

Buoy Project



In the Fall of 2013, the South Haven Chapter of the Michigan Steelheaders and Salmon Fisherman's Association approached the City of South Haven about the possibility of exploring a community project of a near shore data buoy to be located off the coast of South Haven. Presently the largest gap in marine observations is a 70 mile stretch between Bridgman, MI and Port Sheldon, MI.

Click on the picture to learn more about the buoy.

The major objective of this project is to increase access to localized near shore real-time marine observations. The buoy would be capable of measuring basic marine conditions such as air temp, relative humidity, pressure, wind speed & direction, water temperature at depth, wave height, period, and direction. This real-time local data will be useful for critical decision makers, pleasure boaters, sportfishermen, locals and tourists.

The first phase involves community outreach for support of the project in addition to a successful grant application for the purchase of the buoy. The second phase involves securing funding from local supporters required to deploy, retrieve and maintain the nearshore buoy on an annual basis.

The project timeline goal if the grant application is successful and annual funding is secured, is to have the buoy purchased and operationally deployed by June or July of 2014.

For further information or to help support the project contact:

City of South Haven Harbormaster
City Hall
539 Phoenix Street
South Haven, MI 49090
(269) 637-0700
(269) 637-5319 Fax

or go to [Go Fund Me. Click Here](#)

UPDATE: NOAA set the mooring anchor on July 25th, 2014. On July 30th, Limnotech deployed the [South Haven near shore data buoy](#). Thank you to the financial supporters of this project! A number of South Haven organizations have partnered together to support the annual deployment, retrieval, and maintenance cost and add additional sensors to the buoy. These include major contributions from the City of South Haven, Van Buren County, and Entergy Palisades Nuclear Plant. Other organizations supporting annual maintenance costs include the South Haven Yacht Club, South Haven Steelheaders, South Haven Convention and Visitors Bureau, Covert Generating Station, US Coast Guard Auxiliary, River Bend Boat Club, South Haven Kiwanis, Tournament Trail 333, and the South Haven Chamber of Commerce.

The South Haven Steelheaders are supporting the addition of a string of nine temperature sensors below the buoy to report water temperatures in real-time. WOOD-TV out of Grand Rapids is supporting the addition of a high definition webcam to the buoy to provide hourly images and video

clips. Padnos Metal Recycling of Holland has donated two recycled train wheels to be used as the permanent mooring anchor for the buoy. The NOAA field research station in Muskegon, MI is supporting the deployment of the mooring anchor and the buoy by donating use of its 80 ft research vessel, the R/V Laurentian.

In its first year (**2014**), the buoy was deployed 72 days – July 30 to October 10 (72 days). There are 3 websites for accessing the buoy: UGLOS, NOAA NDBC and a webcam site. Total combined page views was 144,000 or about 2,000 per day.

The buoy recorded a max wave height of near 15 ft in late September and wind gusts over 55 mph in mid August during a passing thunderstorm.

In **2015**, the South Haven buoy was deployed on April 28 and retrieved on October 26, 2015 (181 days). Total combined page views were 427,000 or about 2,359 per day. The buoy recorded wave heights near 13 ft during a storm on September 18, 2015 with wind gusts over 30 mph.

In **2016**, the South Haven buoy was deployed on April 15 and retrieved on October 13, 2016 (181 days). Total combined page views were over 500,000 and peaked at nearly 24,000 per day on Labor Day weekend and averaged about 2,760 per day. The highest waves recorded by the buoy were near 13ft on May 4th, with winds gusting to 45mph. Waves over 5ft were recorded on 20 separate days during the 2016 deployment period.

During the **2018** season for the 45168 buoy we registered a total of 275,000 requests for data to ndbc.noaa.gov and 162,000 to glbuoys.glos.us. The text message service that we maintain to access data from the 45168 buoy was used a total of 24,000 times. Also the webcam on the buoy was viewed over 50,000 times. All of these combined for a total of over 510,000 requests for data/images from the buoy, which averaged out to a request every 30 seconds over the entire May to October period.

2019 deployment: April 15 to Oct 15 (180 days).

2020 deployment: April to October

2021 deployment: April 12 to October 18. During the **2021** season, the buoy received 437,000 requests on the uglos or noaa websites, there were 24,000 requests over text messaging platforms. Webcam views were over 50,000 times. Totaled together there were over 510,000 requests for data which equals one request every 30 seconds. The maximum wave height measured by the buoy in 2021 was 11.56 feet in late September and the warmest surface temperature reading was 80 degrees in late August.