



*Florida Department of
Environmental Protection*

Watershed Information Network WIN Project Phase 1

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Monitoring Data Uses

- DEP uses of monitoring data (currently through Florida STORET) include but are not limited to:
 - Assessment of waters for purposes of the Impaired Waters Rule (IWR)
 - Development of:
 - Total Maximum Daily Loads (TMDL)
 - Basin Management Action Plans (BMAP)
 - Strategic Monitoring Plans (SMP)
 - Water Quality Criteria
 - Providing data as required to U.S. EPA and to the public





Watershed Information Network

- WIN will address the needs for a centralized environmental data management platform (excluding regulatory databases) as a replacement of Florida STORET
- Several phases of WIN for manageability, to be phased in as time and budget allow
- Currently engaged in Phase 1
- Phase 1 addresses front-end quality assurance, data input, storage, reporting, and extraction of Surface Water, Ground Water and Continuous Monitoring station and result data





WIN Phases

- Subsequent WIN phases will address:
 - Front-end quality assurance, data input, storage, reporting and extraction of biological data (including biological indices and habitat assessment data and perhaps taxonomic data)
 - Program-specific modules (e.g., for management of IWR and TMDL analysis decisions)



WIN Goals and Requirements

- Better assessments based on improved quality data
 - Front end quality screening and correction within pre-published tables
- System stability & efficiency
 - Web-based instead of local installations
- Provide a scalable framework
 - Serve as the comprehensive centralized environmental data repository for DEAR
- Provide an Audit Trail
 - Lifecycle of a record maintained in history tables
- Spatial component
 - GIS-based public access which provides data query & retrieval capabilities





WIN Phase 1 Project

- **April, 2012:** Hired a contractor, Enterprise 24x7, inc., to conduct Analysis & Design for WIN Phase 1
 - Documenting DEP program (business) and system requirements towards specifications for WIN Phase 1
- **June 2013:** WIN Phase 1 Analysis & Design project with e24x7, inc. is scheduled to be completed
- At the conclusion of Analysis & Design, DEP will:
 - consider the recommended “solution”
 - contract for and initiate construction and implementation of WIN Phase 1





WIN Phase 1 Project

Since April, 2012, e24x7,inc. has:

- Reviewed background documentation from past STORET replacement efforts
- Engaged with DEP staff in more than 30 joint requirements planning (JRP) sessions towards:
 - Understanding “As-Is” business processes
 - Determining Department and Program Minimum Data Quality Standards Requirements
 - Developing the WIN Phase 1 “To-Be” business process flow





Requirements and Responsibilities

- Must establish DEP requirements to be able to do our jobs
- Utilize resources (data sources) as efficiently as possible



Requirements and Responsibilities

- Must establish DEP requirements to be able to do our jobs
 - Federal requirements
 - Clean Water Act – (e.g., monitoring & assessment through IWR)
 - Water Quality Exchange (WQX)
 - Statutory requirements
 - DEP responsibilities to provide an environmental data management system, ensuring it meets data quality requirements
 - Data provider responsibilities to provide data to DEP
 - FDEP Rule requirements
 - QA Rule
 - Program rules and requirements (e.g., IWR)



Requirements and Responsibilities

- Utilize resources (data sources) as efficiently as possible
 - Efficiencies in accessing monitoring data from a variety of sources (not duplicating efforts)
 - Necessities and benefits of providing a quality foundation of data from pooled resources
 - Assuring pooled data are accessible and usable



WIN Phase 1 Project

- DEP and contractor currently “in the thick” of documenting DEP requirements
- Before year’s end we intend to engage with data providers on:
 - Survey
 - MDQS



WIN Phase 1 Project MDQS

- **Survey** to data providers to gather information such as (draft examples):
 - Do you have technical staff on site to modify your existing deliverable for the purposes of WIN?
 - Related to Ground Water Monitoring Locations: Would you have difficulty reporting the following attributes in feet: well casing depth, well total depth, well screen begin depth, well screen end depth?
 - Can your lab(s) produce an ADaPT deliverable?
 - Can you submit monitoring locations in Decimal Degrees or Degrees Minute Seconds?



WIN Phase 1 Project MDQS

- **MDQS** to data providers for comment
 - MDQS are what we need to do our jobs
 - Response from data providers about ability to provide data to these MDQS
 - Assistance to DEP in clarifying or in adding anything we may have missed
 - e.g., particular interest in additional scrutiny for groundwater MDQS, since prior DEP STORET experience is with surface water

Example of MDQS review format

WIN Deliverable MDQS: Organization

The Organization represents the entity responsible for sampling the Water Quality data and providing data into WIN.

Data Element Name	Data Type	Definition	Required	SVL	WIN Minimum Standard Error Checks	Provided By Data Provider	DEP-EPA SVL Relationship
Organization ID	Text(30)	The Organization ID is the unique identifier of the State, Federal, local, academic, commercial, volunteer, or other agency responsible for and in ownership of retrieved data. This identifier is assigned by Florida Department of Environmental Protection in cooperation with US Environmental Protection Agency.	Yes	No (WQX Domain List)	- Organization ID must be unique within WQX (through EPA approval. EPA gave DEP authority to name an org as long as it is within WQX-IT constraints and DEP communicate this new org to EPA such that EPA can update WQX SVL). - Organization ID must exist in WIN through the approval of a WIN Coordinator - SVL check against "WQX Domain List" to be entered the first time. - EPA_ORG_ID must be unique in WIN.	No	1:1
Organization Name	Text(120)	The formal full-length name of the Organization.	Yes	No (WQX Domain List)	Organization Name must be unique within WIN	Yes	1:1
Organization Type	Text(TBD)	The code that describes the type of organization (e.g., Federal, Local-County, Local-City, FDEP, Local-WMD, Local-Other, NERR/NEP, Private Industry, Private Non-Industrial, Volunteer, Tribe, Academia).	Yes	Yes	SVL check against WIN Domain Values	Yes	1:1
OrgInternetAddress	Text(120)	Text used to specify the Internet Address for a given data provider point of contact.	No	No	(NOTE: for purposes of WQX submission, WQX attributes: ElectronicAddressTypeName will be set to 'Internet' and ElectronicAddressText = OrgInternetAddress)	Yes	
OrgDescription	Text(500)	Information that further describes an organization.	No	No		Yes	
OrgStatus	Text(30)	Code used to describe the "status" of the organization in WIN (e.g.: requested, denied, approved-active, etc.)	Yes	Yes	SVL check against WIN Domain Values	No	



Example Basis of MDQS review format

Florida ADaPT Laboratory Deliverable Specifications

Data Element Name	Data Type	Description	Required	SVL	Error Check
Client_Sample_ID	Text(35)	Client's identifier for a sample. If a sample is analyzed as a duplicate, matrix spike, or matrix spike duplicate, append suffixes "DUP", "MS", and "MSD" respectively. For Lab QC samples such as blanks and LCS enter the LabSampleID in this field	Yes	No	• Not null • Length ≤ 35 • Correct naming convention for Lab Duplicates, MS, and MSD samples
Lab_Analysis_Ref_Method_ID	Text(80)	The laboratory reference method ID. Standard values for methods are specified by Florida DEP and SFWMD.	Yes	Yes	• Not null • Length ≤ 80 • SVL check against project library
Lab_Sample_ID	Text(50)	Laboratory tracking number for field samples and laboratory generated QC samples	Yes	No	• Not null • Length ≤ 50
LabID	Text(7)	Identification of the laboratory performing the analysis. Use DOH certification number if possible	Yes	Yes	• Not null • Length ≤ 7 • SVL check against ADaPT standard value list
Client_Analyte_ID	Text(30)	Unique identifier for an analyte name. This is typically the CAS number, NELAC number, or Florida specified ID number	Yes	Yes	• Not null • Length ≤ 30 • SVL check against ClientAnalyteIDs entered in the project library • Completeness (in the project target analyte list for the method and matrix or reported as a spike or surrogate for the method and matrix as applicable)
Analyte_Name	Text(60)	The chemical name for the analyte. Values for Analyte Names are specified by Florida DEP and SFWMD.	Yes	Yes	• Not null • Length ≤ 60 • SVL check against Analyte Names entered in the project library for a method and matrix • Spikes reported in EDD for LCS and MS/MSD match project library for method and matrix • For organics, correct surrogates are reported according to the method requirements as established in the project library



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