



CLALLAM COUNTY
DEPARTMENT OF
COMMUNITY DEVELOPMENT

223 East Fourth Street, Suite 5
Port Angeles, WA 98362-3015
(360) 417-2281 FAX: (360) 417-2443
streamkeepers@co.clallam.wa.us

Ed Chadd and Robert Knapp

July 9, 2008

FOR CONTINUING VOLUNTEERS—REVISED FIELD PROTOCOL INSERTS FOR 2009

Enclosed are the protocols that have changed enough to need replacing; **please review these new sections and replace them in your handbooks** prior to your next field visit.

We've also enclosed the new table of contents for the Field Procedures section, because the **Water Chemistry section has now been broken up into 5 separate sections**: one Water Chem General Section and then a separate section for each piece of equipment.

Your **page numbers won't be correct after the Water Chem section**; if you want to renumber, you'll need to add 4 to all the page numbers starting with the Flow section.

Here's a summary of the sections that have changed:

- ⇒ **WATER CHEMISTRY**: Better explanations in various places, plus...
 - ⇒ "Water Chemistry—General" chapter has some new/updated sections worth a look:
 - ⇒ "Repeating measurements below or near water-quality standards thresholds": Taking replicates of WQ violations gives greater assurance of the accuracy of our data.
 - ⇒ "If you're doing all the water-chem procedures yourself": Gives an order of steps to follow, similar to what was in the old combined protocol.
 - ⇒ "Alternative procedures for poor conditions": Expanded and revised.
 - ⇒ pH: meter calibration is now included in the pH chapter.
 - ⇒ We're trying to keep the pH probe stored in its buffer bottle as much as possible, so you may find it still in that bottle when you check out your kit; instructions for removing it from the bottle, and putting it back in, are in the pH protocol.
 - ⇒ Multimeter (YSI-85) protocol:
 - ⇒ Better explanation of the Dissolved Oxygen calibration procedure.
 - ⇒ Record DO Saturation to tenths of a % (was whole % before).
 - ⇒ Double-check of the new digital barometer.
 - ⇒ No more nitrate strips!

(over)

- ⇒ **FLOW:** When you have no flow at a site, be sure to indicate that on your data sheet.
- ⇒ Common sense & flow readings: Think about the velocity readings you're getting; if they don't make sense, there might be a problem with the meter. When in doubt, try again.
- ⇒ **DATA SHEETS:**
 - ⇒ Noxious weeds added to the list:
 - ⇒ blackberry, Himalayan
 - ⇒ butterfly bush—added last year
 - ⇒ garlic mustard—subject of recent news article—broad, toothed leaves
 - ⇒ hairy willow herb—resembles fireweed, willow herb
 - ⇒ thistle, Canada/bull
 - ⇒ holly, laurel, creeping buttercup, bindweed ("Morning Glory") mentioned in "Other" section