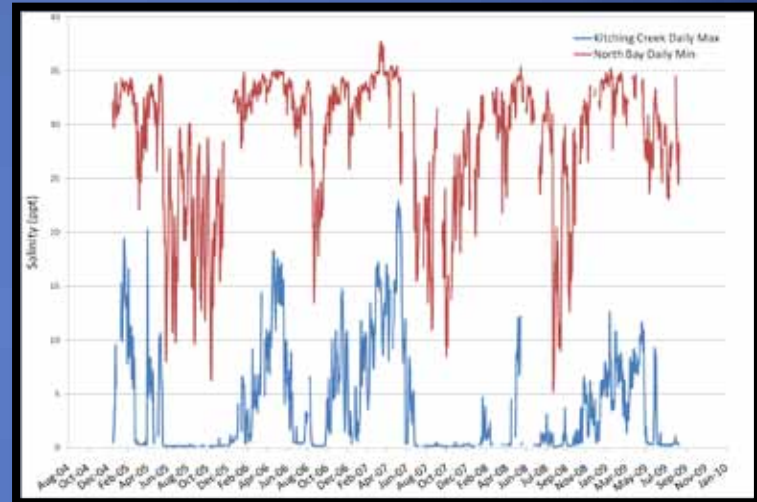


Loxahatchee River Water Quality Monitoring 2011 Datasonde Summary



Loxahatchee River District

2500 Jupiter Park Dr

Jupiter FL, 33458

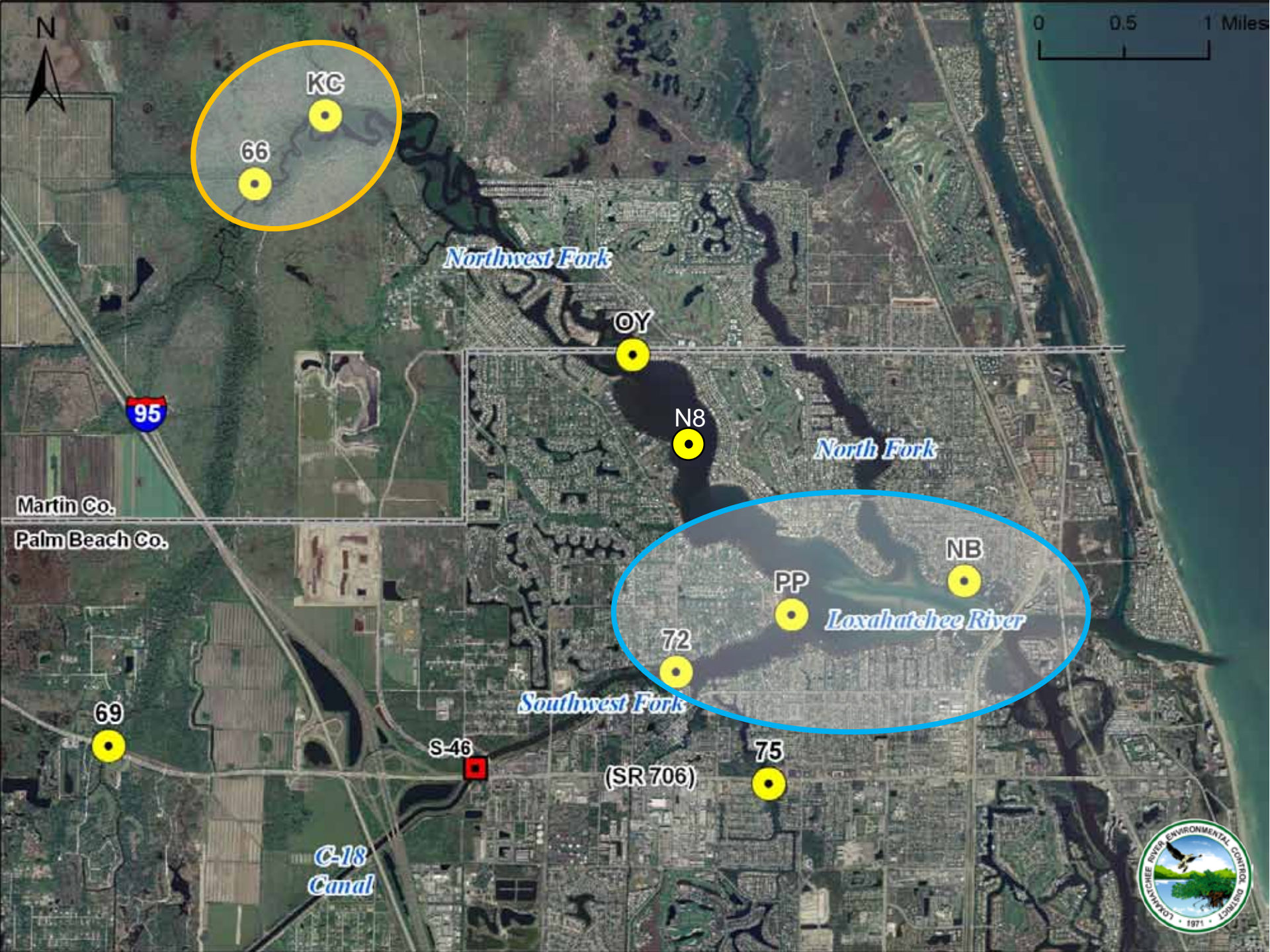
(561) 747-5700

www.loxahatcheeriver.org/reports.php

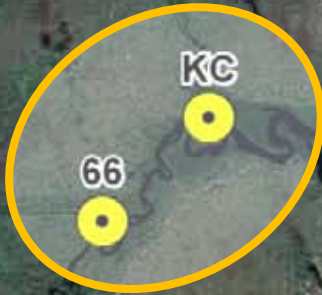
Datasonde Project

- Autonomous
- Salinity / Sp. Cond., Temp., pH, Dissolved Oxygen
- 15 minute intervals
- 2 week deployments
- QC checks weekly
- 8 sites + 1 seasonal
- Data back to 1994/95 for some sites
- ~1.8 M data records





0 0.5 1 Miles



KC

66

Northwest Fork

OY

N8

North Fork

NB

PP

Loxahatchee River

72

Southwest Fork

75

S-46

(SR 706)

C-18 Canal

95

Martin Co.
Palm Beach Co.

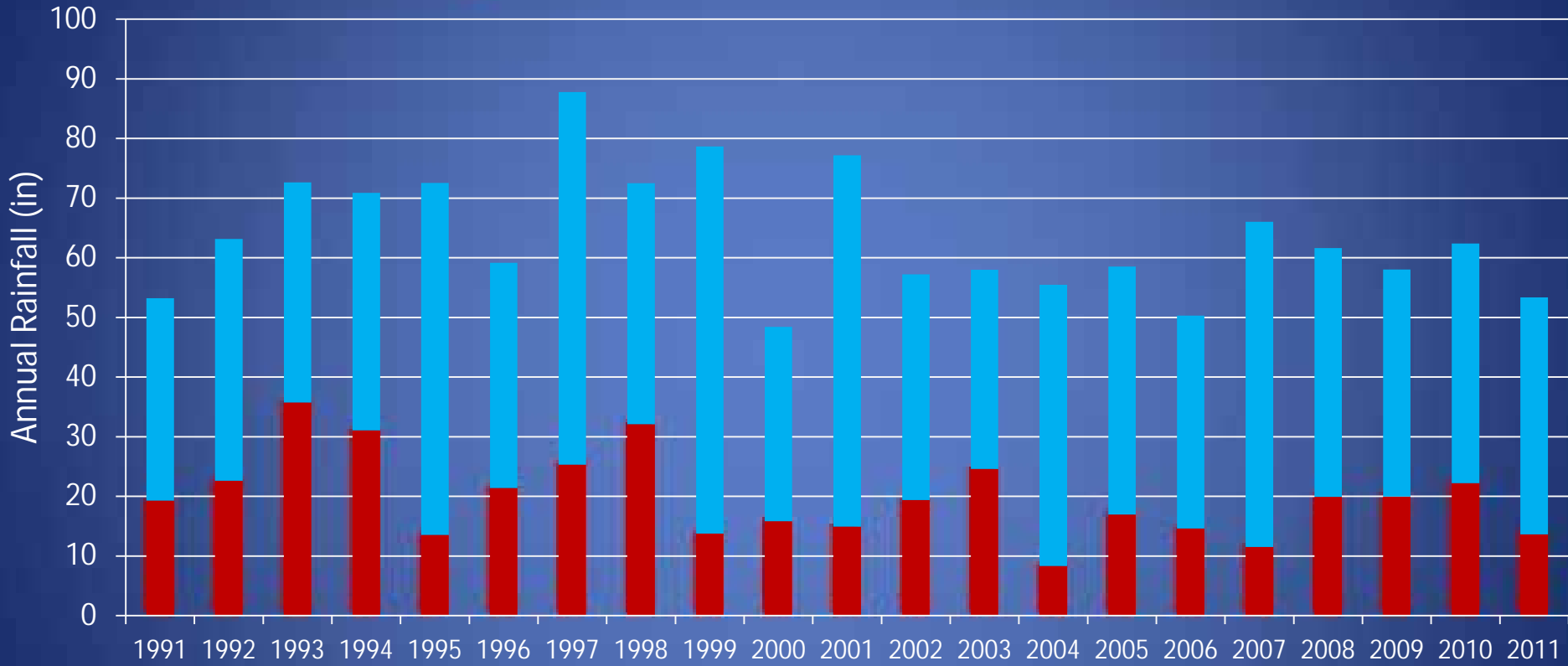
69



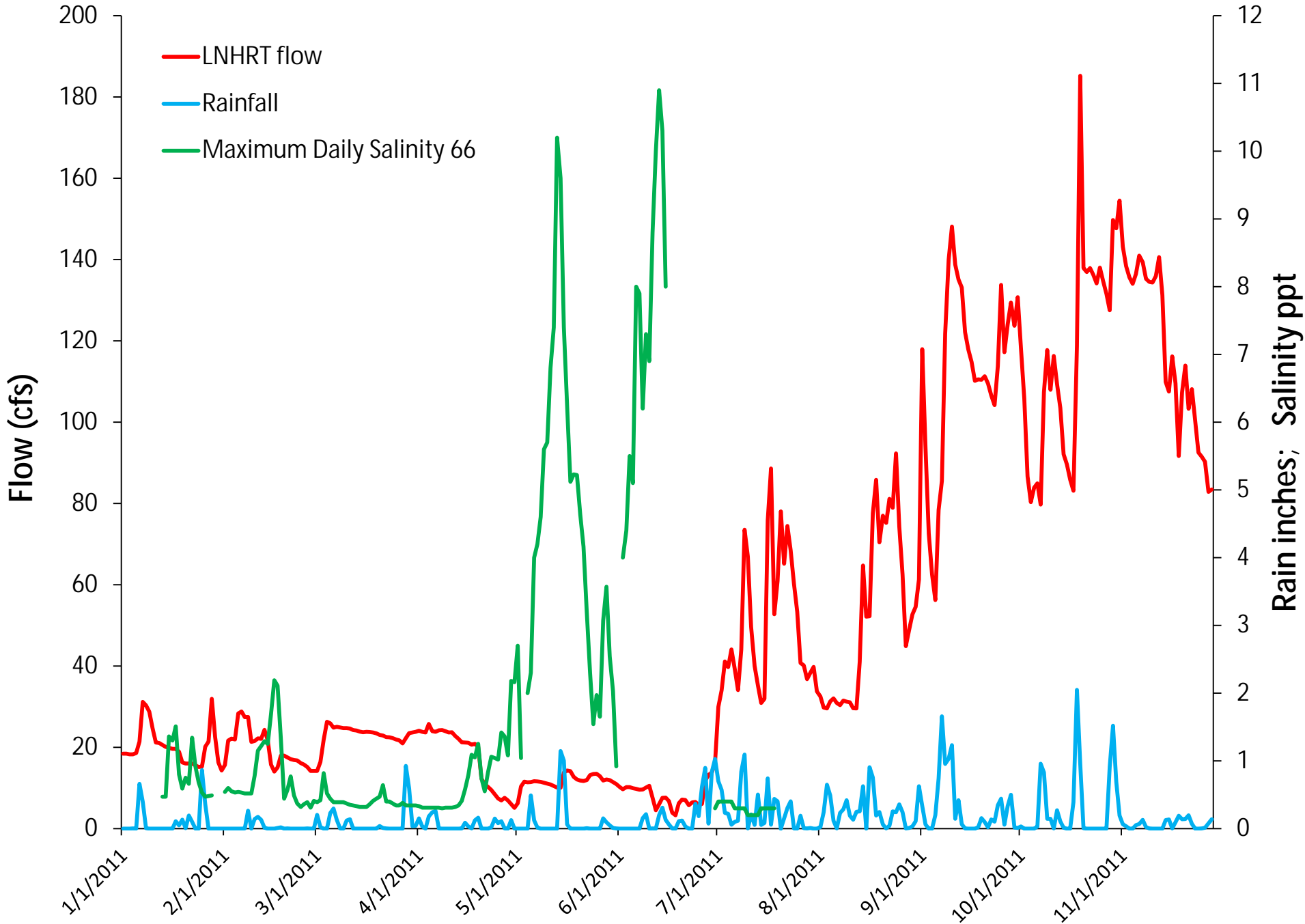
Annual Rainfall at Loxahatchee River District

■ Dry Season (Nov-Apr)

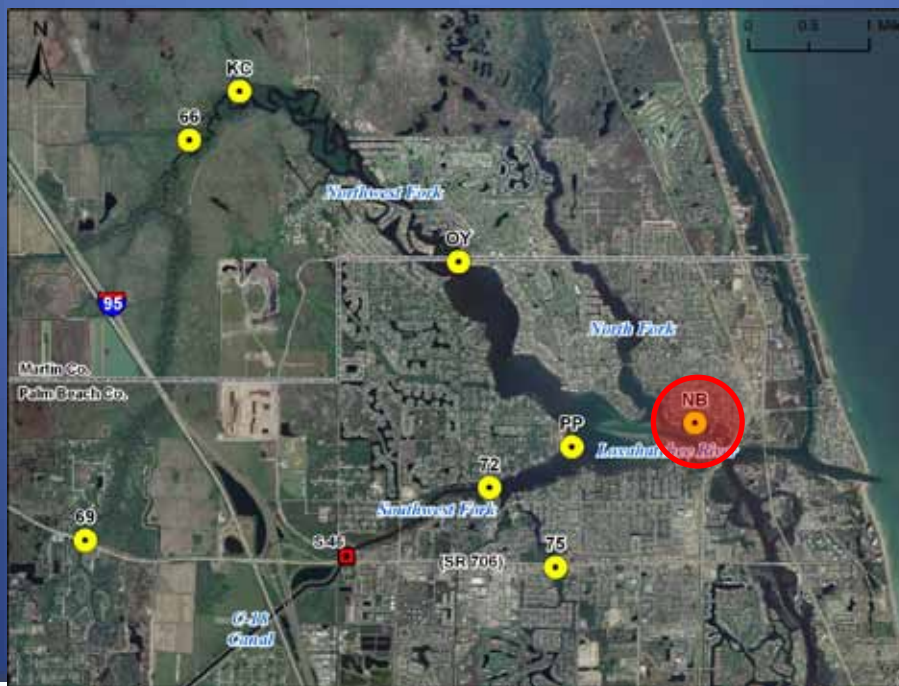
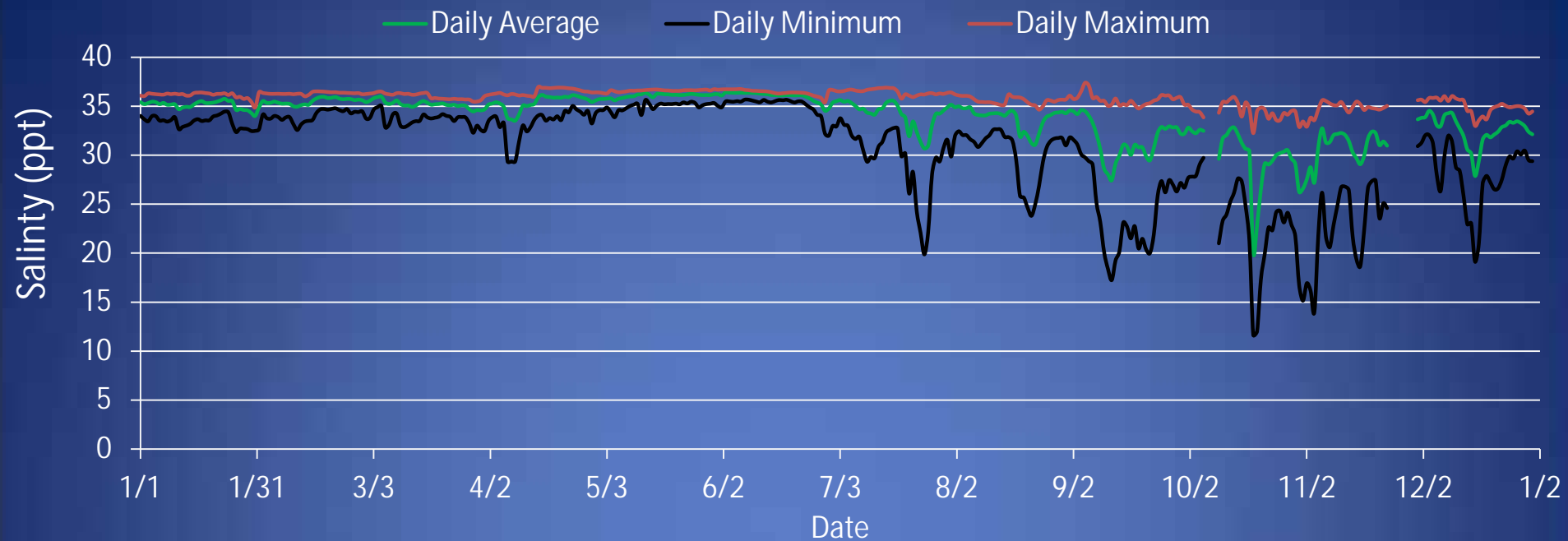
■ Wet Season (May-Oct)



2011 Lainhart Flow, Rain, Station 66

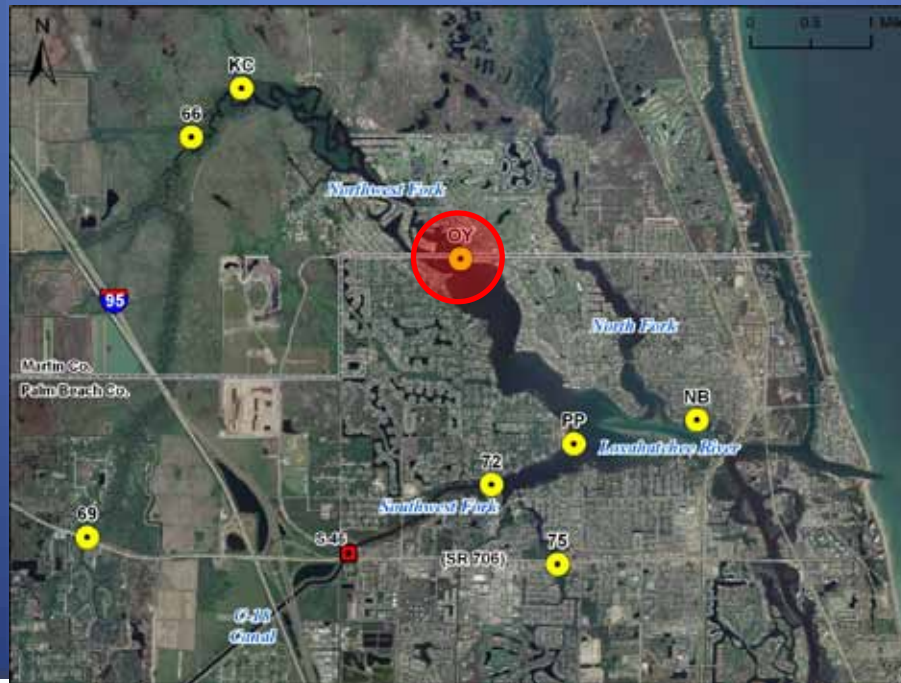
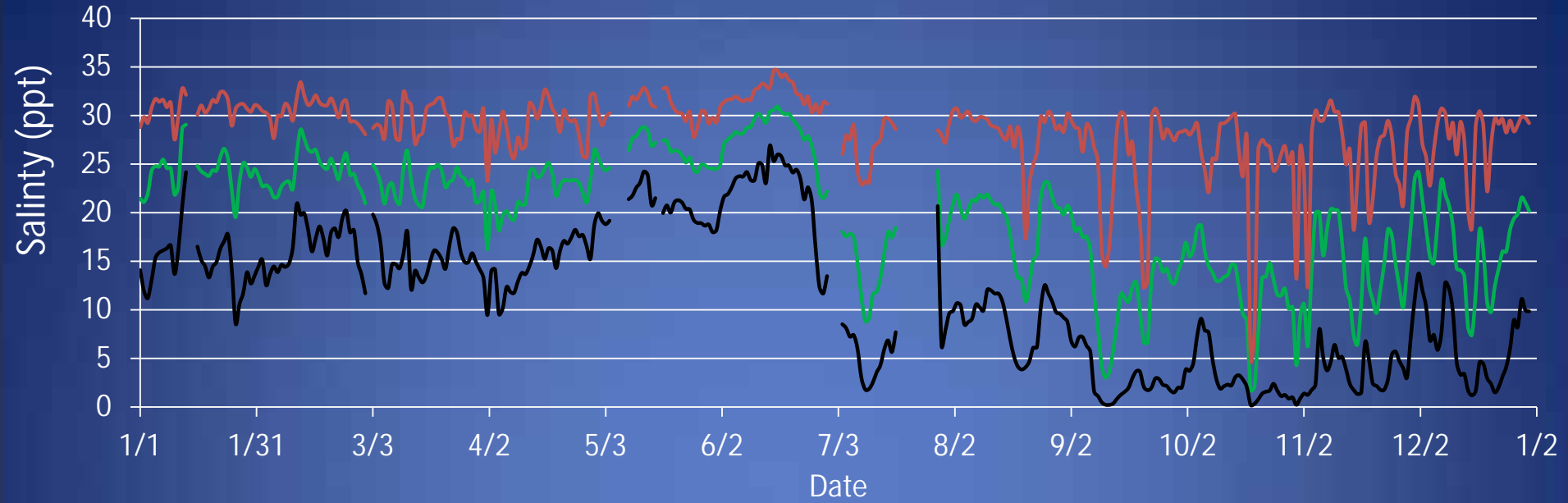


North Bay 2011



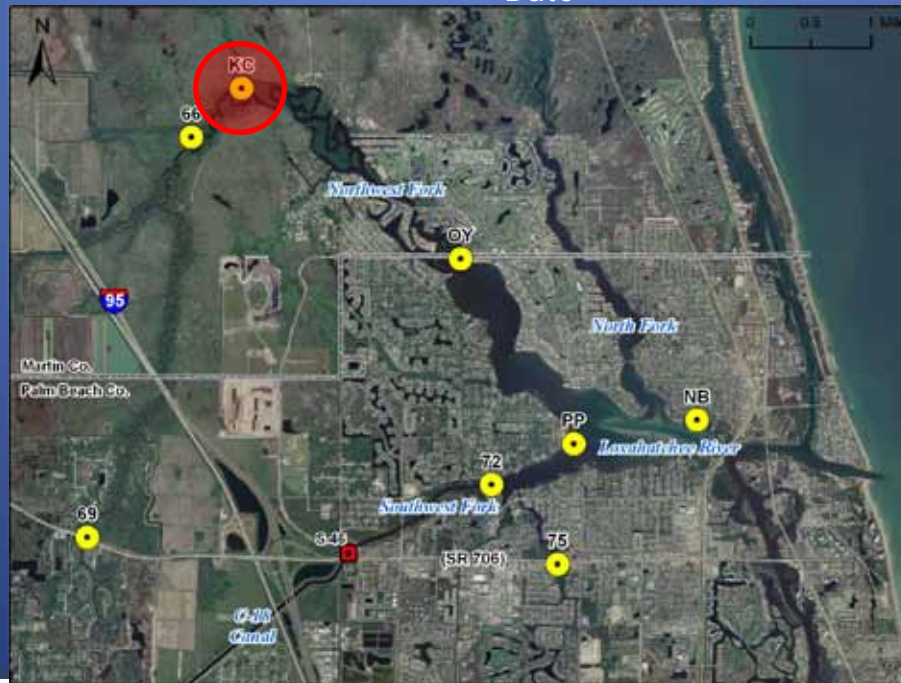
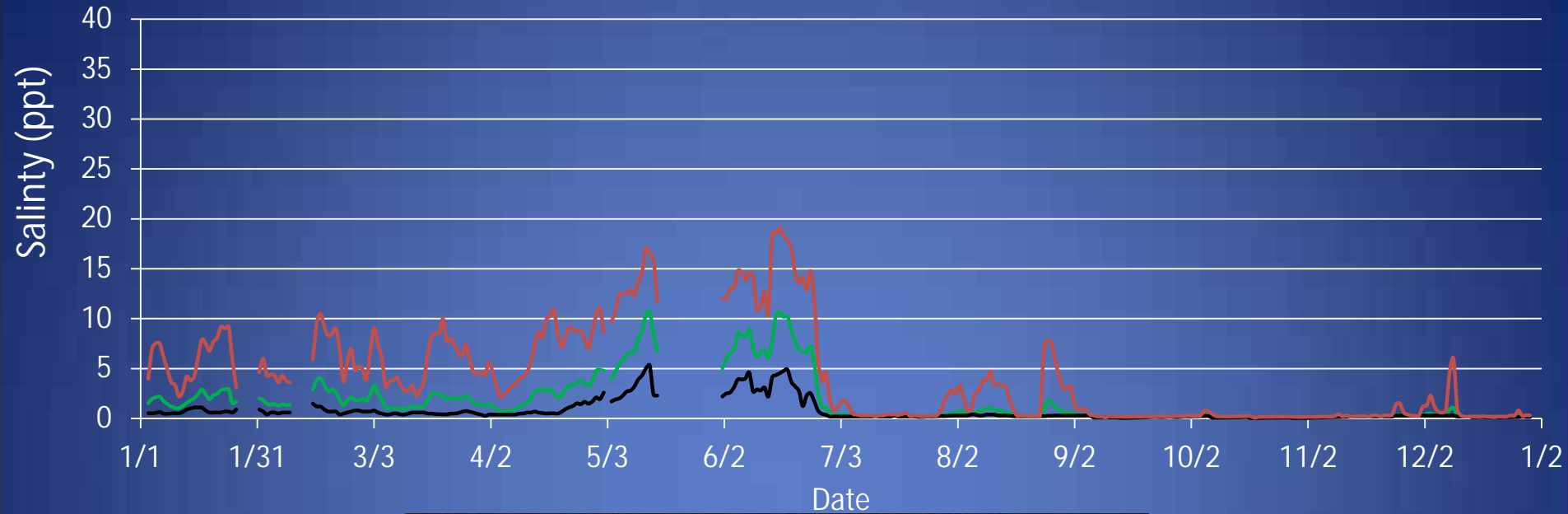
Oyster Reef 2011

— Daily Average — Daily Minimum — Daily Maximum

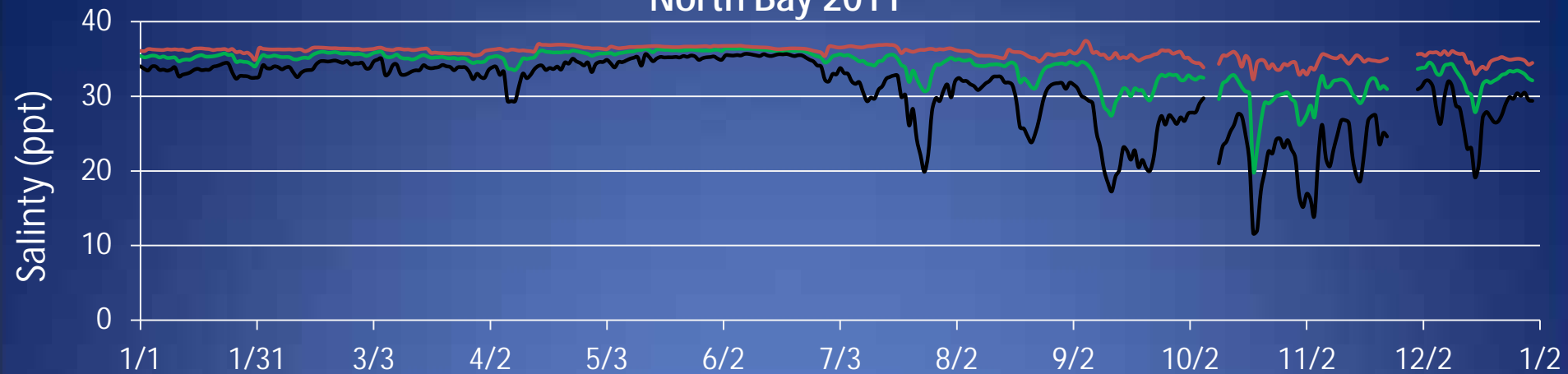


Kitching Creek 2011

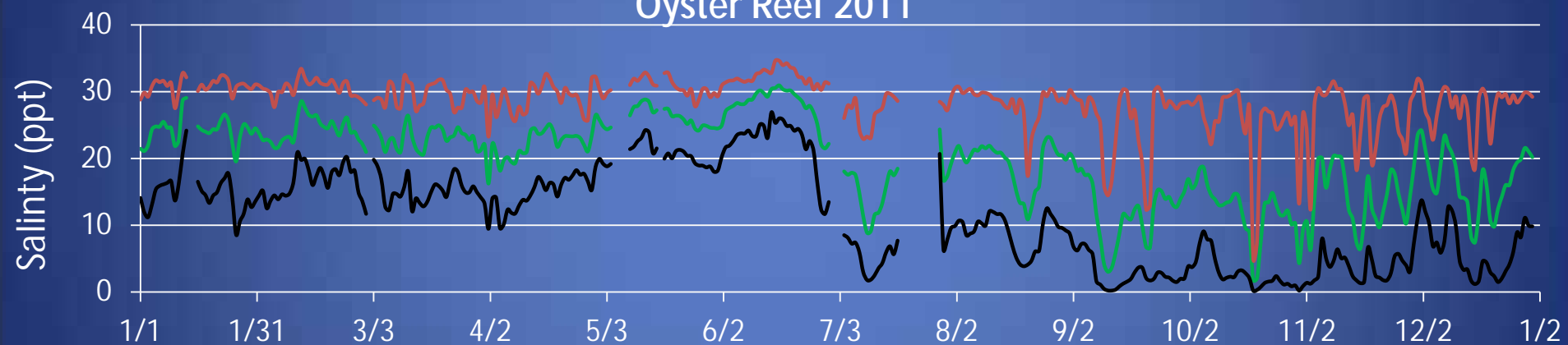
— Daily Average — Daily Minimum — Daily Maximum



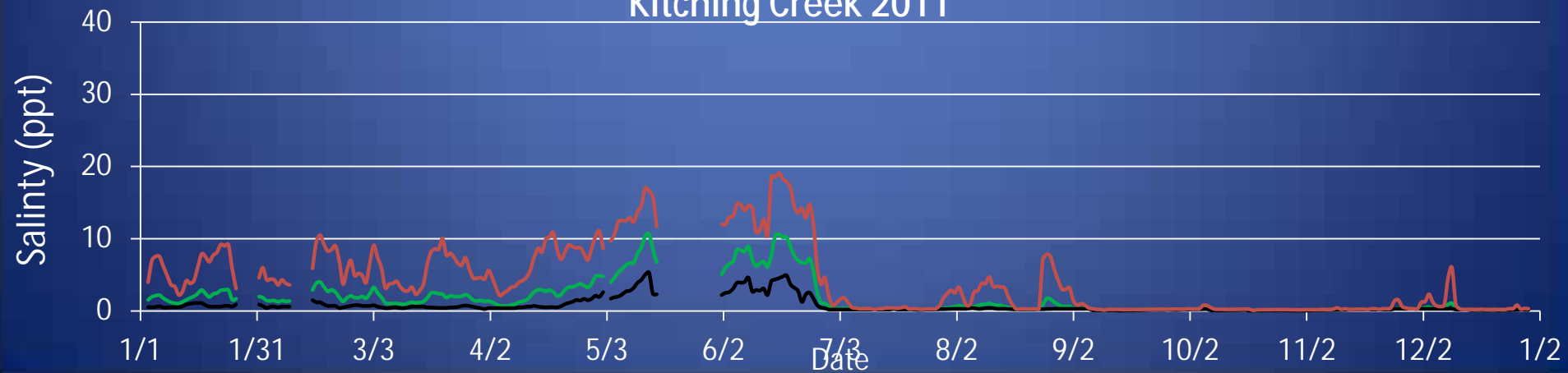
North Bay 2011



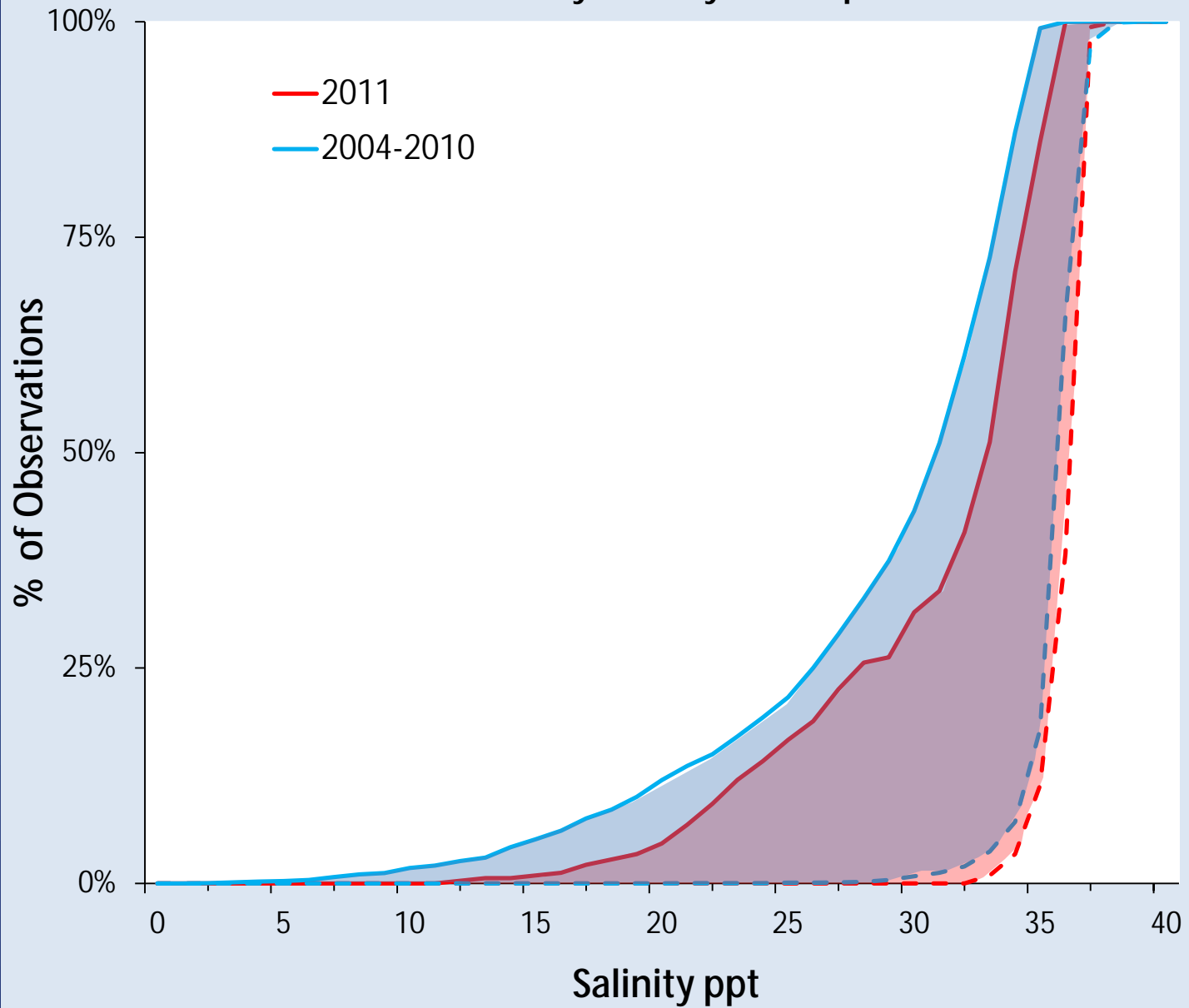
Oyster Reef 2011



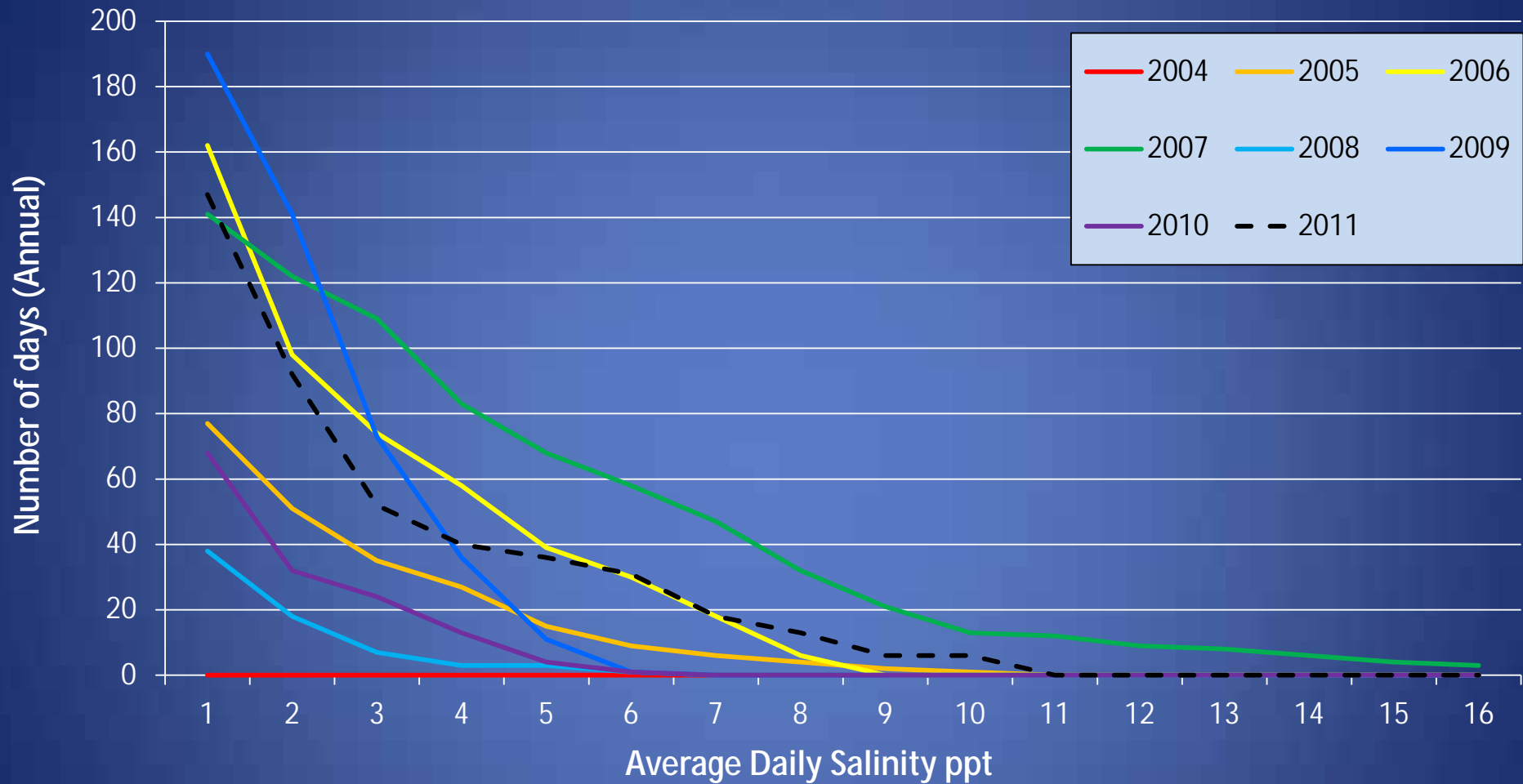
Kitching Creek 2011



North Bay Salinity Envelope



Kitching Creek Surface: Days Above Salinity Value



Summary

- Annual Rainfall Average
 - Dry Spring & Early Summer
 - Watershed slow to saturate
 - Flood Control Releases Limited
 - Few in Sept, Oct, Early Nov
 - Vast Majority Releases <300 cfs
- Downstream Estuary
 - Higher but healthy salinities
- Upstream Segments
 - **Supplemental Flows Worked!**
 - Freshwater habitats avoided significant harm
 - Saline waters migrated upstream following test (May-June)