

CCHMN FY2019 FIELD AUDIT FORM

Sampling Strata: Tidal Caloosahatchee River

Organization: FDEP - Division of Environmental Resource Assessment

Date: 17-Jul-19

Sampling Staff: Nicole Reistad, Maryann Dugan

Time: 7:00am - 1pm

CHNEP Auditor: Nicole Iadevaia

Weather: Sunny

Boat: FDEP - 22' Whaler

Tide: Low Rising, +1.7 @ 15:15

Site # - Grid #					
1	2	3	4	5	

SUMMARY DATA					
Data Recorder	Nicole	Nicole	Nicole	Nicole	Nicole
Secchi Disk Operator	Nicole	Nicole	Nicole	Nicole	Nicole
Alpha or Van Dorn Bottle Operator	Maryann	Maryann	Maryann	Maryann	Maryann
Pump Operator (if applicable)	-	-	-	-	-
YSI Operator	Nicole	Nicole	Nicole	Nicole	Nicole
LiCor Operator	Nicole	Nicole	Nicole	Nicole	Nicole
Total Depth (m)	2.9	2.4	3.0	1.3	1.6
Water Sample & YSI Depths (m)					
Surface	0.5	0.5	0.5	0.5	-
Intermediate(s) (in 1 m increments - optional)	-	-	-	-	-
(If ≥ 3m deep) Bottom	2.4	1.9	2.5	-	1.1
LiCor Depths (m)					
Surface	0.5/1.0	0.5/1.0	0.5/1.0	0.5/1.0	0.5/1.0
Intermediate(s) (in 1 m increments if applicable)	1.0/1.5	1.0/1.5	1.0/1.5	-	-
(If ≥ 3m deep) Bottom	1.5/2.0	-	1.5/2.0	-	-

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GENERAL OBSERVATIONS					
Samples collected from randomly selected sites which are selected prior to field sampling; alternate sites chosen when: a) water depth too shallow b) unable to get to sample site.	Yes - FDEP staff use randomly selected grids & sites generated by LCEL prior to sampling with GIS tool & estuary polygon; used GPS to find sites; sampled as close to site as possible with >0.7 m depth.				
Optional: 1 Duplicate field sample taken every 10 sites or 1 every sampling trip.	No - Optional duplicate samples were not taken.				
1 blank taken every sampling trip.	Yes - Blank sample & readings taken at Site #5.				
Water samples collected using a horizontal sampling device, such as an Alpha or Niskin bottle (opaque preferred).	Yes - Used alpha bottle to collect samples.				
Optional: Use protective gloves.	Yes - Gloves were used during sampling and changed out before each sample was taken.				
All sampling done away from motor; when sampling in a boat, samples taken from bow, away & upwind from engine.	Yes - All samples taken off side near mid-ship & alpha bottle taken off side near stern away from motor at each site.				
DECONTAMINATION					
All equipment cleaned in a controlled environment & transported to the field pre-cleaned ready to use.	Yes -FDEP lab prep area clean & organized; equipment transported in cases; sample containers transported in clean bags for protection; filter holders cleaned in lab & transported to field in protective box & loaded with filters in field.				
Optional: Equipment washed in field with detergents (Liquinox or Alconox).	Yes - Equipment washed prior to blank collection.				
Field cleaned equipment (alpha/niskin bottle, pump tubing, syringes, filters & other equipment) cleaned & rinsed with DI water 3 X after completion of sampling each site.	Yes - equipment rinsed with DI water 3 X	Yes - equipment rinsed with DI water 3 X	Yes - equipment rinsed with DI water 3 X	Yes - equipment rinsed with DI water 3 X	-
AQUEOUS SAMPLING PROCEDURES					
Sample collection equipment & non-preserved sample containers rinsed with sample water before sample is taken.	Yes - sample collection equipment & non-preserved sample containers rinsed with ambient water before sample collection	Yes - sample collection equipment & non-preserved sample containers rinsed with ambient water before sample collection	Yes - sample collection equipment & non-preserved sample containers rinsed with ambient water before sample collection	Yes - sample collection equipment & non-preserved sample containers rinsed with ambient water before sample collection	-
Proper order for filling sample bottles is used: non-preserved, preserved, then filtered.	Yes - Proper order of filling sample bottles was used	Yes - Proper order of filling sample bottles was used	Yes - Proper order of filling sample bottles was used	Yes - Proper order of filling sample bottles was used	-
NH3 & Orthophosphate samples filtered using peristaltic pump or syringe-filter combination with .45 micron filters; tubing for peristaltic pump rinsed with sample water through spigot.	No - Only Orthophosphate samples filtered using syringe-filter combination with .45 micron filters, NH3 was not filtered.	No - Only Orthophosphate samples filtered using syringe-filter combination with .45 micron filters, NH3 was not filtered.	No - Only Orthophosphate samples filtered using syringe-filter combination with .45 micron filters, NH3 was not filtered.	No - Only Orthophosphate samples filtered using syringe-filter combination with .45 micron filters, NH3 was not filtered.	-
Once filled, sample bottles put on ice, except chlorophyll bottles, which are laid on top of other bottles in ice chests until cooled, then completely iced.	NO - samples put in ice immediately, w/Chl in ice	NO - samples put in ice immediately, w/Chl in ice	NO - samples put in ice immediately, w/Chl in ice	NO - samples put in ice immediately, w/Chl in ice	-

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LIGHT DATA					
Secchi disk depth taken on shady side of boat without sunglasses.	Yes - Secchi taken on shadiest side of boat w/o sunglasses	Yes - Secchi taken on shadiest side of boat w/o sunglasses	Yes - Secchi taken on shadiest side of boat w/o sunglasses	Yes - Secchi taken on shadiest side of boat w/o sunglasses	-
Light meter readings taken on sunny side of boat.	Yes - Licor taken on sunny side of boat	Yes - Licor taken on sunny side of boat	Yes - Licor taken on sunny side of boat	Yes - Licor taken on sunny side of boat	-
Licor measurements recorded simultaneously with 2 uw sensors mounted with PVC pole frame held vertically & sensors not shaded by each other, the boat, SAV or other objects.	Yes - Licor taken on sunny side of boat	Yes - Licor taken on sunny side of boat	Yes - Licor taken on sunny side of boat	Yes - Licor taken on sunny side of boat	-
Data qualifier used to record bottom composition information (mucky, sandy, submerged aquatic vegetation, hard bottom or unknown), especially when using a 4 pi light meter over white, sandy sediments.	Yes - bottom type observed from surface &/or anchor & recorded or recorded as unknown if undetermined	Yes - bottom type observed from surface &/or anchor & recorded or recorded as unknown if undetermined	Yes - bottom type observed from surface &/or anchor & recorded or recorded as unknown if undetermined	Yes - bottom type observed from surface &/or anchor & recorded or recorded as unknown if undetermined	-
MISCELLANEOUS					
Multi-parameter sampling meter values (pH, DO, salinity, temperature) recorded to nearest 0.01 values; conductivity readings recorded to nearest unit.	Yes - values for pH, DO, salinity & temperature recorded to .01 units & conductivity recorded to nearest unit	Yes - values for pH, DO, salinity & temperature recorded to .01 units & conductivity recorded to nearest unit	Yes - values for pH, DO, salinity & temperature recorded to .01 units & conductivity recorded to nearest unit	Yes - values for pH, DO, salinity & temperature recorded to .01 units & conductivity recorded to nearest unit	-
Multi-parameter sampling meters calibrated before & after each trip; post-sampling calibration done within 24 hours; data managers notified of failures ASAP & no later than before WIN upload.	Yes - YSI calibrated in lab before & after sampling event. Calibration log provided.				
Each CCHMN partner will participate in a minimum of 2 RAMP meetings annually.	Yes - FDEP staff attended all RAMP meetings held within the last 12 months.				
NOTES					
General	Sampling conducted according to SOPs & in technically sound manner.				
Misc.	Use 4pi sensors for Licor. Chl stored in ice. pH strips used after preservative added.				
Things to Watch					
Discussion for Annual Meeting Based on All FY2019 Field Audit Results	Chl storage. Optical Modeling/Licor. Updates to lab methodologies in SOP.				