Nueces Bay Circulation Monitoring

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Nueces Bay Circulation Monitoring

Goals

• Gather 1 year of circulation data in upper Nueces Bay using tilt current meters (TCMs)

• Create visualizations and summaries of the data and compose a final project report
# Nueces Bay Circulation Monitoring

## Timeline

<table>
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<th>Period</th>
<th>Tasks</th>
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| 2016 Mar–Jun | ✓ Project start  
✓ Scout potential monitoring station locations  
✓ Purchase necessary number of tilt meters |
| 2016 Jun | ✓ Begin continuous monitoring of currents |
| 2016 Jun–2017 Jul | ✓ Maintain current meter array and data collection |
| 2017 Jul–2018 Aug |  
- Prepare final report  
- Present results to NEAC  
- Submit final report and visualization products  
- Submit monitoring data and metadata |
Nueces Bay Circulation Monitoring

Tilt Meters

10 cm-long x 6 (4 deployed)
25 cm-long x 7 (4 deployed)
50 cm-long (2 deployed)

Deployment Setup
<table>
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<tr>
<th>2016</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
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<tbody>
<tr>
<td>2017</td>
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Deployments:  
- Blue: Past/present  
- Gray: Planned
Tilt Meter Retrieval and Re-Deployment

STEP 1: Use precision grapple hooking skills to snag meter line

STEP 2: Pull meter and plenty of mud onto boat; scrape fouling off of meter; offload data
Tilt Meter Retrieval and Re-Deployment

STEP 3: Feed meter into deployment pole; use pole to push meter stake into sediment

STEP 4: Run line from meter to brick; mark location on GPS
Special thanks to our field team, Chris Biggs and Tracy Weatherall!