

NOTES
WATER DATA COLLECTION TEAM MEETING
August 7, 1998 at MAERC

The meeting started at 11:05 AM. It was scheduled for 9 AM but we waited on some people. Dr. Capece and Marcel worked on the CR10 program from 9:30-11:00 AM.

Attending were: Dr. Capece
Ed Rawlinson,
Marcel Tchaou
Angela Alexander
Benno Eidus

Absent were: Dan Ingall
(Dan later explained that he did not get the meeting notice because of an email problem)

Dr. Capece passed out the agenda (sent by email) for the meeting.

STORM EVENT REPORT:

Marcel said the rain started Friday night and ended about Sunday night. Ed said that there was approx 7" of rainfall for the past week.

To determine the data available from the Friday-Friday event, Dr. Capece requested that Marcel produce a table containing the following information for each monitoring site:

1. How many bottles collected
2. Total runoff volume
3. Calculate depth correctly? Y/N
4. Calculate CFS correctly? Y/N
5. Head Water 1 correct? Y/N
6. Table Water 2 correct? Y/N

ISCO sampler operation notes:

Marcel said the CR10 program recorded 24 samples taken by ISCO, but the ISCO did not contain that many samples...possible problem with the ISCO operation...Investigate!

Ed said that at some flumes the CR10s triggered the ISCO while others did not.

Dr. Capece said that his inspection of the data indicated that one problem is that the digital encoders (unlike the previously used ultrasonic sensors) register a high depth (90+ feet) when the encoder rotates CCW past the zero point...as can happen when the well dries down even slightly. This can be fixed by adding an error trap in the program to catch these high values.

Dr. Capece requested that Marcel produce the runoff hydrographs from what data is available from the flow event.

Ed reported that t 230 samples were collected and delivered to HBEL, 16 of these were grab samples from the 8 winter sites.

Dr. Capece asked Ed why do we have samples at S7 and not at the others? Marcel explained that S7 was experiencing backflow while S6 was not. Flowing. It was also observed that S8 rarely backflows and that perhaps S8 ditch is too high...Investigate!

S6 Culvert blocked with weeds?

S7 Culvert blocked with weeds?

Dr. Capece explained that in the future is the ISCO takes all its samples in 10 minute intervals, do not ship all the samples to the lab without first discussing it with him.

Dr. Capece said that the SOP should instruct the technicians to download the ISCO data on exact sampling times so that this information could be compared to the CR10 information. The CR10 data should also be collected when the bottles are changed so the geometric sampling routine can be reset. The SOP must include specific details on how to reset the CR10 after an event.

When were grab samples collected? Wed Aug 5th (by Angie and Ed...Dan was not available to help). Isco samples were taken on Tuesday when there was still strong flow (Marcel & Ed). Dr. Capece noted that this was much too late. The samples (ISCO and grab) should have been taken on Saturday & Sunday because this was the first major wash-off of the year.

PROBLEMS:

Rain started on Friday but Dr. Capece was not informed until mid Monday of the status of data collection. Marcel was at the ranch on Saturday when there was rain but no flow. He sent an email to Dr. Capece. Flow probably started Saturday night. Ed said that we needed to set up the automatic tipping bucket that Dr. Capece suggested.

Dr. Capece requested that he get daily rain reports from the manual raingauge at the ranch until the automatic system is in place. ##SOP## In the SOP we need Dan to notify IFAS immediately after rain

Dr. Capece said that someone (Ed/Marcel) needs to spend time with Dave Parker to learn how to handle the automatic tipping bucket system (tie gauge to PCs & hook to internet). Until this set up Dan needs to call us about rain, but in addition we knew about the rain, but we didn't do anything. Someone needs to sit in the truck and collect grab samples and check instruments to see if they work. Every time it rains we need to be there...until we are confident that all systems are working as intended. When it rains next time all hands on deck (Ed, Marcel, Dr. Capece, Dan, Benno). Ed - What is a significant major event? Dr. Capece – 1 inch or more. Ed - Issue - Maybe I need to change my hours to come in later and go to school in the day since the rains are in the evening

Dr. Capece - * Wants daily field notes faxed to him - mandatory - even daily activity reports w/ rain total.

Dr. Capece - Ed you need to get a list of instruments from Benno that we need to buy for the field parameter data collection component of the grab samples (DO, temp, pH, EC). Benno must training the team on use of these instruments and certify everyone for purposes of the CompQAP and QAPP with FDEP.

CURRENT FIELD TASK DUTIES

Dan Ingall:

1. Changed batteries
2. Put the gates in fences
3. Handle ants
4. Took grab samples occasionally
5. Keep an Eye on rain gauge

What else do we need Dan to do now:

1. Change batteries
2. Handle ants
3. Clean out bugs but don't touch instruments
4. Clean ports
5. Order wet lab supplies - like acid
6. Clean the bottles & lids
7. Prepare the replacement ISCO bottles & bags... Cut Weeds
9. Process incoming samples

Ed - When should we remove the samples? Dr. Capece - Bi weekly or more frequently, so we'll have another week to get them packed and shipped, so your still within you 28 day span. Dr. Capece says that we need to make ##SOP## for grab samples.

**Produce a Dan ##SOP##.

**Produce a Ed ##SOP##

1. Download CR10 data (takes 1 day per 8 sites...2 days total per week)
2. FTP Transfer of files
3. Collect data at the 5 existing sites & 4 weather stations (1 day)
4. Other 2 days needed to repair equipment and data management

**Remove screens from screens - get a pressure clip

Note - Ed now has a spares of everything - encoders, etc., except voltage regulators.

** Dr. Capece - Ed you need to make limited factors and difficulties list for example: gas, cell phone, truck, etc.

Supplemental rain gauges on CR 10s - working fine (Marcel & Ed)

Marcel - gaps in maintenance include weeds in water - down stream. Dr. Capece - Schedule inmates for ditch weed cleaning for once a month. Contact the County Correctional Facility. Get Pam to track down Prison Thank you letter.

Marcel - Color of wiring is confusing...Wiring diagrams need to be in the ##SOP## & in the shelter boxes.

CURRENT SOPs

1. Flume & CR10 data collection and maintenance procedures - Dr. Capece said it has to have steps 1.2.3... Marcel says he is still working on it.
2. Clear port manual ready water depth to see if offsets are working - Tolerance 1 quarter of 1 inch.
3. Adapt all useful Telone ##SOP## to B. I. Project. Marcel requested a copy of this. Consult Telone SOPs when you create your own says Dr. Capece.
4. Put all the SOPs in one binder make additional copies if necessary to put in certain places like in the lab to take out when doing grab samples.

5. Ed should test the WQ SOP and inform Benno of changes to be made.
6. Dr. Capece - Be careful about dumping water into the wells when cleaning the ports- Don't dump on the encoder floats. Encoders need to be locked down. Ed says that he can simply mark the tape and encoder spool and remove the float from the well during cleaning.
7. Dr. Capece - We need a pressure clip for the port screens to work properly

RE-TASKING OF ASSIGNMENTS IN THE EVENTS OF LARGE STORMS

Ed and Marcel can call on Angie and Benno anytime for help during big events that Ed and Dan cannot handle.

To inspect the data after downloading Ed wants an Excel macro instead of a split Utility in PC208.

MODIFICATION OF CR10 PROGRAM

Dr. Capece and Marcel have identified a few program changes and instructed Jeff Dismukes to make these changes. These include adding a decimal Julian day routine, checking for errors in depth readings, and adding a daily sampling in low flow situations.

Data from the CR10s must be reviewed and plotted each week. The graphs should show:

1. Flow
2. Rainfall
3. Isco bottle #- big point

One working ET station good enough for whole ranch - Dr. Capece...therefore weekly review of these data is not critical...monthly is sufficient. Marcel – there are problems with the wind speed sensors that need to be fixed. Dr. Capece – check with Yanling since she has experience from the Wheeler data set. Ed will talk to Kevin about wind sensor issue - he has experience with this.

FLUME SITE MODIFICATIONS

1. S6 has a shallow stilling well...may need shallower float or dissolve concrete from bottom. Keep an eye on S6.
2. Some winter sites may need Gel coat on concrete...not critical.
3. Need weather strip in encoder box & silicon beads - Ed said ok

Ed - we need to make a yearly SOP to keep up with stuff like replace tubing {Dr. Capece said to discuss at a later meeting}

W8 Friction and polyethylene tubing -makes it tuff when it gets to bending when it pulls through the PVC. Dr. Capece suggests that Ed needs a conical connection.

Replacement parts needed: Humidity indicators, drying packs, voltage regulator - **Order

1:32 Dan showed up to the Office

Anticipated Vacations??????????

Ed Thurs & Friday Sept 11 & 12

Angie one Friday a month (probably) Bill comes home

To facilitate communications Dr. Capece will create an email button on the BI webpage. It will get a message to:

John Capece
Ken Campbell
Hilary Swain
Benita Whalen
Marcel Tchaou
Benno Eidus
Ed Rawlinson
Dan Ingall
Angela Alexander

1:40 Meeting End

After Meeting Dr. Capece asked Dan to start additional training with Benno next week to learn more about grab samples and measuring field parameters (DO, pH, Temp, and EC)..