

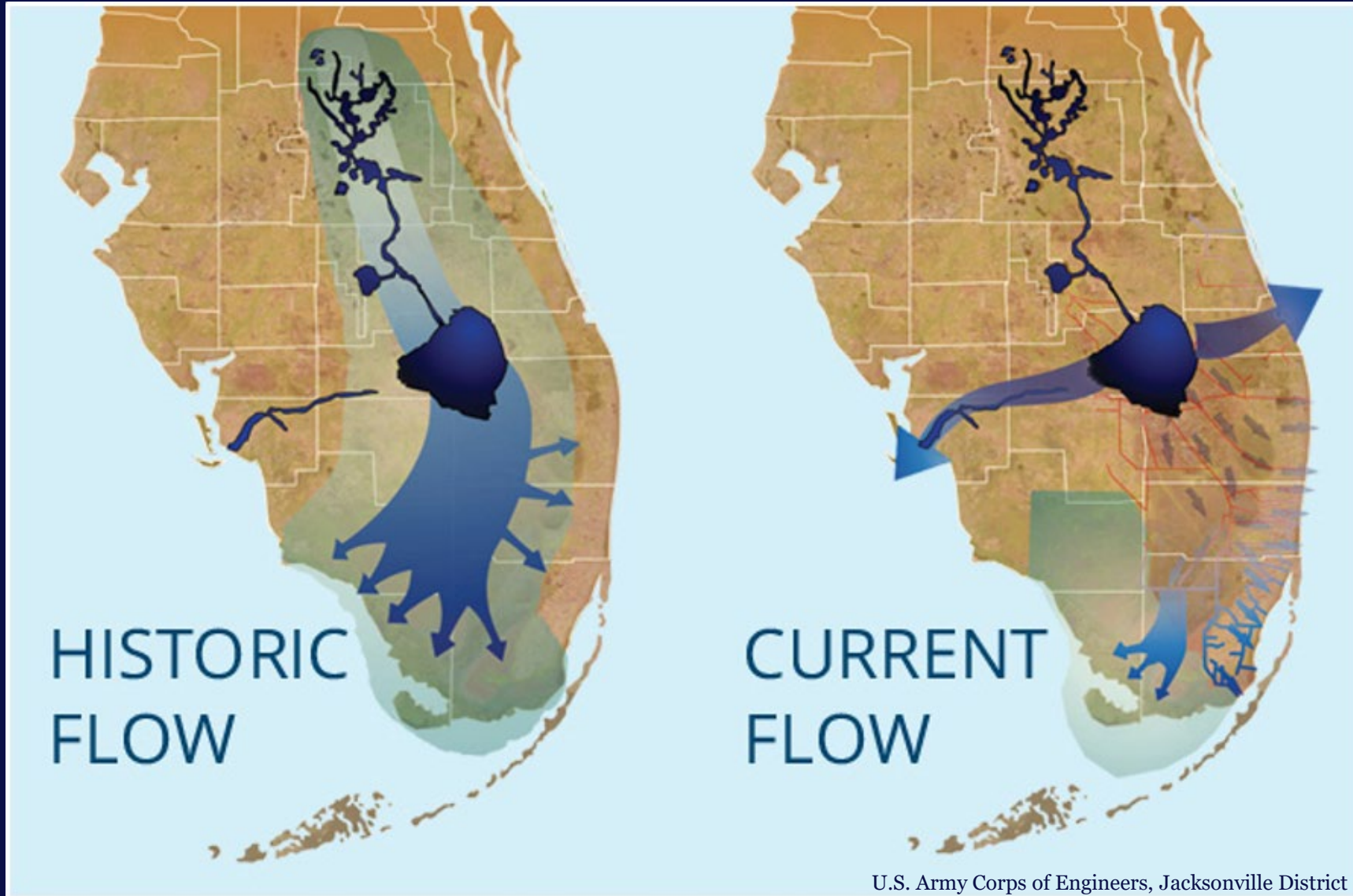
High Discharge Events: Effects on St. Lucie Estuary and an Estuarine Predator

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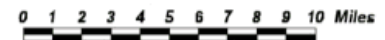
Water Flow Alteration



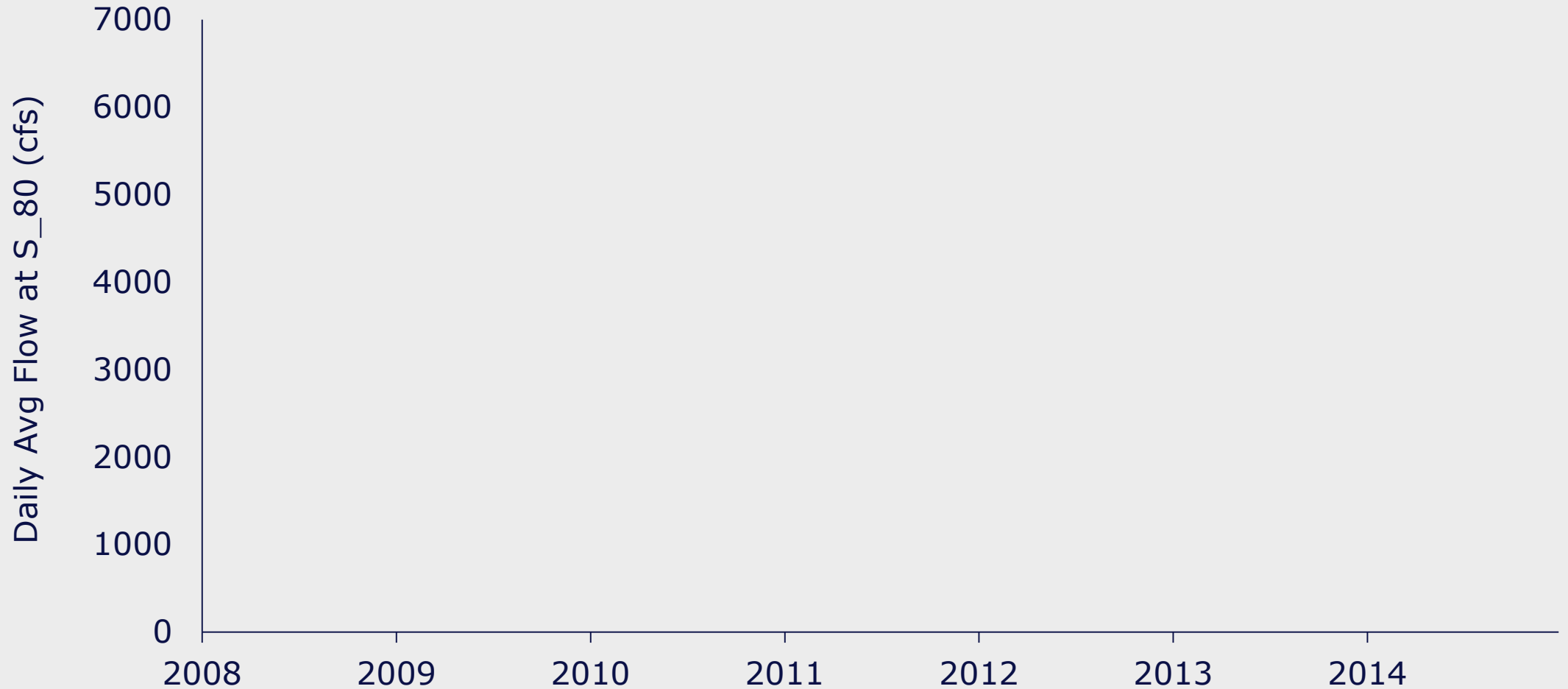
St. Lucie



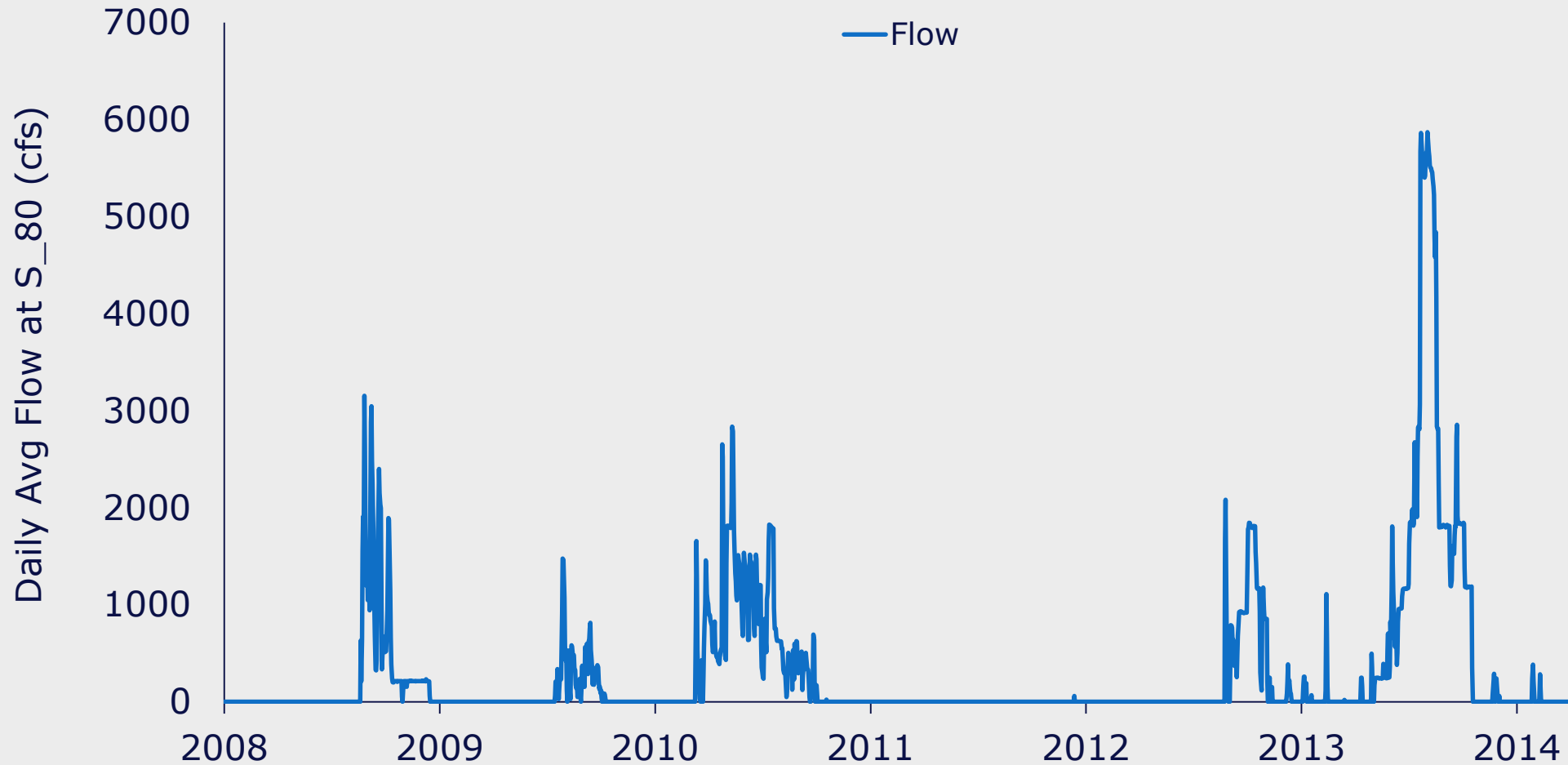
St. Lucie Estuary Watershed



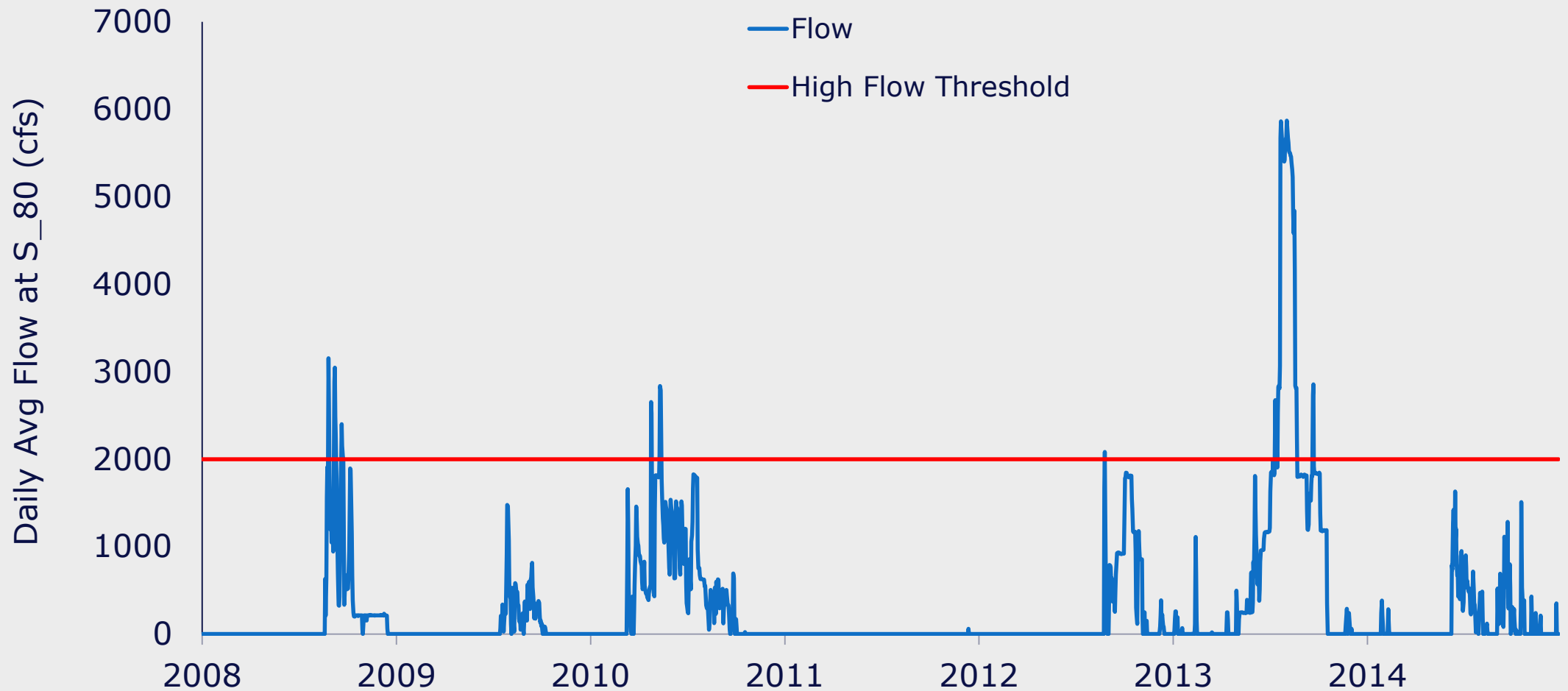
High Discharge Events (2008-2014)



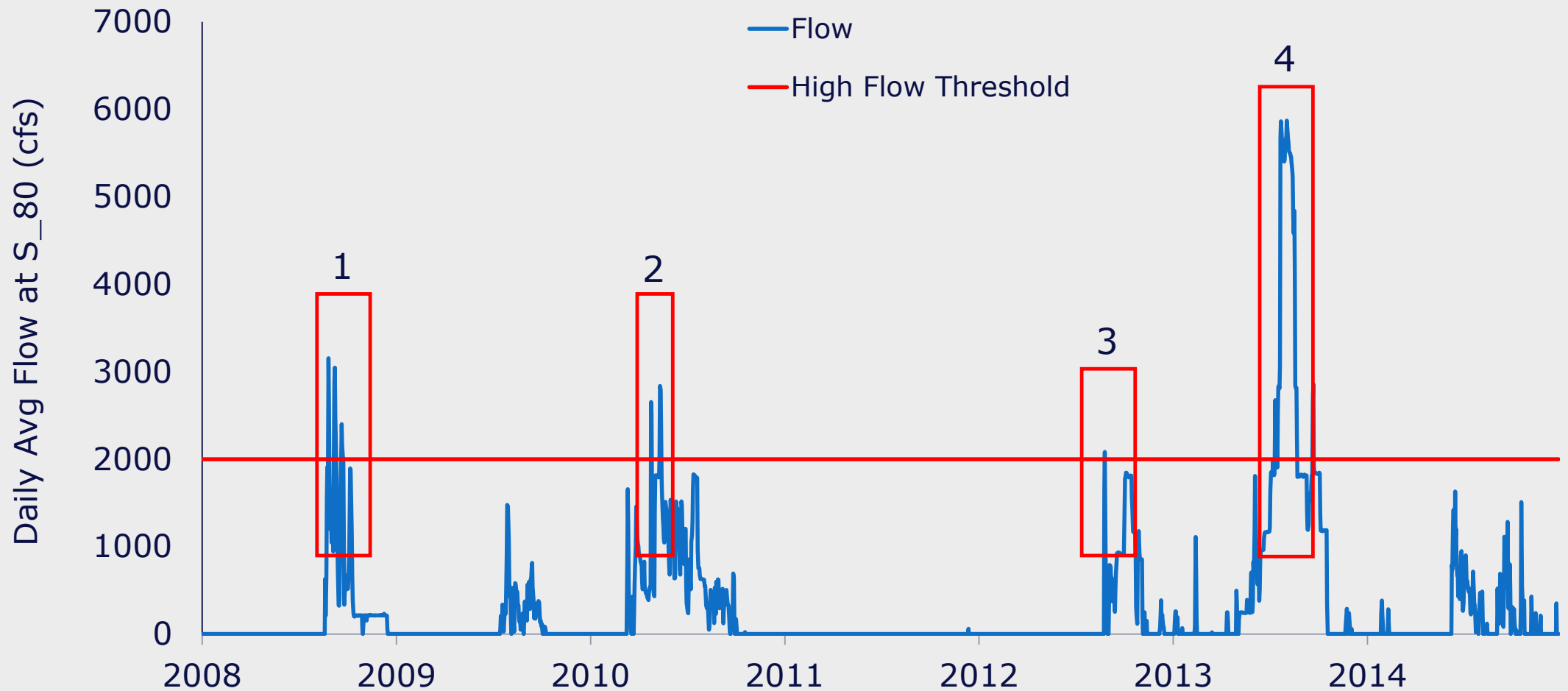
High Discharge Events (2008-2014)



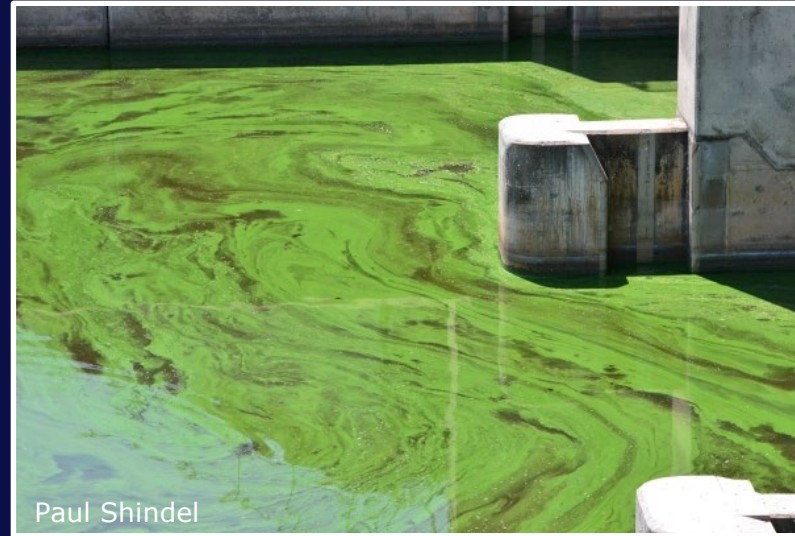
High Discharge Events (2008-2014)



High Discharge Events (2008-2014)



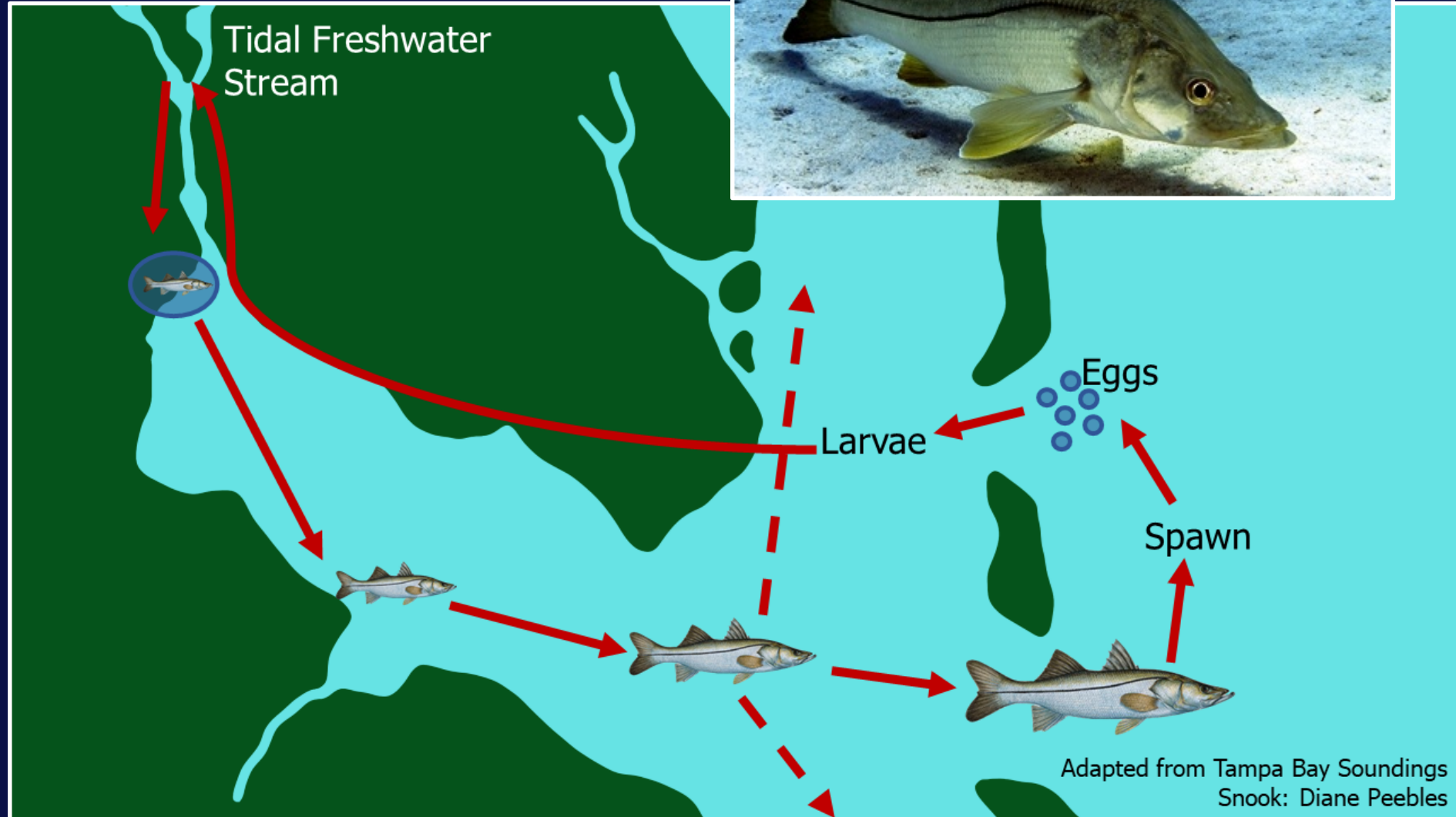
Effects on Abiота/Biota



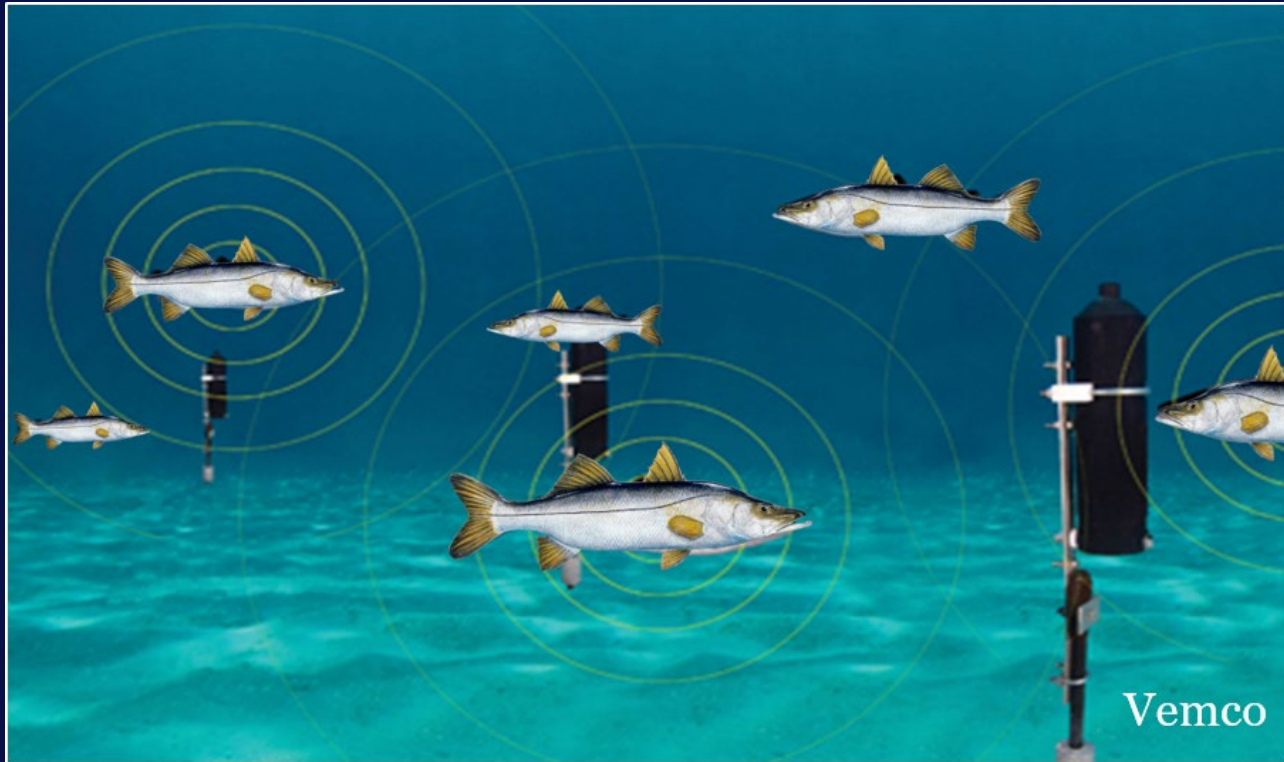
Common snook



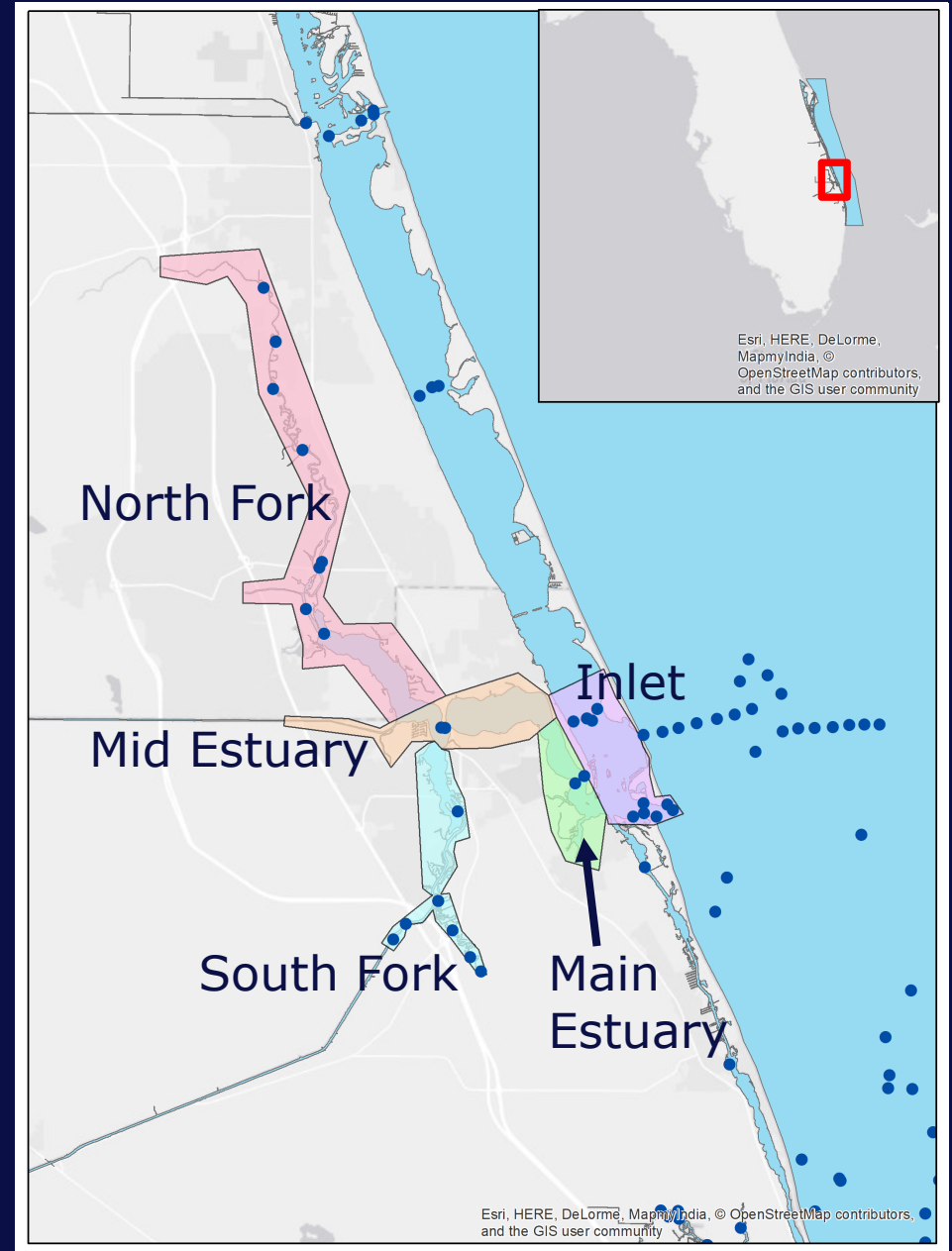
- Euryhaline, tropical sportfish
- Protandric hermaphrodite
- Behavioral contingents



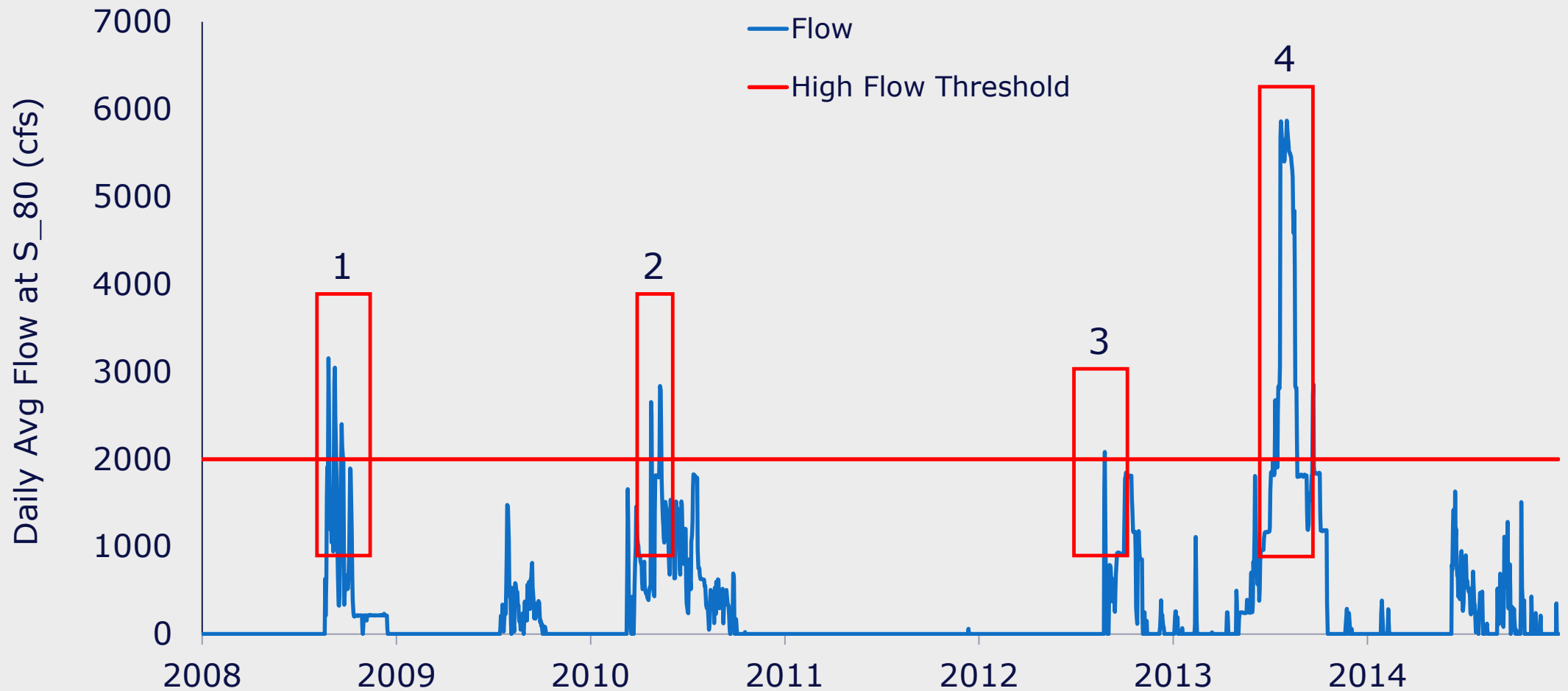
Passive Acoustic Telemetry

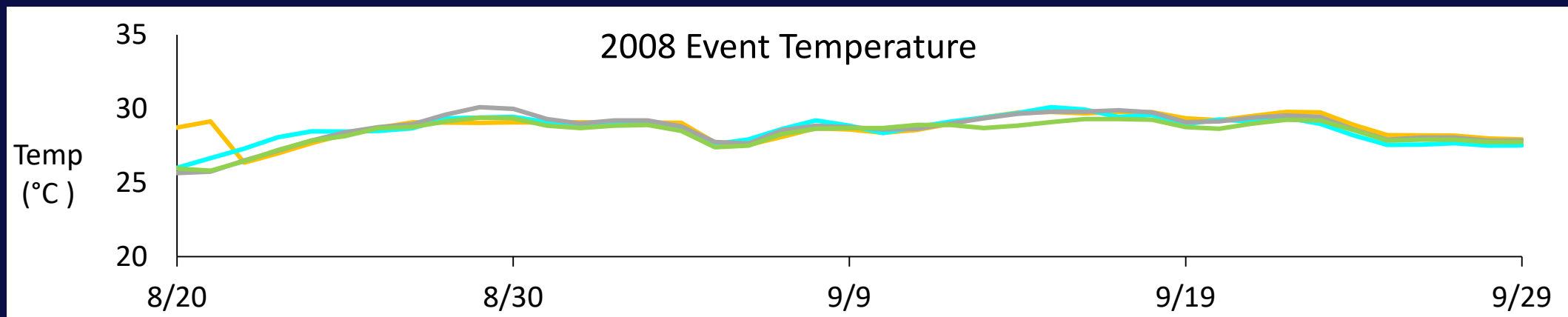
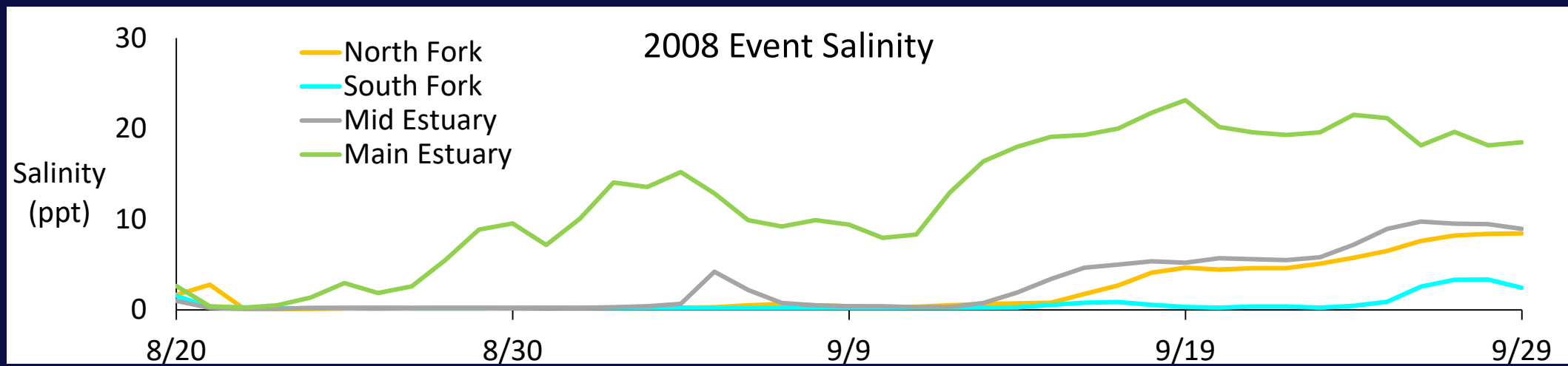
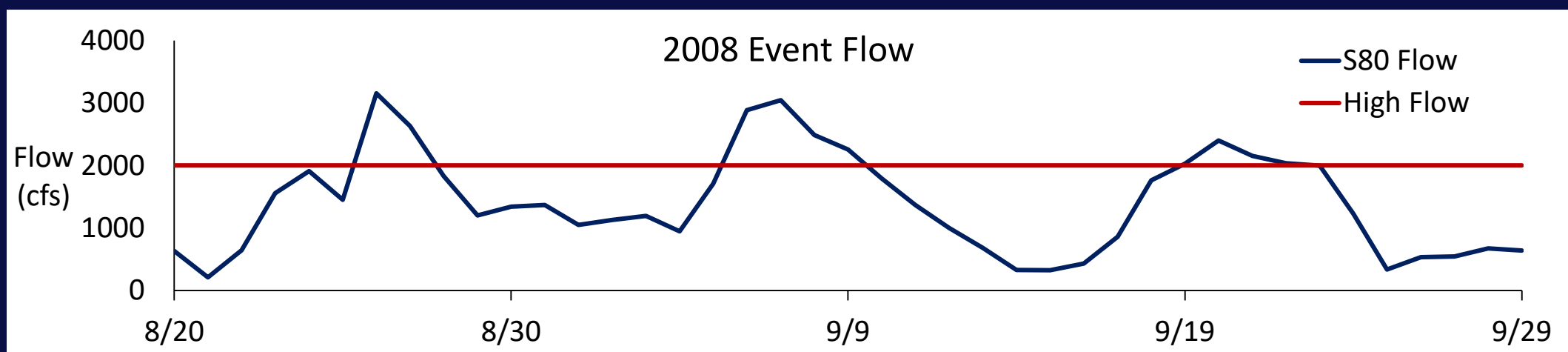


Receivers in St. Lucie

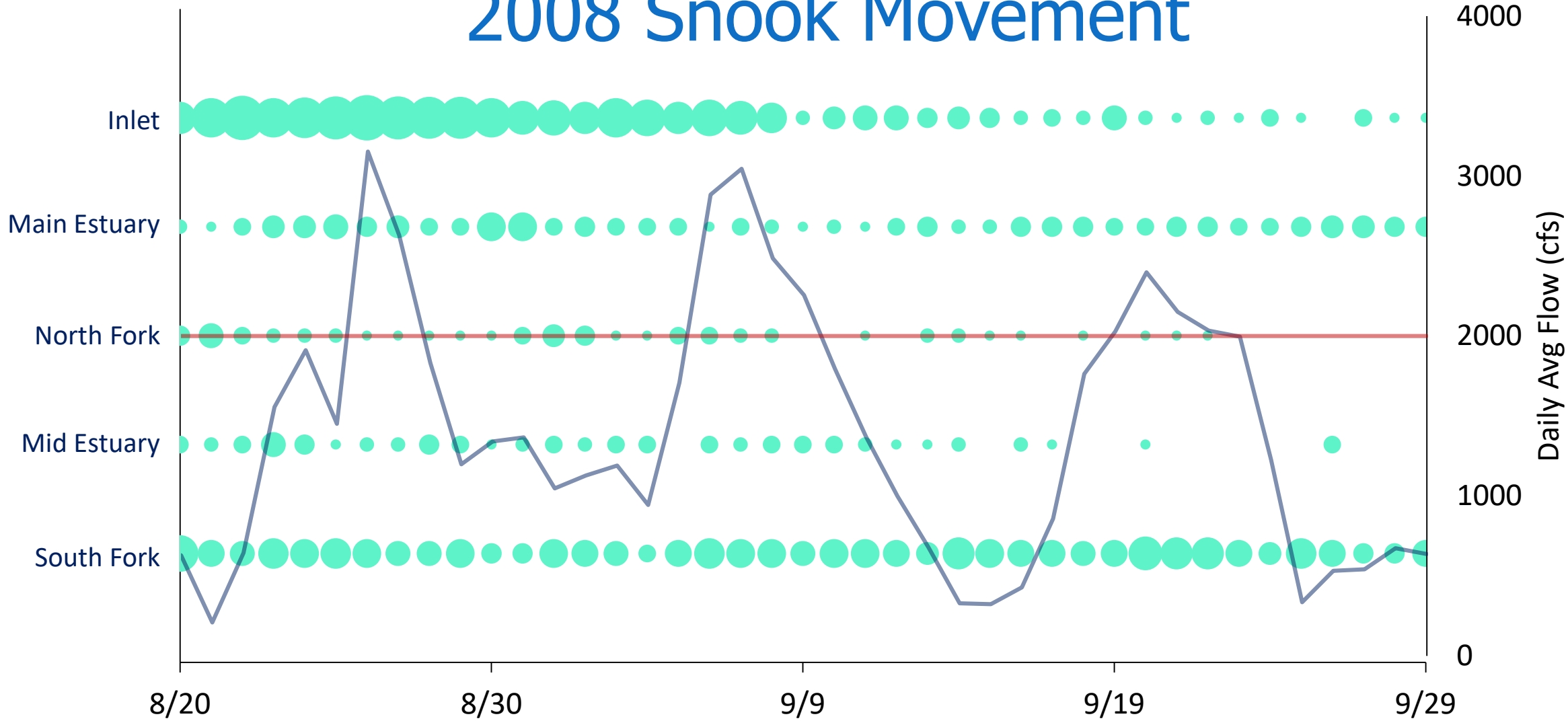


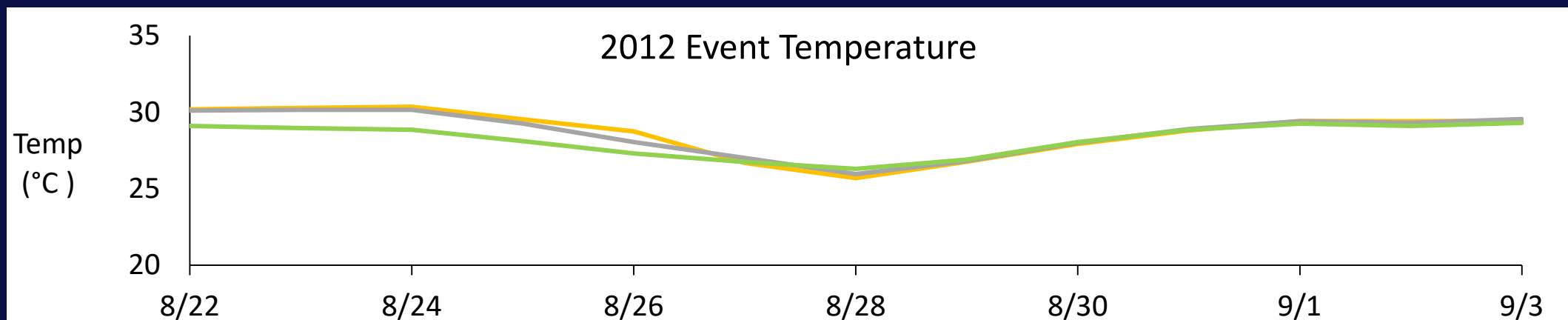
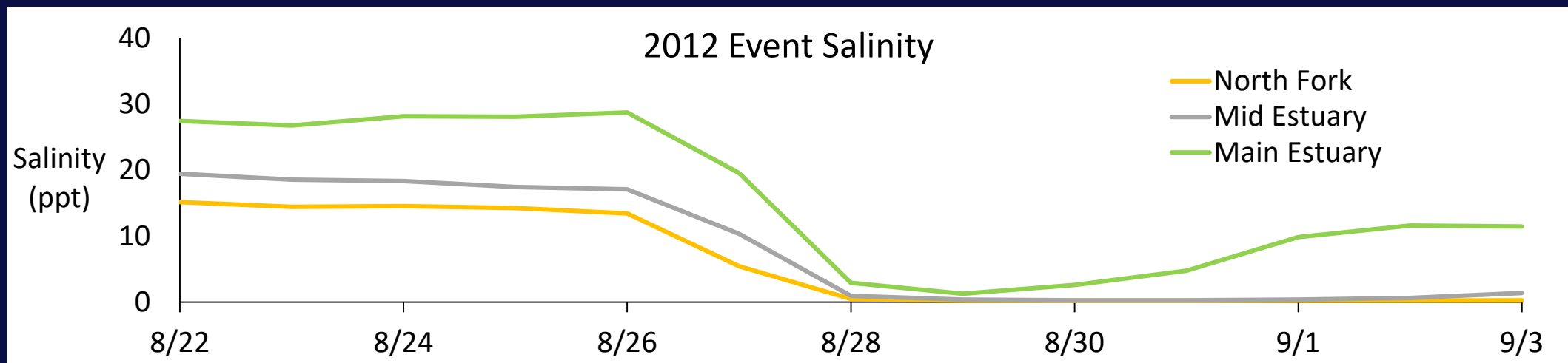
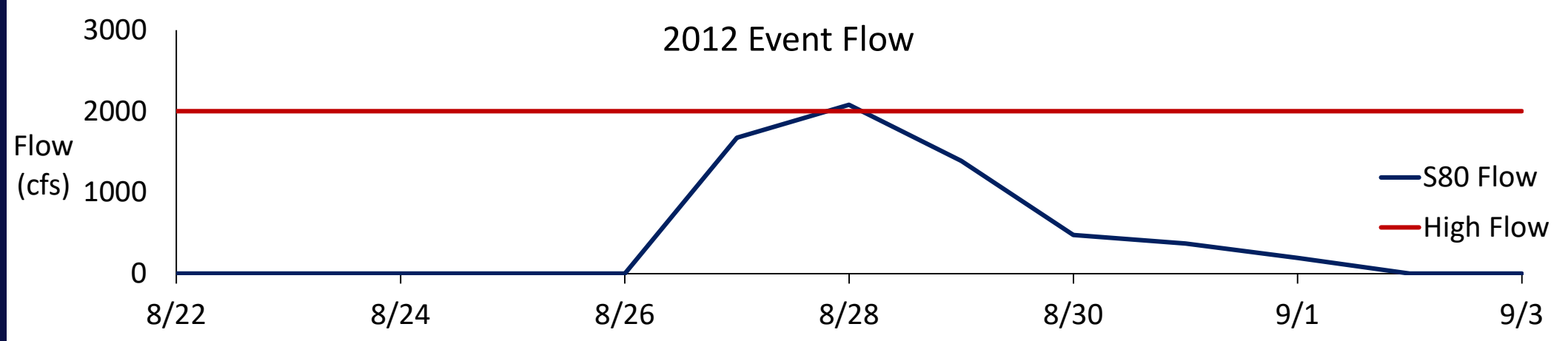
High Discharge Events (2008-2014)



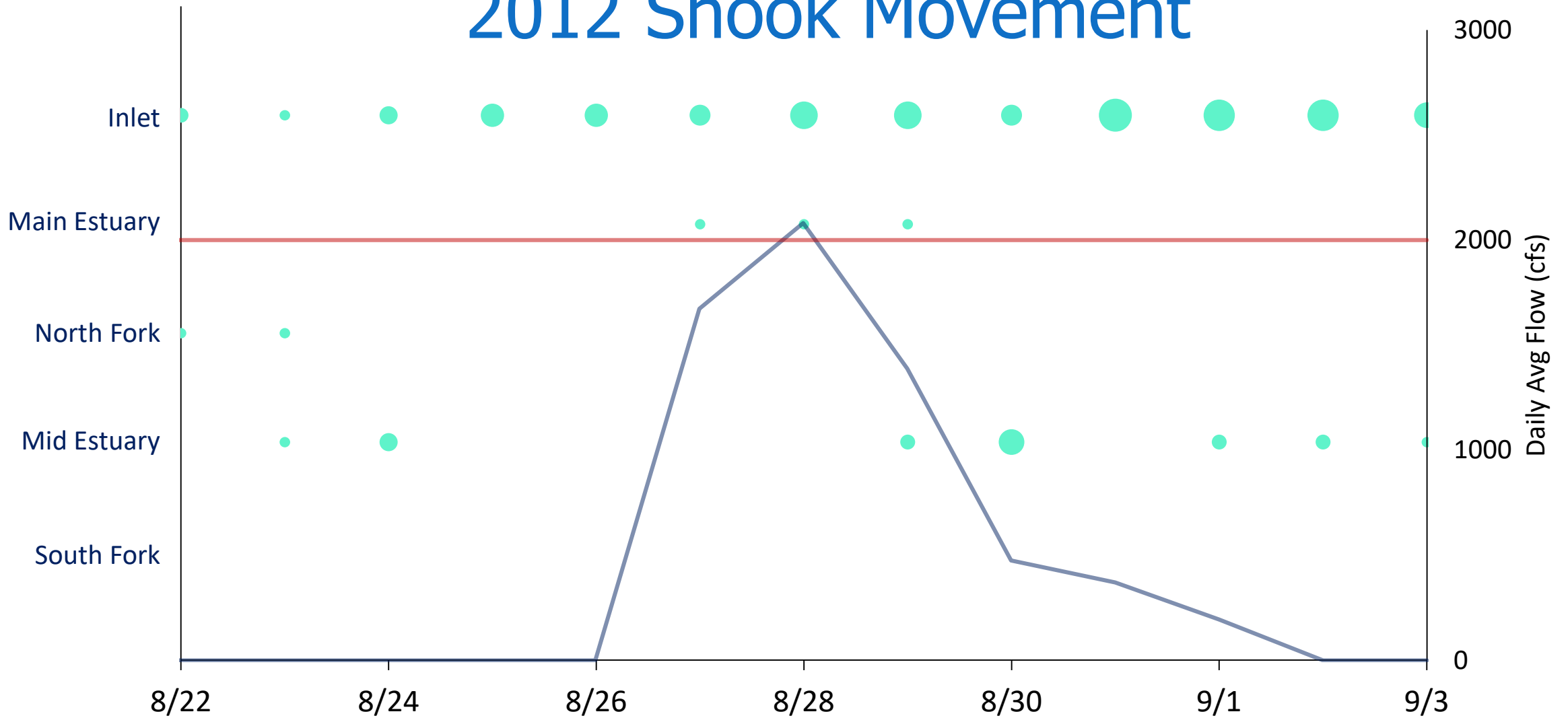


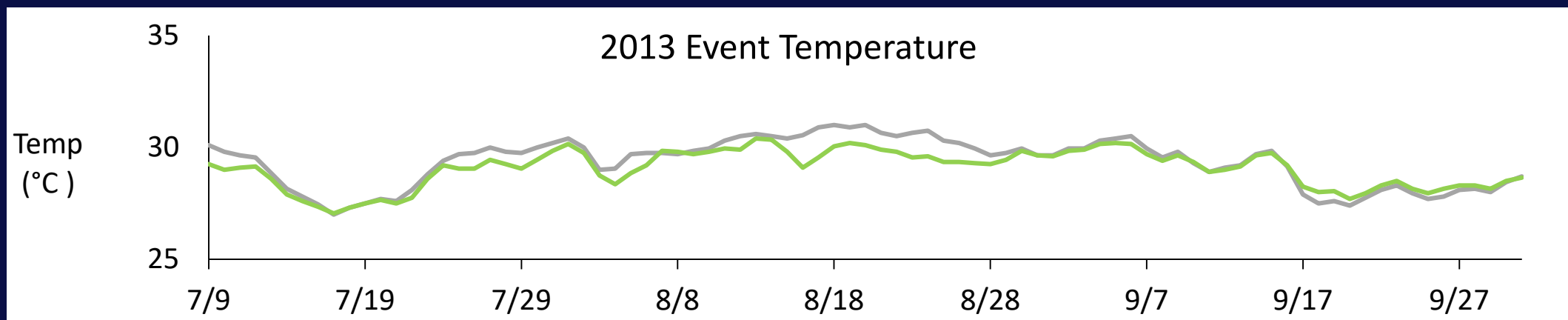
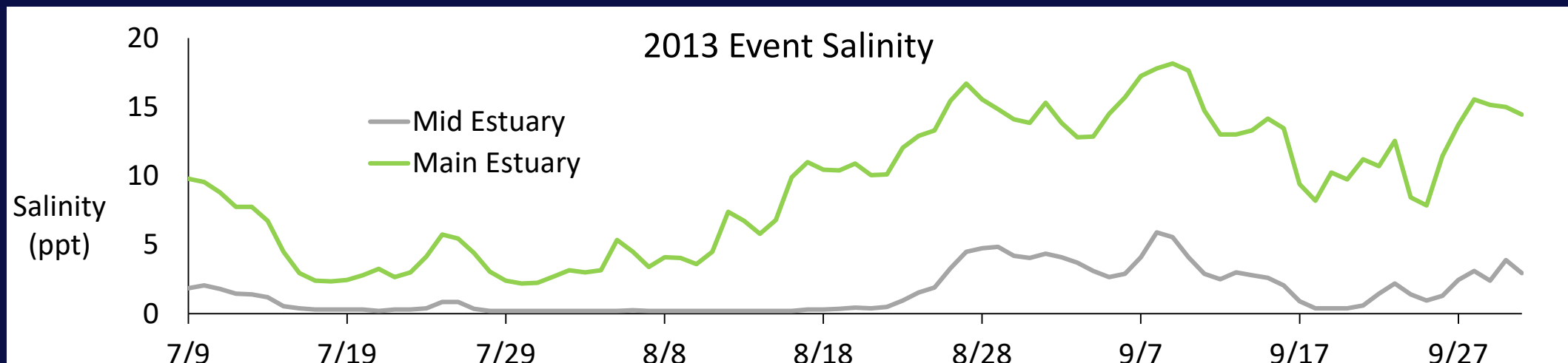
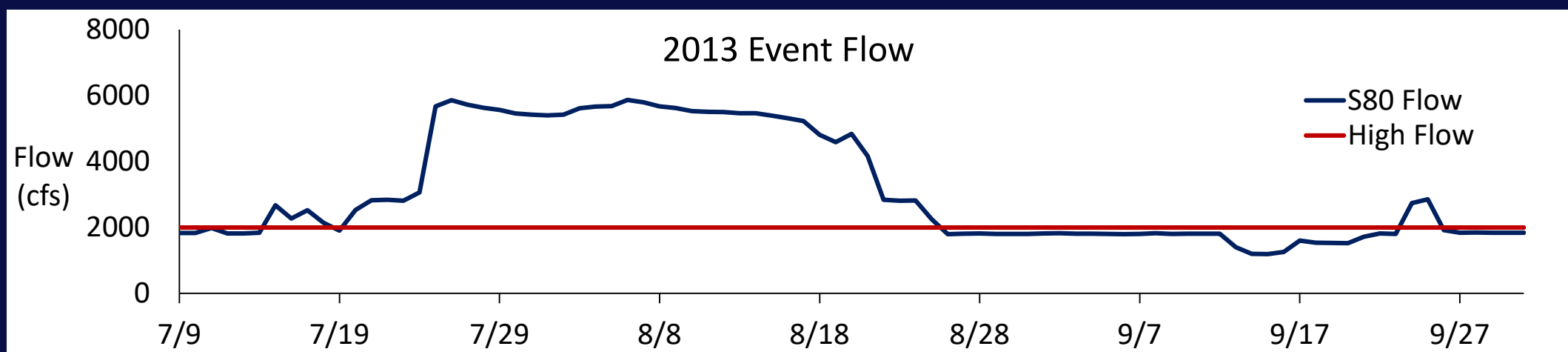
2008 Snook Movement



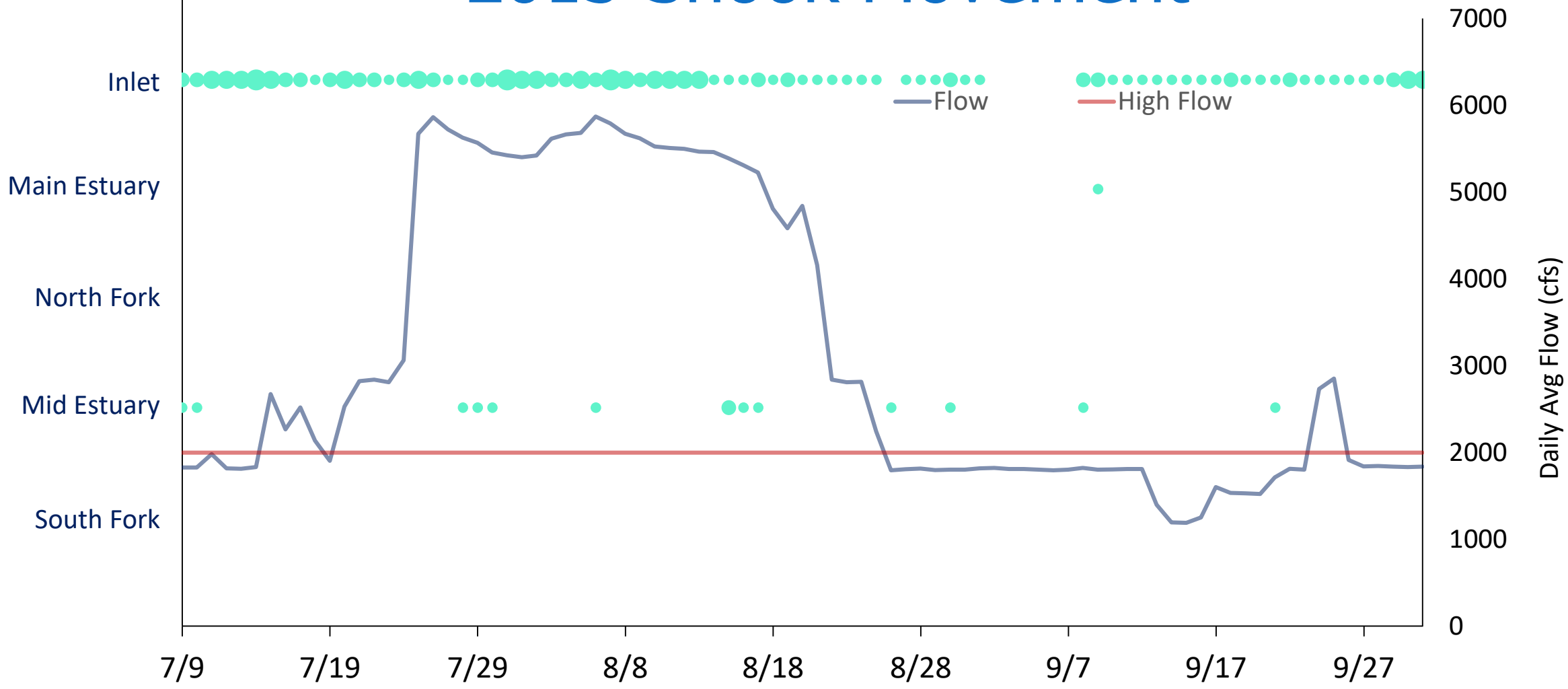


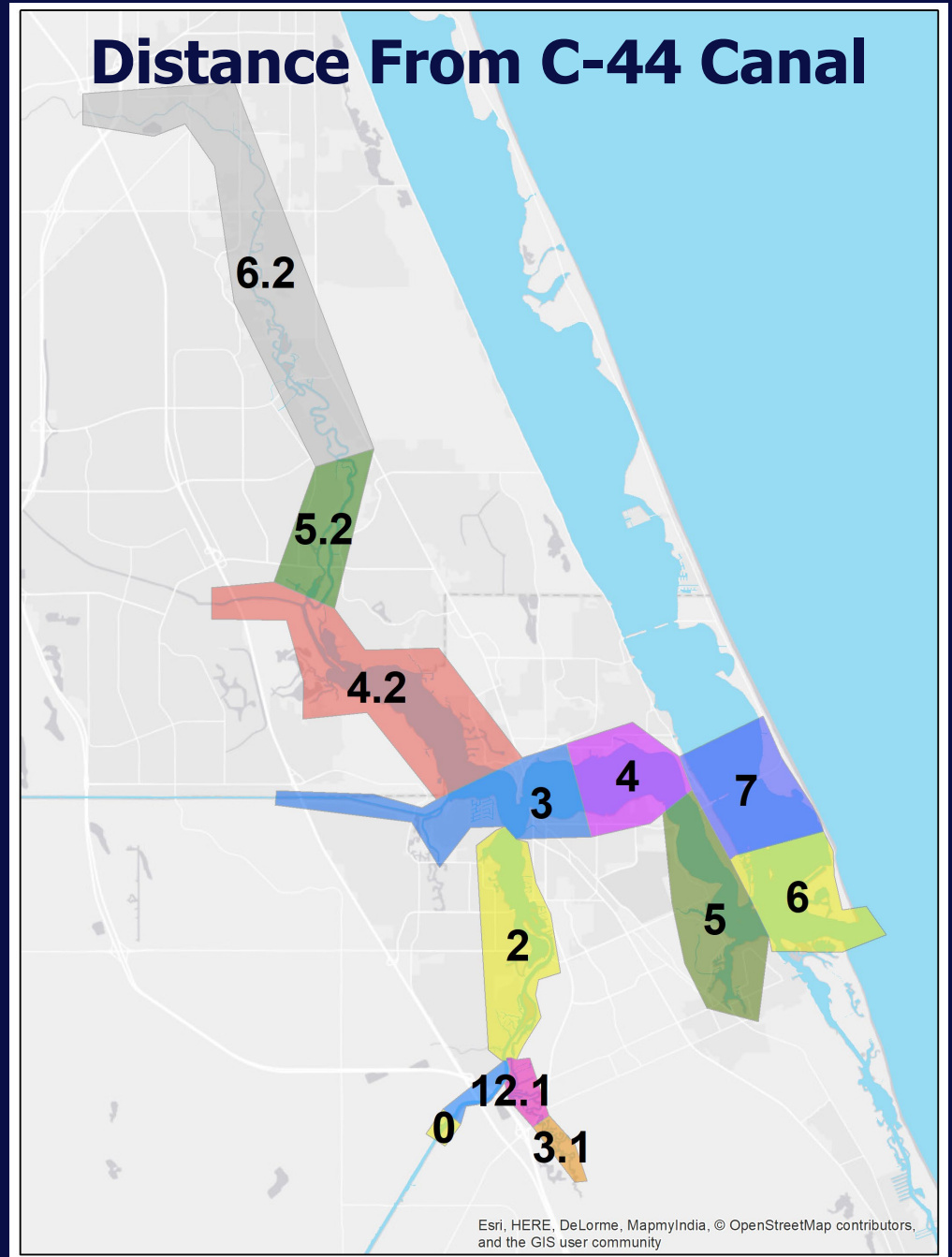
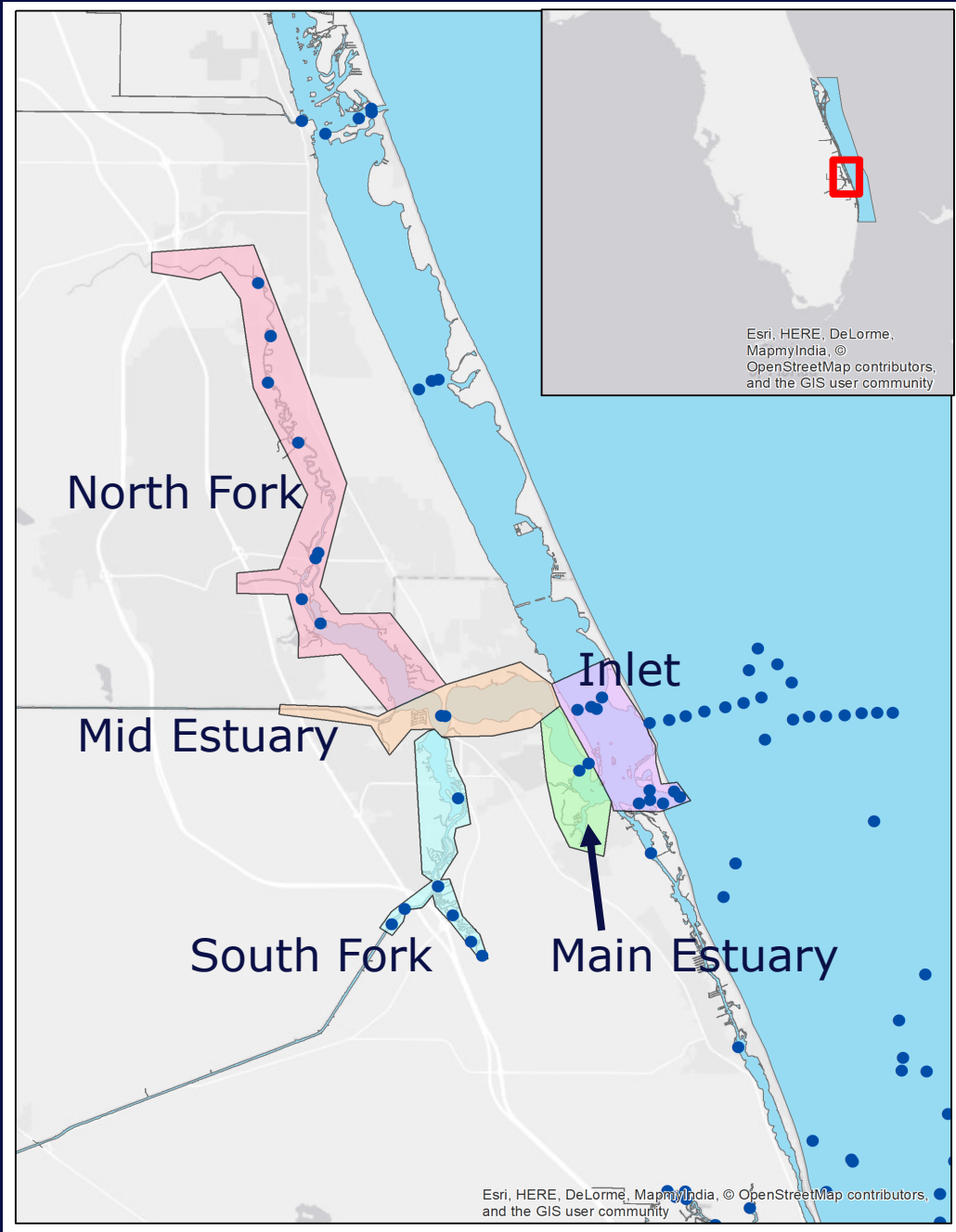
2012 Snook Movement





2013 Snook Movement

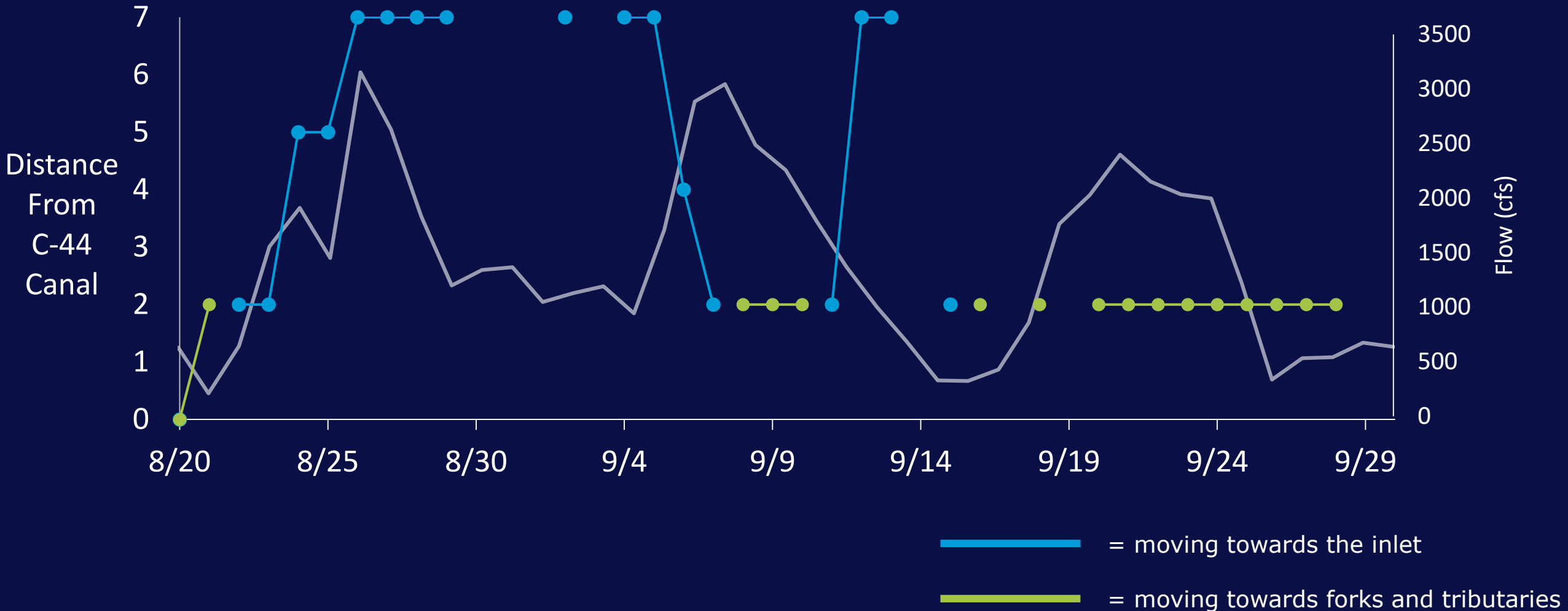




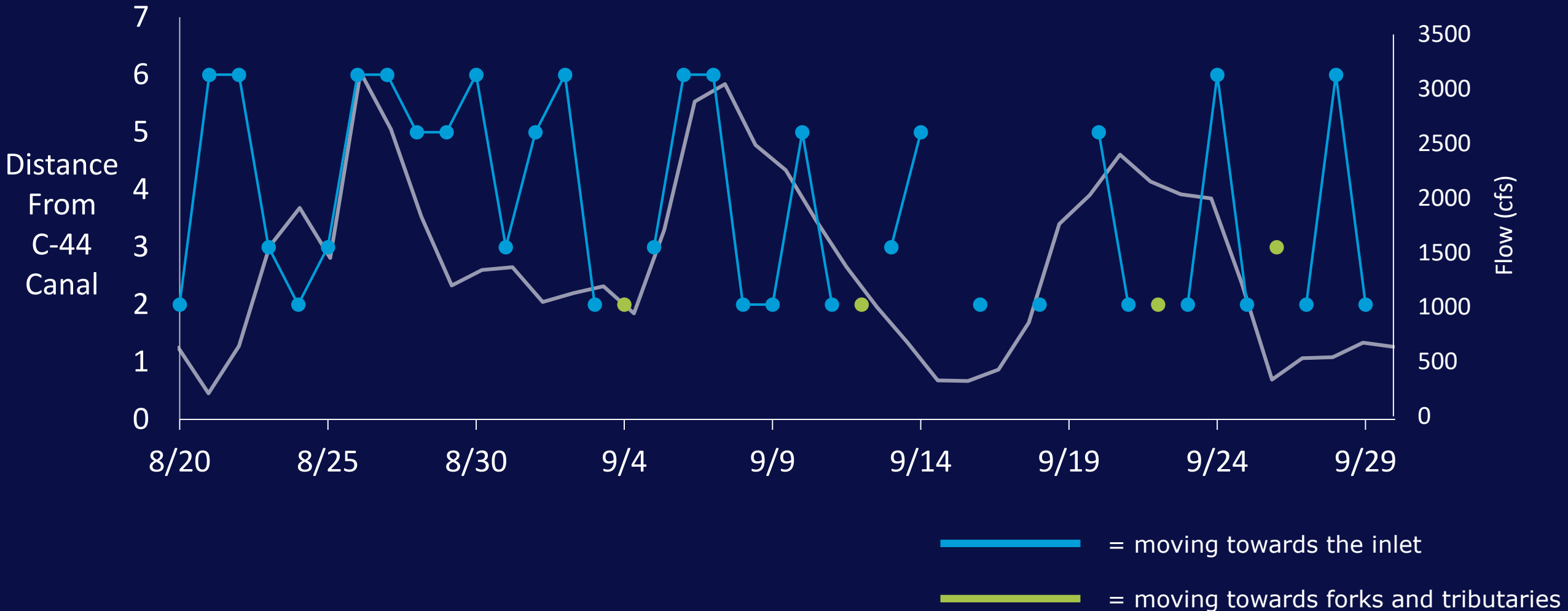
Individual Movement



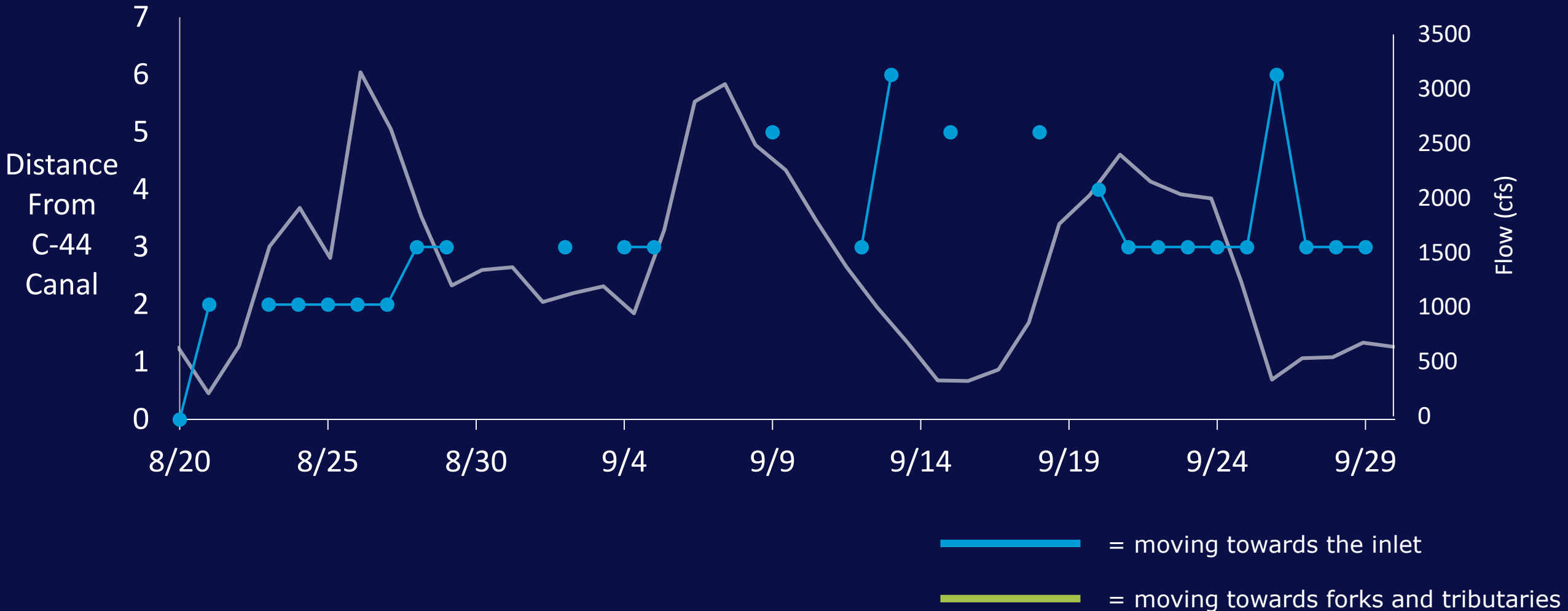
Individual 9763 Movement



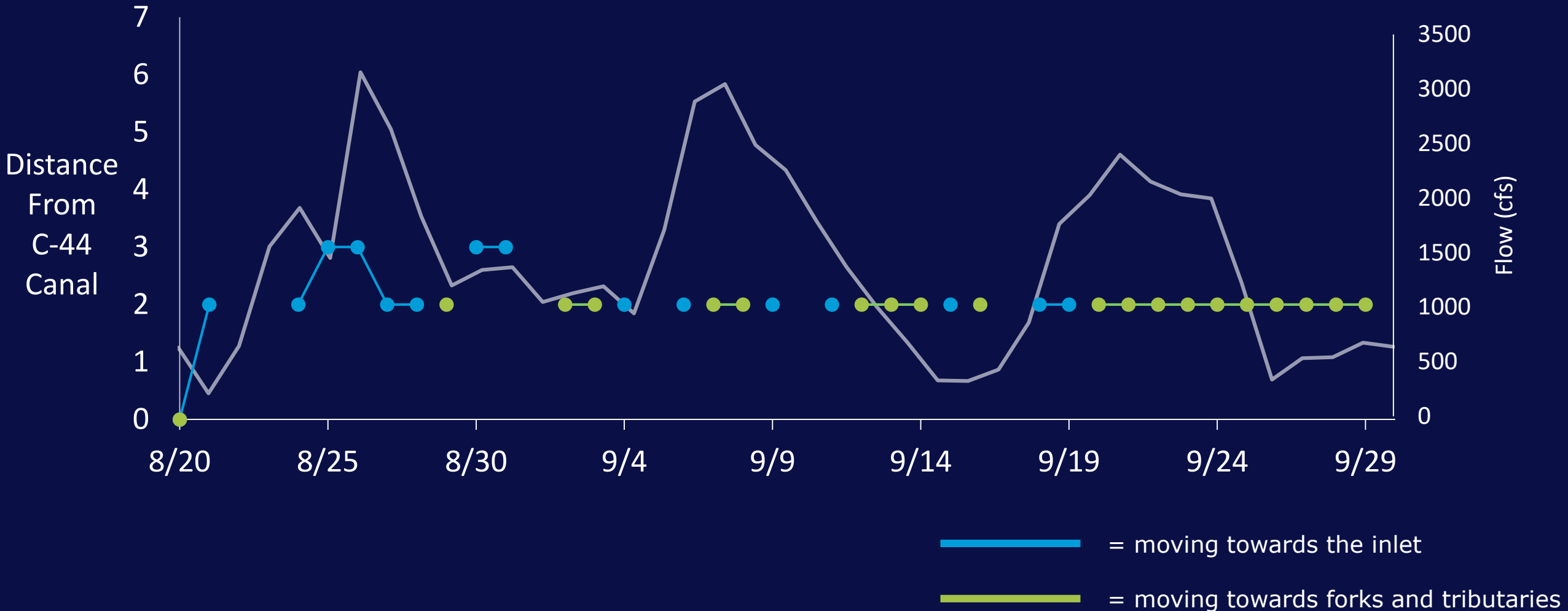
Individual 9764 Movement



Individual 9770 Movement



Individual 9776 Movement



Individual Movement



Summary

- Discharges greatly decrease salinity
 - No large change in temperature
- Population scale
 - Snook don't have distinct movement patterns
- Individual scale
 - Some show movement coincident with discharges
 - So much variation
- Bet-hedging
- Population level resilience



Acknowledgements

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Sun Detong

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Questions?

