

## QARTOD VARIABLE MATRIX

Core Variable Manuals	Date Completed	Update Completed	Core Variable (s) Covered	Other Variables Covered
Dissolved Oxygen	Dec_2012	Apr_2015	Dissolved Oxygen	
In-Situ Currents	Jun_2013	Sep_2015	Current Speed and Direction	
In-Situ Waves	Jun_2013	Jul_2015	Surface Waves	
Temperature and Salinity	Dec_2013	Dec_2015	Temperature Salinity	
Water Level	May_2014	Apr_2016	Sea Level	
Wind Speed and Direction	Oct_2014	May_2017	Wind Speed and Direction	
Ocean Optics	Jun_2015	Update in progress.	CDOM Ocean Color Optical Properties	In-water radiance/irradiance Above-water radiance/irradiance Beam attenuation Turbidity PAR Cholorophyll FDOM
Dissolved Nutrients	Sep_2015		Dissolved Nutrients	Nitrogen (NO3, NO2, and NH4) Phosphate
Phytoplankton Species	May_2017		Phytoplankton Species	
Remaining Core Variable Manuals	Projected Completion		Remaining Core Variables	Notes
Zooplankton			Zooplankton Abundance Zooplankton Species	
CO2/Acidity			Partial Pressure of CO2 Acidity	
Sea Floor			Bathymetry Bottom Character	
Contaminants			Contaminants	
Fish			Fish Abundance Fish Species	
Heat and Ice			Heat Flux Ice Distribution	
Pathogens			Pathogens	
Stream Flow			Stream Flow	
Total Suspended Matter			Total Suspended Matter	
Other Manuals (not core variables)	Completed	Projected Completion		
Data Flags Manual	Jan_2014	May_2017		
HFR Surface Currents	Apr_2016			
Glider DAC	May_2016			
Passive Acoustics		Jun_2017		