

Russian River Estuary - Water Quality Monitoring



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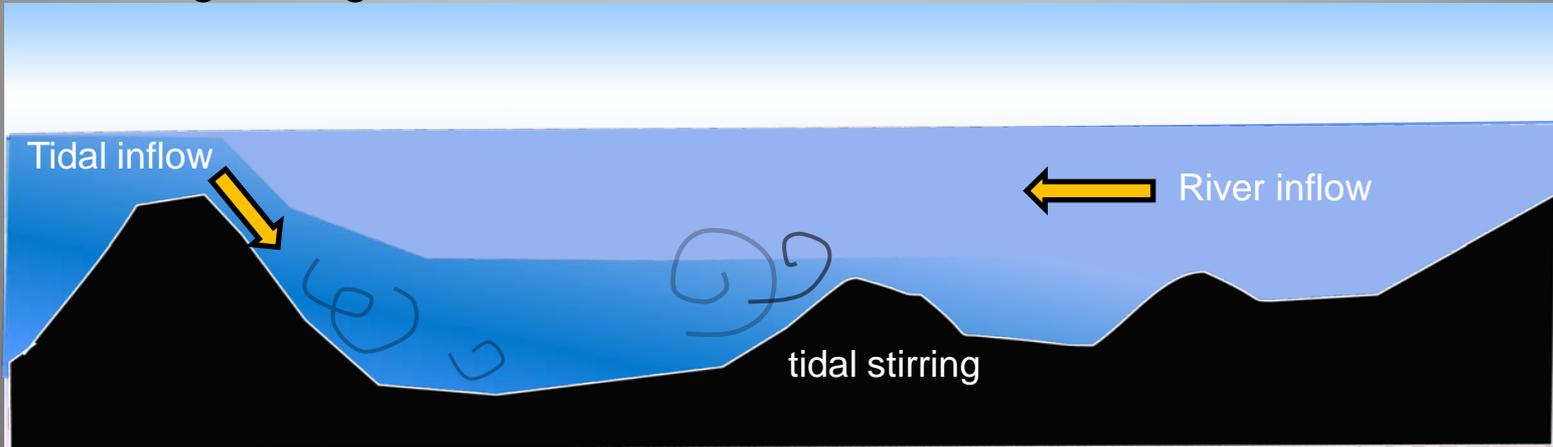
ESA PWA



What happens inside estuary during closure?

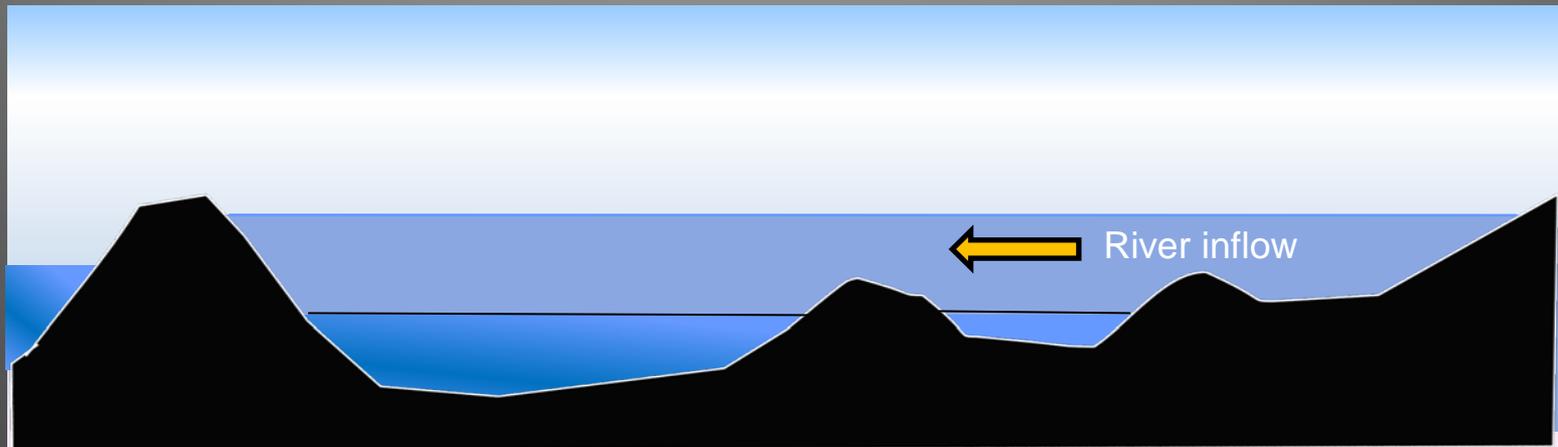
Inlet Open

Strong mixing from tides and riverflow



Inlet Closed

Little or no mixing caused by winds and weak riverflow



Field Study



Salinity, temperature probes



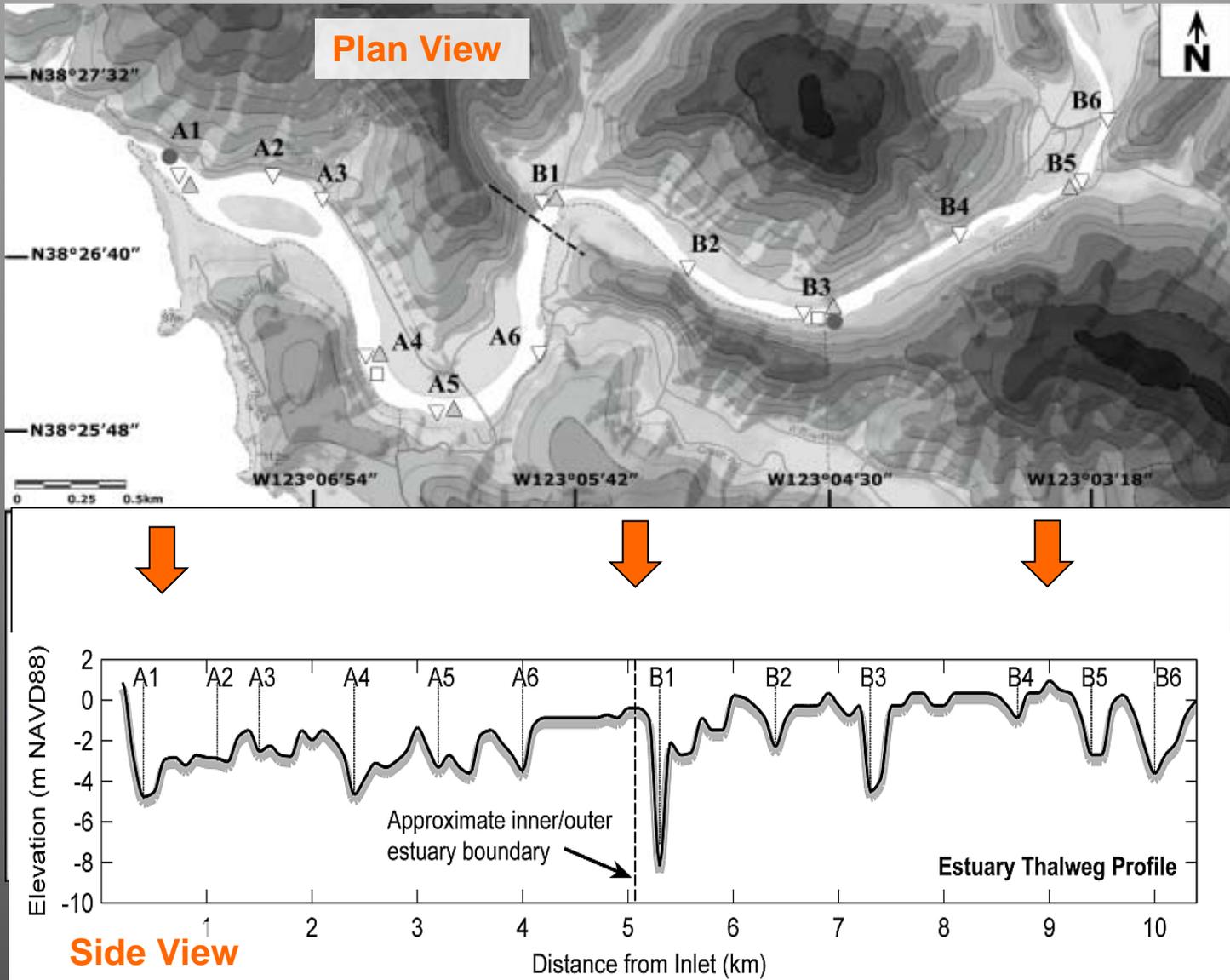
Currents



Water quality profilers



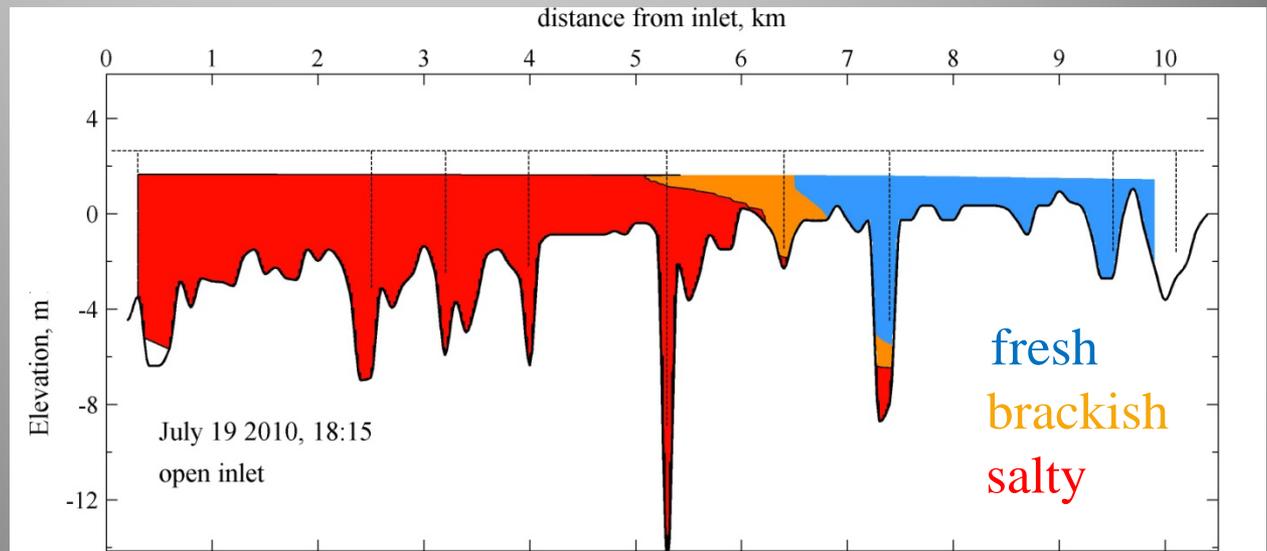
Boat-based monitoring



Estuary Salinity

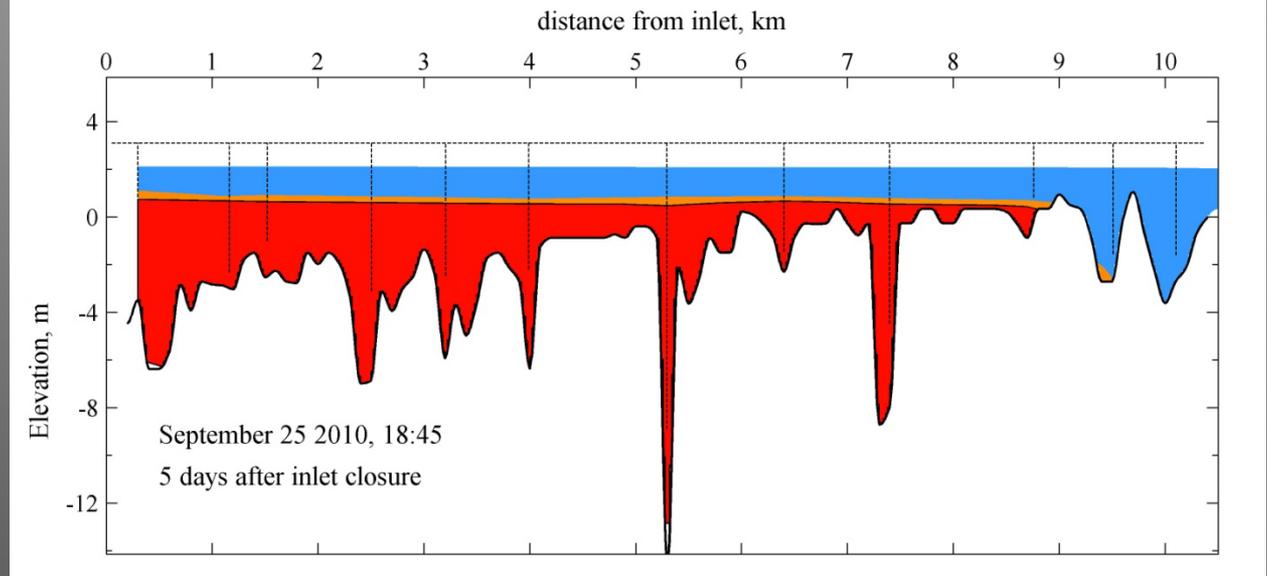
Open Inlet

- colder, saltier near mouth
- warmer, fresher upstream
- strong mixing



Closed Inlet

- mixing in fresh layer
- less mixing in lower salty layer

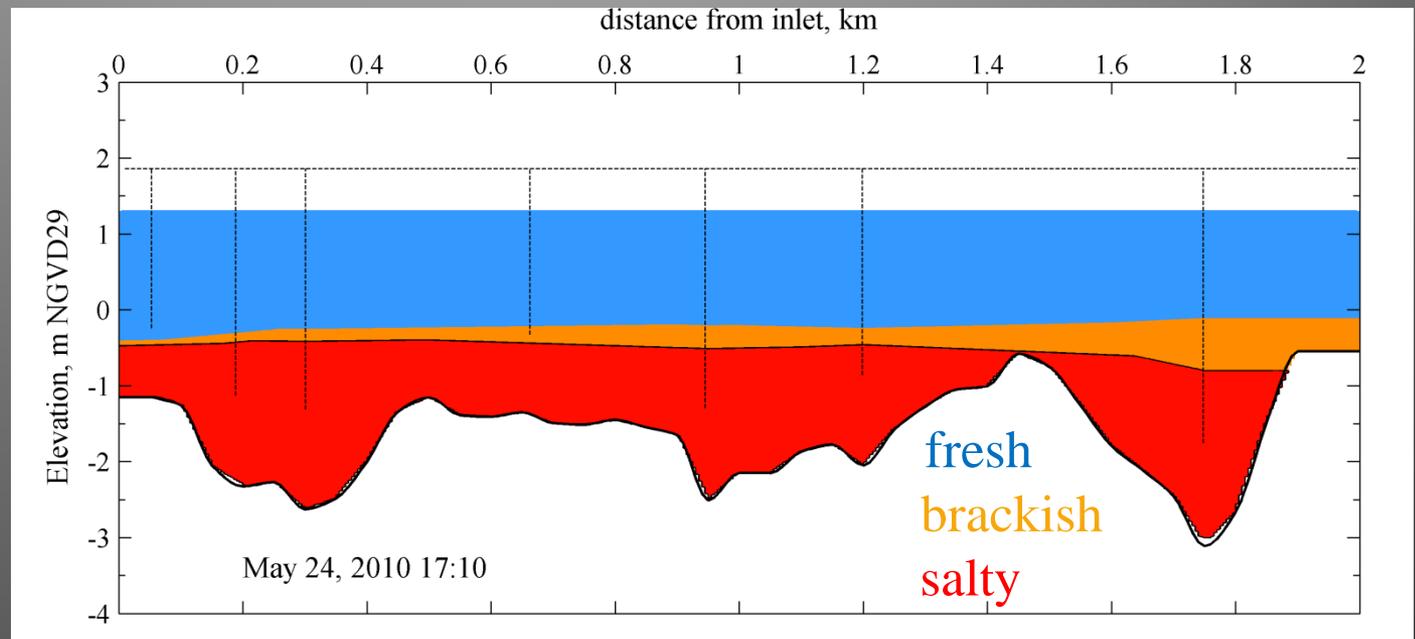


What happens at similar estuaries?



Gualala River

- 30 mi. northwest of Russian R.
- Closes every year in late spring/early summer
- Closed seasonally



Navarro River

- 60 mi. northwest of Russian R.
- Closes every year in late spring/early summer
- Closed seasonally

