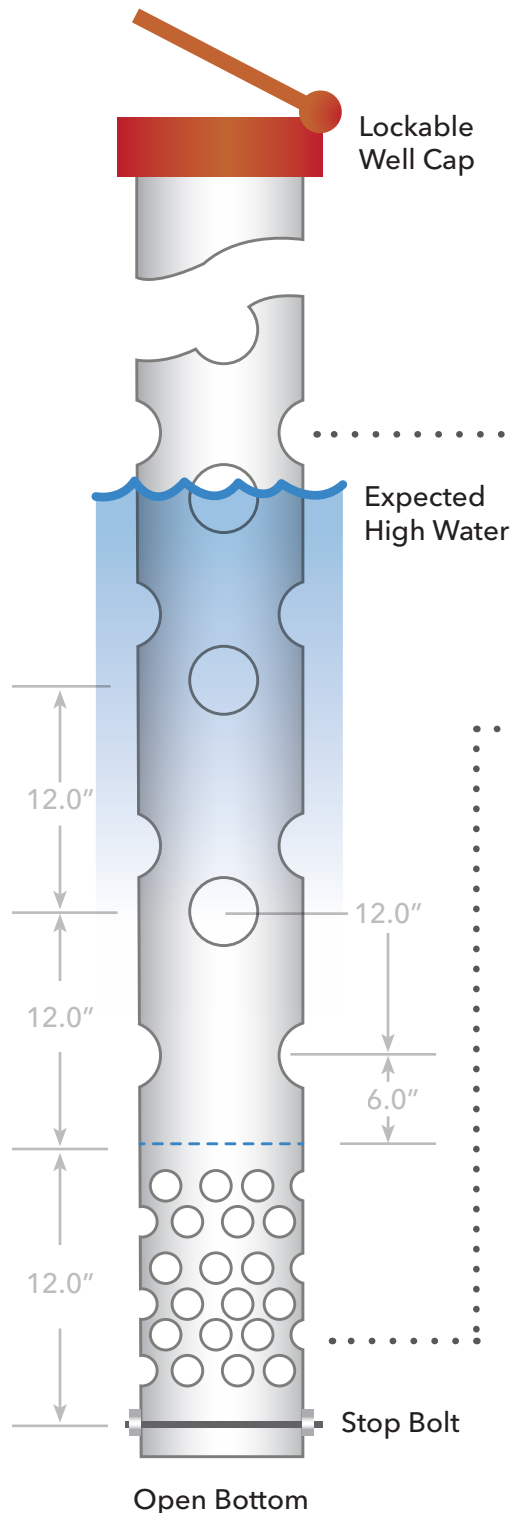




# Long Term Monitoring Guide

## Vertical Tube Deployments



### MATERIALS

- SCH 40 or SCH 80 - 4" PVC Pipe
- 1/2" SS Bolt, 6" Long
- 1/2" Flat Washers, Lock and Nut
- 4" Lockable Well Cap, Plastic or Aluminum
- 5200 Marine Sealant (for bonding pipe to cap)

### INSTRUCTIONS

Vent or tube flushing hole pattern:  
2.5" internal diameter.

Start one set 6" from end or top of sensor holes. Drill two holes at 0° and 180°. Start second set of two holes at 12" from sensor holes, drill at 90° and 270°.

Sensor area hole pattern:  
1.0" internal diameter, 1.5" on center from 1.0" above stop pin.



Mounted to Pier



Copper Design

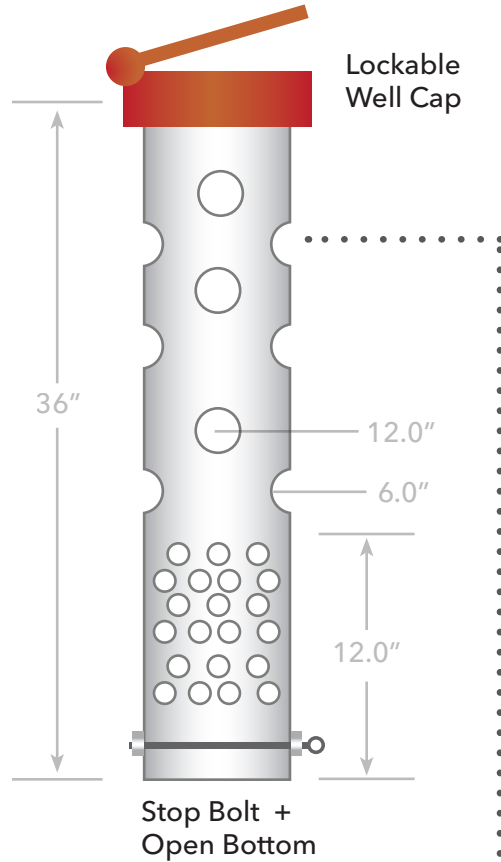
### NOTES

- Clean and degrease pipe prior to modifications
- In marine and other fouling sites paint inside and out with anti-fouling paint
- Clean pipe at least twice a year



# Long Term Monitoring Guide

## Horizontal Tube Deployments

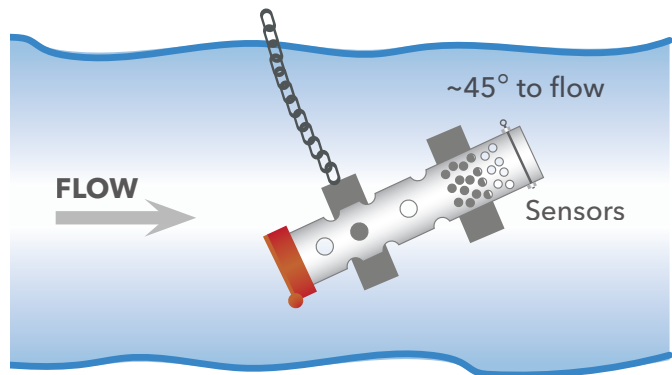


Shows exposed sensors.  
No debris deployments only.

### MATERIALS

- SCH 40 or SCH 80 - 4" PVC Pipe, 36" Long
- 1/2" SS Bolt or Eye Bolt, 6" Long
- 1/2" Flat Washers, Lock and Nut
- 4" Lockable Well Cap, Plastic or Aluminum
- 5200 Marine Sealant (for bonding pipe to cap)
- Two heavy weighted slabs to support pipe

Chain to fixed object or anchor on shore



### INSTRUCTIONS

Vent or tube flushing hole pattern:  
2.5" internal diameter.

Drill one set of two, starting 6" from sensor holes at 0° and 180°. Drill second set of two 12" holes upwards at 90° and 270°.

Sensor area hole pattern:  
1.0" internal diameter, 1.5" on centers 12" area from 1" above stop bolt.

### NOTES

- PVC pipe must be firmly secured to its base or mount to prevent loss in high flows
- Mount and pipe should be treated with anti-fouling paint if in fouling environment
- Secure submerged parts to shore with chain or SS wire rope to a fixed object
- Never clamp sonde directly to mount