## Millport Coastal Flood Protection Scheme

## Protecting the people of Millport



**March 2017** 

**2.1** 

## **Bathymetric Survey**

At the last consultation workshops concerns were raised about the accuracy of the bathymetric survey data.

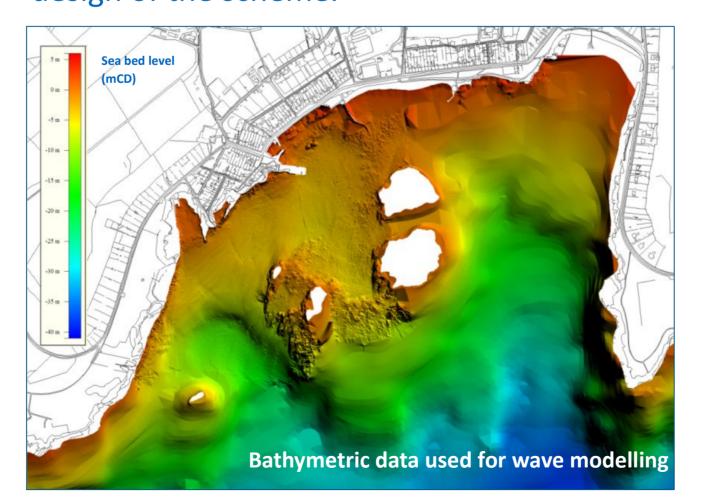
The copies of the 2015 and 2016 bathymetric surveys that were provided at the workshop were simplified contour maps and did not show the spot levels. Bed levels shallower than 3.5m below Chart Datum were not clearly shown, so the shallow ridge between the southern Eilean and the Spoig was not visible.

To check the accuracy of the data we compared the 2015 and 2016 bathymetric surveys with the current Admiralty Chart (2010), with an historic chart (1985) and with the geophysical survey results (2017).

- The 2015, 2016 and 2017 surveys are almost identical.
- The 2016 and 2017 surveys clearly show the shallow ridge between the Spoig and the Eileans. This has a minimum level of 2m below chart datum. The ridge is more clearly defined by the recent surveys than by the 2010 and 1985 charts.
- Comparison of the depth contours from the bathymetric surveys with the charts show a strong correlation in the position of the 2m and 5m contours.

- Comparison of the spot levels shows in general a good correlation between the surveys and the charts for bed levels more than 3m below Chart Datum.
- There are some differences in the sea bed levels in the shallower areas close to the islands. This is expected to be due to movements of mobile sediments away from the sheltered areas since 1985, and improvements in survey techniques since 1985.

Overall we are confident in the accuracy of the 2015 and 2016 bathymetric surveys, and their suitability for use as base data for wave modelling and for design of the scheme.



The Admiralty Chart for Millport and printed copies of the detailed bathymetric survey data are available today for your information.

