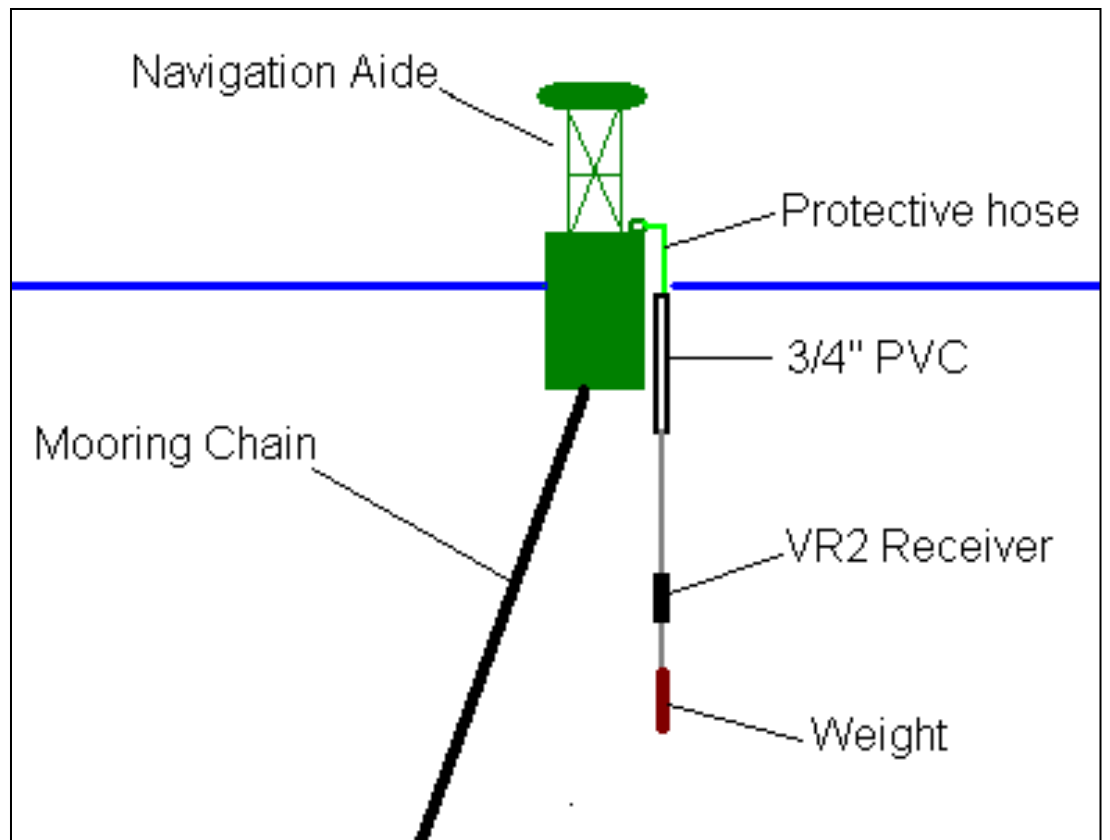




DESU



Buoy Receiver Deployments (DSU Method)

Deployment is designed to guard against cable wear at attachment point on buoy and where it abrades against side and bottom of buoy with tides. On top, a 1-ft piece of hydraulic hose is used; on the bottom PVC. Total length of cable is 30ft feet unless water depth is less. Two crimps on top to attach it to the buoy and one on the bottom to attach the weight. The weights are window/sash weights that were once counter weights in windows in older homes. They are about 3 pounds each. Before buoy attachment, the copper stopper is threaded on cable, then washer, then PVC sleeve. The PVC is adjusted so that it protects wire against abrasion. The receiver is cable tied (5 ties) to the cable, receiver end down. The receiver should be taped or smeared with Destin (baby rash cream) to curtail fouling. This assembly is crimped in place and then attached to the buoy through the rubber hose sleeve.

Parts (DSU):

From Port Supply (west marine)

Cable- 1x9 Brite Stay stainless wire; Type 316ss 1/4 inch #188955

Sleeves 1/4 inch copper oval # 115030

Copper stopper 1/4 inch # 2684355

Fender washer stainless 1/4 inch #121410

You can get the 3/4 PVC at Lowes, etc.

For the hydraulic hose, call a local hydraulic dealer and ask them for a super wear resistant hydraulic hose 5/16 inside diameter or bigger. We use Parker Brand hose but there are others.

Same/additional supply sources (CBL):

1/4", 316 ss, 1x19 wire rope: Port Supply No. 188955 (Port Supply is wholesaler to West Marine)

1/4" zinc plated copper stop sleeve: McMaster Carr Part 3936T18 <http://www.mcmaster.com/>

1/4", 316 ss washer: McMaster Carr Part 91525A124

1/4" tin plated copper sleeves: McMaster Carr Part 3883T47

3/8" hydraulic hose: McMaster Carr No. 9459K341

Type 3 window weight: Architectural Iron Company (800-422-4766) Part AIC 886

To crimp the copper oval sleeves on the cable you will need a crimping tool. Port Supply sells one called a professional swagging tool, # 323816. And bolt cutters to cut the cable.

MD USCG Buoy Request to Albert Grimes

31 receivers in Upper, Mid, Choptank, Nanticoke, Pocomoke

Issues:

- spatial coverage (range)
- winter removal
- private aids
- structures (piles)

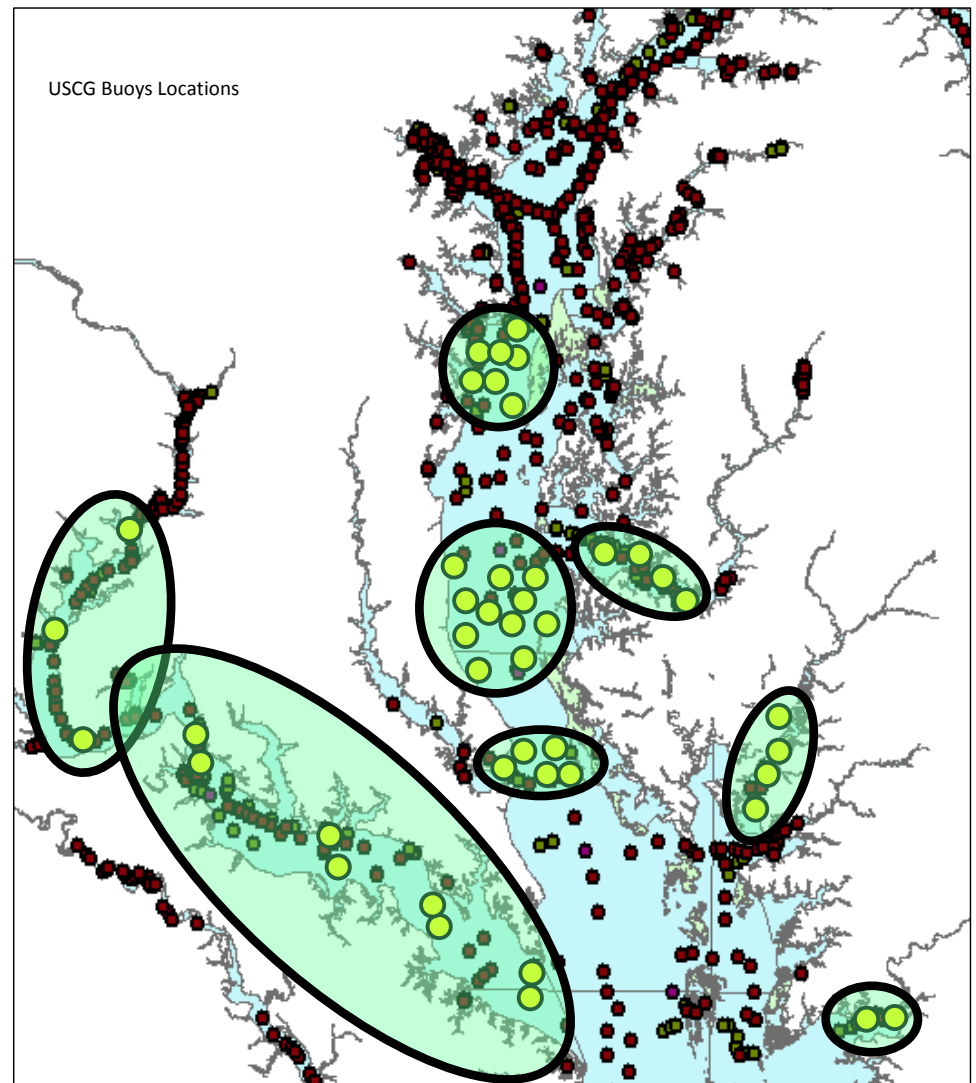


Figure 3. Receiver deployments in MD waters according to Table 1. Yellow circles indicate candidate USCG buoys or other moored/attached locations for VR2W receivers. Note that receivers in Potomac and upper Bay are pending funding of a separate award.



7747

19570

19565

19560

19690

19695

19705
19730 19700

7755

7765

7800

7830

7825 7835

UMCES Buoy; 7837

Image © 2013 TerraMetrics

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Imagery Date: 5/25/2013 38°53'42.00" N 76°20'00.35" W elev -4 ft eye alt 11.93 mi

Google earth

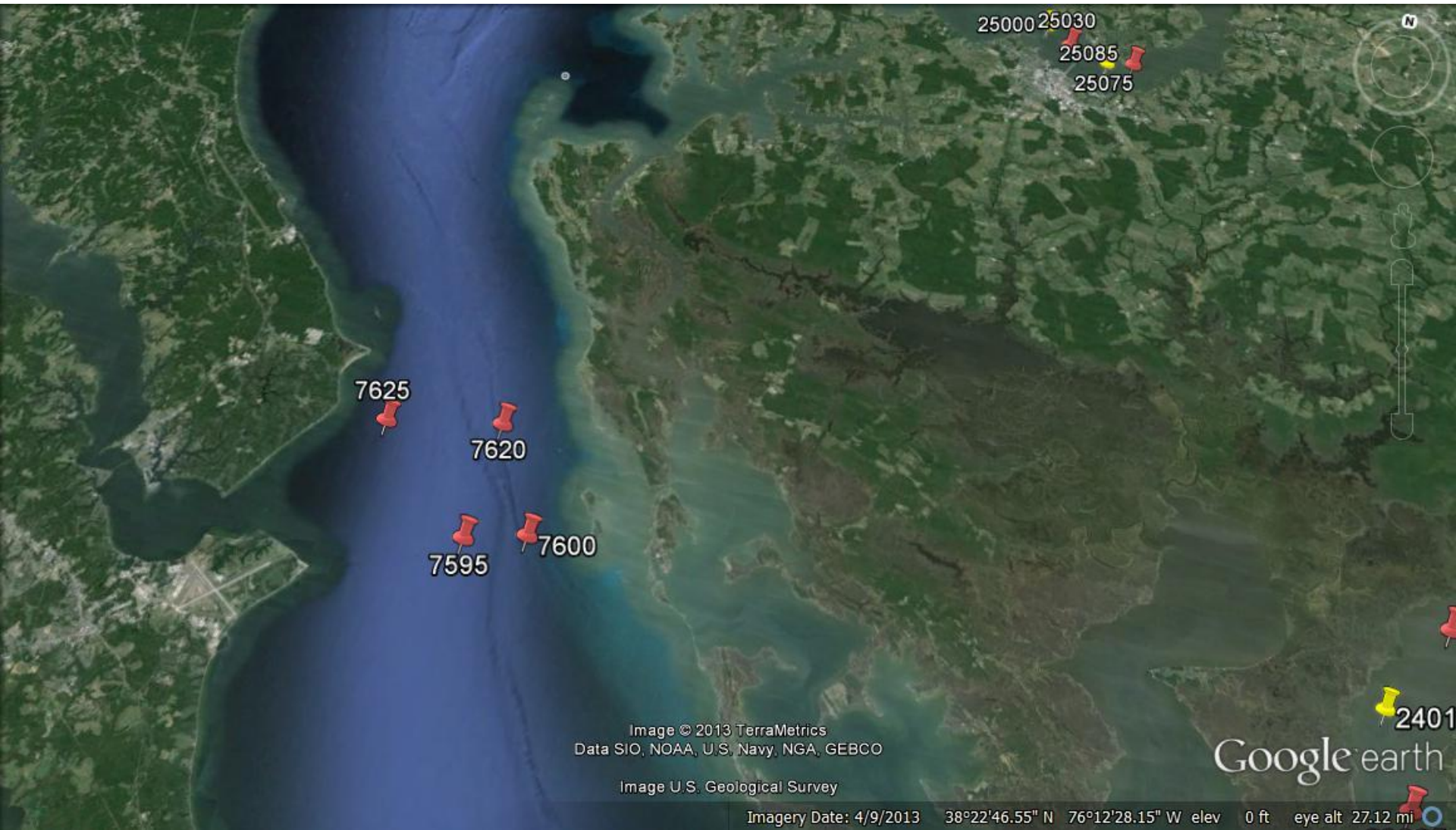


Image © 2013 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image U.S. Geological Survey

Google earth

Imagery Date: 4/9/2013 38°22'46.55" N 76°12'28.15" W elev 0 ft eye alt 27.12 mi



7747

7755

24845

24850

24930

24935

24965

25000

25030

25085

25075

Image U.S. Geological Survey
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat

Google earth

Imagery Date: 4/9/2013 38°38'10.15" N 76°03'22.30" W elev 13 ft eye alt 22.12 mi



25075

24080

24075

24030

24010

23985

Image U.S. Geological Survey
Image USDA Farm Service Agency
Image Landsat

Google earth

Imagery Date: 4/9/2013 38°19'10.93" N 75°47'18.49" W elev 9 ft eye alt 22.12 mi

