



PROJECT PREPARATION STATUS & TREND NETWORKS



Lana Neff
Watershed Monitoring
Section
March 2024



TOPICS

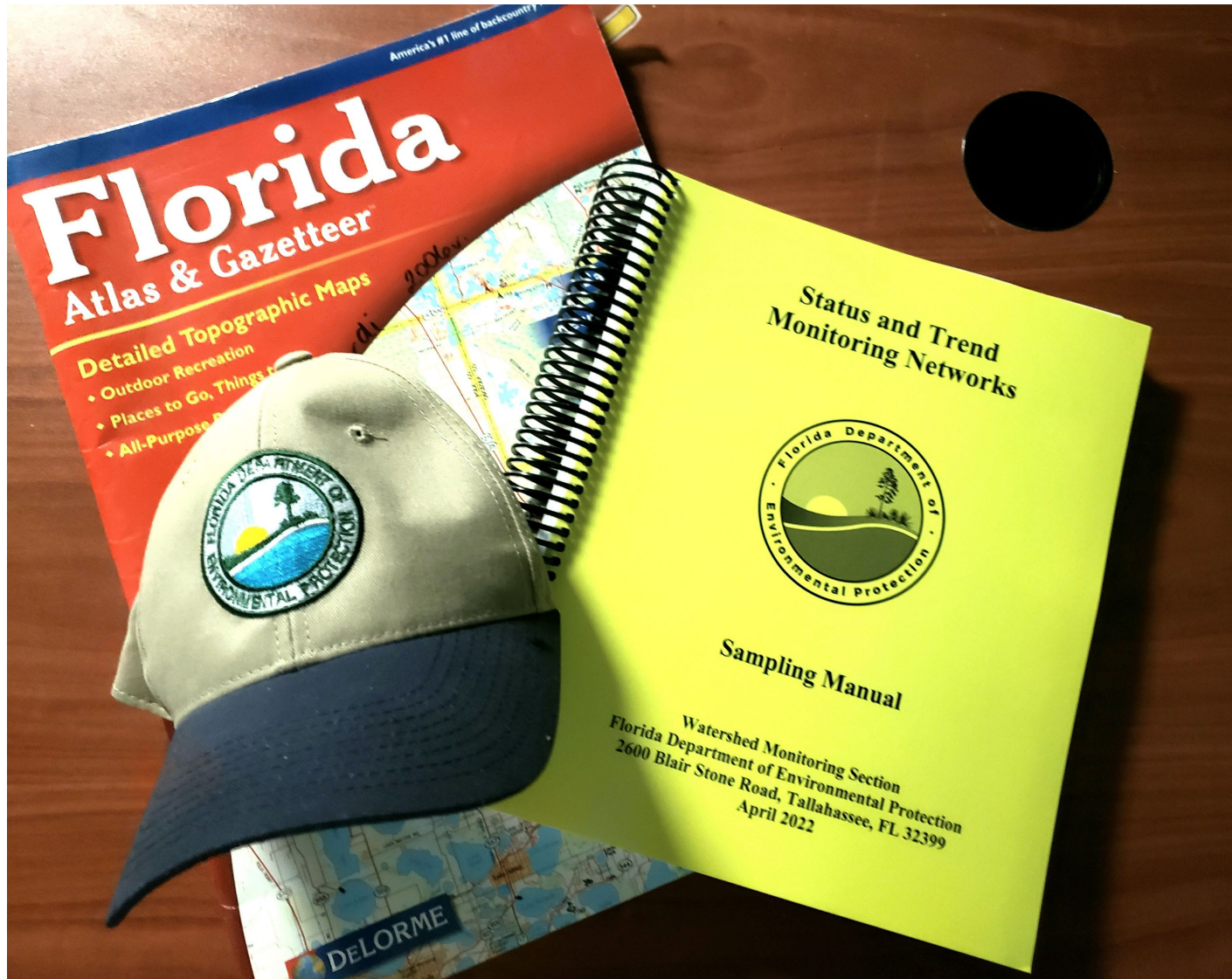
- Scheduling
- Permission
- Supplies
- Site Visit
- Safety





SAMPLING MANUAL - SECTION 2

**ALWAYS
Refer
to the
Sampling
Manual**





WATERSHED MONITORING INFORMATION CENTER

[\[To Parent Directory\]](#)

12/13/2021	9:09 AM	227940	Contacts.pdf
5/23/2019	9:08 AM	243902	Q-Meetings.pdf
12/28/2021	4:30 PM	171118	Sampling-Information.pdf



Florida Department of Environmental Protection Watershed Monitoring Information Center

Sampling Information

The information presented below is intended for use by staff who collect environmental data for the Florida Department of Environmental Protection (DEP) Status Network and Trend Network projects. The information presented below is not intended to be used for other monitoring projects. Please visit the [DEP Quality Assurance website](#) for general guidelines for other monitoring projects.

Status & Trend - Sampling Information Sections

- [Standard Operating Procedures \(SOPs\) & Manuals](#)
- [Sampling Schedule](#)
- [Data Entry Applications](#)
- [Trimble GNSS / GPS Unit Resources](#)
- [Field Sheets and Sampling Resources](#)
- [Map Direct Resources](#)
- [Sampling Training Workshop Presentations](#)
- [Status Network & Trend Network Reports](#)

NEW - Survey123 Quick Links

- Status & Trend Networks Survey123 Instructions
 - [Instructions for DEP ROC staff](#)
 - [Instructions for Non-DEP staff](#)
- Status Network Trimble Data Dictionary for use with Survey123
 - [2022 Status Network Trimble Data Dictionary](#)
- Paper versions of field sheets (keep in vehicle as backup documentation method)
 - [Custody Sheet Cover Page \(Oct. 2020\)](#)
 - [Surface Water Field Sheet \(Jan. 2022\)](#)
 - [Groundwater Field Sheet \(Oct. 2021\)](#)
 - [Micro Land Use \(Oct. 2020\)](#)
- Status & Trend Networks Survey123 Training Presentations
 - [DEP ROCs \(Groundwater & Surface Water\)](#)
 - [NFWFMD \(Groundwater & Surface Water\)](#)
 - [Alachua Co. \(Groundwater only\)](#)
 - [SFWMD \(Surface Water only\)](#)
- Tablet Computer Operations Manuals
 - [DEP ROCs](#)
 - [WMS Contractors](#)

<http://publicfiles.dep.state.fl.us/dear/watershed%20monitoring/Info%20Center/>



WATERSHED MONITORING INFORMATION CENTER

- SOPs
- Sampling Schedules
- Permission Letters
- Log Books
- Field Sheets
- Custody Sheets
- Bioassessment Sheets
- Trimble Resources
- GWIS App Link
- Map Direct
- Sampler Training Presentations





SCHEDULING

1 Month Before the Quarter Begins





SUBMIT PROJECT SAMPLING SCHEDULE TO QA OFFICER

- # of Samples per week
- Total # of coolers
- # of boxes of acids needed

agency	project	begin date	# samples	# blanks	total	RQ#	Comments	Need Acid Vials
South ROC	Z5CN1901	January 7, 2019	8				4 coolers	Yes - 1 case each
South ROC	Z5CN1901	January 14, 2019	7				4 coolers	No
South ROC	Z5CA1902	February 4, 2019	10				10 coolers	Yes - 1 case each
South ROC	Z5CA1902	February 11, 2019	10				10 coolers	No



QA OFFICER WILL ADD:

- Number of blanks
- Total # of samples
- RQ #

agency	project	begin date	# samples	# blanks	total	RQ#	Comments	Need Acid Vials
South ROC	Z5CN1901	January 7, 2019	8	2	10	RQ-2019-01-07-16	4 coolers	Yes - 1 case each
South ROC	Z5CN1901	January 14, 2019	7	1	8	RQ-2019-01-14-13	4 coolers	No
South ROC	Z5CA1902	February 4, 2019	10	2	12	RQ-2019-02-04-15	10 coolers	Yes - 1 case each
South ROC	Z5CA1902	February 11, 2019	10	2	12	RQ-2019-02-11-10	10 coolers	No

Completed Schedules Posted on WM Info Center



WMS TALLAHASSEE WILL:

- Load RQ #s into **GWIS** database

GWIS

Div of Environmental Assessment and Restoration

- Print Site ID (barcode), QA/QC Blank & RQ Labels
 - Check labels for accuracy
 - Mail or deliver to samplers





SITE ACCESS & PERMISSION (STATUS SITES)

1 - 2 Months Before Sampling Begins

KEY	Sampled	Sampleable	Field Recon	Contact Owner	Waiting for reply	Exclude	Additional confirmation needed
pk_random_sam	STATION_ID	STATION_NAME	STATION_ALIAS	STORET_IDENTIFIER	FLORIDA_UNIQUE_WEL	RESOURCE	REPORTING_UNIT
Z4-CA-15001	856	MURRAY ROAD FL		274848081302201	AAK9625	CONFINED , ZONE 4	
Z4-CA-15002	682	WILLIAM PITTMAN-HRS		271533082190201		CONFINED , ZONE 4	
Z4-CA-15003	1033	J ALSTON WELL		281037082071801	AAN1948	CONFINED , ZONE 4	
Z4-CA-15004		CLEARWATER WELL 67	103060-F			CONFINED , ZONE 4	
Z4-CA-15005	594	ROMP 14 SH FLORIDAN		270856081211401	AAI3027	CONFINED , ZONE 4	
Z4-CA-15006	4471	272701081380801		272701081380801	AAK9620	CONFINED , ZONE 4	
Z4-CA-15007		ROMP 43 UPPER INT				CONFINED , ZONE 4	
Z4-CA-15008	952	VALLE DR & PERIO ST		280210082291501	AAI 168	CONFINED , ZONE 4	
Z4-CA-15009	6517	270747081542501		270747081542501		CONFINED , ZONE 4	
Z4-CA-15010	24044	ROMP 62 - CAMPO	057263-F		AAI1679	CONFINED , ZONE 4	
Z4-CA-15011	6578	275530081432001		275530081432001		CONFINED , ZONE 4	
Z4-CA-15012	1068	JCT SR 52 & 581 WELL		281926082212901	AAN1910	CONFINED , ZONE 4	
Z4-CA-15013	649	MABRY CARLTON-HRS		271222082072101		CONFINED , ZONE 4	
Z4-CA-15014	5803	275703081523801		275703081523801		CONFINED , ZONE 4	



GET PERMISSION BEFORE SAMPLING

RETAIN CONTACT DOCUMENTATION

Private property:

- Need permission for all properties have to cross
- Document permission (3 attempts)
 - Mail a written permission form to owner
 - Verbal permission OK, but must document if granted

Government property:

- Contact agency for details about accessibility or well instrumentation
- Request keys for gates / wells

Florida Department of Environmental Protection
Verbal Permission Form

Please fill out when calling owner or contact for permission.

Random Sample Location: _____ Date: _____

Owner Name: _____

Mailing Address: _____

Owner Phone Number: _____

Physical Address: _____

Contact Phone Number: _____

Contact Name: _____

Contact Phone Number: _____

Email Address: _____

Comments: (call ahead, locked gates, dogs, make appointment, pick up key at office, etc.) _____

Send Results?

YES ___ Mail results to home address.

YES ___ Email results.

NO ___



DOCUMENT PERMISSION

Minimum Documentation Requirements:

- Random site number (e.g., Z5-SL-13007)
- Contact First & Last name
- Relationship of Contact to property
 - (e.g., *owner, tenant*)
- Conversation Date & Time
- Contact Phone Number
- Expected Sampling Date

- **Hazards / Obstacles (dogs, cattle, fences)**
- **Mailing Address & email for lab results**





LEGAL WAIVER PROPERTY OWNERS

Permission to Enter Property

Please make any corrections needed and sign below.

1. The undersigned real property owner, Owner Name ("Undersigned"), hereby give(s) permission to the State of Florida Department of Environmental Protection ("DEP") to enter the Undersigned's property located at Property Address ("the property").
2. This permission is specifically limited to the following activities which may be performed by DEP: description of site activities. For example: Ingress and egress across the property to make observations and take samples .
3. This permission expires in 4 months unless extended by the Owner Name ("Undersigned").
4. DEP employees are authorized to enter the property during normal business hours after confirming specific dates for site visits, and may also make arrangements to enter the property at other times with agreement from the Undersigned.
5. The Undersigned shall not be liable for any injury, damage or loss on the property suffered by DEP or its employees not caused by the negligence or intentional acts of the Undersigned, the Undersigned's agents or employees.
6. DEP acknowledges and accepts its responsibility under applicable law (Section 768.28, Florida Statutes) for damages caused by the acts of its employees acting within the scope of their employment while on the property.

Accepted by the following authorized person:

Signature of Undersigned (Property Owner)

Telephone Number

Print Name Date

Others who may be contacted for confirming specific dates for access:

Print Name

Print Name

Telephone Number

Telephone Number

Permission declined: ☐ NO I do not wish for my waterbody to be sampled by DEP.

Accepted by the State of Florida Department of Environmental Protection by the following authorized agent:

Signature of DEP Representative

Print Name

Date

Additional Information to be completed by Property Owner:

Comments: (locked gates, new wells recently installed, dogs, stream or lake is dry, etc.)

I would like a copy of the analytical results from my waterbody.

YES ☐ NO ☐ Please mail a hard copy of the results to the following address:

YES ☐ NO ☐ Please email an electronic copy of the results to the following address:

Please send this form to:

Name

Florida Department of Environmental Protection

Choose an item.

Choose an item.

Email Address

Site Id



- [illegible]



SUPPLIES



1 - 4 Weeks
Before
Sampling
Begins



INVENTORY SUPPLIES

MONTHLY

- **Conductivity Standards and pH buffers (**check expiration dates**), gloves, Kimwipes, resealable (Ziploc) bags, etc. -** Teams are responsible for purchasing these items.
- **Formalin** – Recycled buffered formalin available from DEP lab (must pick up - cannot be mailed). Can also be purchased from MFMP state contracted vendor.
- **Acids for Preservation (**check expiration dates**)** – DEP lab includes sulfuric and nitric acid vials with sample bottle kits.
- **GW Filters** – Contact the WMS QA Officer at least 3 weeks in advance to order.
- **Station ID Labels, RQ Labels** - Contact QA Officer or Tommy Seal (850-245-8514) if you need replacement labels





CHECK EQUIPMENT REGULARLY



- Check that vehicles, boats, and equipment are functional/clean
 - *Check settings & battery charge on equipment*
- If possible, bring backup sampling equipment
- Ensure that all equipment and supplies needed for bioassessment are organized and complete



DEP LAB WILL:

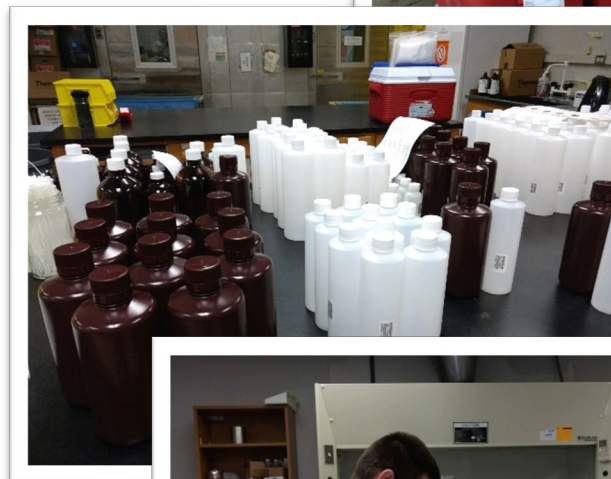
- Print packing list + bottle & cooler labels
- Pack coolers with:
 - Sampling kits
 - Temperature bottle
 - Return FedEx handle tag
 - Large plastic bag

Kits shipped ~1 week before sampling

Make sure kits have arrived!

Check containers for damage

Problems? Call Project Manager / QA Officer





COMPARE CONTAINER LISTS

Upon receipt of coolers:

- Inventory all containers
- What You Got:** Check lab packing list



Cooler Packing Worksheet for Request: RQ-2015-08-31-26			
WMS Training Course - Surface Water & Sediments			
Ship Cooler On: 8/17/2015		Requester: Stephanie	
Customer/Project: AMBIENT/STATUS		Priority: 4	
850-245-8517 2600 Blair Stone Rd. Tallahassee, FL 32399 Attn: Stephanie Sunderman-Barnes			
Comments: No preservatives needed. These kits are for training purposes only. No samples will be turned in for analysis. No extra coolers.			
Requested Analyses:			
Group: A	# of Sites: 1		
Container ID: BP-1L	Qty: 1	Preservation: ICE	Lot # <u>1149272</u>
Description: Brown Plastic Bottle 1L			
ysis	Description		
UITE-W	Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry		
250ML-WO-THI	Qty: 2	Preservation: ICE	Lot # <u>415126</u>
ysis	Description		
I-18QT	Escherichia coli by Colilert 18 QuantiTray method - non-chlorinated water systems		
4-QT	Enterococci by Enterolert Quanti-Tray method - non-chlorinated water systems		



WHAT YOU GOT = WHAT YOU NEED

Upon receipt of coolers:

■ What You Need:

Compare Sample Details Page (paper version) to lab packing list

- Missing items? Call QA Officer or your Project Manager

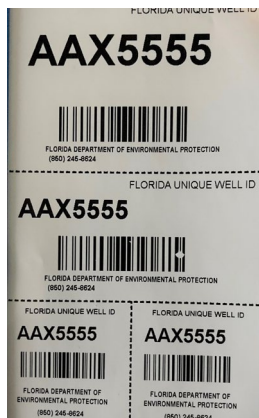
Cooler Packing Worksheet for Request: RQ-2015-08-31-26
WMS Training Course - Surface Water & Sediments

Lab Page 2 of 3

RQ-2021-10-11-22		Collected By (Agency Code): 8050			
Project Name: Z6UA2110		Sampler Names: Sabrina Fischer, Charlie Hoey, Andrew Luering			
Customer: AMBIENT		Lab Project ID: STATUS			
 Site Location: Z6-UA-15013  Field ID: Z6-UA-15013				Comments: Sulfuric Acid Lot #: SA1105060 Nitric Acid Lot #: NA0344060	
Matrix: W-GROUND				✓ Grab	
Date Collected	Time Collected	D.O. (% SAT)	Temp (°C)	pH (SU)	Sp. Cond. (umhos/cm)
10/14/2021	10:50 ETZ	6.4	25.3	6.45	1008
Check Boxes for Each Container Submitted to Lab			Preservation (Must be completed within 15 min of sample collection)		# Bottles sent to Lab
Parameter Suite	Lab Test Codes Trend Core	Lab Test Codes Status Core	Lab Test Codes Special Projects		Bottle Group
Nutrients (P-500ML)	W-NH3 / W-NO2NO3 / W-S-T-P / W-TKN / W-TOC	X W-NH3 / W-NO2NO3 / W-S-T-P / W-TKN / W-TOC	X 2ML H2SO4	X pH < 2 X Ice	1
Metals (P-500ML)	W-HARD / W-ICP / W-ICPMS	X W-HARD / W-ICP / W-ICPMS	X 2ML HNO3	X pH < 2 X Ice	1
Anion / Phys. Aggregate (P-1L)	ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TDS	X ALKALINITY / TURBIDITY / W-CL-IC / W-COLOR / W-COND / W-F / W-SO4-IC / W-TDS	W-TSS X Ice		1
Microbiology (P-250ML or P-1200ML)	ECOLI-18QT / TCOLI-18QT	X ECOLI-18QT / TCOLI-18QT	X Ice		2
Filtered Nutrient (P-125ML)	W-PO4-F		Field Filtered w/ in-line 0.45 um PES filter	X Ice	



FLUWID Tag Label



CHECK PAPERWORK BEFORE EACH PROJECT

Need to have:

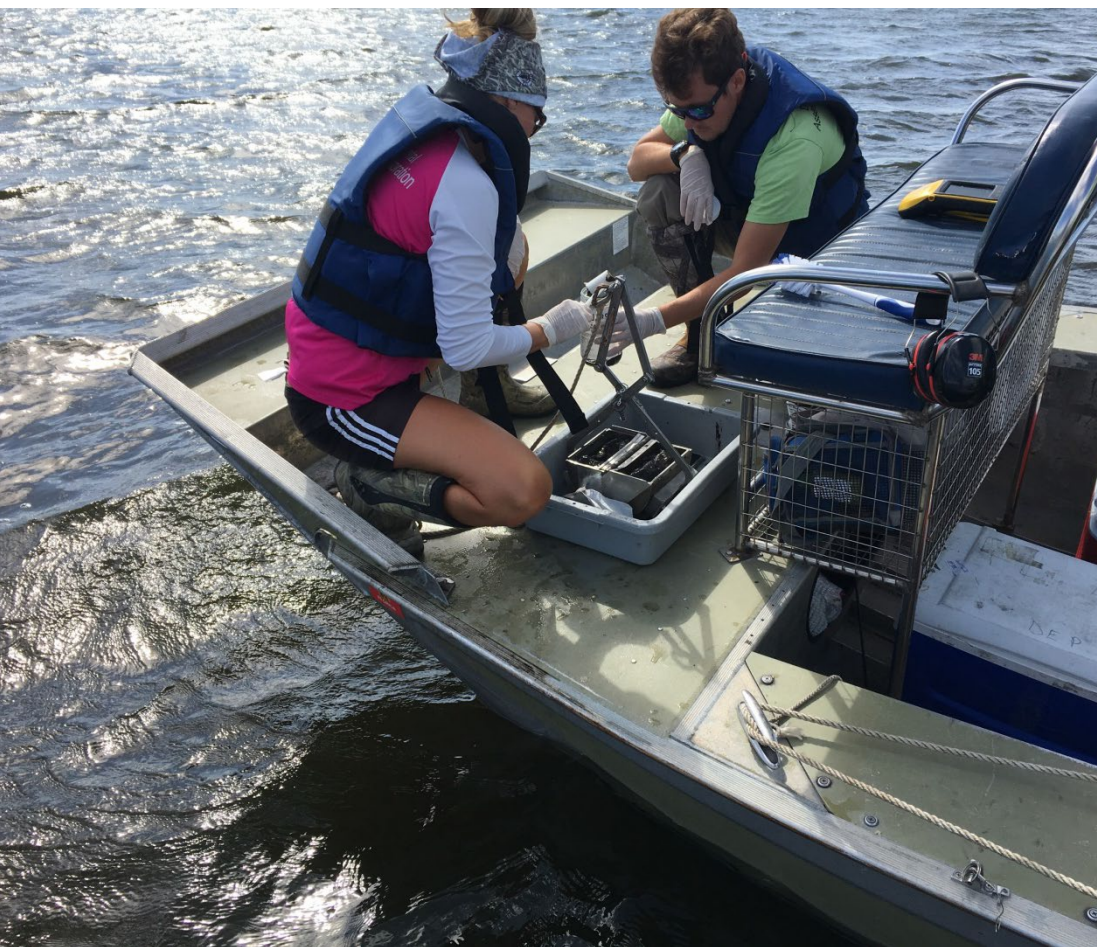
- Tablets (fully charged)
- **Spare Field Sheets (paper)**
- Custody Sheet Cover Page (paper) 10/2020
- Bioassessment Forms
- Labels: Station ID, Blank, RQ
- Extra FLUWID tags (new wells)
- Algal ID & Plant ID Labels
- FedEx Pre-printed handle tag





SITE VISITS

0 - 7 Days
Before
Sampling





STATUS GW – RECOMMEND: REVIEW HISTORICAL SITE INFO

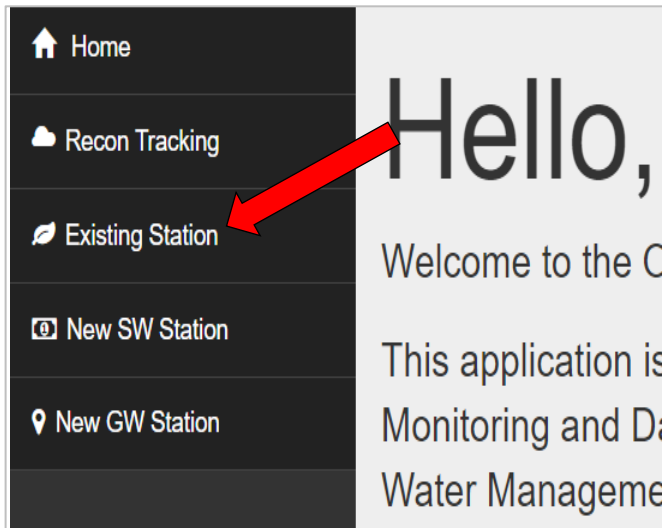
- **GOAL:** Looking for most recent Random ID #
- Can get clues about average purge time, access & safety issues, photos
- Helpful for trip planning





FINDING HISTORICAL INFO - GWIS

1. Select Existing Station



2. Enter the FLUWID # (from the Export file) and press the View Results button

Existing Station

Station ID:

Station Name:

Status Random Site ID:

Water Resource:

Waterbody Name:

County:

Agency Maintaining Info:

Hydrologic Unit Name:

Florida Unique Well ID:



FINDING HISTORICAL INFO - GWIS

Existing Station Results

Selection Criteria:

Florida Unique Well ID = AAI3181;

Station ID	Station Name	County	WMD	District	Waterbody Type	Water
830	ROMP CL-3 FLORIDAN	POLK	SOUTHWEST FLORIDA WMD	SOUTHWEST DISTRICT	AQUIFER	CONFI

3. On the results screen, click the Station ID link

Ground Water Station Update

4. On the station update screen, find the Random Sample ID

5. Find site file & read sampler info

Changes to any information not editable in this form should be made by the Data Manager and Database Manager.

Identifier

STATION ID: 830
STORET ID: 274545081342501
RANDOM SAMPLE 24-CA-8024
LOCATION ID:
FL UNIQUE WELL ID: AAI3181
STATION NAME: ROMP CL-3 FLORIDAN
STATION DESCRIPTION:



INVENTORY SUPPLIES WITH CHECKLIST

- Use a checklist to be sure you have the equipment and supplies you will need for each day's sampling trip



- Keep all supplies & equipment organized in order to locate them quickly.



FIELD SAFETY

- **DEAR Field Safety Manual**
- DEP Field Safety Class
- Boat Safety Class
- Tool Use (winches, machetes, etc.)
- Float Plans
 - If using a boat
 - If sampling alone





PREPARATION = TEAMWORK

- ***At least two*** samplers for each sampling event. At least one sampler must have attended this sampler training course.
- Necessary for safety, efficiency, QA/QC . . . and more fun ☺
- Although not recommended... if solitary sampling must be conducted, talk to your supervisor & file a “float plan”



I have no idea, but it's a good thing there's two of us to figure it out





ALWAYS BRING SAFETY EQUIPMENT

- **Protective eyewear**
- Eye wash
- Sunscreen, Bug spray
- **ORANGE SAFETY VESTS**
- **ROADSIDE CONES / SIGNS**
- First Aid kit
- Poison ivy wash
- Prescription epi-pens for insect stings, if needed
- Formalin spill clean-up kit (for SCI samples)
- COVID-19 masks





MOSQUITOS & TICKS

- **DEET** (Short-Term Repellant)
 - Repels mosquitos and ticks
 - Apply to **exposed skin & clothes** (but not under clothes)
 - **CON: Can damage synthetic fabrics & plastics**
- **Permethrin** (Kills Ticks & Mosquitos)
 - Apply to clothes – Spray outdoors on **clothing** and let dry. **Do not apply to skin.**
 - **CON: Persistent; remains after several washings**
 - **CON: Toxic to cats!**





Guide to Florida's Venomous Snakes



Southern Copperhead,
Copperhead,
Highland Moccasin,
Chunkhead



Cottonmouth,
Florida Cottonmouth,
Water Moccasin



Eastern Diamondback
Rattlesnake,
Rattlesnake, Rattler



Timber Rattlesnake,
Canebrake Rattlesnake



Dusky Pigmy Rattlesnake,
Pigmy Rattler,
Ground Rattler



Eastern Coral Snake,
Coral Snake





TAKE HOME MESSAGE: PLAN AHEAD! BE PREPARED!

Horror Stories from the field...

- Samplers brought a 25' YSI cable for the sonde to sample a site with a 50' drop from a bridge
- After a long drive, samplers discovered a dam blocked the south access and a secure military facility blocked the north
- During an audit, samplers forgot field sheets and bottles (oops!)
- When their boat motor conked out, samplers discovered they were "up a creek without a paddle"



QUESTIONS???

Lana Neff
Project Manager
850-245-8321

Rachael Dragon
WMS QA Officer
850-245-7544