

# Update SWQM Procedures Manual, vol. 1

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## Minor changes

### Add chapter updates

- Drought guidance
- Boat cleaning

### Clarifications

- Reconciling differences/contradiction

### Remove old language that is no longer applicable

- Rounding (under consideration)
- Remove bacteria chapter

### Add some new language

- Flow and 24hr DO
- Exception for prescription sunglasses and Secchi
- Update/overhaul flow section

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## General

- Manual will be accessible

### Chapter 8

#### Calibrating and Maintaining Multiprobe Instruments

Due to the large number of multiprobe (also referred to as a *sonde*) manufacturers and the variety of currently available models, this chapter describes the general calibration procedures and maintenance for the most commonly used instruments. Refer to the manufacturer's instruction manual for detailed information regarding calibration, maintenance and other instrument functions not described in this chapter (i.e. downloading data). Contact your CRP project manager or SWQM Central Office staff to discuss any discrepancies between protocols or recommendations described in this chapter and instructions provided by the manufacturer. [The manufacturer's manual must be made available for reference.]

The types and numbers of sensors that may be configured on a multiprobe can vary widely. When considering a sensor other than those described in this chapter, contact your CRP project manager or SWQM Central Office staff prior to data collection to ensure the data can be reported to SWQMIS.

Ensure the multiprobe and display unit software and firmware are up-to-date. At a minimum, check for updates from the manufacturer annually. Newer model instruments may have updates available more frequently.

All instruments must meet the minimum specifications listed in Table 8.1.

**Table 8.1 - Minimum operating specifications for multiprobes**

Sensor/Parameter	Range	Accuracy	Resolution
Depth	*	depths 1-100m = $\pm 0.05$ m depths >100m = $\pm 0.1$ m	0.001m
Temperature	-5 to +45°C	$\pm 0.2$ °C	0.01°C

RC Robin Cypher

Note:

This chapter is an example of the accessible format (font) that the SWQM Manual eventually look like, give or take a few items like the text boxes.

General revisions to Chapter 8 include:

- Addition of table for minimum requirements for ~~sondes~~.
- Removing detailed instructions for operating ~~sondes~~ and instructing users to refer to their manufacturer's tech manual for operation and maintenance
- Encouraging users to contact SWQM CO staff or CRP PMs if info is not covered in this chapter or is contradictory to the ~~sonde~~ tech manual.

When commenting, please try to provide suggested language when possible.

Charles Dvorsky I'm not following: what's the

Charles Dvorsky I suggest semi-annually and on