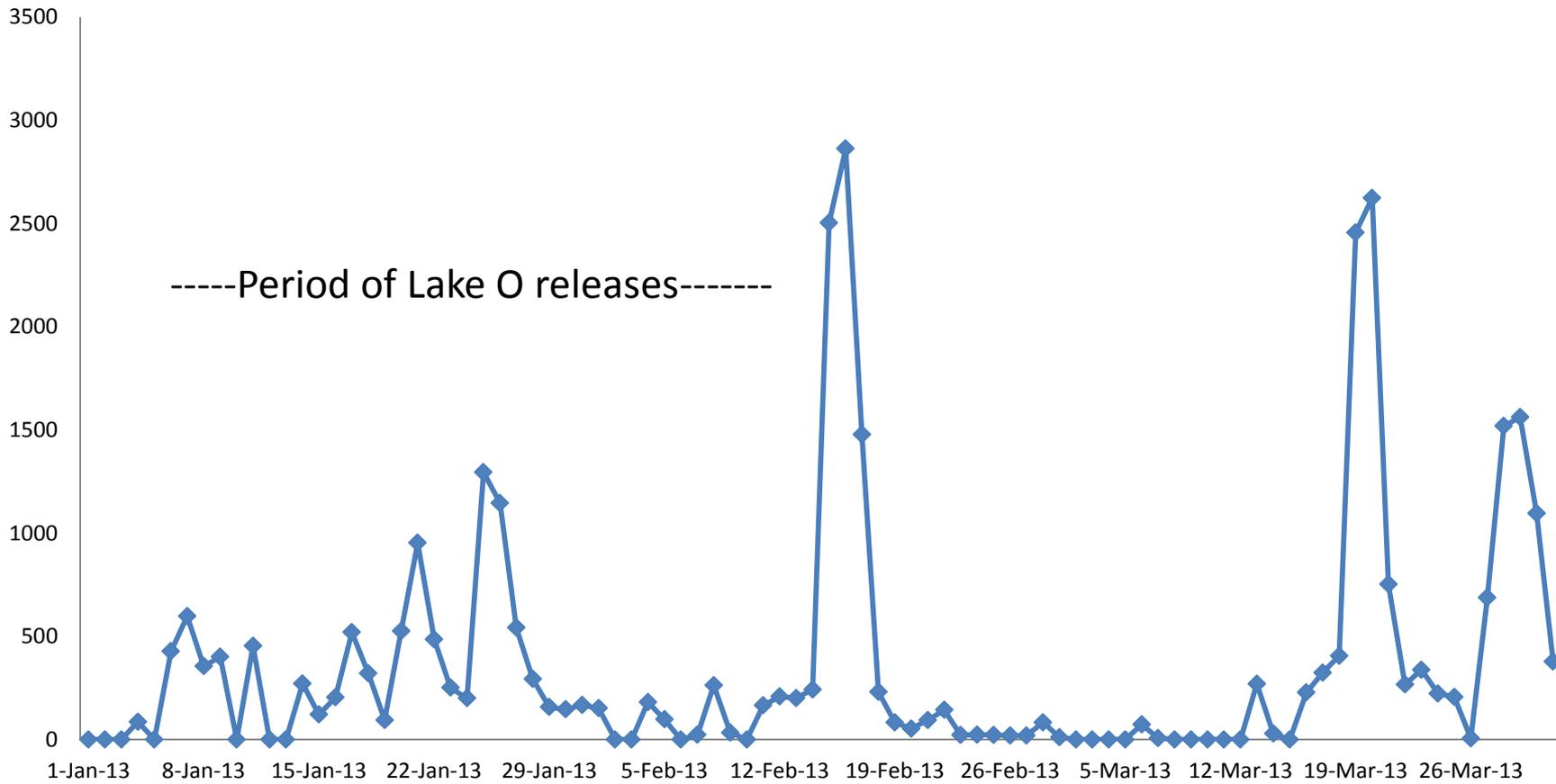
- 34,000 acre-feet of Lake O water was sent south between Jan 1 and June 30 2013
- STA 34 was the only option used during this time
- “one 925 cfs pump (operated one shift/day) provides a reasonable maximum inflow rate for Lake releases during the dry season to avoid harm to the STA’s.” SFWMD page 47

- 2013 Lake O releases through STA 34 were begun Jan 8 and were terminated Feb 14 due to rain.
- Some Lake O releases were resumed in May.
- No explanation as to why there were no releases during weeks of no rainfall following Feb 14.
- The following data run from Jan 1 through March 31, 2013 because these data were available for that time period.

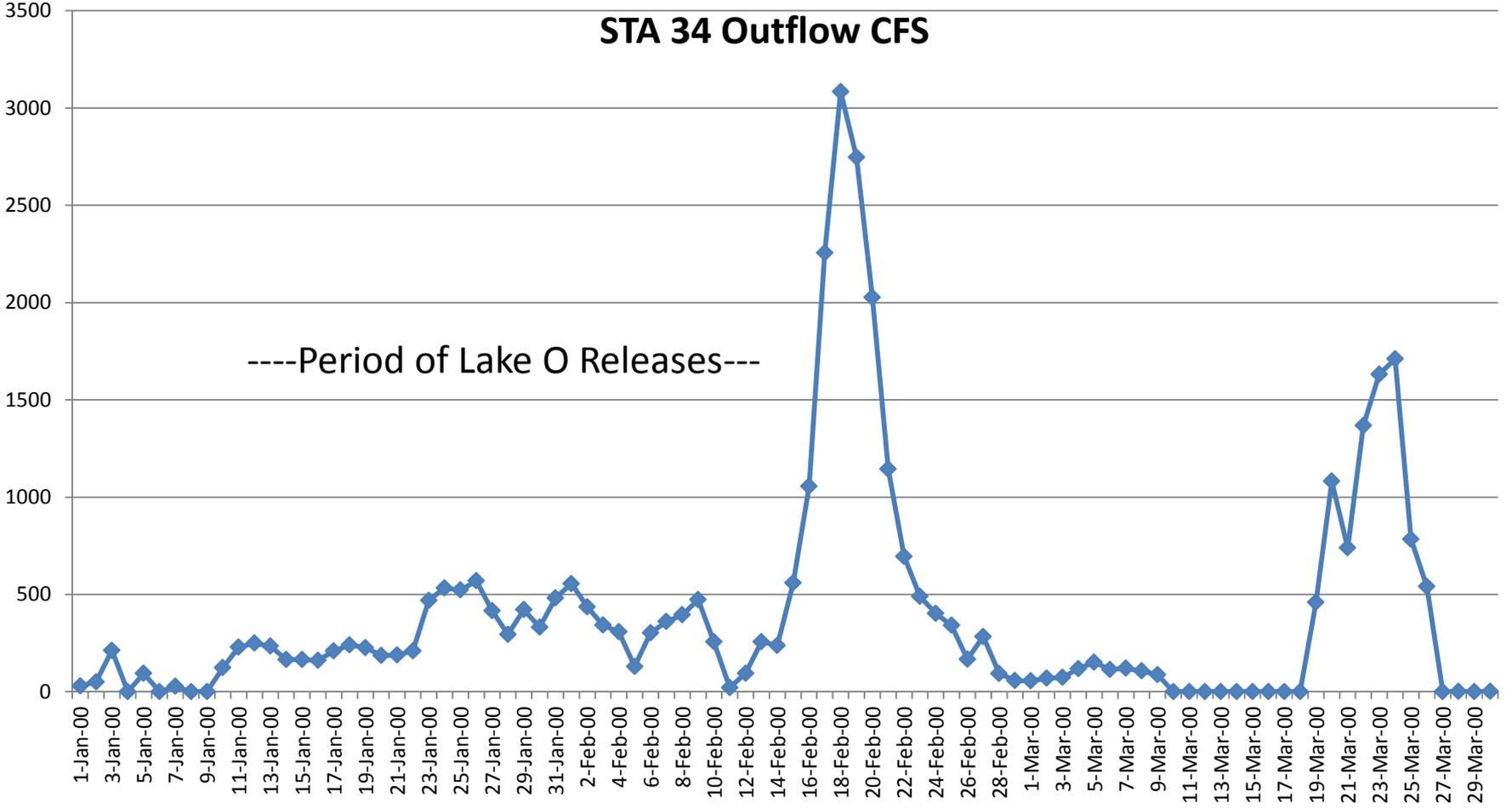
# EAA2+S-5/2 Rainfall

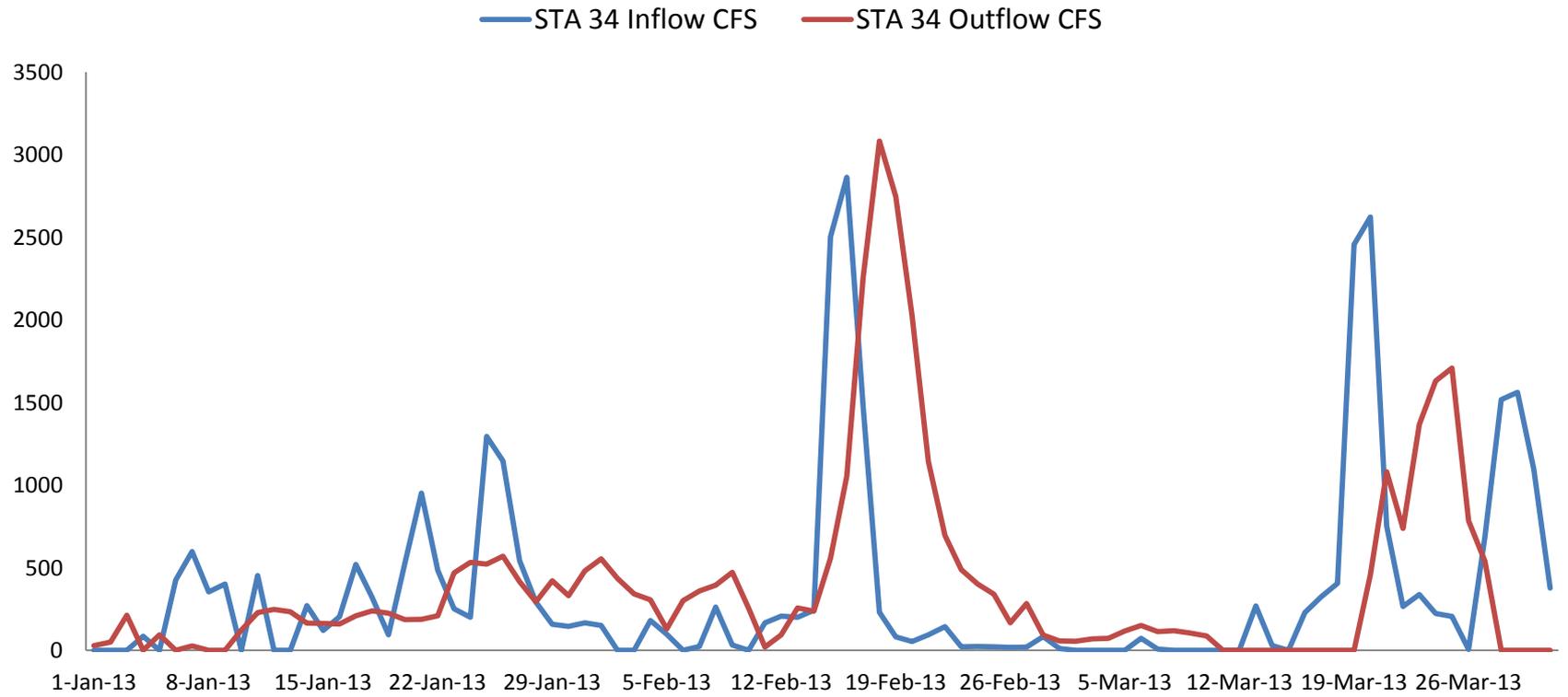


◆ STA 34 Inflow CFS



# STA 34 Outflow CFS





# EAA Rainfall Runoff

- Three rainfall events from Jan 1 to March 31 2013
- Feb 14 event 1.7” in 24 hours.
- STA 34 inflow next 3 days was equivalent to draining 100% of this event from 90,000 acres of land.
- March 18 event 1.8” in 36 hours.
- STA 34 inflow next 3 days was equivalent to draining 100% of this event from 76,000 acres of land.
- March 24 event 0.6” in 48 hours.
- STA 34 inflow next 3 days was equivalent to draining 100% of this event from 164,000 acres of land.

# Unit Area Runoff

## 2008-2012 DbHydro data

- 555,000 EAA south basin averaged 1.66 acre-feet/acre stormwater runoff.
- 1,000,000 acre Upper Kissimmee basin averaged 0.66 acre-feet/acre stormwater runoff.
- 430,000 acre Lower Kissimmee basin averaged 0.61 acre-feet/acre.

# Big Questions

- EAA produces 3X the runoff per acre of land than any other Lake O basin, but we should look north of the Lake for more storage?
- EAA is the only basin with zero natural or man made storage, so the public has provided Lake O and the WCA's and now is going to build them more storage?
- EAA is the only basin with private pumping drainage capacity larger than public drainage capacity, so EAA can create a public flood after less than .5" of rain?

- EAA is the only basin with rapid soil subsidence, so the public should provide perfect irrigation at risk to Lake O and estuaries for free and call it a Best Management Practice?
- Lake O water can not go south, but any amount and quality of EAA drainage can?
- HHD is a good dike. Now it's a dam. Due to EAA subsidence. Now the public should pay to turn HHD into a dam?

# SFWMM Topography v7.0

