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# Entity Type Definition

Model : STORET PROD SYSTEM V1.1

Subset: (complete model)

Dec. 29, 1998 17:25

**Entity Type:** ABSOLUTE\_LOCATION\_POINT

Description: The latitude and longitude and optionally the elevation of various points associated with a Sampling Station.

Types of Absolute Location Points (ALP) include:

- Point of Record
- Boudary Point
- Sampling Point
- End of Pipe
- Well Head
- Transect Origin
- Grid Origin

Additional information recorded about an ALP is the accuracy of its determination and the method used.  
This entity implements the EPA Locational Data Policy.

Relationships between a Station and various Geopolitical descriptors are implemented using the latitude and longitude of the Point of Record.  
Geopolitical descriptors of the Station can include:

- State/Province/County
- FIPS Hydrologic Unit
- EPA RF1 River Reach
- EPA RF3 River Reach
- SCS Watershed
- EcoRegion
- Native American Land
- Ocean/Estuary/Great Lake

Subject area: GEOGRAPHIC\_AREAS

Properties: Persistent

- Open
- Min Occ: 300000 Avg Occ: 3000000
- Max Occ: 6000000 Growth Rate: 5% per year
- TD Name: TSMALP

Attributes: TSMALP\_IS\_NUMBER

- TSMALP\_ORG\_ID
- TYPE\_CODE
- SEQUENCE\_NUMBER
- TBD\_ELEVATION\_DATUM\_CODE
- TBD\_ELEVATION\_METHOD\_CODE

ELEVATION\_MEASUREMENT\_DATE  
 ELEVATION\_MEASURE  
 ELEVATION\_UNIT\_CODE  
 TBD\_GEOPOSITIONING\_DATUM\_CODE  
 TBD\_GEOPOSITIONING\_METHOD\_CODE  
 GEOPOSITIONING\_SCALE\_TEXT  
 LATITUDE\_DIRECTION  
 LATITUDE\_DEGREE\_MEASURE  
 GPS\_LATITUDE\_DEGREE\_MEASURE  
 GPS\_LATITUDE\_MINUTE\_MEASURE  
 GPS\_LONGITUDE\_DEGREE\_MEASURE  
 GPS\_LONGITUDE\_MINUTE\_MEASURE  
 LATITUDE\_MINUTE\_MEASURE  
 LATITUDE\_SECOND\_MEASURE  
 LONGITUDE\_DIRECTION  
 LONGITUDE\_DEGREE\_MEASURE  
 LONGITUDE\_MINUTE\_MEASURE  
 LONGITUDE\_SECOND\_MEASURE  
 LAT\_LONG\_MEASUREMENT\_DATE  
 TBD\_LAT\_LONG\_ACCURACY\_MEASURE  
 TBD\_LAT\_LONG\_ACCURACY\_UNIT\_CODE  
 TBD\_LONGITUDE\_ACCURACY\_MEASURE  
 TBD\_LONGITUDE\_ACCURACY\_UNIT\_CODE  
 RF3\_RIVER\_REACH\_CODE  
 RF1\_MILEAGE\_MEASURE  
 ON\_RIVER\_REACH\_INDICATOR\_CODE  
 NRCS\_WATERSHED\_ID\_NUMBER  
 D\_USERID\_CODE  
 D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IALP01 (Primary)  
 TSMALP\_IS\_NUMBER  
 TSMALP\_ORG\_ID

**Entity Type:** ACTUAL\_ACTIVITY\_LOCATION

Description: (V30.1.0) Additional information describing the location where the Field Activity took place.

If the Field Activity did not take place at an Absolute Location Point, the Additional Location Information might include the distance, bearing and vector from a known Absolute Location Point.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open  
 Min Occ: 500000 Avg Occ: 1000000  
 Max Occ: 2000000 Growth Rate: 5% per year

TD Name: TSRAAL

Attributes: TSRAAL\_TYPE\_NAME  
BOTTOM\_DEPTH\_MSR  
BOTTOM\_DEPTH\_UNIT\_CD  
ADDITIONAL\_LOCATION\_INFO\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IAAL01 (Primary)  
TSRAAL\_TYPE\_NAME  
IS\_CONDUCTED\_AT ABSOLUTE\_LOCATION\_POINT  
PLACES FIELD\_ACTIVITY

**Entity Type: ADDRESS**

Description: The various addresses associated with the Organization,  
and the date on which each became effective.

These addresses include:

Located At  
Shipping  
Mailing

Subject area: ADDRESSES

Properties: Persistent

Open  
Min Occ: 5000 Avg Occ: 150000  
Max Occ: 500000 Growth Rate: 5% per year  
TD Name: TSMADDR

Attributes: TSMADDR\_IS\_NUMBER  
TSMADDR\_ORG\_ID  
TYPE\_CODE  
START\_DATE  
LINE\_ONE\_TEXT  
LINE\_TWO\_TEXT  
LINE\_THREE\_TEXT  
LINE\_FOUR\_TEXT  
STATE\_POSTAL\_CODE  
ZIP\_CODE  
COUNTRY\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IADDR01 (Primary)  
TSMADDR\_IS\_NUMBER  
TSMADDR\_ORG\_ID

**Entity Type:** ALP\_METHOD\_DATUM\_ASGMT

Description: <None>

Subject area: GEOGRAPHIC\_AREAS

Properties: Persistent

Open

Min Occ: 30000 Avg Occ: 3000000

Max Occ: 6000000 Growth Rate: 0% per year

TD Name: ALP\_METHOD\_DATUM\_ASGMT

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IAMDA01 (Primary)

MEASURES ABSOLUTE\_LOCATION\_POINT

IS\_DESCRIBED\_BY METHOD\_AND\_DATUM

**Entity Type:** ANALYTICAL\_EQUIPMENT

Description: The primary piece of equipment employed by the  
Analytical Procedure which is responsible for the  
result value for the target Characteristic(s).

Subject area: ANALYTICAL\_PROCEDURES

Properties: Persistent

Open

Min Occ: 500 Avg Occ: 10000

Max Occ: 15000 Growth Rate: 5% per year

TD Name: TSRANLEQ

Attributes: TSRANLEQ\_IS\_NUMBER

TSRANLEQ\_ORG\_ID

TYPE\_NAME

NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IANLEQ01 (Primary)

TSRANLEQ\_IS\_NUMBER

TSRANLEQ\_ORG\_ID

**Entity Type:** ANALYTICAL\_PROCEDURE

Description: >>> Analytical Procedures may be National or

Org-Specific; both types must have a Citation.

>>> Results for Chemical Characteristics must be assigned to an Analytical Procedure that has Analytical Equipment.

Methodology guidelines used to obtain a Result. An analytical procedure may be cited in a formal reference document and/or may be associated with a piece of analytical equipment. The Analytical Procedure will contain field and lab analytical procedures.

Subject area: ANALYTICAL\_PROCEEDURES

Properties:Persistent

Open

Min Occ: 3000 Avg Occ: 5000

Max Occ: 10000 Growth Rate: 5% per year

TD Name: TSRANLPR

Attributes: TSRANLPR\_IS\_NUMBER

TSRANLPR\_ORG\_ID

OWNER\_TYPE\_CODE

PROCEDURE\_ID

NAME

SOURCE\_NAME

SOURCE\_ACR

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IANLPR01 (Primary)

TSRANLPR\_IS\_NUMBER

TSRANLPR\_ORG\_ID

**Entity Type:** AUTOMATED\_DATA\_LOGGER

Description: <None>

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 2500 Avg Occ: 75000

Max Occ: 250000 Growth Rate: 5% per year

TD Name: TSRADL

Attributes: TSRADL\_IS\_NUMBER

TSRADL\_ORG\_ID

IDENTIFICATION\_CODE

MEDIUM\_TYPE\_NAME

SERIAL\_NUMBER  
MODEL  
MAKE  
INSTALL\_DATE  
INSTALL\_TIME  
REMOVAL\_DATE  
REMOVAL\_TIME  
COMMENT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IADL01 (Primary)  
TSRADL\_IS\_NUMBER  
TSRADL\_ORG\_ID

**Entity Type:** BIOLOGICAL\_PART

Description: The portion of an organism on which analysis will be done.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open  
Min Occ: 100 Avg Occ: 150  
Max Occ: 200 Growth Rate: 5% per year  
TD Name: TSRBIOPT

Attributes: TSRBIOPT\_IS\_NUMBER  
TSRBIOPT\_ORG\_ID  
NAME  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IBIOPT01 (Primary)  
TSRBIOPT\_IS\_NUMBER  
TSRBIOPT\_ORG\_ID

**Entity Type:** BIOLOGICAL\_RESULT\_GROUP

Description: Created when the organisms in a biological sample are grouped for enumeration and/or description purposes.  
The individuals in a single biological sample may be grouped and regrouped in many different ways.

Examples include:

1. population census by taxon (non- duplicative species count)
2. Coliform bacteria census by taxon



3. Single taxon frequency class
4. Single taxon group summary
5. Single taxon individual

Subject area: RESULTS

Properties: Persistent

Open

Min Occ: 100 Avg Occ: 5000

Max Occ: 100000 Growth Rate: 10% per year

TD Name: TSRBRG

Attributes: TSRBRG\_IS\_NUMBER

TSRBRG\_ORG\_ID

IDENTIFICATION\_CODE

TYPE\_NAME

TYPE\_INDICATOR

SEX\_NAME

LIFE\_STAGE\_NAME

VALUE\_TYPE\_NAME

SUMMARY\_GROUP\_COUNT

DESCRIPTION\_TEXT

SPECIES\_NUMBER

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IBRG01 (Primary)

TSRBRG\_IS\_NUMBER

TSRBRG\_ORG\_ID

**Entity Type:** BIO\_RESULT\_GROUP\_INDIVIDUAL

Description: System sequentially assigned numbers based upon the size of the group as reported by the user. This refers only to biological result groups of type Single Taxon Individuals.

Subject area: RESULTS

Properties: Persistent

Open

Min Occ: 100 Avg Occ: 20000

Max Occ: 100000 Growth Rate: 5% per year

TD Name: TSRBRGI

Attributes: TSRBRGI\_IS\_NUMBER

TSRBRGI\_ORG\_ID

INDIVIDUAL\_NUMBER

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IBRGI01 (Primary)  
TSRBRGI\_IS\_NUMBER  
TSRBRGI\_ORG\_ID

**Entity Type:** CASING

Description: A liner placed in a borehole to prevent entry of loose rock, gas, or liquid into the borehole or to prevent loss of circulation liquid into porous, cavernous, or crevassed ground. Liners may be constructed of sections of tubing fastened or screwed together, or concrete poured in place.

Subject area: WELL\_STATIONS

Properties:Persistent

Open  
Min Occ: 1 Avg Occ: 10  
Max Occ: 100 Growth Rate: 5% per year  
TD Name: TSMCSNG

Attributes: TYPE\_CODE

THICKNESS\_MEASURE  
THICKNESS\_UNIT\_CODE  
INSIDE\_DIAMETER\_MEASURE  
INSIDE\_DIAMETER\_UNIT\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICSNG01 (Primary)  
IS\_USED\_IN INTERVAL

**Entity Type:** CELL\_DESCRIPTOR

Description: <None>

Subject area: RESULTS

Properties:Persistent

Open  
Min Occ: 100 Avg Occ: 1000  
Max Occ: 10000 Growth Rate: 5% per year  
TD Name: TSRCLDES

Attributes: CELL\_FORM\_TYPE\_NM

CELL\_SHAPE\_TYPE\_NAME  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICLDES01 (Primary)

DESCRIBES\_CELL\_FORMS\_FOR RESULT

**Entity Type:** CHARACTERISTIC

Description: >>> only EPA can link a Characteristic to a Citation.

>>> For Taxons, the Characteristic contains the Serial Number (doesn't change), but the ... see Lee ... is what is displayed on windows

>>> Ratios are Characteristics

Names of the subject of the result (i.e., analytes, constituents, parameters, etc.).

A Characteristic is the name of the "thing" being investigated. For example, in an analysis for phosphorus, the name of Characteristic is phosphorus. Examples of other Characteristics include chemicals, taxa, life stages, particle sizes, various lengths, volumes, masses, etc.

Subject area: CHARACTERISTICS

Properties: Persistent

Open

Min Occ: 10000 Avg Occ: 50000

Max Occ: 150000 Growth Rate: 10% per year

TD Name: TSRCHAR

Attributes: TSRCHAR\_IS\_NUMBER

TSRCHAR\_ORG\_ID

EXTERNAL SERIAL NUMBER

UOM\_TYPE

SEARCH\_NAME

DISPLAY\_NAME

D\_SCREEN\_TYPE\_CODE

PROCEDURE\_REQUIRED\_IND\_CODE

VALID\_FOR\_QC\_INDICATOR\_CODE

SAMPLE\_FRACTION\_REQUIRED\_CODE

CHARACTERISTIC TYPE CODE

TAXON\_RANK\_CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICHAR01 (Primary)

TSRCHAR\_IS\_NUMBER  
TSRCHAR\_ORG\_ID

**Entity Type:** CHARACTERISTIC\_ALIAS

Description: Reference table containing alternate names for characteristics and categories for which they are assigned.

Category/Alias Examples: CAS number/XXX-XX-X, common name/round-up, trade name/Silvex, legacy STORET parameter code/1027

Subject area: CHARACTERISTICS

Properties: Persistent

Open

Min Occ: 10000 Avg Occ: 50000

Max Occ: 150000 Growth Rate: 10% per year

TD Name: TSRCHALS

Attributes: TSRCHALS\_IS\_NUMBER

TYPE\_NAME

NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICHALS01 (Primary)

TSRCHALS\_IS\_NUMBER

ALTERNATIVELY\_NAMES CHARACTERISTIC

**Entity Type:** CHARACTERISTIC\_CHAR\_GROUP\_ASGNMT

Description: Associates a characteristic with each characteristic group to which an organization assigns it. The same characteristic may be associated more than once to a characteristic group, to accommodate different sample fractions and so forth.

Subject area: CHARACTERISTICS

Properties: Persistent

Open

Min Occ: 20000 Avg Occ: 75000

Max Occ: 250000 Growth Rate: 5% per year

TD Name: TSRCCGA

Attributes: TSRCCGA\_IS\_NUMBER

TSRCCGA\_ORG\_ID

SEQUENCE\_NUMBER  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICCGA01 (Primary)  
TSRCCGA\_IS\_NUMBER  
TSRCCGA\_ORG\_ID

**Entity Type:** CHARACTERISTIC\_DEFAULT

Description: Each row in this table is an extension of a row in the characteristic-to-group assignment table, and contains defaults for the row for such items as units, sample fraction, time basis, and others.

Subject area: CHARACTERISTICS

Properties: Persistent

Open  
Min Occ: 15000 Avg Occ: 50000  
Max Occ: 150000 Growth Rate: 5% per year  
TD Name: TSRCHDEF

Attributes: TSRCHDEF\_IS\_NUMBER

TSRCHDEF\_ORG\_ID  
ROW\_ID  
SAMPLE\_FRACTION\_TYPE\_NAME  
UNIT\_OF\_MEASURE\_NAME  
DURATION\_BASIS\_TYPE\_NAME  
STATISTIC\_TYPE\_NAME  
VALUE\_TYPE\_NAME  
WEIGHT\_BASIS\_TYPE\_NAME  
TEMPERATURE\_BASIS\_LEVEL\_NAME  
SPECIES\_NUMBER  
LOWER\_RANGE\_VALUE  
UPPER\_RANGE\_VALUE  
TAXON\_POLLUTION\_TOLERANCE  
FUNCTIONAL\_FEEDING\_GROUP  
TROPHIC\_LEVEL  
COMPLETE\_INDICATOR\_CODE  
PARTICLE\_SIZE\_BASIS  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICHDEF01 (Primary)  
TSRCHDEF\_IS\_NUMBER  
TSRCHDEF\_ORG\_ID

**Entity Type:** CHARACTERISTIC\_GROUP

Description: Entity type containing an organization-specific "group" label for a group of characteristics:

Example National groups may include:

- Trace metals
- Organic chemicals
- Inorganic compounds
- MCLs
- Banned Pesticides
- EPA Priority Pollutants
- EPA Organics
- Cercla Reported Quantity
- SARA Title III
- EHS

Org-specific groups -- Florida Organics

Note: A characteristic group is controlled by the Organization that established it. For example, the Chemical Characteristic DDT belongs to the Characteristic Group "banned pesticide" established by EPA/OTS.

Note: The relationship between Characteristic Group and Organization enables different Organizations to create different groups with the apparent same names. For example, EPA might want to create a group called "metals" and include lead, cadmium, and mercury in its membership. Another organization (e.g., USGS) might want to create a group called "metals" and include arsenic, iron, and copper in its membership. With such a link between Organization and Characteristic Group, each Organization can create its own group and use it as it wishes.

Note: Organizations should be able to copy groups and their memberships from other Organizations. In this way, groups do not have to be re-invented each time someone outside the "owning" Organization wants to use them. It is necessary, however, for each Organization using a group to "own" its own copy of the group because the "owning" Organization has control over changes (especially deletions) that could produce "create-read-update-delete" anomalies.

Subject area: CHARACTERISTICS

Properties: Persistent

Open

Min Occ: 20000 Avg Occ: 100000

Max Occ: 1000000 Growth Rate: 5% per year  
TD Name: TSRCHGRP

Attributes: TSRCHGRP\_IS\_NUMBER  
TSRCHGRP\_ORG\_ID  
IDENTIFICATION\_CODE  
NAME  
FIELD\_ACTIVITY\_TYPE\_NAME  
MEDIUM\_TYPE\_NAME  
INTENT\_TYPE\_NAME  
COMMUNITY\_NAME  
RESULT\_GROUP\_TYPE\_NAME  
DESCRIPTION\_TEXT  
HABITAT\_ASSESS\_IND  
CHARACTERISTIC\_DEFINED\_IND  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICHGRP01 (Primary)  
TSRCHGRP\_IS\_NUMBER  
TSRCHGRP\_ORG\_ID

**Entity Type:** CHARACTERISTIC\_PERMITD\_VALUE

Description: Reference table containing valid choices for a given Characteristic. For example, if one is documenting biological characteristics of an organism and the characteristic of interest is the Sex of that organism, then the Characteristic Permitted Value is the set of valid sexes for that organism (e.g., male, female, hermaphrodite, androgynous); for the characteristic Life Stage the permitted values would include Larva, Pupa, Juvenile, Adult.

Subject area: CHARACTERISTICS

Properties: Persistent

Open  
Min Occ: 1000 Avg Occ: 5000  
Max Occ: 10000 Growth Rate: 5% per year  
TD Name: TSRCPV

Attributes: TSRCPV\_IS\_NUMBER  
TSRCPV\_ORG\_ID  
SHORT\_NAME  
DESCRIPTION\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICPV01 (Primary)

TSRCPV\_IS\_NUMBER  
TSRCPV\_ORG\_ID

**Entity Type:** CHARACTERISTIC\_TYPE

Description: Primary categories and sub-categories into which the characteristic list is divided for purposes of reducing user search time.

The valid values/combinations of primary and sub-category are held in this table.

Subject area: CHARACTERISTICS

Properties: Persistent

Open

Min Occ: 50 Avg Occ: 100

Max Occ: 500 Growth Rate: 5% per year

TD Name: TSRCHTYP

Attributes: TSRCHTYP\_CATEGORY

TSRCHTYP\_SUBCATGRY

TSRCHTYP\_ORG\_ID

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICHTYP01 (Primary)

TSRCHTYP\_CATEGORY

TSRCHTYP\_SUBCATGRY

TSRCHTYP\_ORG\_ID

**Entity Type:** CHARACTERISTIC\_TYPE\_CHAR\_ASGMNT

Description: <None>

Subject area: CHARACTERISTICS

Properties: Persistent

Open

Min Occ: 10000 Avg Occ: 50000

Max Occ: 100000 Growth Rate: 5% per year

TD Name: TSRCTCA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICTCA01 (Primary)

IS\_ASSIGNED\_TO\_CHARACTERISTIC

ASSIGNS\_CHARACTERISTIC\_TYPE



**Entity Type: CHECKPOINT\_INFO**

Description: This entity stores the identifier of the last row processed during replication process.

Subject area: REPLICATION

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 1

Max Occ: 1 Growth Rate: 0% per year

TD Name: TSMCHKPT

Attributes: LAST\_PROCESSED\_TAB

LAST\_ACTION

LAST\_PROCESSED\_IS\_NBR1

LAST\_PROCESSED\_IS\_NBR2

LAST\_PROCESSED\_IS\_NBR3

LAST\_PROCESSED\_ORG1

LAST\_PROCESSED\_ORG2

LAST\_PROCESSED\_ORG3

SIC\_CODE

TYPE\_NAME

Identifiers:

ICHKPT01 (Primary)

LAST\_PROCESSED\_TAB

**Entity Type: CITATION**

Description: (V30.2.0) A bibliographic reference cited to provide additional information concerning an Organization's procedures, methods and/or data.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 500 Avg Occ: 1000

Max Occ: 10000 Growth Rate: 5% per year

TD Name: TSRCITN

Attributes: TSRCITN\_IS\_NUMBER

TSRCITN\_ORG\_ID

ORGANIZATION\_TYPE\_CODE

ORGANIZATION\_REFERENCE\_ID\_NUMBER

AUTHOR\_NAME

PUBLICATION\_YEAR

ARTICLE\_OR\_BOOK\_TITLE\_NAME

JOURNAL\_OR\_PUBLISHER\_NAME  
VOLUME\_AND\_PAGE\_NUMBER  
COMMENT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICITN01 (Primary)  
TSRCITN\_IS\_NUMBER  
TSRCITN\_ORG\_ID

**Entity Type:** CITATION\_PROJECT\_ASGNMT

Description: Associative entity that resolves many-to-many relationship between project and citation.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 4000 Avg Occ: 20000

Max Occ: 200000 Growth Rate: 5% per year

TD Name: TSRCPA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICPA01 (Primary)  
ASSIGNS CITATION  
CORRESPONDS\_TO PROJECT

**Entity Type:** COOPERATING\_ORGANIZATION

Description: For the purposes of this database:

A Cooperating Organization is a State, Federal, local, academic, commercial, or other group which works with or provides funding for a data-owning Organization.

Types of work that may be performed by a Cooperating Organization include:

- field sample collection
- taxonomic identification
- funding
- laboratory analysis
- logistical support
- any other tasks in support of the activities or operations of the data-owning organization.

Subject area: ORGANIZATIONS

Properties:Persistent

Open

Min Occ: 4000 Avg Occ: 20000

Max Occ: 200000 Growth Rate: 5% per year

TD Name: TSMCPORG

Attributes: TSMCPORG\_IS\_NUMBER

TSMCPORG\_ORG\_ID

NAME

POINT\_OF\_CONTACT\_NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ICPORG01 (Primary)

TSMCPORG\_IS\_NUMBER

TSMCPORG\_ORG\_ID

**Entity Type: DBMS\_USER**

Description: This entity type was added to the model in order to obtain the USERID that is logged onto the system while executing under the ORACLE based server system. In addition to the USERID, the current timestamp is also retrieved. It is characterized by a VIEW materialization in the host system. The VIEW DDL is as follows:

```
CREATE OR REPLACE VIEW TSMDBUSR (TSMDBUSR_USERID,  
DB_TIMESTAMP) AS SELECT USER,  
TO_CHAR(SYSDATE,'YYYY-MM-DDHH24.MI.SS') FROM DUAL;
```

Subject area: REFERENCE\_TABLES

Properties:Persistent

Open

Min Occ: 200 Avg Occ: 300

Max Occ: 500 Growth Rate: 10% per year

TD Name: TSMDBUSR

Attributes: DB\_TIMESTAMP

TSMDBUSR\_USERID

Identifiers:

IDBUSR01 (Primary)

TSMDBUSR\_USERID

**Entity Type: DETECTION\_QUANTITATION\_LIMIT**

Description: Limit of the instrument and analytical process conducted to detect and/or quantify the substance

associated with a result value.

Subject area: RESULTS

Properties: Persistent

Open

Min Occ: 100 Avg Occ: 1000

Max Occ: 10000 Growth Rate: 10% per year

TD Name: TSRDQL

Attributes: MINIMUM\_DETECTION\_LIMIT  
MAXIMUM QUANTITATION LIMIT  
MINIMUM QUANTITATION LIMIT  
DESCRIPTION\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IDQL01 (Primary)

QUALIFIES RESULT

**Entity Type:** ELECTRONIC\_ADDRESS

Description: The phone numbers, fax numbers, and E-MAIL addresses  
for an Organization or an individual.

Subject area: ADDRESSES

Properties: Persistent

Open

Min Occ: 5000 Avg Occ: 150000

Max Occ: 500000 Growth Rate: 5% per year

TD Name: TSMEADDR

Attributes: TSMEADDR\_IS\_NUMBER  
TSMEADDR\_ORG\_ID  
TYPE\_CODE  
ADDRESS\_TEXT  
COMMENT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IEADDR01 (Primary)

TSMEADDR\_IS\_NUMBER

TSMEADDR\_ORG\_ID

**Entity Type:** ELECTROSHOCK\_OPERATION\_DETAIL

Description: (V30.4.0) A description of settings and procedures  
applied to the electroshock equipment at the time the

Sample was collected.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 4000 Avg Occ: 40000

Max Occ: 200000 Growth Rate: 5% per year

TD Name: TSREOD

Attributes: VOLTAGE\_MEASURE

CURRENT\_TYPE\_CODE

AMPERAGE\_MEASURE

PASS\_COUNT

PASS\_LENGTH\_MEASURE

PASS\_LENGTH\_UNIT\_CODE

PULSE\_RATE\_MEASURE

COMMENT\_TEXT

TOTAL\_ENERGIZED\_TIME

ENERGIZED\_TIME\_UNITS

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IEOD01 (Primary)

PROVIDES\_DETAIL\_ABOUT\_SAMPLE

**Entity Type:** ENTITY\_INTERNAL\_SYSTEM\_NUMBER

Description: This entity supports internal system activities associated with updates.

This table contains the identity of every system entity and the next available internal system number (ISN) for each.

Note to development team: This entity implements a row equals page system lock.

Subject area: REFERENCE\_TABLES

Properties:Persistent

Open

Min Occ: 50 Avg Occ: 75

Max Occ: 200 Growth Rate: 5% per year

TD Name: TSMEISN

Attributes: TSMEISN\_NAME

TSMEISN\_ORG\_ID

IS\_NUMBER

Identifiers:

IEISN01 (Primary)  
TSMEISN\_NAME  
TSMEISN\_ORG\_ID

**Entity Type:** ERROR\_MESSAGES

Description: This table keeps track of STORET error handling procedure.

Subject area: REFERENCE\_TABLES

Properties:Persistent

Open

Min Occ: 200 Avg Occ: 500

Max Occ: 2000 Growth Rate: 15% per year

TD Name: tsmermsg

Attributes: TSMERMSG\_IS\_NUMBER

TSMERMSG\_ORG\_ID

MESSAGE\_ID

MESSAGE\_TEXT

DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

iermsg01 (Primary)

TSMERMSG\_IS\_NUMBER

TSMERMSG\_ORG\_ID

**Entity Type:** ESTUARY

Description: A semi-enclosed coastal body of water which has a free connection with the open sea and within which sea water is measurably diluted with fresh water.

For purposes of this database, an estuary is bounded on the ocean side by the U.S. Department of State Continental Base Line, from which the 12-mile limit for the Territorial Sea and the 200-mile limit of the Exclusive Economic Zone (EEZ) are measured oceanward.

Subject area: GEOGRAPHIC\_AREAS

Properties:Persistent

Open

Min Occ: 200 Avg Occ: 500

Max Occ: 1000 Growth Rate: 5% per year

TD Name: TSMESTRY

Attributes: TSMESTRY\_IS\_NUMBER  
TSMESTRY\_ORG\_ID  
NAME  
COUNTRY\_CODE  
STATE\_PROVINCE\_NAME  
PRIMARY\_INDICATOR  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IESTRY01 (Primary)  
TSMESTRY\_ORG\_ID  
TSMESTRY\_IS\_NUMBER

**Entity Type:** ESTUARY\_LOCATION

Description: The location of a station that is in an Estuary, and additional details concerning its description. An Estuary is a semi-enclosed coastal body of water which has a free connection with the open sea and with in which sea water is measurably diluted with fresh water.

Subject area: GEOGRAPHIC\_AREAS

Properties: Persistent

Open  
Min Occ: 3000 Avg Occ: 30000  
Max Occ: 60000 Growth Rate: 5% per year  
TD Name: TSMESTLC

Attributes: OTHER\_ESTUARY\_NAME  
ADDITIONAL\_LOCATION\_NAME  
DISTANCE\_TO\_SHORE\_MEASURE  
DISTANCE\_TO\_SHORE\_UNIT\_CODE  
REFERENCE\_POINT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IESTLC01 (Primary)  
CHARACTERIZES ABSOLUTE\_LOCATION\_POINT

**Entity Type:** EXTERNAL\_REFERENCE\_SCHEME

Description: A scheme, method, or plan that creates alternate references or provides supplemental information to identify or reference Stations.

Examples:

1) NPDES permit

- 2) EMAP hexagon
- 3) FRDS public water supply number
- 4) FINDS number
- 5) Illinois Well Number scheme
- 6) Florida Land Grant
- 7) USGS well number

Subject area: STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 10

Max Occ: 100 Growth Rate: 5% per year

TD Name: TSMERS

Attributes: TSMERS\_IS\_NUMBER

TSMERS\_ORG\_ID

ACRONYM

NAME

DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IERS01 (Primary)

TSMERS\_IS\_NUMBER

TSMERS\_ORG\_ID

**Entity Type:** FACILITY\_SIC\_ASSIGNMENT

Description: The Standard Industrial Classification code (SIC) is the statistical classification standard underlying all establishment-based Federal economic statistics classified by industry. This entity captures all SICs which are associated with a Facility Station.

Subject area: FACILITY\_STATIONS

Properties: Persistent

Open

Min Occ: 0 Avg Occ: 1000

Max Occ: 10000 Growth Rate: 5% per year

TD Name: TSMFSA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFSA01 (Primary)

DESCRIBES FACILITY\_STATION

IS\_DESCRIBED\_BY STANDARD\_INDUSTRIAL\_CLASS



**Entity Type:** FACILITY\_STATION

Description: A Station which is considered by its owner to be a Facility.

NOTE: THIS ENTITY TYPE WILL EVENTUALLY HAVE MORE ATTRIBUTES.

Subject area: FACILITY\_STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 10

Max Occ: 100 Growth Rate: 5% per year

TD Name: TSMFCLTY

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFCLTY01 (Primary)

IS STATION

**Entity Type:** FIELD\_ACTIVITY

Description: (V30.5.0) Field activities are performed during a Station Visit to evaluate conditions in the environment. Field Activities consist of Sample collection, Measurements and Observations made on-site.

SAMPLE COLLECTION involves something extracted from its environmental setting using some type of equipment.

MEASUREMENTS involve something measured in its environmental setting usually using some type of equipment.

OBSERVATIONS involve something observed in its environmental setting usually without using some type of equipment.

Note: 'Parent' Field Activities cannot be deleted if it has 'Children' Field Activities.

For Composites - the Field Activities being 'composited' cannot be deleted if it was used to create a 'Composite' sample.

For Split/Subsample/Created - the Field Activity that was 'split/subsampled/created' cannot be deleted if it was used to create a 'Created' sample.

Note: The existence of multiple depth attributes in this entity type is only a temporary solution for the prototype. They should probably be in a separate entity type FIELD ACTIVITY DEPTH for the production system. A FIELD ACTIVITY may have one or more FIELD ACTIVITY DEPTHS (with types of actual, upper, lower).

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 100000 Avg Occ: 1000000

Max Occ: 5000000 Growth Rate: 5% per year

TD Name: TSRFDACT

Attributes: TSRFDACT\_IS\_NUMBER

TSRFDACT\_ORG\_ID

TYPE\_NAME

CATEGORY\_TYPE\_NAME

IDENTIFICATION\_CODE

REPLICATE\_NUMBER

MEDIUM\_TYPE\_NAME

INTENT\_TYPE\_NAME

COMMUNITY\_NAME

START\_DATE

START\_TIME

START\_TIME\_ZONE

STOP\_DATE

STOP\_TIME

STOP\_TIME\_ZONE

COMMENT\_TEXT

ZONE\_TYPE\_NAME

RELATIVE\_DEPTH\_NAME

DEPTH\_REFERENCE\_POINT\_TEXT

DEPTH\_TO\_ACTIVITY\_MSR

DEPTH\_TO\_ACTIVITY\_UNIT\_CD

UPPER\_DEPTH\_TO\_ACTIVITY\_MSR

DEPTH\_TO\_ACTIVITY\_MSR\_UNIT\_CD

LOWER DEPTH TO ACTIVITY MSR

THERMOCLINE\_LOCATION\_CODE

PYCNOCLINE LOCATION CODE

HALOCLINE LOCATION CODE

SPECIES\_NUMBER

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFDACT01 (Primary)

TSRFDACT\_IS\_NUMBER  
TSRFDACT\_ORG\_ID

**Entity Type:** FIELD\_ACTIVITY\_FIELD\_SET\_ASGNMT

Description: (V30.6.0) Describes the association between Field Activity and Field Set.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 7500 Avg Occ: 50000

Max Occ: 150000 Growth Rate: 5% per year

TD Name: TSRFAFSA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFAFSA01 (Primary)

HAS FIELD\_ACTIVITY

BELONGS\_TO FIELD\_SET

**Entity Type:** FIELD\_ACTIVITY\_PERSON\_ASSIGNMENT

Description: (V30.7.0) Describes the association between Field Activity and Person.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 100000 Avg Occ: 1000000

Max Occ: 5000000 Growth Rate: 5% per year

TD Name: TSRFAPEA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFAPA01 (Primary)

COLLECTS FIELD\_ACTIVITY

IS\_COLLECTED\_BY PERSON

**Entity Type:** FIELD\_ACTIVITY\_PROJECT\_ASSGNMT

Description: (V30.8.0) Describes the association between Field Activity and Project.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 50000 Avg Occ: 500000

Max Occ: 1000000 Growth Rate: 5% per year

TD Name: TSRFAPRA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFAPRA01 (Primary)

IS\_FOR FIELD\_ACTIVITY

IS\_FOR PROJECT

**Entity Type:** FIELD\_ACTIVITY\_QC\_SAMPLE\_ASGN

Description: (V30.9.0) Describes the association between Field Activity and QC Sample.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 50000 Avg Occ: 500000

Max Occ: 1000000 Growth Rate: 5% per year

TD Name: TSRFAQSA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFAQSA01 (Primary)

VALIDATES FIELD\_ACTIVITY

HAS\_CHECK\_PROVIDED\_BY FIELD\_QC\_SAMPLE

**Entity Type:** FIELD\_GEAR

Description: (V30.15.0) Equipment used to extract a sample from its environmental setting.

Note: Measurements use analytical equipment not field sampling gear. Observations use neither.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 500 Avg Occ: 10000

Max Occ: 100000 Growth Rate: 5% per year

TD Name: TSRFLDGR

Attributes: TSRFLDGR\_IS\_NUMBER  
TSRFLDGR\_ORG\_ID  
IDENTIFICATION\_CODE  
TYPE\_NAME  
NAME  
DESCRIPTION\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFLDGR01 (Primary)  
TSRFLDGR\_IS\_NUMBER  
TSRFLDGR\_ORG\_ID

**Entity Type:** FIELD\_PROCEDURE

Description: (V30.16.0) Organization-defined procedures used in the field to generate Samples, Measurements, and/or Observations.

Note: A Field Sampling Procedure cannot be deleted if there is a Sample that is associated with it.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open  
Min Occ: 500 Avg Occ: 10000  
Max Occ: 100000 Growth Rate: 5% per year  
TD Name: TSRFLDPR

Attributes: TSRFLDPR\_IS\_NUMBER  
TSRFLDPR\_ORG\_ID  
IDENTIFICATION\_CODE  
NAME  
FIELD\_GEAR\_TYPE\_NAME  
DESCRIPTION\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFLDPR01 (Primary)  
TSRFLDPR\_IS\_NUMBER  
TSRFLDPR\_ORG\_ID

**Entity Type:** FIELD\_QC\_SAMPLE

Description: (V30.11.0) Field QC samples (field blanks, field spikes, stock solution samples, reagent blank) are

prepared in the field and are sent to a laboratory along with other, "real" samples. The laboratory is not notified of the presence of QC samples and, therefore, processes and analyzes them like any other sample. If the lab analysis does not return the anticipated result for the QC sample, then the field team knows that there were QC violations committed by the lab.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 15000 Avg Occ: 150000

Max Occ: 800000 Growth Rate: 5% per year

TD Name: TSRFQS

Attributes: TSRFQS\_IS\_NUMBER

TSRFQS\_ORG\_ID

IDENTIFICATION\_CODE

TYPE\_NAME

NAME

CREATION\_DATE

CREATION\_TIME

TIME\_ZONE

TOTAL\_VOLUME\_MEASURE

TOTAL\_VOLUME\_UNIT\_CODE

CONTAINER\_TYPE\_NAME

CONTAINER\_COLOR

CONTAINER\_SIZE\_MSR

CONTAINER\_SIZE\_UNIT\_CODE

COMMENT\_TEXT

CREATION\_METHOD\_TEXT

TRANSPORT\_STORAGE\_COMMENT\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFQS01 (Primary)

TSRFQS\_IS\_NUMBER

TSRFQS\_ORG\_ID

**Entity Type:** FIELD\_QC\_SAMPLE\_DEFAULT\_PROFILE

Description: <None>

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 1500 Avg Occ: 15000

Max Occ: 50000 Growth Rate: 5% per year  
TD Name: TSRFQSDP

Attributes: TSRFQSDP\_IS\_NUMBER  
TSRFQSDP\_ORG\_ID  
IDENTIFICATION\_CODE  
TYPE\_NAME  
NAME  
CONTAINER\_TYPE\_NAME  
CONTAINER\_COLOR  
CONTAINER\_SIZE\_MSR  
CONTAINER\_SIZE\_UNIT\_CODE  
COMMENT\_TEXT  
CREATION\_METHOD\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFQSDP01 (Primary)  
TSRFQSDP\_IS\_NUMBER  
TSRFQSDP\_ORG\_ID

**Entity Type:** FIELD\_QC\_SAMPLE\_PERSON\_ASGNMT

Description: (V30.12.0) Describes the association between Field QC  
Sample and Person.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open  
Min Occ: 30000 Avg Occ: 150000  
Max Occ: 1500000 Growth Rate: 5% per year  
TD Name: TSRFQSPA

Attributes: D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFQSPA01 (Primary)  
IS\_FOR FIELD\_QC\_SAMPLE  
IS\_FOR PERSON

**Entity Type:** FIELD\_SET

Description: (V30.17.0) An optional user-specified grouping of  
Field Activities (i.e., measurements, observations,  
and/or samples).

Note: Each Field Set may be associated with one or more  
Field Activities. Each Field Activity may be

associated with one or more Field Sets.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 10000 Avg Occ: 500000

Max Occ: 1000000 Growth Rate: 5% per year

TD Name: TSRFDSET

Attributes: TSRFDSET\_IS\_NUMBER

TSRFDSET\_ORG\_ID

IDENTIFICATION\_CODE

NAME

DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFDSET01 (Primary)

TSRFDSET\_IS\_NUMBER

TSRFDSET\_ORG\_ID

**Entity Type:** FILL

Description: The material placed in the area between a Casing and a borehole in order to prevent fluid migration between permeable zones and to support the casing.

Subject area: WELL\_STATIONS

Properties:Persistent

Open

Min Occ: 1 Avg Occ: 10

Max Occ: 100 Growth Rate: 5% per year

TD Name: TSMFILL

Attributes: MATERIAL\_TYPE\_CODE

VOLUME\_MEASURE

VOLUME\_UNIT\_CODE

THICKNESS\_MEASURE

THICKNESS\_UNIT\_CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFILL01 (Primary)

IS\_USED\_IN INTERVAL

**Entity Type:** FIPS\_HYDROLOGIC\_UNIT



Description: The Federal Information Processing Standard (FIPS) information for Hydrologic Units, as defined in FIPS Publication 103.

For purposes of implementation, STORET has determined lat/long max/min locations which bound the Hydrologic Unit.

Subject area: GEOGRAPHIC\_AREAS

Properties:Persistent

Open

Min Occ: 3000 Avg Occ: 3000

Max Occ: 3000 Growth Rate: 10% per year

TD Name: TSMFHU

Attributes: TSMFHU\_IS\_NUMBER

TSMFHU\_ORG\_ID

HYDROLOGIC\_UNIT\_CODE

NAME

STATES\_NAME

LATITUDE\_MAXIMUM\_DEGREE\_MEASURE

LATITUDE\_MINIMUM\_DEGREE\_MEASURE

LONGITUDE\_MAXIMUM\_DEGREE\_MEASURE

LONGITUDE\_MINIMUM\_DEGREE\_MEASURE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IFHU01 (Primary)

TSMFHU\_IS\_NUMBER

TSMFHU\_ORG\_ID

**Entity Type:** GEAR\_CONFIGURATION

Description: (V30.18.0) Organization-specific configurations that define modifications to or variations of a standard Field Sampling Gear.

Note: A Gear Configuration cannot be deleted if there is a Sample that is associated with it.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 1000 Avg Occ: 20000

Max Occ: 200000 Growth Rate: 5% per year

TD Name: TSRGRCFG

Attributes: TSRGRCFG\_IS\_NUMBER  
          TSRGRCFG\_ORG\_ID  
          IDENTIFICATION\_CODE  
          NAME  
          D\_USERID\_CODE  
          D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IGRCFG01 (Primary)  
          TSRGRCFG\_IS\_NUMBER  
          TSRGRCFG\_ORG\_ID

**Entity Type: GENERIC\_TEXT**

Description: For those characteristics whose permitted value is  
          "free text".

TSMGNTXT\_DESC\_Name values are as follows:

1. PURPOSE = TSMPROJ Purpose\_Description\_Text
2. AREADESC = TSMPROJ Area\_Description\_Text
3. QAPPSUMM = TSMPROJ Qapp\_Summary\_Text
4. WORKPLAN = TSMPROJ Workplan\_Location\_Desc\_  
Text
5. SMPARSTR = TSMPROJ Sample\_Archive\_Strategy\_  
Text
6. MSRMNTQL = TSMPROJ Measurement\_Qual\_Obj\_  
Descr\_Text
7. DSGNDESC = TSMPROJ Design\_Description\_Text
8. SPECTXT = TSRGRCFG Specifications\_Text
9. PROCEXCP = TSRRSLT Procedure\_Exception\_Text
10. RSLTDESC = TSRRSLT Result\_Text

Subject area: REFERENCE\_TABLES

Properties: Persistent

Open  
Min Occ: 100 Avg Occ: 2000  
Max Occ: 300000 Growth Rate: 10% per year  
TD Name: TSMGNTXT

Attributes: TSMGNTXT\_IS\_NUMBER  
          TSMGNTXT\_ORG\_ID  
          TABLE\_NAME  
          DESCRIPTION\_NAME  
          DESCRIPTION\_TEXT  
          D\_USERID\_CODE  
          D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IGNTXT01 (Primary)  
          TSMGNTXT\_ORG\_ID  
          TSMGNTXT\_IS\_NUMBER

**Entity Type:** GEOLOGIC\_UNIT

Description: The name of a stratum characterized by consolidated or unconsolidated rock containing a degree of lithologic homogeneity.

Subject area: STATIONS

Properties: Persistent

Open

Min Occ: 5000 Avg Occ: 10000

Max Occ: 13000 Growth Rate: 10% per year

TD Name: TSMGEOUN

Attributes: TSMGEOUN\_CD

TSMGEOUN\_ORG\_ID

TYPE\_CODE

STATE\_CODE

NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IGEOUN01 (Primary)

TSMGEOUN\_CD

TSMGEOUN\_ORG\_ID

**Entity Type:** GEOPOLITICAL\_AREA

Description: A political or administratively constructed area representing a jurisdictional or regulatory area, e.g. state, province, county.

For purposes of implementation, STORET has determined lat/long max/min locations which bound the Geopolitical Area.

For an individual state or province, indicator codes specify whether the state/province has coastline continuous with an ocean or a Great Lake.

Subject area: GEOGRAPHIC\_AREAS

Properties: Persistent

Open

Min Occ: 4000 Avg Occ: 4000

Max Occ: 4000 Growth Rate: 10% per year

TD Name: TSMGEOPA

Attributes: TSMGEOPA\_IS\_NUMBER  
TSMGEOPA\_ORG\_ID  
LATITUDE\_MINIMUM\_DEGREE\_MEASURE  
LATITUDE\_MAXIMUM\_DEGREE\_MEASURE  
LONGITUDE\_MINIMUM\_DEGREE\_MEASURE  
LONGITUDE\_MAXIMUM\_DEGREE\_MEASURE  
COUNTY\_FIPS\_CODE  
COUNTY\_NAME  
STATE\_FIPS\_CODE  
STATE\_NAME  
STATE\_POSTAL\_CODE  
COUNTRY\_CODE  
COUNTRY\_NAME  
COASTAL\_INDICATOR\_CODE  
GREAT\_LAKE\_INDICATOR\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IGEOPA01 (Primary)  
TSMGEOPA\_IS\_NUMBER  
TSMGEOPA\_ORG\_ID

**Entity Type:** GREAT\_LAKE\_LOCATION

Description: The location of a Station that is in a Great Lake, and additional details concerning its description. A Great Lake is one of the five fresh water lakes of Central North America on either side of the United States-Canadian boundary: Lake Erie, Lake Huron, Lake Superior, Lake Michigan, and Lake Ontario.

Subject area: GEOGRAPHIC\_AREAS

Properties: Persistent

Open  
Min Occ: 3000 Avg Occ: 30000  
Max Occ: 60000 Growth Rate: 5% per year  
TD Name: TSMGLL

Attributes: NAME  
ADDITIONAL\_LOCATION\_NAME  
DISTANCE\_TO\_SHORE\_MEASURE  
DISTANCE\_TO\_SHORE\_UNIT\_CODE  
REFERENCE\_POINT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IGLL01 (Primary)  
CHARACTERIZES ABSOLUTE\_LOCATION\_POINT

**Entity Type:** HABITAT\_CLASS\_SCHEME\_CHAR

Description: The name and description of an evaluable characteristic of the natural habitat, which will, when combined with other evaluable characteristics, comprise a habitat evaluation scheme.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 60000 Avg Occ: 300000

Max Occ: 3000000 Growth Rate: 5% per year

TD Name: TSRHCSC

Attributes: TSRHCSC\_IS\_NUMBER

TSRHCSC\_ORG\_ID

ROW\_ID

CHARACTERISTIC\_NAME

DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IHCSC01 (Primary)

TSRHCSC\_IS\_NUMBER

TSRHCSC\_ORG\_ID

**Entity Type:** HOLE

Description: A cavity in the ground constructed for the purpose of creating a Well.

Subject area: WELL\_STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 10

Max Occ: 100 Growth Rate: 5% per year

TD Name: TSMHOLE

Attributes: DIAMETER\_MEASURE

UNIT\_CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IHOLE01 (Primary)

IS INTERVAL

**Entity Type:** INTERVAL

Description: A vertically defined (upper and lower depth) section of interest within a Well or borehole.

Subject area: WELL\_STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 10

Max Occ: 100 Growth Rate: 5% per year

TD Name: TSMINTVL

Attributes: TSMINTVL\_IS\_NUMBER

TSMINTVL\_ORG\_ID

TYPE\_CODE

DEPTH\_UNIT\_CODE

START\_DEPTH\_MEASURE

STOP\_DEPTH\_MEASURE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IINTVL01 (Primary)

TSMINTVL\_IS\_NUMBER

TSMINTVL\_ORG\_ID

**Entity Type:** INTERVAL\_GEOL\_UNIT\_ASGMNT

Description: <None>

Subject area: WELL\_STATIONS

Properties: Persistent

Open

Min Occ: 10000 Avg Occ: 15000

Max Occ: 20000 Growth Rate: 5% per year

TD Name: TSMIGUA

Attributes: TSMIGUA\_IS\_NUMBER

TSMIGUA\_ORG\_ID

OTHER\_GEOLOGIC\_UNIT\_NAME

PRIMARY\_AQUIFER\_INDICATOR\_CODE

WATER BEARING INDICATOR CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IIGUA01 (Primary)

TSMIGUA\_IS\_NUMBER

TSMIGUA\_ORG\_ID

**Entity Type:** LABORATORY

Description: >>> Org-specific; no National labs

A facility which employs Analytical Procedures to perform analysis of Characteristics to provide Results.

Subject area: RESULTS

Properties:Persistent

Open

Min Occ: 100 Avg Occ: 200

Max Occ: 1000 Growth Rate: 10% per year

TD Name: TSRLAB

Attributes: TSRLAB\_IS\_NUMBER

TSRLAB\_ORG\_ID

NAME

IDENTIFICATION\_CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ILAB01 (Primary)

TSRLAB\_IS\_NUMBER

TSRLAB\_ORG\_ID

**Entity Type:** LAB\_REMARK

Description: Reference table of remark codes which may be used by laboratories to indicate conditions that may affect the validity of the result.

Subject area: RESULTS

Properties:Persistent

Open

Min Occ: 10 Avg Occ: 50

Max Occ: 1000 Growth Rate: 5% per year

TD Name: TSRLBRMK

Attributes: TSRLBRMK\_IS\_NUMBER

TSRLBRMK\_ORG\_ID

SHORT\_NAME

DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ILBRMK01 (Primary)  
TSRLBRMK\_IS\_NUMBER  
TSRLBRMK\_ORG\_ID

**Entity Type:** LAB\_SAMPLE\_PREP\_PROCEDURE

Description: <None>

Subject area: ANALYTICAL\_PROCEDURES

Properties:Persistent

Open  
Min Occ: 100 Avg Occ: 500  
Max Occ: 1000 Growth Rate: 5% per year  
TD Name: TSRLSPP

Attributes: TSRLSPP\_IS\_NUMBER  
TSRLSPP\_ORG\_ID  
OWNER\_TYPE\_CODE  
PREPARATION\_ID  
NAME  
SOURCE\_NAME  
SOURCE\_ACR  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ILSPP01 (Primary)  
TSRLSPP\_IS\_NUMBER  
TSRLSPP\_ORG\_ID

**Entity Type:** LITHOLOGIC\_UNIT

Description: A homogeneous body of strata characterized by certain observable physical features, or by the dominance of certain rock types or the combination of certain rock types.

Subject area: STATIONS

Properties:Persistent

Open  
Min Occ: 5000 Avg Occ: 10000  
Max Occ: 13000 Growth Rate: 10% per year  
TD Name: TSMLTHUN

Attributes: TSMLTHUN\_CD  
TSMLTHUN\_ORG\_ID  
NAME



D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ILTHUN01 (Primary)  
TSMITHUN\_CD  
TSMITHUN\_ORG\_ID

**Entity Type:** LOG

Description: A record of the layers of earth penetrated during construction of the borehole. After construction additional logs may be conducted to identify other stratigraphic features of the Well.

Subject area: WELL\_STATIONS

Properties:Persistent

Open  
Min Occ: 1 Avg Occ: 10  
Max Occ: 100 Growth Rate: 5% per year  
TD Name: TSMLOG

Attributes: TSMLOG\_IS\_NUMBER  
TSMLOG\_ORG\_ID  
TYPE\_CODE  
REPORT\_FORMAT\_CODE  
LOCATION\_DESCRIPTION\_TEXT  
CONDUCTED\_DATE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ILOG01 (Primary)  
TSMLOG\_IS\_NUMBER  
TSMLOG\_ORG\_ID

**Entity Type:** METHOD\_AND\_DATUM

Description: <None>

Subject area: GEOGRAPHIC\_AREAS

Properties:Persistent

Open  
Min Occ: 500 Avg Occ: 750  
Max Occ: 1500 Growth Rate: 10% per year  
TD Name: TSMMD

Attributes: TSMMD\_IS\_NUMBER  
TSMMD\_ORG\_ID

IDENTIFICATION\_CODE  
CATEGORY  
SUBCATEGORY  
DESCRIPTION

Identifiers:

IMAD01 (Primary)  
TSMAD\_IS\_NUMBER  
TSMAD\_ORG\_ID

**Entity Type:** NATIVE\_AMERICAN\_LAND

Description: The Indian reservations and Alaskan remote villages, as defined in FIPS Publication 55-2.

Subject area: GEOGRAPHIC\_AREAS

Properties:Persistent

Open  
Min Occ: 1000 Avg Occ: 1000  
Max Occ: 1000 Growth Rate: 10% per year  
TD Name: TSMNAL

Attributes: TSMNAL\_CD  
TSMNAL\_STATE  
TSMNAL\_ORG\_ID  
NAME  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

INAL01 (Primary)  
TSMNAL\_CD  
TSMNAL\_STATE  
TSMNAL\_ORG\_ID

**Entity Type:** OCEAN\_LOCATION

Description: The location of a Station that is in an Ocean, and additional details concerning its description and location. An ocean is a major primary subdivision of the interconnected body of salt water occupying the depressions of the Earth's surface; bounded by continents and imaginary lines.

Subject area: GEOGRAPHIC\_AREAS

Properties:Persistent

Open  
Min Occ: 3000 Avg Occ: 30000  
Max Occ: 60000 Growth Rate: 10% per year

TD Name: TSMOCNLC

Attributes: NAME

SHORE\_RELATION\_TEXT  
LORAN\_C\_READING\_1  
LORAN\_C\_READING\_2  
BOTTOM\_TOPOGRAPHY\_TEXT  
ADDITIONAL\_LOCATION\_NAME  
DISTANCE\_TO\_SHORE\_MEASURE  
DISTANCE\_TO\_SHORE\_UNIT\_CODE  
REFERENCE\_POINT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IOC�LC01 (Primary)  
CHARACTERIZES ABSOLUTE\_LOCATION\_POINT

**Entity Type:** OPENING

Description: A perforation in the casing or the bore hole which allows water in the surrounding strata to enter the well. When the opening is in the casing it may be screened or unscreened. Screened openings may have a mesh size and material.

Subject area: WELL\_STATIONS

Properties: Persistent

Open  
Min Occ: 1 Avg Occ: 10  
Max Occ: 100 Growth Rate: 5% per year  
TD Name: TSMOPNG

Attributes: TYPE\_CODE

DESCRIPTION\_TEXT  
MATERIAL\_TYPE\_CODE  
LENGTH\_MEASURE  
LENGTH\_UNIT\_CODE  
WIDTH\_MEASURE  
WIDTH\_UNIT\_CODE  
MESH\_SIZE\_MEASURE  
MESH\_SIZE\_UNIT\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IOPNG01 (Primary)  
IS INTERVAL

**Entity Type:** OPERATING\_PERIOD

Description: <None>

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 5000 Avg Occ: 150000

Max Occ: 500000 Growth Rate: 5% per year

TD Name: TSROPPRD

Attributes: TSROPPRD\_IS\_NUMBER

TSROPPRD\_ORG\_ID

LOG\_FILE\_NAME

INTERVAL\_HOURS

INTERVAL\_MINUTES

INTERVAL\_SECONDS

START\_DATE

START\_TIME

STOP\_DATE

STOP\_TIME

COMMENT\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IOPPRD01 (Primary)

TSROPPRD\_IS\_NUMBER

TSROPPRD\_ORG\_ID

**Entity Type:** ORGANIZATION

Description: For the purposes of this database:

An Organization is a State, Federal, local, academic, commercial, or other group united for a particular purpose.

An Organization may sponsor Projects or Surveys, select, describe, or establish Sampling Stations, conduct Station Visits, be responsible for Programs, and assign Station Alias' and External Reference Scheme labels to Sampling Stations.

Edit and update authority over its data and descriptions is allocated to each Organization through the implementation of a user controlled security password, i.e., the unlock key.

Subject area: ORGANIZATIONS

Properties:Persistent

Open

Min Occ: 2000 Avg Occ: 10000

Max Occ: 100000 Growth Rate: 10% per year

TD Name: TSMORGAN

Attributes: TSMORGAN\_IS\_NUMBER

TYPE\_CODE

ORG\_ID

NAME

UNLOCK\_KEY

SHORT\_NAME

PARENT\_ORGANIZATION\_NAME

DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IORGAN01 (Primary)

TSMORGAN\_IS\_NUMBER

**Entity Type:** ORG\_ANALYTICAL\_PROCEDURE\_ASGMT

Description: Describes the relationship between an Organization and an Analytical Procedure (e.g., adopting a National Procedure or creating an Organization-owned Procedure)

An organization must own a list of analytical procedures which will describe how results were obtained from samples. EPA will provide a master list of analytical procedures, and each org can adopt any or all of these procedures to create their list.

Additionally, each org can add their own procedures to the list, and these organization procedures behave as though they were adopted as well.

Only adopted procedures can be linked as metadata describing results.

Subject area: ANALYTICAL\_PROCEDURES

Properties:Persistent

Open

Min Occ: 5000 Avg Occ: 15000

Max Occ: 30000 Growth Rate: 5% per year

TD Name: TSROAPA

Attributes: TYPE\_CODE

SUSPEND\_INDICATOR

D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IOAPA01 (Primary)  
ASSIGNS ANALYTICAL\_PROCEDURE  
IS\_ASSIGNED\_TO ORGANIZATION

**Entity Type:** ORG\_ANA\_PROC\_CHAR\_ASGNMT

Description: A list of characteristic(s) which have been assigned to a single analytical method adopted by the organization.

Subject area: CHARACTERISTICS

Properties:Persistent

Open  
Min Occ: 50000 Avg Occ: 100000  
Max Occ: 150000 Growth Rate: 5% per year  
TD Name: TSROAPCA

Attributes: D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IOAPCA01 (Primary)  
ACCEPTS CHARACTERISTIC  
IS\_ACCEPTED\_FOR ORG\_ANALYTICAL\_PROCEDURE\_ASGMT

**Entity Type:** ORG\_LAB\_SMPL\_PREP\_PRCDRE\_ASGMT

Description: Describes the relationship between an Organization and the Lab\_Sample\_Prep\_Procedure (e.g. adopting a National Lab\_sample\_prep\_procedure or creating an organization owned preparation).

Subject area: ANALYTICAL\_PROCEDURES

Properties:Persistent

Open  
Min Occ: 5000 Avg Occ: 15000  
Max Occ: 30000 Growth Rate: 5% per year  
TD Name: TSROLSPA

Attributes: TYPE\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IOLSPA01 (Primary)  
ASSIGNS LAB\_SAMPLE\_PREP\_PROCEDURE  
IS\_ASSIGNED\_TO ORGANIZATION

**Entity Type:** PERMANENT\_GRID

Description: A system of two groups of parallel equally spaced lines, perpendicular to each other, such that a checker board pattern is formed.

(Any station type except Well, Facility, Spring or Cave, may have a Grid.)

Note: Must relate to one ALP of type GRID ORIGIN.

Subject area: STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 100

Max Occ: 1000 Growth Rate: 5% per year

TD Name: TSMPPMGRD

Attributes: DESCRIPTION\_TEXT

X\_AXIS\_LENGTH\_MEASURE

Y\_AXIS\_LENGTH\_MEASURE

X\_AXIS\_UNIT\_CODE

Y\_AXIS\_UNIT\_CODE

CELL\_AREA\_MEASURE

CELL\_AREA\_UNIT\_CODE

LABELING\_SCHEME\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPMGRD01 (Primary)

BELONGS\_TO STATION

**Entity Type:** PERMANENT\_TRANSECT

Description: A permanently established line or belt of survey or sampling designed to study changes in environmental conditions across a particular area associated with a station.

(Any station type except Well, Facility, Spring or Cave, may have a Transect.)

Note: Must relate to one ALP of type TRANSECT ORIGIN.

May relate to many ALP of type TRANS SAMPLING.

Subject area: STATIONS

Properties:Persistent

Open

Min Occ: 1 Avg Occ: 100

Max Occ: 1000 Growth Rate: 5% per year

TD Name: TSMPMTCT

Attributes: DESCRIPTION\_TEXT

INTERVAL\_MEASURE

INTERVAL\_UNIT\_CODE

LENGTH\_MEASURE

LENGTH\_UNIT\_CODE

LABELING\_SCHEME\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPMTCT01 (Primary)

BELONGS\_TO STATION

**Entity Type:** PERMITTED\_VALUE

Description: <None>

Subject area: REFERENCE\_TABLES

Properties:Persistent

Open

Min Occ: 50000 Avg Occ: 75000

Max Occ: 150000 Growth Rate: 10% per year

TD Name: TSMPRMVL

Attributes: TSMPRMVL\_IS\_NUMBER

TSMPRMVL\_ORG\_ID

TABLE\_NAME

FIELD\_NAME

SEQUENCE\_NUMBER

FIELD\_VALUE

FIELD\_DESCRIPTION

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPRMVL01 (Primary)

TSMPRMVL\_IS\_NUMBER

TSMPRMVL\_ORG\_ID

**Entity Type:** PERSON

Description: Contains identifying information about an individual  
that plays a role in an Organization or Project.



Subject area: ORGANIZATIONS

Properties:Persistent

Open

Min Occ: 20000 Avg Occ: 200000

Max Occ: 750000 Growth Rate: 5% per year

TD Name: TSMPERSON

Attributes: TSMPERSON\_IS\_NUMBER

TSMPERSON\_ORG\_ID

FIRST\_NAME

LAST\_NAME

ACTIVE\_INDICATOR\_CODE

HONORIFIC\_NAME

AFFILIATION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPERSN01 (Primary)

TSMPERSON\_IS\_NUMBER

TSMPERSON\_ORG\_ID

**Entity Type:** PERSON\_ROLE

Description: Contains the roles a person can play in relation to projects and organizations (as well as field monitoring activities and result analysis).

Subject area: ORGANIZATIONS

Properties:Persistent

Open

Min Occ: 100 Avg Occ: 200

Max Occ: 500 Growth Rate: 1% per year

TD Name: TSMPROLE

Attributes: TSMPROLE\_IS\_NUMBER

TSMPROLE\_ORG\_ID

TITLE

TYPE\_CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPROLE01 (Primary)

TSMPROLE\_IS\_NUMBER

TSMPROLE\_ORG\_ID

**Entity Type:** PERSON\_ROLE\_ASSIGNMENT

Description: Describes the association between the Organization and the Person entities.

Subject area: ORGANIZATIONS

Properties: Persistent

Open

Min Occ: 20000 Avg Occ: 200000

Max Occ: 750000 Growth Rate: 10% per year

TD Name: TSMPPRA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPRA01 (Primary)

IS\_FOR PERSON

IS\_FOR PERSON\_ROLE

**Entity Type: PIPE**

Description: For purposes of this database:

A Pipe is defined as either an intake or an outfall.

Outfall: A Pipe that transports a liquid or slurry from a Facility to a discharge point on or in a body of water.

Intake: A Pipe that transports water from a body of water to a Facility.

Subject area: FACILITY\_STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 1000

Max Occ: 2000 Growth Rate: 5% per year

TD Name: TSMPIPE

Attributes: TSMPIPE\_IS\_NUMBER

TSMPIPE\_ORG\_ID

IDENTIFICATION\_NUMBER

DESCRIPTION\_TEXT

SUBSURFACE\_DISCHARGE\_IND\_CODE

STATUS\_NAME

TREATMENT\_NAME

FLOW\_TYPE\_NAME

USE\_NAME

DISCHARGE\_FREQUENCY\_TYPE\_CODE

RECEIVING\_WATER\_TEXT

D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPIPE01 (Primary)  
TSMPIPE\_IS\_NUMBER  
TSMPIPE\_ORG\_ID

**Entity Type: PROGRAM**

Description: A program is a user-defined set of comprehensive federal, state, or local activities that combine to control or prevent pollution, remediate or restore contaminated sites, and protect and preserve environmental resources through statute, regulation, or standard operating procedures.

A Program may be comprised of many Projects or Surveys.

Additionally, Program names may be selected from a standardized list developed by EPA (e.g. well head protection, drinking water).

Subject area: ORGANIZATIONS

Properties: Persistent

Open  
Min Occ: 500 Avg Occ: 2500  
Max Occ: 25000 Growth Rate: 5% per year  
TD Name: TSMPROGM

Attributes: TSMPROGM\_IS\_NUMBER  
TSMPROGM\_ORG\_ID  
TYPE\_CODE  
NAME  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPROGM01 (Primary)  
TSMPROGM\_IS\_NUMBER  
TSMPROGM\_ORG\_ID

**Entity Type: PROJECT**

Description: A Project or Survey is a planned activity or set of activities conducted for the purpose of collecting information concerning environmental quality. For purposes of this database, each Organization controls (owns) the identifications and descriptions of its

Projects or Surveys.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 2000 Avg Occ: 10000

Max Occ: 100000 Growth Rate: 5% per year

TD Name: TSMPROJ

Attributes: TSMPROJ\_IS\_NUMBER

TSMPROJ\_ORG\_ID

IDENTIFICATION\_CODE

NAME

START\_DATE

PLANNED\_DURATION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

I PROJ01 (Primary)

TSMPROJ\_IS\_NUMBER

TSMPROJ\_ORG\_ID

**Entity Type:** PROJECT\_COOP\_ORG\_ASSIGNMENT

Description: Assigns a Cooperating Organization to a Project.

Cooperating Organizations may be assigned to more than one Project.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 2000 Avg Occ: 10000

Max Occ: 100000 Growth Rate: 5% per year

TD Name: TSMPCOA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPCOA01 (Primary)

INVOLVES COOPERATING\_ORGANIZATION

IS\_INVOLVED\_IN PROJECT

**Entity Type:** PROJECT\_OPERATING\_PERIOD\_ASGMNT

Description: <None>

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 7500 Avg Occ: 200000

Max Occ: 1500000 Growth Rate: 5% per year

TD Name: TSRPOPA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPOPA01 (Primary)

LINKS\_A\_PROJECT\_TO\_OPERATING\_PERIOD

LINKS\_AN\_OPERATING\_PERIOD\_TO\_PROJECT

**Entity Type:** PROJECT\_PERSON\_ASSIGNMENT

Description: The roster of assigned people and their roles on the Project.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 6000 Avg Occ: 30000

Max Occ: 300000 Growth Rate: 10% per year

TD Name: TSMPPA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPPA01 (Primary)

HAS PERSON

HAS PROJECT

**Entity Type:** PROJECT\_PERSON\_ROLE\_ASSIGNMENT

Description: Describes the association between the Project, Person, and Person Role entities. A Person assigned to a Project can have multiple roles.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 6000 Avg Occ: 30000

Max Occ: 300000 Growth Rate: 10% per year

TD Name: TSMPPRA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPPRA01 (Primary)

IS\_FOR PERSON\_ROLE

HAS PROJECT\_PERSON\_ASSIGNMENT

**Entity Type:** PROJECT\_PROGRAM\_ASSIGNMENT

Description: Describes the association between Program and Project.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 2000 Avg Occ: 5000

Max Occ: 50000 Growth Rate: 5% per year

TD Name: TSMPPRA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPRPA01 (Primary)

PARTICIPATED\_IN\_BY PROGRAM

IS\_FOR PROJECT

**Entity Type:** PROJECT\_STATION\_ASSIGNMENT

Description: Assigns a Station to a Project. Stations may be assigned to more than one Project.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 200000 Avg Occ: 4000000

Max Occ: 10000000 Growth Rate: 10% per year

TD Name: TSMPSA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPSA01 (Primary)

USES STATION

IS\_USED\_BY PROJECT

**Entity Type:** PROJECT\_STATION\_ROLE

Description: Contains possible type designations for a given station

on a given project. Valid type designations include:

- 1) Control
- 2) Water quality monitoring
- 3) Biological monitoring
- 4) Meteorological
- 5) Sediment chemistry
- 6) Habitat evaluation
- 7) Benthic monitoring

Subject area: PROJECTS

Properties: Persistent

Open

Min Occ: 20 Avg Occ: 50

Max Occ: 100 Growth Rate: 10% per year

TD Name: TSMPSR

Attributes: TSMPSR\_IS\_NUMBER

TSMPSR\_ORG\_ID

TYPE\_NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPSR01 (Primary)

TSMPSR\_IS\_NUMBER

TSMPSR\_ORG\_ID

**Entity Type:** PROJECT\_STATION\_ROLE\_ASSIGNMENT

Description: Identifies the role(s) of a Station assigned to a Project. Stations may be assigned more than one role on a single Project.

Subject area: PROJECTS

Properties: Persistent

Open

Min Occ: 200000 Avg Occ: 4000000

Max Occ: 10000000 Growth Rate: 10% per year

TD Name: TSMPSRA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPSRA01 (Primary)

IS\_FOR PROJECT\_STATION\_ASSIGNMENT

IS\_FOR PROJECT\_STATION\_ROLE

**Entity Type:** PUMP

Description: A mechanical device or lift installed in a Well used to move liquids against a gradient (e.g., gravity, pressure).

Subject area: WELL\_STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 10

Max Occ: 100 Growth Rate: 5% per year

TD Name: TSMPUMP

Attributes: TSMPUMP\_IS\_NUMBER

TSMPUMP\_ORG\_ID

TYPE\_CODE

SERIAL\_NUMBER

MANUFACTURER\_NAME

MANUFACTURER\_MODEL\_NAME

RATED\_RPM\_MEASURE

RATED\_CAPACITY\_MEASURE

RATED\_CAPACITY\_UNIT\_CODE

RATED\_POWER\_MEASURE

RATED\_POWER\_UNIT\_CODE

INTAKE\_DEPTH\_MEASURE

INTAKE\_DEPTH\_UNIT\_CODE

INTAKE\_DEPTH\_REFERENCE\_PT\_TEXT

LOCATION\_MEASURE

LOCATION\_UNIT\_CODE

LOCATION\_REFERENCE\_POINT\_TEXT

INSTALLATION\_DATE

REMOVAL\_DATE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IPUMP01 (Primary)

TSMPUMP\_IS\_NUMBER

TSMPUMP\_ORG\_ID

**Entity Type:** REFERENCE\_LABEL

Description: Label that provides the identifier for a Station in a specific External Reference Scheme (e.g., NPDES permit number, FRDS #, EMAP Hexagon #).

Subject area: STATIONS

Properties: Persistent

Open



Min Occ: 1 Avg Occ: 1000000  
Max Occ: 2000000 Growth Rate: 5% per year  
TD Name: TSMRFLBL

Attributes: TSMRFLBL\_IS\_NUMBER  
LABEL\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:  
IRFLBL01 (Primary)  
TSMRFLBL\_IS\_NUMBER  
REFERENCES EXTERNAL\_REFERENCE\_SCHEME  
REFERENCES STATION

**Entity Type: RESULT**

Description: Information about an environmental characteristic determined as a result of either field measurements, observations or analytical procedures performed on samples.

Note: Existing STORET has 200 million or more results.

Subject area: RESULTS

Properties: Persistent  
Open  
Min Occ: 100 Avg Occ: 100000  
Max Occ: 1000000 Growth Rate: 10% per year  
TD Name: TSRRRESULT

Attributes: TSRRRESULT\_IS\_NUMBER  
TSRRRESULT\_ORG\_ID  
D\_SEQ\_NUMBER  
COMPLETE\_INDICATOR\_CODE  
LAB\_CERTIFICATION\_IND\_CODE  
VALUE\_TEXT  
VALUE\_MEASURE  
VALUE STATUS  
PRECISION\_AMOUNT\_TEXT  
LABORATORY\_BATCH\_ID\_CODE  
DILUTION\_INDICATOR\_CODE  
RECOVERY\_INDICATOR\_CODE  
CORRECTION\_INDICATOR\_CODE  
RESULT TEXT INDICATOR CODE  
CELL DESCRIPTOR INDICATOR CODE  
CONFIDENCE\_LEVEL\_PERCENT\_MEASURE  
PROCEDURE EXCEPTION INDICATOR CD  
DURATION\_BASIS\_TYPE\_NAME  
DETECTION\_CONDITION\_CODE

SAMPLE\_FRACTION\_TYPE\_NAME  
 STATISTIC\_TYPE\_NAME  
 VALUE\_TYPE\_NAME  
 WEIGHT\_BASIS\_TYPE\_NAME  
 TEMPERATURE\_BASIS\_LEVEL\_NAME  
 SPECIES\_NUMBER  
 REFERENCE\_POINT\_FROM\_NAME  
 REFERENCE\_POINT\_TO\_NAME  
 LOWER\_RANGE\_VALUE  
 UPPER\_RANGE\_VALUE  
 TAXON\_POLLUTION\_TOLERANCE  
 FUNCTIONAL\_FEEDING\_GROUP  
 TROPHIC\_LEVEL  
 ANALYSIS\_DATE  
 ANALYSIS\_TIME  
 ANALYSIS\_TIME\_ZONE  
 REPLICATE\_ANALYSIS\_NUM  
 D\_USERID\_CODE  
 D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IRSULT01 (Primary)  
 TSRRRESULT\_IS\_NUMBER  
 TSRRRESULT\_ORG\_ID

**Entity Type:** RESULT\_CLASS\_INTERVAL

Description: The range of values with a defined minimum and maximum which defines a frequency class.

For analytical results where the characteristic is a count or percent of the substance analyzed, the individual count or percent is typically further qualified by a range or frequency class to which it applies.

For example, a sediment size analysis might produce results like:

Size Class	%
000 - 1.0	15%
1.0 - 5.0	20%
5.0 - 999	65%

Subject area: RESULTS

Properties: Persistent

Open  
 Min Occ: 100 Avg Occ: 1000  
 Max Occ: 10000 Growth Rate: 10% per year

TD Name: TSRRCI

Attributes: LOWER\_BOUND\_AMOUNT  
UPPER\_BOUND\_AMOUNT  
PRIMARY\_CLASS\_DESCRIPTOR  
SECONDARY\_CLASS\_DESCRIPTOR  
PARTICLE\_SIZE\_BASIS  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IRRCI01 (Primary)  
INCLUDES RESULT

**Entity Type:** RESULT\_LAB\_REMARK\_ASGNMT

Description: <None>

Subject area: RESULTS

Properties:Persistent

Open  
Min Occ: 100 Avg Occ: 5000  
Max Occ: 100000 Growth Rate: 0% per year  
TD Name: TSRRLLRA

Attributes: D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IRLRA01 (Primary)  
QUALIFIES\_A\_RESULT\_WITH LAB\_REMARK  
QUALIFIES RESULT

**Entity Type:** RESULT\_QC\_ADJUSTMENT\_FACTOR

Description: Factors requiring adjustments to the result value. The identified factors have already been applied to the result value and are thereby associated with the result.

Subject area: RESULTS

Properties:Persistent

Open  
Min Occ: 100 Avg Occ: 1000  
Max Occ: 10000 Growth Rate: 10% per year  
TD Name: TSRRQCAF

Attributes: TSRRQCAF\_IS\_NUMBER  
TSRRQCAF\_ORG\_ID

TYPE\_NAME  
VALUE\_TEXT  
DESCRIPTION\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IRQCAF01 (Primary)  
TSRRQCAF\_IS\_NUMBER  
TSRRQCAF\_ORG\_ID

**Entity Type:** RF1\_RIVER\_REACH

Description: The EPA designation for river reaches in the United States, as defined in the EPA River Reach file (Version 1.0, commonly called RF1).

For purposes of implementation, STORET has determined lat/long max/min locations which bound each RF1 River Reach.

Subject area: GEOGRAPHIC\_AREAS

Properties: Persistent

Open  
Min Occ: 70000 Avg Occ: 70000  
Max Occ: 70000 Growth Rate: 5% per year  
TD Name: TSMRRR

Attributes: TSMRRR\_IS\_NUMBER

TSMRRR\_ORG\_ID  
HYDROLOGIC\_UNIT\_CODE  
SEGMENT\_CODE  
NAME  
TYPE\_CODE  
LEVEL\_CODE  
MILE\_LENGTH\_MEASURE  
LATITUDE\_MAXIMUM\_DEGREE\_MEASURE  
LATITUDE\_MINIMUM\_DEGREE\_MEASURE  
LONGITUDE\_MAXIMUM\_DEGREE\_MEASURE  
LONGITUDE\_MINIMUM\_DEGREE\_MEASURE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IRRR01 (Primary)  
TSMRRR\_IS\_NUMBER  
TSMRRR\_ORG\_ID

**Entity Type:** SAMPLE

Description: (V30.20.0) Samples are quantities of material (e.g., water, sediment, biota) presumed to be representative of the environment. Samples may be collected in the field or created from other samples for the purpose of detailed analysis to identify constituents or pollutants.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 75000 Avg Occ: 750000

Max Occ: 4000000 Growth Rate: 5% per year

TD Name: TSRSMPLE

Attributes: TOTAL\_VOLUME\_MEASURE

TOTAL\_VOLUME\_UNIT\_CODE

TOTAL\_WEIGHT\_MEASURE

TOTAL\_WEIGHT\_UNIT\_CODE

DATA\_FILE\_NAME\_LOCATION\_TEXT

CONTAINER\_TYPE\_NAME

CONTAINER\_COLOR

CONTAINER\_SIZE\_MSR

CONTAINER\_SIZE\_UNIT\_CODE

TEMPERATURE\_PRESERVATION\_TYPE\_NM

PARENT\_INDICATOR\_CODE

GEAR\_DEPLOYMENT\_COMMENT\_TEXT

TRANSPORT\_STORAGE\_COMMENT\_TEXT

PRESRV\_STORAGE\_PROCEDURE\_TEXT

DURATION\_TIME

DURATION\_UNITS

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISMPLE01 (Primary)

IS\_PART\_OF FIELD\_ACTIVITY

**Entity Type:** SAMPLING\_DEFAULT\_PROFILE

Description: (V30.14.0) An Organization-defined group of defaults for sample collection & handling descriptors such as preservation, container, procedure, and gear. Profiles are representative of a particular type of sampling.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 20000 Avg Occ: 100000

Max Occ: 1000000 Growth Rate: 5% per year

TD Name: TSRS DP

Attributes: TSRS DP\_IS\_NUMBER  
TSRS DP\_ORG\_ID  
IDENTIFICATION\_CODE  
NAME  
CONTAINER\_TYPE\_NAME  
CONTAINER\_COLOR  
CONTAINER\_SIZE\_MSR  
CONTAINER\_SIZE\_UNIT\_CODE  
TEMPERATURE\_PRESERVATION\_TYPE\_NM  
PRESRV\_STORAGE\_PROCEDURE\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISDP01 (Primary)  
TSRS DP\_IS\_NUMBER  
TSRS DP\_ORG\_ID

**Entity Type: SERIAL\_ORG\_IDENTIFICATION**

Description: This entity is used to keep track of Organizations distributed from central on CDROM (or other packaging medium) to each location. It is also used by each location for purposes of specifying which Organizations they wish to have updated for each full export back to central.

Subject area: REFERENCE\_TABLES

Properties: Persistent

Open  
Min Occ: 2000 Avg Occ: 10000  
Max Occ: 100000 Growth Rate: 5% per year  
TD Name: TSMSOI

Attributes: TSMSOI\_SERIAL\_ID  
TSMSOI\_ORG\_ID  
ACTIVITY\_DATE  
REPLICATION\_FLAG  
LINE\_ONE\_TEXT  
LINE\_TWO\_TEXT  
LINE\_THREE\_TEXT  
LINE\_FOUR\_TEXT  
ZIP\_CODE  
COMMENTS  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISOI01 (Primary)

TSMSOI\_ORG\_ID  
TSMSOI\_SERIAL\_ID

**Entity Type:** SPRING\_STATION

Description: A discrete place where ground water flows naturally from a rock or the soil onto the land surface or into a body of surface water.

Subject area: SPRING\_STATIONS

Properties:Persistent

Open

Min Occ: 1 Avg Occ: 1000

Max Occ: 2000 Growth Rate: 5% per year

TD Name: TMSMPRNG

Attributes: PERMANENCE\_CODE

IMPROVEMENT\_CODE

OTHER\_GEOLOGIC\_UNIT\_NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISPRNG01 (Primary)

IS STATION

**Entity Type:** STANDARD\_INDUSTRIAL\_CLASS

Description: The Standard Industrial Classification code (SIC) is the statistical classification standard underlying all establishment-based Federal economic statistics classified by industry. The SIC is used to promote the comparability of establishment data describing various facets of the U.S. Economy. The classification scheme covers the entire field of economic activities and defines industries in accordance with the composition and structure of the economy.

Source: Preface to SIC code book developed by the Technical Committee on Industrial Classification, Office of Management and Budget.

Subject area: FACILITY\_STATIONS

Properties:Persistent

Open

Min Occ: 0 Avg Occ: 5000

Max Occ: 10000 Growth Rate: 5% per year

TD Name: TSMSIC

Attributes: TSMSIC\_CODE  
TSMSIC\_ORG\_ID  
NAME  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISIC01 (Primary)  
TSMSIC\_CODE  
TSMSIC\_ORG\_ID

**Entity Type: STATION**

Description: The location of the sample collection, measurement, or observation. May be an area or point. A Station must include at least one latitude/longitude point and may include many latitude/longitude points. In surface water monitoring, Station may be part of a network of stations in a stream, lake, or river. For ocean monitoring, Sampling Station may be a point at sea defined by latitude, longitude, and depth. For groundwater monitoring, a Sampling Station is a well that may be identified by name, number, latitude, longitude, and depth. For biological monitoring, a Station may be a sample area plus or minus X yards from the Station or a lat/long range. (There may be some unique data requirements for identifying Station for biological samples.) Note that Permit number, Program name, and Pipe identification number are part of the external reference scheme for a Station and not considered part of the Station itself.

Subject area: STATIONS

Properties: Persistent

Open  
Min Occ: 100000 Avg Occ: 1000000  
Max Occ: 2000000 Growth Rate: 5% per year  
TD Name: TSMSTATN

Attributes: TSMSTATN\_IS\_NUMBER  
TSMSTATN\_ORG\_ID  
IDENTIFICATION\_CODE  
EPA\_KEY\_IDENTIFIER  
NAME  
ESTABLISHMENT\_DATE  
ZID\_RELATION\_CODE  
INFLUENCE\_AREA\_DESCRIPTION\_TEXT  
DESCRIPTION\_TEXT



TRAVEL\_DIRECTIONS\_TEXT  
WATER\_DEPTH\_MEASURE  
WATER\_DEPTH\_UNIT\_CODE  
ECOREGION\_NAME  
D\_COMPLETE\_FLAG  
D\_DELETE\_FLAG  
D\_LAST\_STATION\_UPDATE\_TIMESTAMP  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISTATN01 (Primary)  
TSMSTATN\_IS\_NUMBER  
TSMSTATN\_ORG\_ID

**Entity Type:** STATION\_VISIT

Description: (V30.21.0) A period of time spent at a Station during which measurements, observations, and/or sampling activities may take place.

Note: Each Station Visit may be associated with one or more Trips. Each Trip may be associated with one or more Station Visits.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open  
Min Occ: 300000 Avg Occ: 8000000  
Max Occ: 50000000 Growth Rate: 15% per year  
TD Name: TSRSTVST

Attributes: TSRSTVST\_IS\_NUMBER

TSRSTVST\_ORG\_ID  
IDENTIFICATION\_NUMBER  
ARRIVAL\_DATE  
ARRIVAL\_TIME  
ARRIVAL\_TIME\_ZONE  
DEPARTURE\_DATE  
DEPARTURE\_TIME  
DEPARTURE\_TIME\_ZONE  
COMMENT\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISTVST01 (Primary)  
TSRSTVST\_IS\_NUMBER  
TSRSTVST\_ORG\_ID

**Entity Type:** STORET\_CDB\_TABLE\_SYNCHRONIZATION

Description: <None>

Subject area: REFERENCE\_TABLES

Properties: Persistent

Open

Min Occ: 5 Avg Occ: 100

Max Occ: 10000 Growth Rate: 10% per year

TD Name: TSMSCTS

Attributes: TSMSOI\_SERIAL\_ID

TSMSOI\_ORG\_ID

TABLE\_NAME

REPL\_SUCCEEDED\_FLG

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ISCTS01 (Primary)

TABLE\_NAME

TSMSOI\_SERIAL\_ID

TSMSOI\_ORG\_ID

**Entity Type:** STORET\_USER

Description: A registered user of the STORET application.

Subject area: ORGANIZATIONS

Properties: Persistent

Open

Min Occ: 50 Avg Occ: 100

Max Occ: 1000 Growth Rate: 5% per year

TD Name: TSMUSER

Attributes: TSMUSER\_USERID

FIRST\_NAME

LAST\_NAME

ROLE

COMMENT\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IUSER01 (Primary)

TSMUSER\_USERID

**Entity Type:** TABLE\_INFO

Description: This entity has information about all the STORET tables like name, whether a table needs to be replicated , whether it is a standard table or not etc.

Subject area: REPLICATION

Properties: Persistent

Open

Min Occ: 114 Avg Occ: 114

Max Occ: 200 Growth Rate: 1% per year

TD Name: TSMTBINF

Attributes: NAME

TYPE\_FLAG

COMMIT\_INTERVAL

HEIRARCHY\_NUMBER

ALTERNATE\_IS\_NUMBE

ALTERNATE\_ORG\_ID

STANDARD\_TABLE

Identifiers:

ITBINF01 (Primary)

NAME

**Entity Type:** TRAP\_NET\_OPERATION\_DETAIL

Description: (V30.22.0) A description of the manner in which the trap or net is set and relevant environmental conditions during the time the Sample was collected.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 4000 Avg Occ: 40000

Max Occ: 200000 Growth Rate: 5% per year

TD Name: TSRTNOD

Attributes: SAMPLING\_DURATION\_MEASURE

SAMPLING\_DURATION\_UNIT\_CODE

ORIENTATION\_TO\_CURRENT\_NAME

RELATIVE\_CURRENT\_DIR\_MSR

RELATIVE\_WIND\_DIRECTION\_MSR

COMMENT\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ITNOD01 (Primary)

PROVIDES\_DETAIL\_ABOUT\_SAMPLE

**Entity Type:** TRAWL\_OPERATION\_DETAIL

Description: (V30.23.0) A description of the manner in which the trawl or net is operated and relevant environmental conditions during the time the Sample was collected.

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 4000 Avg Occ: 40000

Max Occ: 200000 Growth Rate: 5% per year

TD Name: TSRTOD

Attributes: FISHED\_DURATION\_MEASURE

FISHED\_DURATION\_UNIT\_CODE

BOAT\_SPEED\_MEASURE

BOAT\_SPEED\_UNIT\_CODE

FISHED\_DISTANCE\_MEASURE

FISHED\_DISTANCE\_UNIT\_CODE

RELATIVE\_CURRENT\_DIR\_MSR

RELATIVE\_WIND\_DIRECTION\_MSR

COMMENT\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ITOD01 (Primary)

PROVIDES\_DETAIL\_ABOUT\_SAMPLE

**Entity Type:** TRIP

Description: (V30.24.0) An expedition or outing undertaken for the purpose of monitoring environmental quality at one or more sites (stations).

Subject area: FIELD\_ACTIVITIES

Properties: Persistent

Open

Min Occ: 300000 Avg Occ: 8000000

Max Occ: 50000000 Growth Rate: 5% per year

TD Name: TSRTRIP

Attributes: TSRTRIP\_IS\_NUMBER

TSRTRIP\_ORG\_ID

IDENTIFICATION\_CODE

NAME

START\_DATE

START\_TIME

START\_TIME\_ZONE

END\_DATE  
END\_TIME  
END\_TIME\_ZONE  
LEADER\_NAME  
VEHICLE\_SHIP\_NAME  
TRIP\_PLAN\_TEXT  
COMMENT\_TEXT  
SINGLE\_PROJECT\_INDICATOR  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ITRIP01 (Primary)  
TSRTRIP\_IS\_NUMBER  
TSRTRIP\_ORG\_ID

**Entity Type:** TRIP\_PROJECT\_ASSIGNMENT

Description: (V30.25.0) Describes the association between Trip and Project.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 300000 Avg Occ: 8000000

Max Occ: 50000000 Growth Rate: 5% per year

TD Name: TSRTPA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ITPA01 (Primary)  
IS\_FOR PROJECT  
IS\_FOR TRIP

**Entity Type:** TRIP\_STATION\_ASSIGNMENT

Description: (V30.26.0) Describes the association between Trip and Station.

Subject area: FIELD\_ACTIVITIES

Properties:Persistent

Open

Min Occ: 300000 Avg Occ: 8000000

Max Occ: 50000000 Growth Rate: 5% per year

TD Name: TSRTSA

Attributes: D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

ITSA01 (Primary)  
IS\_FOR STATION  
IS\_FOR TRIP

**Entity Type:** UNIT\_OF\_MEASURE

Description: The category that represents the broad class of a related set of units. Used to aid in minimizing choices when reporting the value of a characteristic, and to partially prevent invalid choices.

Subject area: RESULTS

Properties: Persistent

Open  
Min Occ: 100 Avg Occ: 200  
Max Occ: 1000 Growth Rate: 5% per year  
TD Name: TSRUOM

Attributes: TSRUOM\_IS\_NUMBER  
TSRUOM\_ORG\_ID  
UOM\_TYPE  
SHORT\_FORM\_NAME  
DESCRIPTION\_TEXT  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IUOM01 (Primary)  
TSRUOM\_IS\_NUMBER  
TSRUOM\_ORG\_ID

**Entity Type:** USER\_ORGANIZATION\_ASSIGNMENT

Description: An occurrence of this entity is used to determine STORET\_User access to a given Organization. The System Administrator will indicate which Organizations a particular User can update. When an Organization is selected, an occurrence of this entity is created.  
Assumption: Every user will be given read access throughout the application.

Subject area: ORGANIZATIONS

Properties: Persistent

Open  
Min Occ: 100 Avg Occ: 1000  
Max Occ: 2000 Growth Rate: 5% per year

TD Name: TSMUOA

Attributes: D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IUOA01 (Primary)  
PROVIDES\_ACCESS\_FOR STORET\_USER  
ESTABLISHES\_ACCESS\_TO ORGANIZATION

**Entity Type:** VALID\_STATION\_TYPE\_COMBINATION

Description: Valid combinations of primary and secondary station designations.

This replaces the Type Code in Station.

Subject area: STATIONS

Properties: Persistent

Open  
Min Occ: 1 Avg Occ: 100  
Max Occ: 10000 Growth Rate: 5% per year  
TD Name: TSMVSTC

Attributes: TSMVSTC\_IS\_NUMBER  
TSMVSTC\_ORG\_ID  
PRIMARY\_TYPE\_CODE  
SECONDARY TYPE CODE  
NATURAL\_INDICATOR\_CODE  
D\_USERID\_CODE  
D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IVSTC01 (Primary)  
TSMVSTC\_IS\_NUMBER  
TSMVSTC\_ORG\_ID

**Entity Type:** VOUCHER\_SPECIMEN\_COLLECTION

Description: A Voucher Specimen is a specimen or material used to define a species. The Voucher Specimen Collection is used by a program or special study to verify taxonomic identifications.

A voucher specimen is used as a "standard" against which all other specimens or samples are compared for the purpose of taxonomic identification. For example, the Smithsonian maintains a large collection of voucher specimens so that researchers can compare organisms collected in the field to the "standard" of the museum.

Subject area: PROJECTS

Properties:Persistent

Open

Min Occ: 500 Avg Occ: 1000

Max Occ: 2000 Growth Rate: 10% per year

TD Name: TSMVSC

Attributes: TSMVSC\_IS\_NUMBER

TSMVSC\_ORG\_ID

NAME

DESCRIPTION\_TEXT

CONTACT\_PERSON\_NAME

LOCATION\_DESCRIPTION\_TEXT

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IVSC01 (Primary)

TSMVSC\_IS\_NUMBER

TSMVSC\_ORG\_ID

**Entity Type:** WELL\_LEGAL\_ENTITY

Description: The identification and addresses of persons or organizations with certain formal interests in the well.

Example: Driller

Owner

Operator

Subject area: WELL\_STATIONS

Properties:Persistent

Open

Min Occ: 1 Avg Occ: 100

Max Occ: 1000 Growth Rate: 5% per year

TD Name: TSMWLE

Attributes: TSMWLE\_TYPE\_NAME

NAME

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IWLE01 (Primary)

TSMWLE\_TYPE\_NAME

IS\_FOR WELL\_STATION



**Entity Type:** WELL\_STATION

Description: A shaft or pit dug into the earth for the extraction of water. It may contain several predefined sampling points which are distinguished by depth. A well station may be comprised of several wells as in a well field.

Note: Some organizations consider these different depths as separate Sampling Stations.

Subject area: WELL\_STATIONS

Properties: Persistent

Open

Min Occ: 1 Avg Occ: 150000

Max Occ: 300000 Growth Rate: 5% per year

TD Name: TSMWELL

Attributes: TSMWELL\_IS\_NUMBER

TSMWELL\_ORG\_ID

NAME

IDENTIFICATION\_NUMBER

USE\_CODE

WELL HEAD PROTECTION AREA NAME

DEVELOPMENT\_METHOD\_CODE

CONSTRUCTION\_METHOD\_CODE

WATER\_PRIMARY\_USE\_CODE

GRADIENT\_TYPE\_CODE

DEPTH\_AT\_COMPLETION\_MEASURE

DEPTH\_AT\_COMPLETION\_UNIT\_CODE

DEPTH\_OF\_HOLE\_MEASURE

DEPTH\_OF\_HOLE\_UNIT\_CODE

WELL HEAD HEIGHT MEASURE

WELL HEAD HEIGHT UNIT CODE

CASING HEIGHT MEASURE

CASING HEIGHT UNIT CODE

DISINFECTED\_INDICATOR\_CODE

CONSTRUCTION\_START\_DATE

CONSTRUCTION\_END\_DATE

INITIAL\_PUMPING\_DURATION

INITIAL\_PUMPING\_DURATION\_UNT\_COD

INITIAL\_PUMPING\_RATE\_MEASURE

INITIAL\_PUMPING\_RATE\_UNIT\_CODE

NATURAL\_FLOW\_INDICATOR\_CODE

STATUS\_CODE

INIT\_BOREHOLE\_DIAMETER\_MEASURE

INIT\_BOREHOLE\_DIAMETER\_UNIT\_CODE

D\_USERID\_CODE

D\_LAST\_UPDATE\_TIMESTAMP

Identifiers:

IWELL01 (Primary)

TSMWELL\_IS\_NUMBER  
TSMWELL\_ORG\_ID

-End of Report-