

# CMAR COASTAL MONITORING PROGRAM REFERENCE SHEET

## REPORT & DATA ACCESS

The Centre for Marine Applied Research (CMAR) collects high-resolution coastal data on Essential Ocean Variables (EOVs) through the Coastal Monitoring Program (CMP). This program aims to support science-based development of coastal industry, guide government policy and management decisions, encourage environmental stewardship, and monitor coastal ecosystem change. CMAR ensures data are publicly accessible in a variety of formats. Outlined below are CMAR's Coastal Monitoring Program data products and the ways in which they can be accessed. Click the underlined text to access the links.

### Water Quality

Water quality data (e.g., temperature, dissolved oxygen, and salinity) is typically collected using “sensor strings” deployed within 1km of the coastline for 3 to 12 months at a time. Sensor strings are attached to the seafloor by an anchored acoustic release, and suspended in the water column by a sub-surface buoy. Sensors are attached at fixed depths. Occasional data collection occurs in lakes and rivers, or with different configurations.



Processed\* data is summarized in reports which are available via the interactive station locations map on the [CMAR website](#). Datasets and summary reports are updated annually.

A map of water quality station locations is also available on the [Nova Scotia Open Data Portal](#).

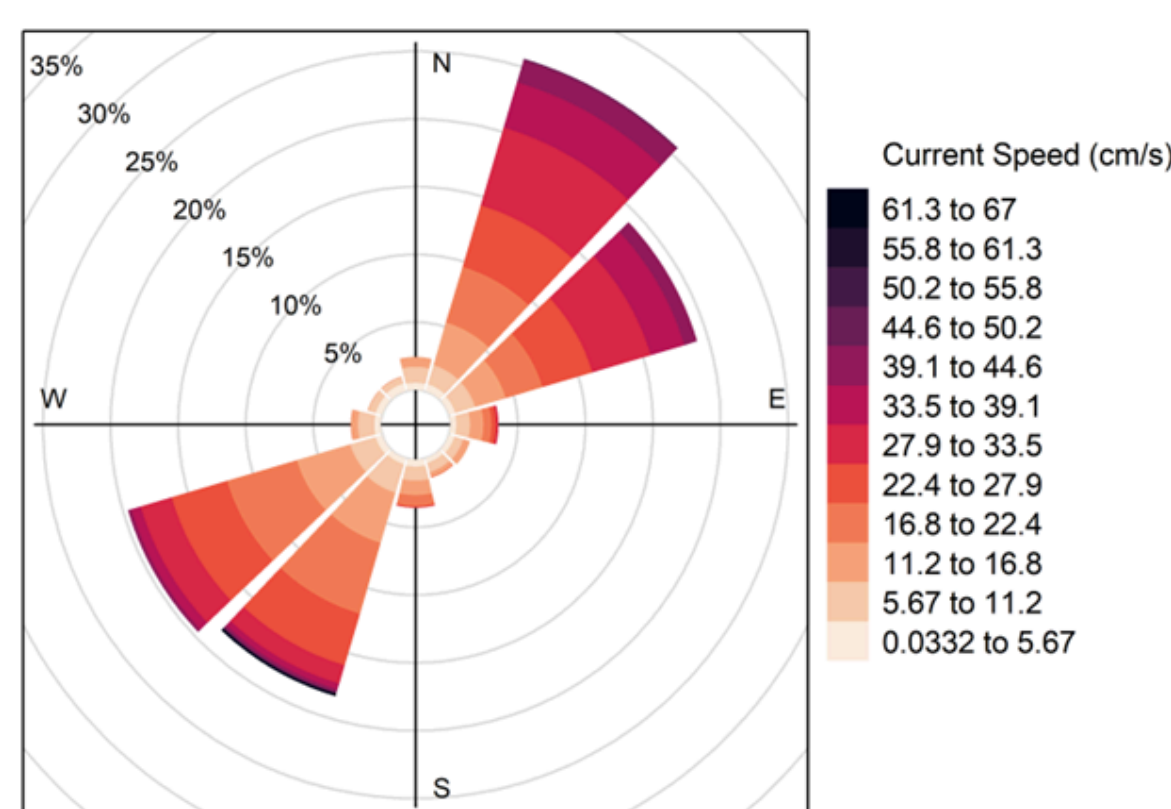
Processed data is grouped by county, and can be downloaded directly from the [Nova Scotia Open Data Portal](#).

Water quality data is available for download from ERDDAP through [CIOOS Atlantic](#).

\*Water Quality data is processed & visualized using the CMAR-developed R package 'sensorstrings'. Quality Control flags are applied using the cmar-developed R package 'gaqcmr'

### Current

Acoustic Doppler Current Profilers (ADCPs) have been deployed by the [NSDEFA](#) in coastal waters of Nova Scotia to collect current profiles. These ADCPs sit on the sea floor and detect current speed and direction throughout the water column. Data is sent to CMAR for processing and publication.



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A map of ADCP station locations is also available on the [Nova Scotia Open Data Portal](#).

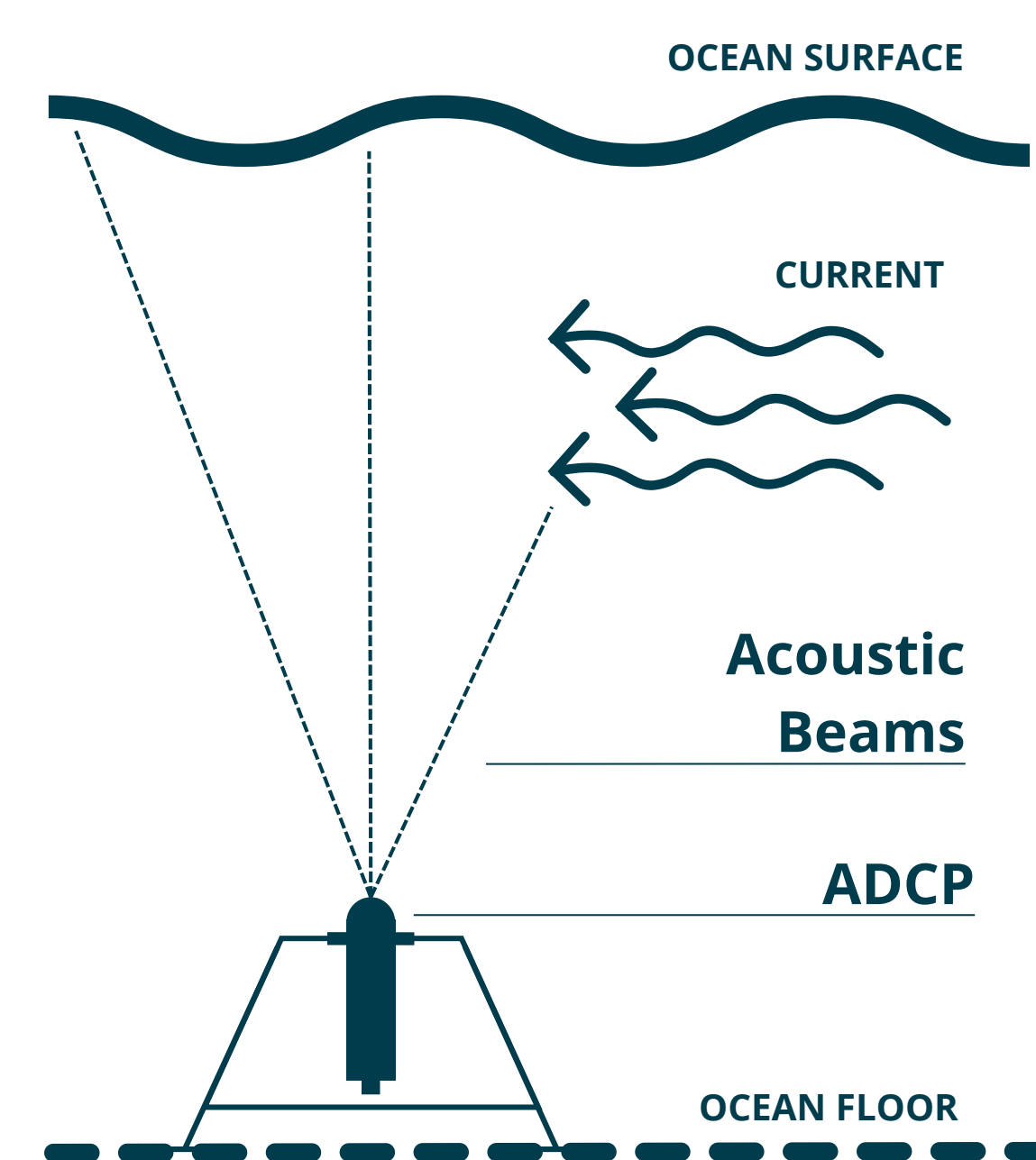
Processed data is grouped by county, and can be downloaded directly from the [Nova Scotia Open Data Portal](#).

CMAR is currently working with [CIOOS Atlantic](#) to make current data available for download from ERDDAP.

\*Current data is processed & visualized using the CMAR-developed R package 'adcp'. Quality Control checks are applied within the ADCP software and additional flags are applied during processing.

### Wave

Some Acoustic Doppler Current Profilers (ADCPs) collect wave height, period and direction data in addition to current parameters. ADCPs are typically deployed for 1 to 3 months.



Processed\* data is summarized in reports which are available via the interactive station locations map on the [CMAR website](#). Datasets and summary reports are updated annually.

A map of ADCP station locations is also available on the [Nova Scotia Open Data Portal](#).

Processed data is grouped by county, and can be downloaded directly from the [Nova Scotia Open Data Portal](#).

CMAR is currently working with [CIOOS Atlantic](#) to make wave data available for download from ERDDAP.

\*Wave data is processed & visualized using the CMAR-developed R package 'waves'. Quality Control checks are applied within the ADCP software and additional flags are applied during processing.