

Tides and Currents

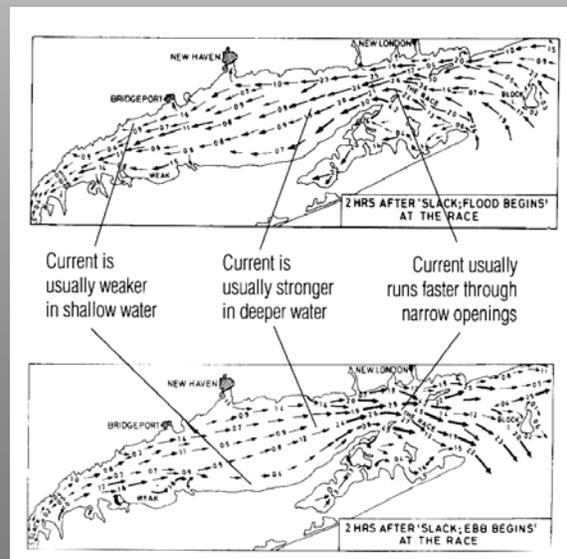
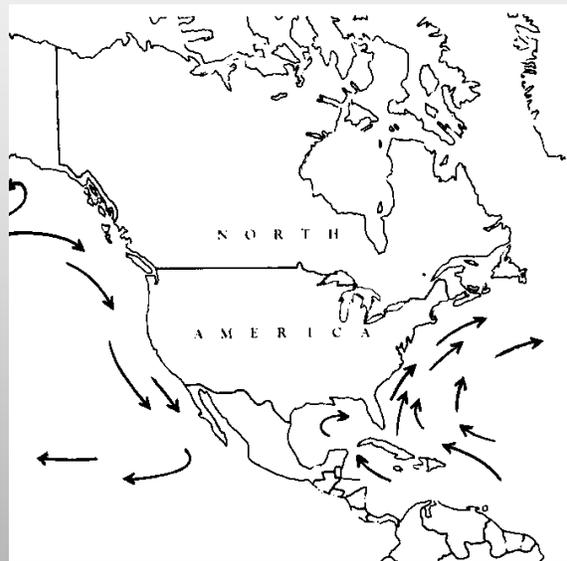
Coasters Harbor Navy Yacht Club

www.nwc.navy.mil/chnyc

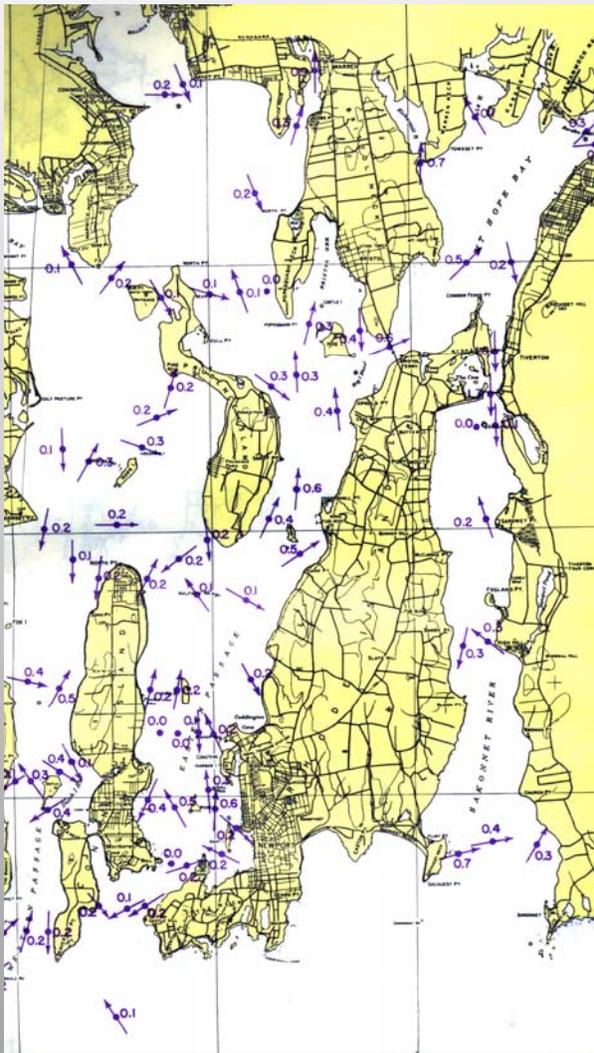


Currents

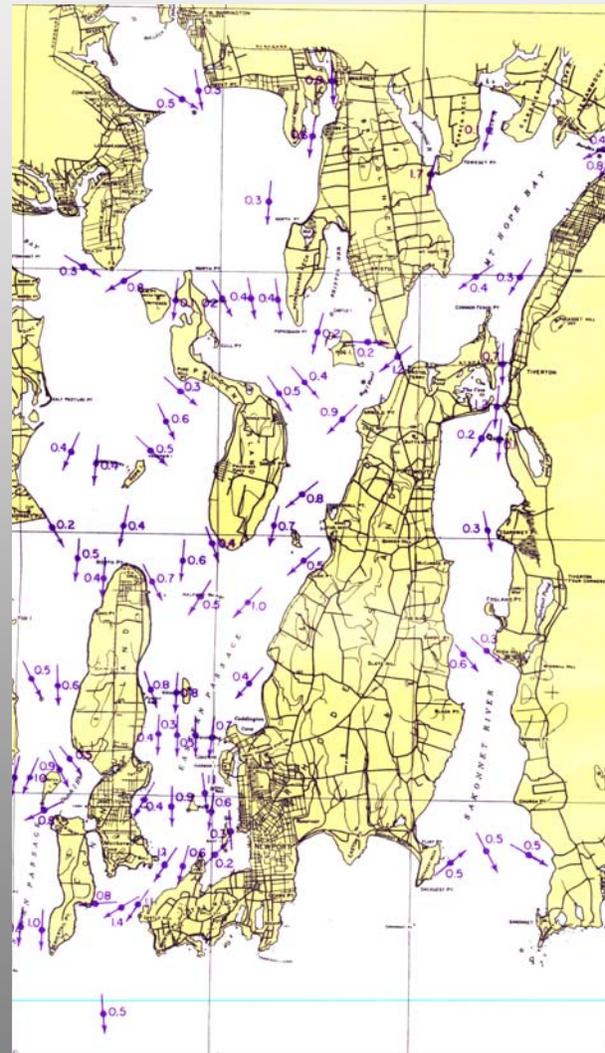
- **Horizontal movement of water**
 - Flow caused by wind and ocean movement
 - Gulf Stream
 - Tides rising and falling
 - Coming in: **flooding**
 - Going out: **ebbing**



Narragansett Bay



High tide



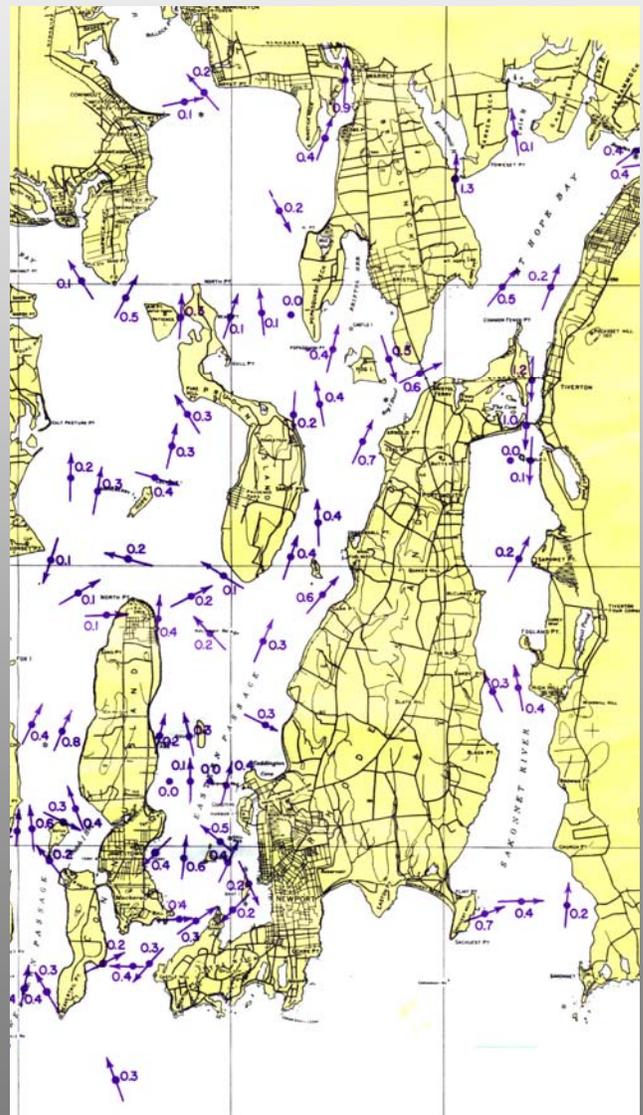
H + 4h

Narragansett Bay



H + 8h

Tides & current

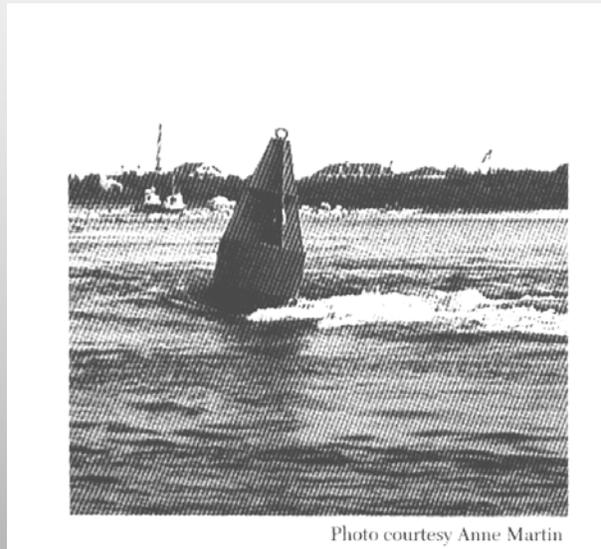


H + 12h

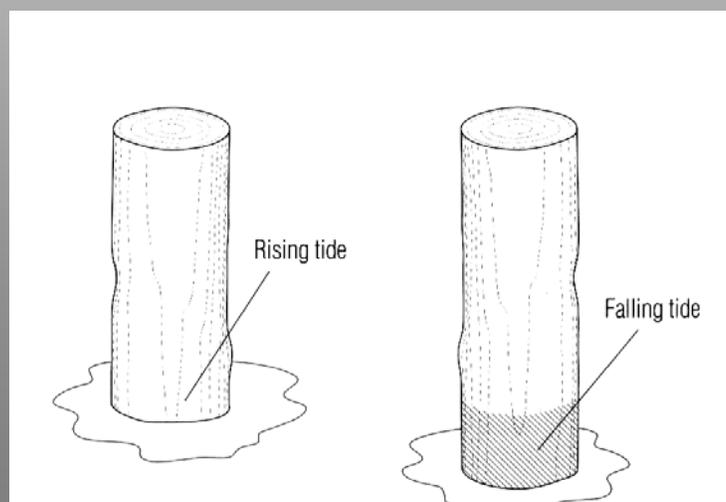
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Tell What Is Happening

- **Currents pull on buoys causing them to lean**
 - Leave wake

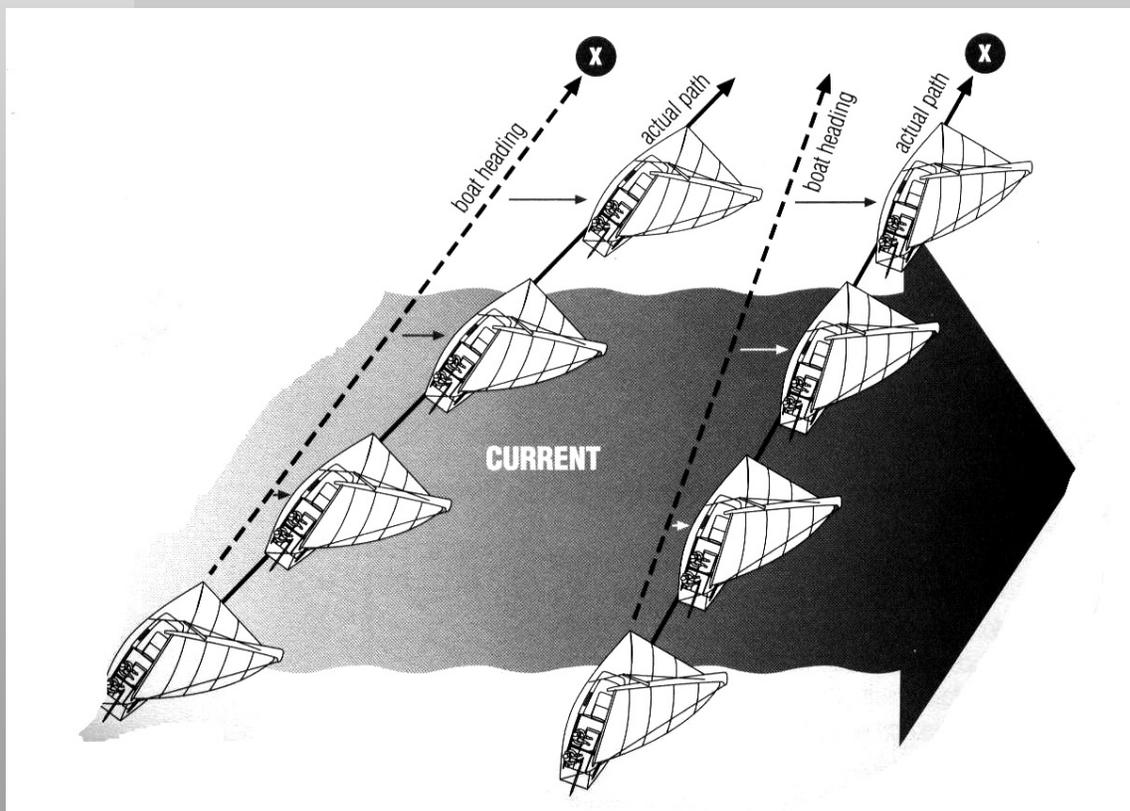


- **Piling or shoreline**
 - Dry shows rising tide
 - Wet shows falling tide



Compensate for Current

- **When sailing across current**
 - **Steer for a point “upstream”**
 - **Current pulls you back to desired destination or course**



Tide & Current Summary

- **Water moves**
- **Takes you places**
 - You want to go
 - You don't want to go
- **Current is**
 - Weaker in shallow water
 - Stronger in deep water
 - Faster through narrows
- **Beware of**
 - Newport Bridge
 - Gull Rock
 - Rose Island
 - Dumplings