



Software Release Notes for STORET Central Warehouse 2.0.3

United States Environmental
Protection Agency

Office of Wetlands, Oceans and
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**SOFTWARE RELEASE NOTES
FOR
STORET CENTRAL WAREHOUSE 2.0.3**

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1.0 INTRODUCTION

The STORET Central Warehouse operates as a retrieval mechanism for data submitted to the Environmental Protection Agency (EPA). The STORET Central Warehouse is composed of Extract, Transform, and Load (ETL) software which populates the STORET Central Warehouse with data, and an associated Web Interface which allows the selective retrieval of data. This release provides enhancements to this functionality.

This release is identified and tracked under the configuration identifier C2.0.3, and is being provided to the Office of Wetlands, Oceans, and Watersheds (OWOW), Assessment and Watershed Protection Division, Monitoring Branch, STORET Job Assignment Manager (JAM).

2.0 REFERENCES

The STORET Project Plan dated April 13, 2004 was the basis for developing the STORET Central Warehouse upgrade. The requirements were initiated and documented through the Change Control Board (CCB) process.

3.0 SUMMARY OF FUNCTIONALITY

The requirements associated with this release have been integrated with prior releases of the STORET Central Warehouse. The software for creating tables, populating data (i.e., ETL), and creating and operating the Web interface is included in this deliverable. The requirements specific to this release are described below.

3.1 New Functionality

This release includes the following new functionality:

- C Added converted result values and units to result reports. Results associated with a given unit type (e.g., volume, mass) are converted to a single target unit. Updated the web interface to allow selection of converted values and units for inclusion in result reports.
- C Added converted datums to result reports. The converted datums are based on the Oracle Spatial conversion factors and specifically include North American Datum (NAD) 27, World Geodetic System (WGS) 84, and WGS72 datums converted to NAD83. Updated the web interface to allow selection of converted datums for inclusion in the report.

- C Created ability to retrieve Station reports based on Organization ID and Station ID.
- C Modified ETL to allow the display of User Defined Habitat Assessments in support of the Station Home Page.

3.2 Improved Functionality

This release includes the following improved functionality:

- C Replaced “Compress Data File Now” button with hyper-linked text on the Download Results and Download Site Descriptions pages. Updated page wording as requested by the client.
- C Flagged Stations which are only associated with User-Defined Habitat Assessment activities as Visited.
- C Enhanced ETL process to improve system performance and capabilities. The most significant changes are:
 - Consolidated Characteristic Alias Structured Query Language (SQL) to improve ETL performance.
 - Modified software to set table Percent Free (i.e., %free) sizes to 0 after ETL and before import/export processing.
 - Added TSMALP_IS_NUMBER to the Station fact table for future use.
 - Added ORGANIZATION_IS_NUMBER to the Regular Result, Biological Result, and Habitat Result fact tables for future use.
- C Updated Central Warehouse Help for C2.0.3 changes and enhancements.
- C Added Station Description Text to the Station ETL.
- C Added Station Description Text to the Stations by Geographic Location and Stations by Organization/Station ID selection pages, and to the Station (Site) Description report.
- C Modified system to allow the display of replicate numbers on Result Reports.

4.0 DEGREE OF FUNCTIONALITY BEING PROVIDED

The software provided by this release fulfills the requirements agreed to with the JAM, and has been developed in accordance with the design specifications (Appendix A). No unresolved discrepancies are known to exist upon conclusion of testing.

5.0 INSTALLATION INSTRUCTION

This section contains the step-by-step installation instruction to create the STORET Central Warehouse, and install the associated Web Application. There are several noteworthy items regarding the installation:

- C This release of the Central Warehouse requires Oracle 9i and JServer.
- C Edit this script for database usernames, passwords, and connect strings.
- C Edit all ETL scripts for tablespace names.
- C Scripts must be run in the order listed to ensure correct software installation.
- C A rollback segment named RBSBIG must exist and be on-line.
- C Oracle archiving should be turned off when running the ETL scripts.
- C Log files are created for each of the Structured Query Language (SQL) scripts listed in these instructions. These log files have parallel names and directory locations as the scripts that create them. Log files should be checked for errors after each step of the installation process to ensure the installation completes successfully.
- C Copy the storetw directory from the “Release C2.0.3\software” directory to your C:\ drive.
- C Install Oracle Spatial into the ETL database before running this ETL.
- C An optional script has been provided (i.e., tbs_coalesce.sql) to coalesce the STORETDATA and STORETINDX tablespaces for improved performance. Execute this script if the storetw schema is being imported into another database (e.g., the ETL loaded storetw schema is moved to a different production database). Connect to the database with Database Administrator (DBA) privileges to run the tbs_coalesce.sql script.

The installation package is not dependent upon a specific drive letter. If the installation package is placed on a different drive, replace “C:” with the letter of that drive in the following instructions.

1. Open a SQL*Plus session.
2. Create storetw schema with appropriate system and object privileges.

```
CONNECT SYSTEM/STO2ET@STORET.SDC
```

```
@C:\storetw\storetw\create_storetw.sql;
```

```
CONNECT STORET/STO2ET@STORET.SDC
```

```
@C:\storetw\storetw\storet_grants.sql;
```

```
CONNECT STORET1/STO2ET1@STORET.SDC
```

```
@C:\storetw\storetw\storet1_grants.sql;
```

3. Create the functions used by the ETL scripts.

```
CONNECT STORETW/STORETW@STORET.SDC
```

```
@C:\storetw\functions\etl_glob_var.sql;
```

```
@C:\storetw\functions\f_createflbrmk.sql;
```

```
@C:\storetw\functions\f_estry.sql;
```

```
@C:\storetw\functions\f_mad.sql;
```

```
@C:\storetw\functions\f_station_visited.sql;
```

```
@C:\storetw\functions\f_fieldset.sql;
```

```
@C:\storetw\functions\f_createFNAICS.sql;
```

```
@C:\storetw\functions\f_biopt.sql;
```

```
@C:\storetw\functions\f_prmv1.sql;
```

```
@c:\storetw\functions\f_char_name.sql;
```

4. Create FA_STATION table.
@C:\storetw\fa_statn\fa_station_table.sql;
5. Create Characteristic tables.
@C:\storetw\char_stn\char_stn_table.sql;
@C:\storetw\char_stn\char_table.sql;
6. Create Drainage Basin tables.
@C:\storetw\drainagebasin\db_tables.sql;
7. Create Geographical tables (state/county).
@C:\storetw\geopa\geo_tables.sql;

8. Create Method and Datum (MAD) code tables.
@C:\storetw\mad\mad_tables.sql;
@C:\storetw\mad\stn_std_datum.sql;
9. Create Organization table.
@C:\storetw\org\org_tables.sql;
10. Create Station Types table.
@C:\storetw\statn_types\statn_types_tables.sql;
11. Create Estuary tables.
@C:\storetw\estuary\estry_tables.sql;
12. Create DI_DATE table.
@C:\storetw\di_date\di_date_table.sql;
13. Create UOM table with Unit Conversion factors.
@C:\storetw\unit_conversion.sql;
14. Create FA_REGULAR_RESULT table.
@C:\storetw\fa_regular_result\fa_regular_result_table.sql;
@C:\storetw\fa_regular_result\fa_regular_result_data1.sql;
@C:\storetw\fa_regular_result\fa_regular_result_pdl_data1.sql;
@C:\storetw\fa_regular_result\create_temp_tables.sql;
@C:\storetw\fa_regular_result\update_temp_tables.sql;
@C:\storetw\fa_regular_result\fa_regular_result_data2.sql;
15. Create FA_BIOLOGICAL_RESULT table.
@C:\storetw\fa_biological_result\fa_bio_result_table.sql;
@C:\storetw\fa_biological_result\fa_bio_result_data1.sql;
@C:\storetw\fa_biological_result\create_bio_temp_tables.sql;
@C:\storetw\fa_biological_result\update_bio_temp_tables.sql;
@C:\storetw\fa_biological_result\update_bio_temp_tables2.sql;
@C:\storetw\fa_biological_result\fa_bio_result_data2.sql;
16. Create FA_HABITAT_RESULT table.
@C:\storetw\fa_habitat_result\fa_habitat_result_table.sql;
@C:\storetw\fa_habitat_result\fa_habitat_result_data1.sql;
@C:\storetw\fa_habitat_result\create_habitat_temp_tables.sql;
@C:\storetw\fa_habitat_result\update_habitat_temp_tables.sql;
@C:\storetw\fa_habitat_result\fa_habitat_result_data2.sql;

17. Create DI_ACT_MEDIUM table.
@C:\storetw\di_act_medium\di_act_medium.sql;
18. Create result fact table indexes.
@C:\storetw\fa_regular_result\fa_regular_result_index.sql;
@C:\storetw\fa_biological_result\fa_bio_result_index.sql;
@C:\storetw\fa_habitat_result\fa_habitat_result_index.sql;
19. Create LU_CHAR_ALIAS AND LU_CHAR_ALIAS_TYPE tables.
@C:\storetw\lu_char_alias\lu_char_alias.sql;
20. Create DI_PROJECT table and the associated relationship tables.
@C:\storetw\di_project\di_project_table.sql;
@C:\storetw\di_project\project_rel_tables.sql;
21. Create the LU_STATION_ALIAS table.
@C:\storetw\lu_station_alias\lu_station_alias.sql;
22. Create the remaining dimension tables (i.e., DI_ACTIVITY_INTENT, DI_COMMUNITY_SAMPLED, DI_SUBJECT_TAXON, DI_GROUP_TYPE, DI_BIOPART, and DI_ACTIVITY_MATRIX).
@C:\storetw\di_activity_intent\di_activity_intent.sql;
@C:\storetw\di_community_sampled\di_community_sampled.sql;
@C:\storetw\di_subject_taxon\di_subject_taxon.sql;
@C:\storetw\di_group_type\di_group_type.sql;
@C:\storetw\di_biopart\di_biopart.sql;
@C:\storetw\di_activity_matrix\di_activity_matrix.sql;
23. Create the BLOB table and add BLOB IDs to the fact tables.
@C:\storetw\fa_blob\fa_blob.sql;
24. Finish building the FA_REGULAR_RESULT table.
@C:\storetw\fa_regular_result\fa_regular_result_const.sql;
@C:\storetw\fa_regular_result\fa_regular_result_drop_cols.sql;
25. Finish building the FA_BIOLOGICAL_RESULT table.
@C:\storetw\fa_biological_result\fa_bio_result_const.sql;
@C:\storetw\fa_biological_result\fa_bio_result_drop_cols.sql;
26. Finish building the FA_HABITAT_RESULT table.
@C:\storetw\fa_habitat_result\fa_habitat_result_const.sql;
@C:\storetw\fa_habitat_result\fa_habitat_result_drop_cols.sql;

27. Drop unnecessary columns from FA_STATION table.
@C:\storetw\fa_statn\fa_station_drop_cols.sql;
28. Analyze database objects and performance tune.
@C:\storetw\analyze_objects.sql;
@C:\storetw\performance_tuning.sql;
29. Delete temporary tables.
@C:\storetw\drop_temp_tables.sql;
30. Update User Defined Habitat Result columns.
@C:\storetw\fa_habitat_result\DW_user_def_hab.sql;
31. Update tables and indexes storage parameters.
@C:\storetw\gen_tblstrg.sql;
@C:\storetw\gen_idxstrg.sql;

The ETL process is now complete. Perform the remaining steps for installing the web interface.

32. Create report customization related table and materialized views.
CONNECT STORETW/STORETW@STORET.SDC
@C:\storetw\application\APP_COLUMN_NAME.sql;
@C:\storetw\materialized_views.sql;
33. Alter the file C:\storetw\application\DW_glob_var.sql to reflect the directory structure of the environment where the software is being installed. The global variables established in this package should have values identical to the values in the glob_var.sql file included with the existing STORET Web Application with one exception; the file name section of the variable lv_script_path should be set to "DW_storet.js".
34. Create the global variables package as storetw.
@C:\storetw\application\DW_glob_var.sql;
35. Compile Java procedures used by the web application procedures.
@C:\storetw\application\procedures\DW_exec_os.java;
@C:\storetw\application\procedures\DW_blob_handler.java;
36. Create the web application procedures as storetw.
@C:\storetw\application\procedures\DW_huc_popup.sql;
@C:\storetw\application\procedures\DW_counties_popup.sql;
@C:\storetw\application\procedures\DW_top_of_page.sql;

```
@C:\storetw\application\procedures\DW_bottom_of_page.sql;  
@C:\storetw\application\procedures\DW_display_calendar.sql;  
@C:\storetw\application\procedures\DW_geo_select.sql;  
@C:\storetw\application\procedures\DW_date_select.sql;  
@C:\storetw\application\procedures\DW_char_select.sql;  
@C:\storetw\application\procedures\DW_project_select.sql;  
@C:\storetw\application\procedures\DW_station_select.sql;  
@C:\storetw\application\procedures\DW_medium_select.sql;  
@C:\storetw\application\procedures\DW_community_select.sql;  
@C:\storetw\application\procedures\DW_selection_criteria.sql;  
@C:\storetw\application\procedures\DW_selection_criteria_station.sql;  
@C:\storetw\application\procedures\DW_station_count.sql;  
@C:\storetw\application\procedures\DW_station_download_custom.sql;  
@C:\storetw\application\procedures\DW_station_hub_custom.sql;  
@C:\storetw\application\procedures\DW_proj_popup.sql;  
@C:\storetw\application\procedures\DW_char_alias_popup.sql;  
@C:\storetw\application\procedures\DW_station_popup.sql;  
@C:\storetw\application\procedures\DW_extref_popup.sql;  
@C:\storetw\application\procedures\DW_result_criteria_geo.sql;  
@C:\storetw\application\procedures\DW_result_criteria_project.sql;  
@C:\storetw\application\procedures\DW_result_criteria_station.sql;  
@C:\storetw\application\procedures\DW_bio_result_criteria_geo.sql;  
@C:\storetw\application\procedures\DW_bio_result_criteria_project.sql;  
@C:\storetw\application\procedures\DW_bio_result_criteria_station.sql;  
@C:\storetw\application\procedures\DW_hab_result_criteria_geo.sql;  
@C:\storetw\application\procedures\DW_hab_result_criteria_project.sql;  
@C:\storetw\application\procedures\DW_hab_result_criteria_station.sql;  
@C:\storetw\application\procedures\DW_result_count.sql;  
@C:\storetw\application\procedures\DW_result_download_custom.sql;  
@C:\storetw\application\procedures\DW_result_hub_custom.sql;  
@C:\storetw\application\procedures\DW_home.sql;  
@C:\storetw\application\procedures\DW_blob_download.sql;  
@C:\storetw\application\procedures\DW_station_download_zip.sql;  
@C:\storetw\application\procedures\DW_result_download_zip.sql;
```

37. Copy the application's JavaScript library file into the scripts directory indicated in the global variables script (see step 33).
--C:\storetw\application\scripts\DW_storet.js
38. Copy the application's Help and the associated image files into the Hyper-Text Markup Language (HTML) documents directory indicated in the global variables script (see step 33).

```
--C:\storetw\application\doc\DW_storet_help.html  
--C:\storetw\application\doc\lat_long_ex.gif
```

39. Alter the file C:\storetw\application\procedures\DW_PERMISSIONS.sql to reflect the environment where the software is being installed. This script includes JAVA permissions that require a username/password with DBA privileges. The script must also be modified to include the correct directory location of the GZIP file compression utility and the location of the user reports directory (established in DW_glob_var).
40. Grant appropriate privileges and create required synonyms.
@C:\storetw\application\DW_GRANTS.sql;
CONNECT STORETWEB/STORETWEB@STORET.SDC
@C:\storetw\application\DW_SYNONYMS.sql;
CONNECT SYSTEM/STO2ET@STORET.SDC
@C:\storetw\application\DW_PERMISSIONS.sql;
DISCONNECT

APPENDIX A

STORET Central Warehouse Specifications

STORET Central Warehouse Specification**SIR:** 1502, 1532, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Bio_Result_Criteria_Geo**Web Page Name:** Biological Results by Geographic Location**Creation Date:** 8/06/2003**Processing Overview/Description:**

The Biological Results by Geographic Location page is the first Biological Result search page of the STORET Central Warehouse and provides four major search areas: Geographic Location, Date, Activity Intent and Community Sampled, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. In addition, the Geographic Location dimension is divided into three sub-dimensions: State/County, Latitude/Longitude, and Hydrologic Unit Code (HUC). The user is able to select one of these three location sub-dimensions per Result query. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Results by Geographic Location

Input Parameters:

These parameters are passed from the three Popup windows (DW_County_Popup, DW_HUC_Popup, and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Hydrologic Unit Code value. By default this value is 'ALL'.	AS_HUC
A Pl/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_County_Popup	STORET: Select Counties	Look Up
DW_HUC_Popup	STORET: Select a Hydrologic Unit Code (HUC)	Look Up
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
Identifies the geographic location parameter being used for the search. By default this value is 'StateCounty'.	GEOGRAPHIC
The name of the selected State. By default this value is 'ALL'.	AS_STATE

Natural Language	Parameter
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Northern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 90.	MAX_LAT_DD
The Western Limit of a Latitude/Longitude query in decimal degrees. By default this value is 180.	MIN_LONG_DD
The Eastern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MAX_LONG_DD
The Southern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MIN_LAT_DD
The direction of the Northern Limit. By default this value is N.	DIR_MAXLAT
The direction of the Southern Limit. By default this value is N.	DIR_MINLAT
The direction of the Eastern Limit. By default this value is W.	DIR_MAXLONG
The direction of the Western Limit. By default this value is W.	DIR_MINLONG
The Hydrologic Unit Code value. By default this value is 'ALL'.	AS_HUC
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1

Natural Language	Parameter
The month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_MON3
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4

Natural Language	Parameter
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—”).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—”).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—”).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—”).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags(). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE
A PI/Sql table of selected Activity Intent (Intent Key List).	D_INTENT_LIST
A PI/Sql table of selected Community Sampled (Community Sampled Key List).	D_COMMUNITY_LIST

Internal Procedure Events:**Onload**

- C Populate the State Name list box with State Names organized alphabetically by country (with the U. S. first followed by Mexico and Canada).
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Populate and format the Activity Intent list box with Activity Intent names.
- C Populate and format the Community Sampled list box with Community Sampled names.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Geographic Location Section

- C State/County 'Lookup' onclick: Display a pop-up window showing the available counties for the state currently selected from the drop-down list. Populate the County Name(s) text area with the Counties that the user selects from the pop-up window.
- C HUC 'Lookup' onclick: Display a pop-up window showing all available HUC codes and their corresponding names. Populate the Cataloging Unit text box with the HUC code that the user selects from the pop-up window.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user selects 'All' State/Counties, all result records are included in the search.
- C If the user selects 'All' HUCs, all result records are included in the search.
- C If the user selects defaults latitude/longitude values (i.e., N=90, S=0, E=0, W=180), all result records are included in the search.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To Date = current date), all result records are included in the search.
- C Selected Community Sampled are included in the search only if Intent is 'Select All' or 'Taxon Abundance'.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.

- C The user will not be allowed to proceed to the next page if a non-numeric character is entered in the Latitude/Longitude fields or if the entry is outside the Latitude/Longitude permitted value range.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- An alert is displayed if the user attempts to perform a County look-up before selecting a State.
- The county field is reset to 'All' if the selected State is changed.
- The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g. Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First half of page.

The screenshot shows a web browser window titled "EPA > STORET > Biological Results by Geographic Location - Microsoft Internet Explorer". The address bar shows the URL "http://oasdev.sdc-moses.com/storet/srpp/DW_bio_resultcriteria_geo". The page header includes the U.S. Environmental Protection Agency logo and the STORET logo. A search bar is present with a "GO" button. Below the header, the page title is "Biological Results by Geographic Location".

Geographic Location

Select a single type of location search that you wish to perform (state/county, latitude/longitude, or HUC). Then enter the corresponding search criteria.

<input checked="" type="radio"/> State/County	State Name ALL	County Name ALL	Look Up
<input type="radio"/> Latitude/Longitude (in decimal degrees)	West Limit 180	North Limit 90 South Limit 0	East Limit 0
<input type="radio"/> Drainage Basin/HUC	Cataloging Unit ALL		

Date

Specify Activity Start Date range(s)

Date Range 1:	JAN	1	1900	To	SEP	3	2003
Date Range 2:	---	--	----	To	---	--	----
Date Range 3:	---	--	----	To	---	--	----
Date Range 4:	---	--	----	To	---	--	----

Second half of page.

The screenshot shows a web browser window with a title bar and standard navigation icons. The main content area is divided into two sections:

Activity Intent and Community Sampled

This section contains two side-by-side selection boxes:

- Left Box:** Titled "Select one or more Activity Intent". It has a dropdown menu labeled "ACTIVITY INTENT" with the following options: "Select All", "Individual", "Taxon Abundance", and "Tissue".
- Right Box:** Titled "If Intent is Taxon Abundance, select one or more Community Sampled". It has a dropdown menu labeled "COMMUNITY SAMPLED" with the following options: "Select All", "Aquatic Vegetation", "Bacteria/Virus", "Benthic Macroinvertebrates", "Birds", "Corals", and "Fish/Nekton".

Characteristic

Below the selection boxes is a section titled "Characteristic" with the instruction: "Use the Characteristic Search to create a list of up to 50 Characteristics".

This section includes:

- A "Characteristic Search" text input field.
- A "Search By" dropdown menu currently set to "CHARACTERISTIC NAME".
- A "Search" button.
- A checked checkbox labeled "Hide Taxonomic Names".
- A large empty text area labeled "Characteristic Name".
- "Clear Selected" and "Clear All" buttons at the bottom of the text area.
- "Continue" and "Clear Form" buttons at the bottom of the section.

At the bottom right of the page, there is a blue "Help" link.

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Last updated on November 26, 2003
URL: http://oasdev.sdc-moses.com/storet/srpp/DW_bio_resultcriteria_geo

STORET Central Warehouse Specification**SIR:** 1502, 1532, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Bio_Result_Criteria_Project**Web Page Name:** Biological Results by Project**Creation Date:** 8/6/2003**Processing Overview/Description:**

The Biological Results by Project page is the third Biological Result search page of the STORET Central Warehouse and provides four major search areas: Organization/Project, Date, Activity Intent and Community Sampled, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select a single Project from a single Organization. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	ORGANIZATION_ID	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Results by Project

Input Parameters:

These parameters are passed from the two Popup windows (DW_Project_Popup and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Project_Popup	STORET: Select Project	Look Up
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1

Natural Language	Parameter
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as “—”).	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as “—”).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—”).	END_MON3

Natural Language	Parameter
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER

Natural Language	Parameter
A Pl/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE
A Pl/Sql table of selected Activity Intent (Intent Key List).	D_INTENT_LIST
A Pl/Sql table of selected Community Sampled (Community Sampled Key List).	D_COMMUNITY_LIST

Internal Procedure Events:

Onload

- C** Populate and format the Organization list box with Organization IDs and Names organized by Organization ID.
- C** For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C** Populate and format the Activity Intent list box with Activity Intent names.
- C** Populate and format the Community Sampled list box with Community Sampled names.
- C** Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Organization/Project Section

- C** Project 'Lookup' onclick: Display a pop-up window showing the available Projects for the Organization currently selected from the drop-down list. Populate the Project Name textbox with the Project that the user selects from the pop-up window and populate the hidden variable D_PROJ_LIST with the corresponding key.

Date Section

- C** Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.

- C If the user has selected an Organization but does not select a Project, data for the selected Organization is retrieved for the report.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To = current date), all result records are included in the search.
- C Selected Community Sampled are included in the search only if Intent is 'Select All' or 'Taxon Abundance'.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- An alert is displayed if the user attempts to perform a Project look-up before selecting an Organization.
- The Project field is reset to 'Select a Project' if the selected Organization is changed.
- The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g., Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First half of page.

The screenshot shows the STORET web application interface in a Microsoft Internet Explorer browser window. The browser address bar shows the URL: http://oasdev.sdc-moses.com/storet/srpp/DW_bio_resultcriteria_project. The page header includes the U.S. Environmental Protection Agency logo and the STORET title. Below the header, there are navigation links: [Recent Additions](#), [Contact Us](#), and [Print Version](#). A search bar with a "GO" button is also present. The main content area is titled "Biological Results by Project" and contains several sections:

- Project:** A section with two steps. Step 1: "Select a Single Organization from the List" includes a dropdown menu for "ORGANIZATION NAME" with the text "Select an Organization". Step 2: "Select a Single Project by Clicking 'Look Up'" includes a dropdown menu for "Select a Project" and a "Look Up" button.
- Date:** A section titled "Specify Activity Start Date range(s)" with four rows of date range selectors. Each row has "Date Range 1:" through "Date Range 4:" followed by month, day, and year dropdowns, and a "To" followed by another set of month, day, and year dropdowns. The first row is pre-filled with "JAN 1 1900" and "SEP 3 2003".
- Activity Intent and Community Sampled:** Two side-by-side dropdown menus. The left one is titled "Select one or more Activity Intent" and lists "Select All", "Individual", "Taxon Abundance", and "Tissue". The right one is titled "If Intent is Taxon Abundance, select one or more Community Sampled" and lists "Select All", "Aquatic Vegetation", "Bacteria/Virus", "Benthic Macroinvertebrates", "Birds", "Fish/Nekton", and "Mammals".

Second half of page.

The screenshot shows a web browser window with a toolbar at the top. The main content area is divided into two sections:

Activity Intent and Community Sampled

This section contains two side-by-side selection boxes:

- Left Box:** Titled "Select one or more Activity Intent". It has a dropdown menu labeled "ACTIVITY INTENT" with the following options: "Select All", "Individual", "Taxon Abundance", and "Tissue".
- Right Box:** Titled "If Intent is Taxon Abundance, select one or more Community Sampled". It has a dropdown menu labeled "COMMUNITY SAMPLED" with the following options: "Select All", "Aquatic Vegetation", "Bacteria/Virus", "Benthic Macroinvertebrates", "Birds", "Corals", and "Fish/Nekton".

Characteristic

Below the selection boxes is a section titled "Characteristic" with the instruction: "Use the Characteristic Search to create a list of up to 50 Characteristics".

The search form includes:

- A text input field for "Characteristic Search".
- A dropdown menu for "Search By" with "CHARACTERISTIC NAME" selected.
- A "Search" button.
- A checkbox labeled "Hide Taxonomic Names" which is checked.
- A large text area for "Characteristic Name" (currently empty).
- "Clear Selected" and "Clear All" buttons below the text area.
- "Continue" and "Clear Form" buttons at the bottom of the section.

At the bottom of the page, there is a "Help" link on the right, a horizontal line, and footer text: "EPA Home | Privacy and Security Notice | Contact Us", "Last updated on November 26, 2003", and "URL: http://oasdev.sdc-moses.com/storet/srpp/DW_bio_resultcriteria_project".

STORET Central Warehouse Specification**SIR:** 1502, 1532, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Bio_Result_Criteria_Station**Web Page Name:** Biological Results by Station**Creation Date:** 8/06/2003**Processing Overview/Description:**

The Biological Results by Station page is the second Biological Result search page of the STORET Central Warehouse and provides four search areas: Organization/Station, Date, Activity Intent and Community Sampled, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select Stations from multiple Organizations, but is limited to selecting a maximum of 100 Stations per query. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	ORGANIZATION_ID	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Results by Station

Input Parameters:

These parameters are passed from the three Popup windows (DW_Extref_Popup, DW_Station_Popup and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Type. By default this value is 0.	D_EXTREF_LIST
A Pl/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
A Pl/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Extref_Popup	STORET: Select a Station Alias Type	Look Up
DW_Station_Popup	STORET: Station Search Results	Search Stations
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Types. By default this value is 0.	D_EXTREF_LIST
The search string used to find Stations within the Organization. By default this value is 'DUMMY'.	AS_STATION
A Pl/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
The names of the selected Station(s) string separated by HTML break tags (). By default this value is NULL.	V_STATION_NAMES
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_YYYY2

Natural Language	Parameter
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—”).	END_MON3
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—”).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—”).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—”).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—”).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—”).	END_MON4

Natural Language	Parameter
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE
A PI/Sql table of selected Activity Intent (Intent Key List).	D_INTENT_LIST
A PI/Sql table of selected Community Sampled (Community Sampled Key List).	D_COMMUNITY_LIST

Internal Procedure Events:**Onload**

- C Populate and format the Organization list box with Organization IDs and Names organized by Organization ID.

- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Populate and format the Activity Intent list box with Activity Intent names.
- C Populate and format the Community Sampled list box with Community Sampled names.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Station Section

- C 'Look Up' onclick: Display a popup window showing the Station Alias Types that match the Organization selected by the user. If the user has not selected an Organization, display an alert message prompting them to do so. Populate the Station Alias Type display field with the Station Alias the user selects from the pop-up window.
- C 'Search Stations' onclick: Display a pop-up window showing the Stations that match the search string, search type, Station Alias Type and Organization entered by the user. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Station listbox with the Stations the user selects from the pop-up window. No more than 100 Stations can be added to the stations selected list.
- C 'Clear Selected' onclick: All selected Stations are removed from the stations selected list.
- C 'Clear All' onclick: All Stations are removed from the stations selected list.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the characteristics selected list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristics selected list.
- C 'Clear All' onclick: All characteristics are removed from the characteristics selected list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user has selected an Organization but does not select any Stations, data for the selected Organization is retrieved for the report.
- C Stations can not be added to the Selected Stations list more than once.
- C If the user selects 'Search by Station Alias Type' but does not change the selected Station Alias Type (i.e., default of 'STANDARD'), then Stations will be searched by ID.
- C The user may add no more than 100 Stations to the Selected Stations list. The attempted addition of Stations in excess of this limit is blocked and an alert is displayed.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To = current date), all result records are included in the search.
- C Selected Community Sampled are included in the search only if Intent is 'Select All' or 'Taxon Abundance'.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before selecting an Organization.
- C An alert is displayed if the user attempts to perform a Station Alias Type lookup before selecting an Organization.
- C The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g., Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First half of page.

EPA > STORET > Biological Results by Station - Microsoft Internet Explorer

Address: http://oasdev.sdc-moses.com/storet/srpp/DW_bio_resultcriteria_station

U.S. Environmental Protection Agency

STORET

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Biological Results by Station

Station

Select an Organization and a Search Type, then enter a Search String and click "Search Stations".

ORG ID **ORGANIZATION NAME**

Select an Organization

Search Type

Search by Station ID
 Search by Station Name
 Search by Station Alias

Select Station Alias Type: STANDARD

Search String

Org ID	Station ID	Alias Type	Station Alias	Station Name
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Second half of page.

The screenshot shows a web browser window with a title bar. The main content area is divided into two sections: "Activity Intent and Community Sampled" and "Characteristic".

Activity Intent and Community Sampled

This section contains two side-by-side dropdown menus. The left menu is titled "Select one or more Activity Intent" and has a header "ACTIVITY INTENT". The options are: "Select All", "Individual", "Taxon Abundance", and "Tissue". The right menu is titled "If Intent is Taxon Abundance, select one or more Community Sampled" and has a header "COMMUNITY SAMPLED". The options are: "Select All", "Aquatic Vegetation", "Bacteria/Virus", "Benthic Macroinvertebrates", "Birds", "Corals", and "Fish/Nekton".

Characteristic

This section is titled "Use the Characteristic Search to create a list of up to 50 Characteristics". It contains a "Characteristic Search" input field and a "Search By" dropdown menu set to "CHARACTERISTIC NAME". There is a "Search" button and a checked checkbox for "Hide Taxonomic Names". Below the search area is a large empty text box labeled "Characteristic Name". At the bottom of this section are "Clear Selected" and "Clear All" buttons. Below the entire section are "Continue" and "Clear Form" buttons.

At the bottom of the page, there is a "Help" link on the right. A horizontal line separates the footer from the rest of the page. The footer contains the following text:

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Last updated on November 26, 2003
URL: http://oasdev.sdc-moses.com/storet/srpp/DW_bio_resultcriteria_station

STORET Central Warehouse Specification**SIR:** 1559**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Blob_Download**Web Page Name:** Download Document/Graphic**Creation Date:** 10/30/2003**Processing Overview/Description:**

The DW_Blob_Download procedure processes Document/Graphic Uniform Resource Locators (URLs) referenced in Central Warehouse reports. The Document/Graphic that corresponds to the requested identifier is retrieved from the database and written to a file for download. A link to this file is then presented to the requesting user.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
BLOB (FA_BLOB)	BLOB_TYPE	N
	ORGANIZATION_IS_NUMBER	N
	TSMBLOB_IS_NUMBER	N
	BLOB_CONTENT	N

Links From:

URLs embedded in Result and Station Reports.

Input Parameters:

Natural Language	Parameter
The internal code corresponding to a single document or graphic that has been stored in the system.	V_BLOB_ID

Links To:

None.

Output Parameters:

None.

Internal Procedure Events:**Onload**

- C Call DW_Blob_Handler JAVA procedure to control file I/O for creation of the Document/Graphic files.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_page Specifications for standard footer links on each page.

Images:

The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

None.

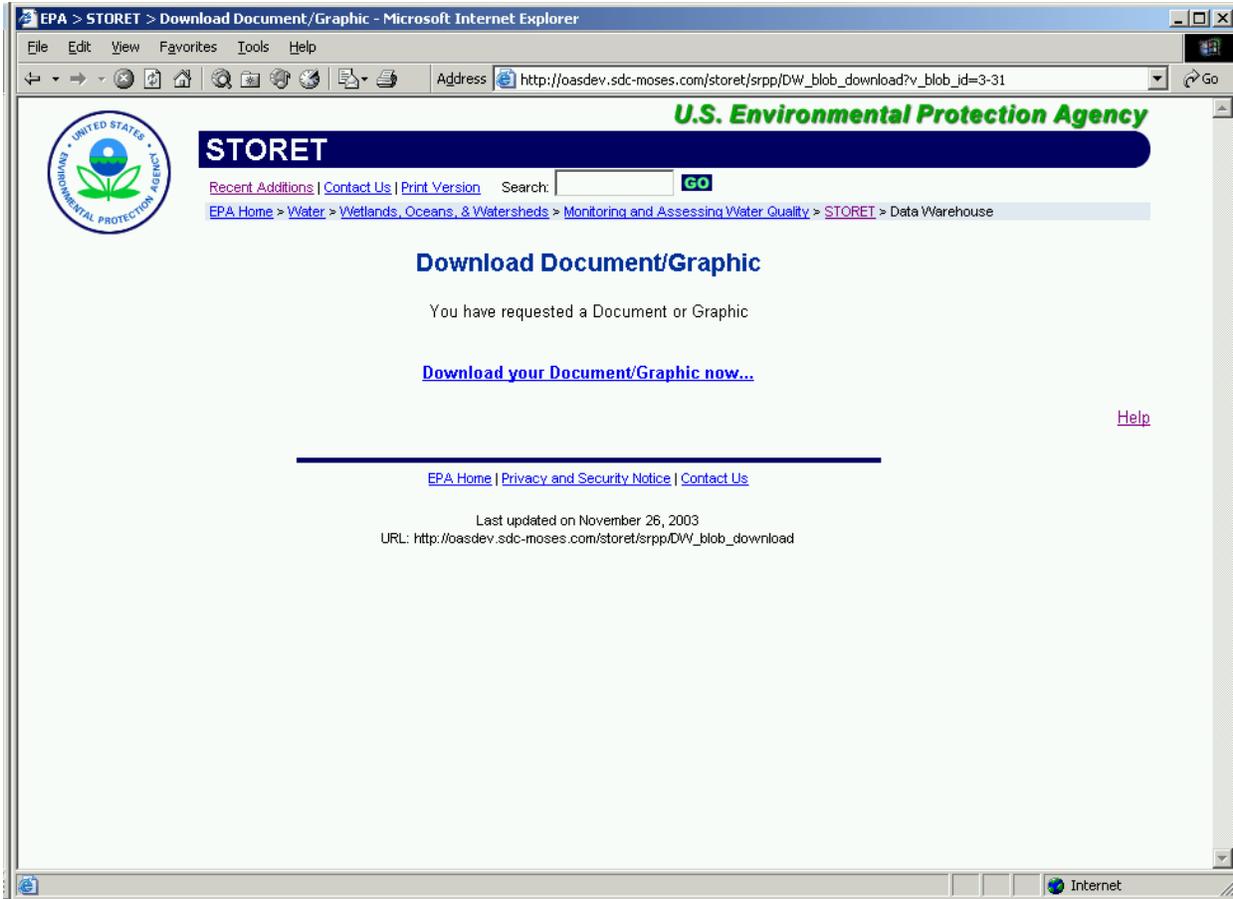
Error Handling:

- A standard Error Page should be displayed when this page is not loaded upon request.
- If an invalid code is sent to the procedure (one for which a graphic/document object does not exist) the user is prompted with an error message.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** Global**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Bottom_of_Page**Web Page Name:** EPA standard web template footer**Creation Date:** 11/27/2002**Process Overview/Description:**

The DW_bottom_of_page procedure is used to create the standard footer used by all pages of the Central Warehouse application. This footer provides a links to several EPA web pages. In addition, this procedure creates the link used to open application help.

Tables:

(Display Fields are listed in the order they are displayed)

None.

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET Central Warehouse	onLoad
DW_Result_Criteria_Geo	Regular Results by Geographic Location	onLoad
DW_Result_Criteria_Station	Regular Results by Station	onLoad
DW_Result_Criteria_Project	Regular Results by Project	onLoad
DW_Result_Count	Result Search Summary	onLoad
DW_Result_Hub_Custom	Download Results	onLoad
DW_Station_Criteria	Station Search Criteria	onLoad

Procedure	Web_Page	Button/Text
DW_Station_Count	Station Search Summary	onLoad
DW_Station_Hub_Custom	Download Site Descriptions	onLoad
DW_Bio_Result_Criteria_Geo	Biological Results by Geographic Location	onLoad
DW_Bio_Result_Criteria_Station	Biological Results by Station	onLoad
DW_Bio_Result_Criteria_Project	Biological Results by Project	onLoad
DW_Hab_Result_Criteria_Geo	Habitat Results by Geographic Location	onLoad
DW_Hab_Result_Criteria_Station	Habitat Results by Station	onLoad
DW_Hab_Result_Criteria_Project	Habitat Results by Project	onLoad
DW_Result_Download_Zip	Download Results	onLoad
DW_Station_Download_Zip	Download Site Descriptions	onLoad
DW_Blob_Download	Download Document/Graphic	onLoad

Input Parameters:

None.

Links To:

Uniform Resource Locator	Web_Page	Hyperlink Text
http://www.epa.gov/	EPA home page	'EPA Home'
http://www.epa.gov/epafiles/usenotice.htm	EPA privacy and security page	'Privacy and Security Notice'
http://www.epa.gov/storet/contact.html	STORET contact us page	'Contact Us'

Output Parameters:

None.

Internal Procedure Events:

Onload

- C Display the date of the release - August 27, 2004
- C Display the URL of the current page.

Form Level

- C 'Help' onclick: Call the Javascript function used to display the application's help documentation.

Images:

The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

None.

Error Handling:

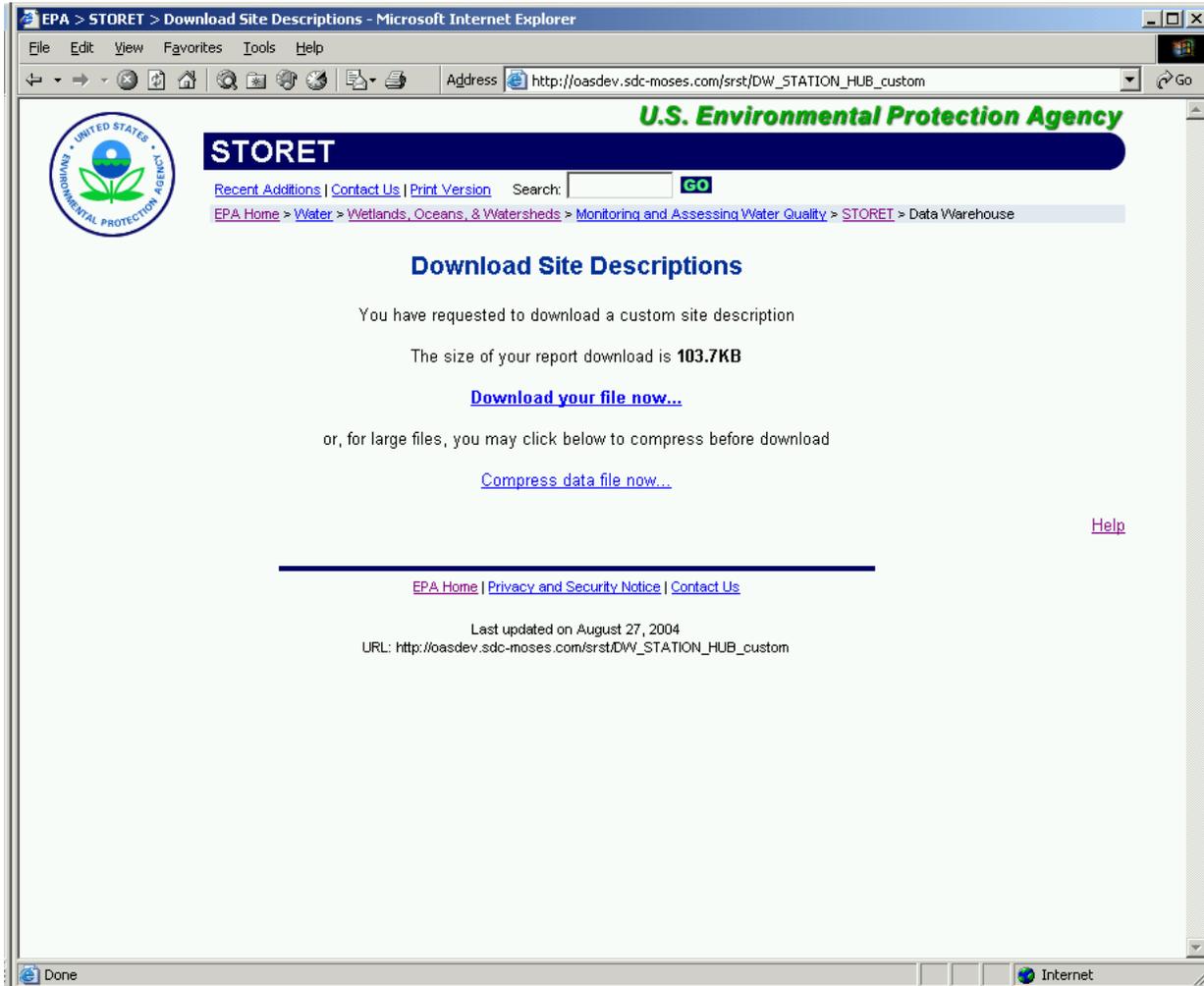
- See specifications for the Web pages that call this procedure.

Code Changes:

None.

Page Print:

The DW_bottom_of_page procedure produces the standard footer found at the bottom of the Central Warehouse's web pages.



STORET Central Warehouse Specification**SIR:** 1437, 1595**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Char_Alias_Popup**Web Page Name:** STORET: Characteristic Search Results**Creation Date:** 3/2/2003**Processing Overview/Description:**

The Characteristic Search Results pop-up is called by all Result Search Criteria pages and the Station Search Criteria page. It is used to display a list of available Characteristics that conform to the user's search string. The user can search by the standard STORET name (STORET DEFAULT), or by Characteristic Alias such as CAS Number (CAS NUMBER) and STORET Parameter Code (STORET PARM CODE). If the user has chosen to search by Characteristic Alias, the pop-up window will display both the Characteristic Alias name and standard STORET name. The user is able to select one or more Characteristics from this list. The names and codes of the selected Characteristics are passed to the calling Result Search Criteria page where the appropriate fields are populated with the standard STORET names and corresponding codes.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Characteristic (DI_CHARACTERISTIC)	DISPLAY_NAME	Y
	SEARCH_NAME	N
	PK_ISN	N
	TYPE_CODE	N
Characteristic Alias (LU_CHAR_ALIAS)	CHAR_ALIAS	Y

Entity	Attribute	Display
	FK_CHARACTERISTIC	N
	FK_CHAR_ALIAS_TYPE	N

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Geo	Regular Results by Geographic Location	<Select>
DW_Result_Criteria_Station	Regular Results by Station	<Select>
DW_Result_Criteria_Project	Regular Results by Project	<Select>
DW_Bio_Result_Criteria_Geo	Biological Results by Geographic Location	<Select>
DW_Bio_Result_Criteria_Station	Biological Results by Station	<Select>
DW_Bio_Result_Criteria_Project	Biological Results by Project	<Select>
DW_Hab_Result_Criteria_Geo	Habitat Results by Geographic Location	<Select>
DW_Hab_Result_Criteria_Station	Habitat Results by Station	<Select>
DW_Hab_Result_Criteria_Project	Habitat Results by Project	<Select>

Input Parameters:

Natural Language	Parameter
The text string used to search available Characteristics.	V_CHARSTRING
Boolean flag used to signal whether taxonomic names should be included in characteristic searches.	TAXON_FILTER
The key of the Characteristic Alias Type being used for the search. By default this is set to '0', 'STORET DEFAULT'.	AS_CHAR_ALIAS_TYPE

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Geo	Regular Results by Geographic Location	<Select>
DW_Result_Criteria_Station	Regular Results by Station	<Select>
DW_Result_Criteria_Project	Regular Results by Project	<Select>
DW_Bio_Result_Criteria_Geo	Biological Results by Geographic Location	<Select>
DW_Bio_Result_Criteria_Station	Biological Results by Station	<Select>
DW_Bio_Result_Criteria_Project	Biological Results by Project	<Select>
DW_Hab_Result_Criteria_Geo	Habitat Results by Geographic Location	<Select>
DW_Hab_Result_Criteria_Station	Habitat Results by Station	<Select>
DW_Hab_Result_Criteria_Project	Habitat Results by Project	<Select>

Output Parameters:

Natural Language	Parameter
A PL/SQL table of selected Characteristics (Characteristic ID List).	CHAR_LIST
The names of the selected Characteristic(s) in a string separated by a break.	V_CHAR_NAMES

Internal Procedure Events:**Onload**

- C Populate the select list with the Characteristics that conform to the Characteristic Search Criteria.

Form Level

- C 'Select' onclick: Populate the Selected Characteristics list on the calling Selection Criteria page with the Characteristic names and hidden Ids that the user selects from this pop-up window. If Characteristics were previously added, insert the new Characteristics at the end of the existing Selected Characteristics list.

- C 'Cancel' onclick: Close this pop-up window and return focus to the calling Result Selection Criteria page. Do not alter the value of the Selected Characteristics list.

Images:

None.

Business Rules:

- C Only display Taxonomic Characteristics if the user has requested to see them.
- C If Taxonomic Characteristics are requested, only display those that have recorded result data.
- C Allow multiple Characteristics to be selected.
- C If a Characteristic is selected multiple times, include it only once on the calling Result Selection Criteria page.
- C Do not show the User Defined Habitat Assessment Characteristic as a selection option.

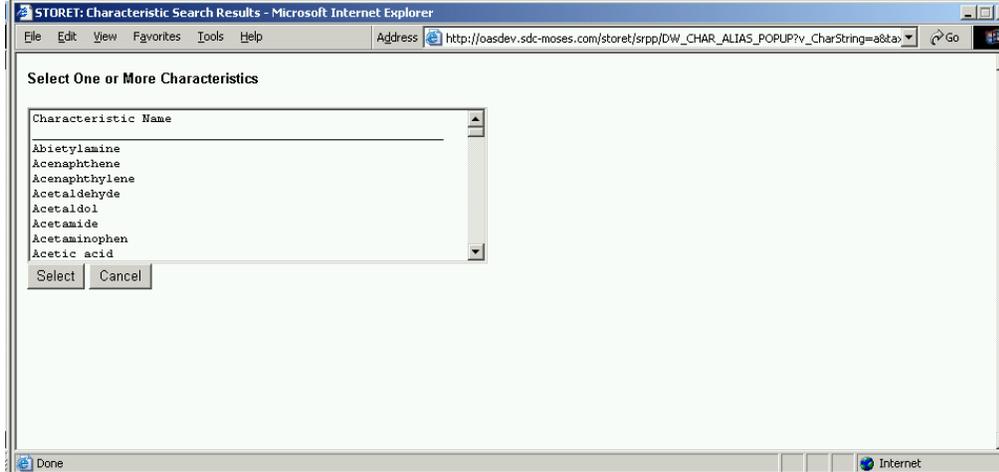
Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C Only valid Characteristic Codes are returned to the Result Selection Criteria page.

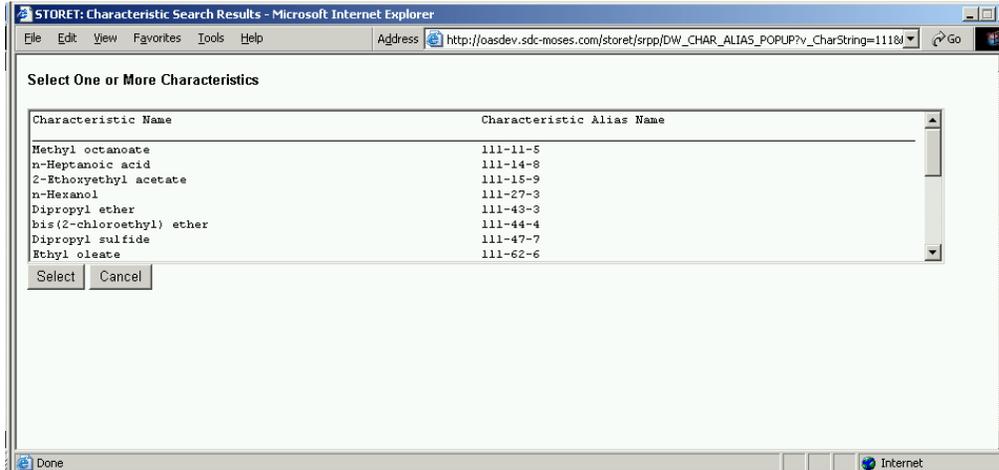
Code Changes:

None.

Page Print: STORET DEFAULT



Characteristic Alias (e.g., CAS NUMBER)



STORET Central Warehouse Specification**SIR:** 1363**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_County_Popup**Web Page Name:** STORET: Select Counties**Creation Date:** 10/30/2002**Processing Overview/Description:**

The Select Counties page is called by the Station Search Criteria page and the Results by Geographic Location pages and is used to display a list of all available Counties for the State the user has selected. The user is able to select one or more Counties from this list. The names and codes of the selected Counties are passed to the calling page where the appropriate fields are populated with this information.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
State (DI_GEO_STATE)	STATE_NAME	Y
	STATE_CODE	N
	PK_ISN	N
County (DI_GEO_COUNTY)	COUNTY_NAME	Y
	COUNTY_CODE	N
	FK_GEO_STATE	N
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Station_Criteria	Station Search Criteria	<Look Up>
DW_Results_Criteria_Geo	Regular Results by Geographic Location	<Look Up>
DW_Bio_Results_Criteria_Geo	Biological Results by Geographic Location	<Look Up>
DW_Hab_Results_Criteria_Geo	Habitat Results by Geographic Location	<Look Up>

Input Parameters:

Natural Language	Parameter
The internal code corresponding to the State the user has selected.	V_STATECODE

Links To:

Procedure	Web_Page	Button/Text
DW_Station_Criteria	Station Search Criteria	<Look Up>
DW_Results_Criteria_Geo	Regular Results by Geographic Location	<Look Up>
DW_Bio_Results_Criteria_Geo	Biological Results by Geographic Location	<Look Up>
DW_Hab_Results_Criteria_Geo	Habitat Results by Geographic Location	<Look Up>

Output Parameters:

Natural Language	Parameter
The names of the selected County(s) in a comma separated string.	AS_COUNTY
The codes of the selected County(s) in a comma separated string.	V_COUNTY_CODE

Internal Procedure Events:

- C 'Select' onclick: Populate the County Name text area on the calling page with the County names that the user selects from this pop-up window. Write the corresponding County codes in the hidden field V_COUNTY_CODE.
- C 'Cancel' onclick: Close this pop-up window and return focus to the calling page. Do not alter the value of the County Name text area.

Images:

None.

Business Rules:

- C All Counties for the selected state are displayed.
- C Multiple Counties can be selected per search but all selected Counties must belong to the same State.

Error Handling:

- C A standard Error Page should be displayed when this page is not loaded upon request.
- C Only valid County Names and County Codes are returned to the calling page.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1438**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Extref_Popup**Web Page Name:** STORET: Select a Station Alias Type**Creation Date:** 4/21/2003**Processing Overview/Description:**

The Select a Station Alias Type page is called by the Results by Station pages and is used to display a list of all available Station Alias Types for the Organization the user has selected. The user is able to select a single Station Alias Type from this list. The name and code of the selected Station Alias Type are passed to the calling Results by Station page where the appropriate fields are populated with this information.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
External Ref Scheme (LU_EXTERNAL_REF_SCHEME)	REF_SCHEME_ACRONYM	Y
	REF_SCHEME_NAME	Y
	PK_ISN	N
	ORGANIZATION_ID	N
Organization (DI_ORG)	ORGANIZATION_ID	N
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Station	Results by Station	<Look Up>

Input Parameters:

Natural Language	Parameter
A Pl/Sql table of selected Organizations (Organization Key List).	V_ORG

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Station	Results by Station	<Select>

Output Parameters:

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Type. By default this value is 0.	D_EXTREF_LIST

Internal Procedure Events:

- C 'Select' onclick: Populate the Station Alias Type text area on the calling Results by Station page with the REF_SCHEME_ACRONYM (Station Alias Type) that the user selects from this pop-up window. Write the corresponding Ref Scheme code in the hidden field D_EXTREF_LIST.
- C 'Cancel' onclick: Close this pop-up window and return focus to the calling Results by Station page. Do not alter the value of the Station Alias Type text area.

Images:

None.

Business Rules:

C Only one Station Alias Type may be selected at a time.

Error Handling:

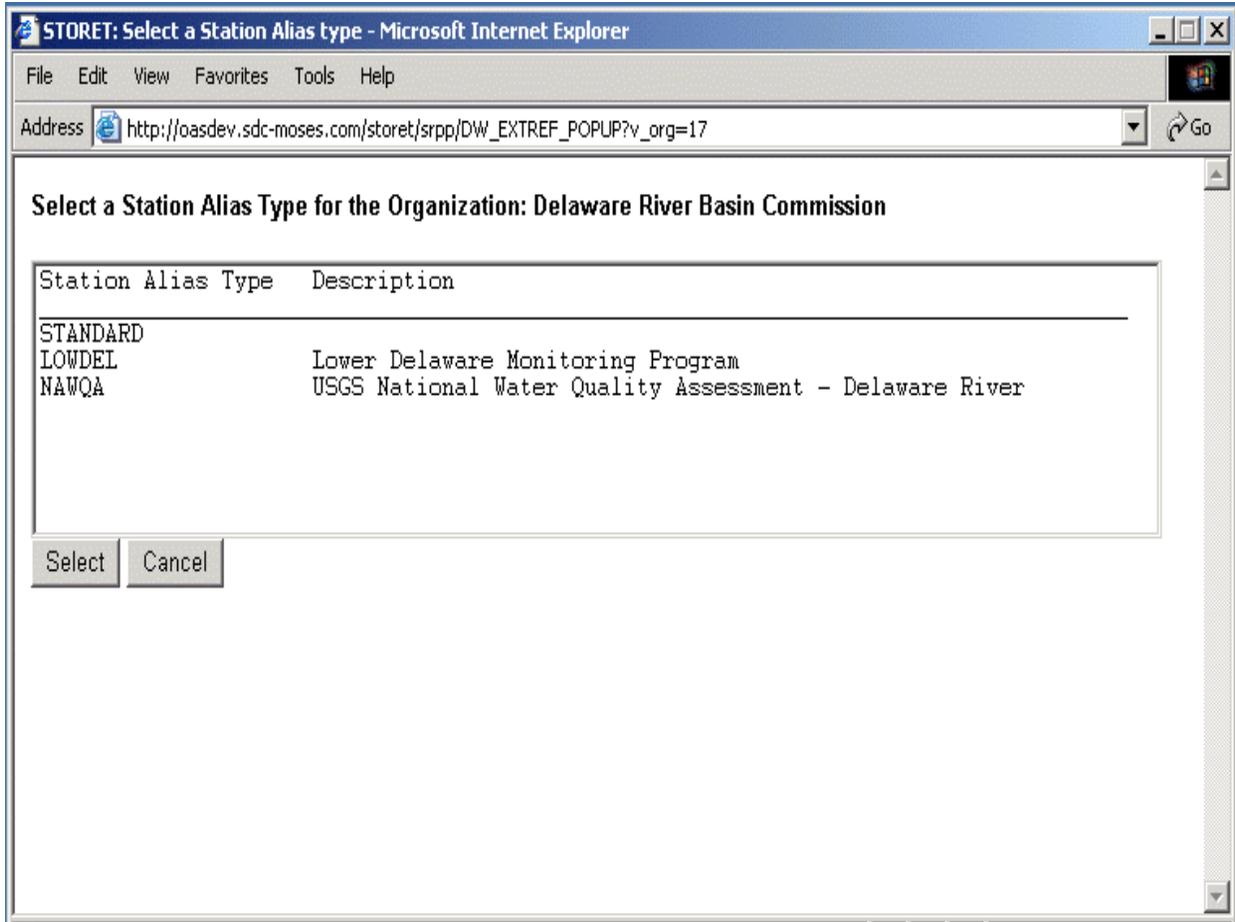
C A standard Error Page should be displayed when this page is not loaded upon request.

C Only valid Ref Scheme Acronyms and Ref Scheme Codes are returned to the Results by Station page.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1503, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Hab_Result_Criteria_GEO**Web Page Name:** Habitat Results by Geographic Location**Creation Date:** 8/15/2003**Processing Overview/Description:**

The Habitat Results by Geographic Location page is the first Habitat Result search page of the STORET Central Warehouse and provides three major search areas: Geographic Location, Date, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. In addition, the Geographic Location dimension is divided into three sub-dimensions: State/County, Latitude/Longitude, and Hydrologic Unit Code (HUC). The user is able to select one of these three location sub-dimension per Result query. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Habitat Results by Geographic Location

Input Parameters:

These parameters are passed from the three Popup windows (DW_County_Popup, DW_HUC_Popup, and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Hydrologic Unit Code value. By default this value is 'ALL'.	AS_HUC
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_County_Popup	STORET: Select Counties	Look Up
DW_HUC_Popup	STORET: Select a Hydrologic Unit Code (HUC)	Look Up
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
Identifies the geographic location parameter being used for the search. By default this value is 'StateCounty'.	GEOGRAPHIC
The name of the selected State. By default this value is 'ALL'.	AS_STATE

Natural Language	Parameter
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Northern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 90.	MAX_LAT_DD
The Western Limit of a Latitude/Longitude query in decimal degrees. By default this value is 180.	MIN_LONG_DD
The Eastern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MAX_LONG_DD
The Southern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MIN_LAT_DD
The direction of the Northern Limit. By default this value is N.	DIR_MAXLAT
The direction of the Southern Limit. By default this value is N.	DIR_MINLAT
The direction of the Eastern Limit. By default this value is W.	DIR_MAXLONG
The direction of the Western Limit. By default this value is W.	DIR_MINLONG
The Hydrologic Unit Code value. By default this value is 'ALL'.	AS_HUC
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1

Natural Language	Parameter
The month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_MON3
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4

Natural Language	Parameter
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags(). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE

Internal Procedure Events:**Onload**

A-DW_Hab_Result_Criteria_GEO-5

- C Populate the State Name list box with State Names organized alphabetically by country (with the U. S. first followed by Mexico and Canada).
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Geographic Location Section

- C State/County 'Lookup' onclick: Display a pop-up window showing the available counties for the state currently selected from the drop-down list. Populate the County Name(s) textarea with the Counties that the user selects from the pop-up window.
- C HUC 'Lookup' onclick: Display a pop-up window showing all available HUC codes and their corresponding names. Populate the Cataloging Unit text box with the HUC code that the user selects from the pop-up window.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user selects 'All' State/Counties, all result records are included in the search.
- C If the user selects 'All' HUCs, all result records are included in the search.
- C If the user selects default latitude/longitude values (i.e., N=90, S=0, E=0, W=180), all result records are included in the search.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To Date = current date), all result records are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C The user will not be allowed to proceed to the next page if a non-numeric character is entered in the latitude/longitude fields or if the entry is outside the Latitude/Longitude permitted value range.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
 - An alert is displayed if the user attempts to perform a County look-up before selecting a State.
 - The county field is reset to 'All' if the selected State is changed.

- The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g. Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First half of page.

The screenshot shows the STORET web application interface. At the top, there is a navigation bar with the U.S. Environmental Protection Agency logo and the STORET title. Below this, there are links for 'Recent Additions', 'Contact Us', and 'Print Version', along with a search box and a 'GO' button. The breadcrumb trail reads: 'EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse'. The main heading is 'Habitat Results by Geographic Location'. Underneath, the 'Geographic Location' section contains three radio buttons: 'State/County' (selected), 'Latitude/Longitude (in decimal degrees)', and 'Drainage Basin/HUC'. The 'State/County' section has dropdown menus for 'State Name' (set to 'ALL') and 'County Name' (set to 'ALL'), with a 'Look Up' button. The 'Latitude/Longitude' section has input fields for 'West Limit' (180), 'North Limit' (90), 'East Limit' (0), and 'South Limit' (0), each with a directional dropdown (W, N, W, N). The 'Drainage Basin/HUC' section has a 'Cataloging Unit' dropdown (set to 'ALL') and a 'Look Up' button. The 'Date' section is titled 'Specify Activity Start Date range(s)' and contains four rows of date range selectors. The first row is set to 'Date Range 1: JAN 1 1900 To NOV 20 2003'. The other three rows are empty. The 'Characteristic' section is partially visible at the bottom.

Second half of page.

The screenshot shows a web browser window with a title bar and standard navigation icons. The main content area is divided into two sections:

Specify Activity Start Date range(s)

This section contains four rows of date range selection. Each row has a "Date Range" label followed by a "To" label. The date ranges are specified using dropdown menus for month, day, and year. The first row is populated with "JAN", "1", "1900" for the start and "NOV", "20", "2003" for the end. The other three rows are empty, showing "--" for each field.

Characteristic

This section is titled "Use the Characteristic Search to create a list of up to 50 Characteristics". It features a search form with the following elements:

- Characteristic Search:** A text input field.
- Search By:** A dropdown menu currently set to "CHARACTERISTIC NAME".
- Search:** A button to execute the search.
- Hide Taxonomic Names:** A checked checkbox.
- Characteristic Name:** A large text area for displaying search results.
- Clear Selected** and **Clear All:** Buttons below the results area.
- Continue** and **Clear Form:** Buttons at the bottom of the search section.

At the bottom of the page, there is a footer with the following text:

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Last updated on November 26, 2003
URL: http://oasdev.sdc-moses.com/storet/srdev/DW_hab_resultcriteria_geo

The Windows taskbar at the bottom shows the Start button, several application icons, and the system tray with the date "Thursday, November 20, 2003".

STORET Central Warehouse Specification**SIR:** 1503, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Hab_Result_Criteria_Project**Web Page Name:** Habitat Results by Project**Creation Date:** 8/15/2003**Processing Overview/Description:**

The Habitat Results by Project page is the third Habitat Result search page of the STORET Central Warehouse and provides three major search areas: Organization/Project, Date, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select a single Project from a single Organization. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	ORGANIZATION_ID	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Habitat Results by Project

Input Parameters:

These parameters are passed from the two Popup windows (DW_Project_Popup and DW_Char_Alias_Popup) windows back to this procedure.

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST
A Pl/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Project_Popup	STORET: Select Project	Look Up
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1

Natural Language	Parameter
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_MON3

Natural Language	Parameter
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER

Natural Language	Parameter
A Pl/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE

Internal Procedure Events:

Onload

- C Populate the Organization list box with Organization IDs and Names organized by Organization ID.
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Organization/Project Section

- C Project 'Lookup' onclick: Display a pop-up window showing the available Projects for the Organization currently selected from the drop-down list. Populate the Project Name textbox with the Project that the user selects from the pop-up window and populate the hidden variable D_PROJ_LIST with the corresponding key.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.

- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user has selected an Organization but does not select a Project, data for the selected Organization is retrieved for the report.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To = current date), all result records are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.

- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- An alert is displayed if the user attempts to perform a Project look-up before selecting an Organization.
 - The Project field is reset to 'Select a Project' if the selected Organization is changed.
 - The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g., Jan 1, 2003 - Jan 1, 1900).

Code Changes:

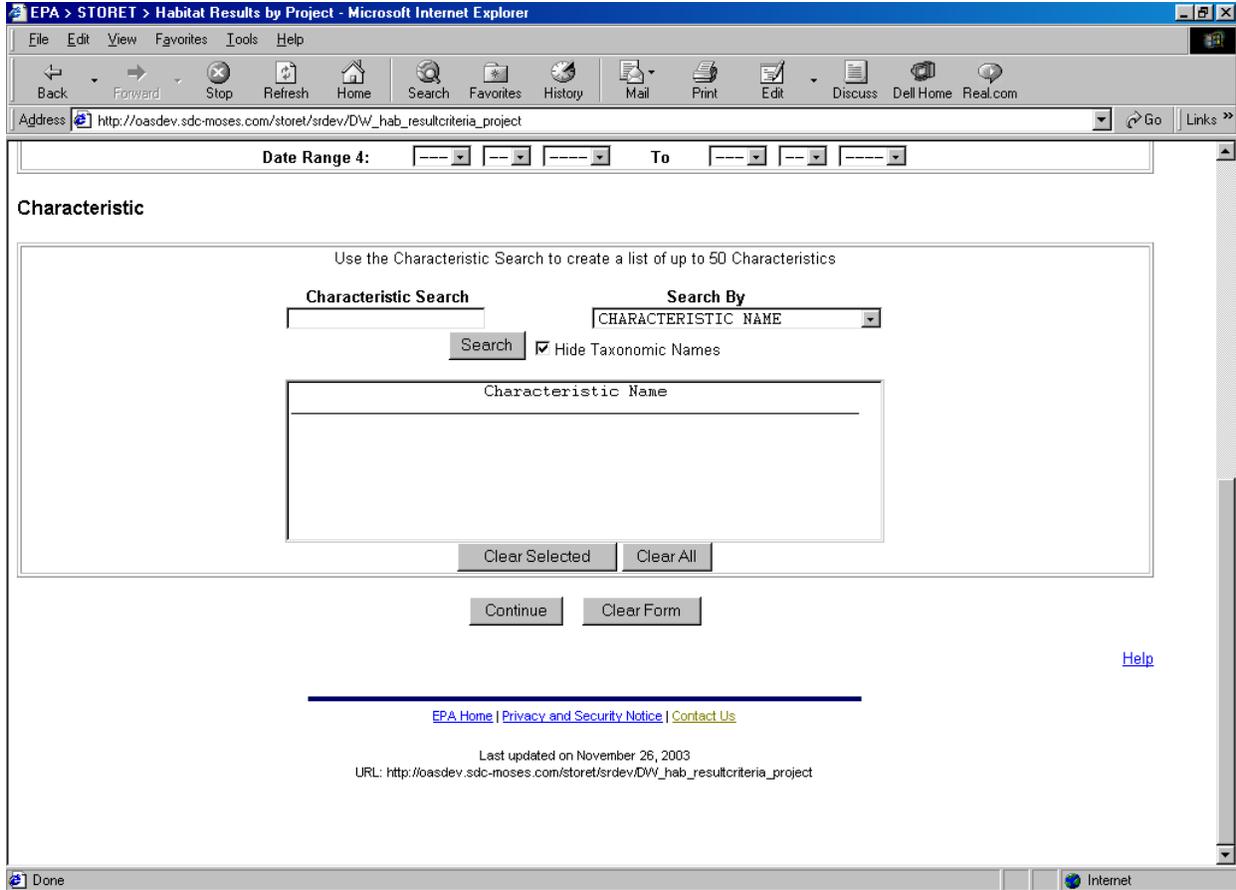
None.

Page Print:

First half of page.

The screenshot shows a Microsoft Internet Explorer browser window displaying the STORET website. The address bar shows the URL: http://oasdev.sdc-moses.com/storet/srdev/DW_hab_resultcriteria_project. The page header features the U.S. Environmental Protection Agency logo and the STORET title. Below the header, there is a search bar with a 'GO' button and a breadcrumb trail: EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse. The main heading is 'Habitat Results by Project'. Under the 'Project' section, there are two steps: 'Step 1: Select a Single Organization from the List' with a dropdown menu for 'ORG ID' and 'ORGANIZATION NAME', and 'Step 2: Select a Single Project by Clicking "Look Up"' with a 'Look Up' button. The 'Date' section is titled 'Specify Activity Start Date range(s)' and contains four rows of date range selectors (Date Range 1 through 4), each with month, day, and year dropdowns and a 'To' separator. The 'Characteristic' section is partially visible at the bottom. The browser's status bar shows 'Done' and 'Internet'.

Second half of page.



STORET Central Warehouse Specification**SIR:** 1503, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Hab_Result_Criteria_Station**Web Page Name:** Habitat Results by Station**Creation Date:** 4/02/2003**Processing Overview/Description:**

The Habitat Results by Station page is the second Habitat Result search page of the STORET Central Warehouse and provides three major search areas: Organization/Station, Date, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select Stations from multiple Organizations, but is limited to selecting a maximum of 100 Stations per query. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	ORGANIZATION_ID	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Habitat Results by Station

Input Parameters:

These parameters are passed from the three Popup windows (DW_Extref_Popup, DW_Station_Popup and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Type. By default this value is 0.	D_EXTREF_LIST
A PI/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Extref_Popup	STORET: Select a Station Alias Type	Look Up
DW_Station_Popup	STORET: Station Search Results	Search Stations
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Types. By default this value is 0.	D_EXTREF_LIST
The search string used to find Stations within the Organization. By default this value is 'DUMMY'.	AS_STATION

Natural Language	Parameter
A Pl/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
The names of the selected Station(s) string separated by HTML break tags (). By default this value is NULL.	V_STATION_NAMES
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as "--").	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as "--").	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as "--").	END_YYYY2

Natural Language	Parameter
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_MON3
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES

Natural Language	Parameter
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is 'ON'.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE

Internal Procedure Events:

Onload

- C Populate the Organization list box with Organization IDs and Names organized by Organization ID.
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Station Section

- C 'Look Up' onclick: Display a popup window showing the Station Alias Types that match the Organization selected by the user. If the user has not selected an Organization, display an alert message prompting them to do so. Populate the Station Alias Type display field with the Station Alias Type the user selects from the pop-up window.
- C 'Search Stations' onclick: Display a pop-up window showing the Stations that match the search string, search type, Station Alias Type, and Organization entered by the user. If the user has not entered a search string, display an alert message prompting them to

- do so. Populate the Station listbox with the Stations the user selects from the pop-up window. No more than 100 Stations can be added to the Selected Stations list.
- C 'Clear Selected' onclick: All selected Stations are removed from the characteristic select list.
 - C 'Clear All' onclick: All Stations are removed from the characteristic select list.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user has selected an Organization but does not select any Stations, data for the selected Organization is retrieved for the report.
- C Stations can not be added to the Selected Stations list more than once.
- C If the user selects 'Search by Station Alias Type' but does not change the selected Station Alias Type (i.e., default of 'STANDARD'), then Stations will be searched by ID.
- C The user may add no more than 100 Stations to the Selected Stations list. The attempted addition of Stations in excess of this limit is blocked and an alert is displayed.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To = current date), all result records are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before selecting an Organization.
- C An alert is displayed if the user attempts to perform a Station Alias Type lookup before selecting an Organization.
- C The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g., Jan 1, 2003 - Jan 1, 1900)

Code Changes:

None.

Second half of page.

The screenshot shows a web browser window with a toolbar at the top. The main content is divided into two sections: "Date" and "Characteristic".

Date Section: Titled "Specify Activity Start Date range(s)", it contains four rows of date range selection. "Date Range 1" is set from "JAN 1 1900" to "NOV 20 2003". The other three rows ("Date Range 2", "Date Range 3", and "Date Range 4") are currently empty, each with "----" in the month, day, and year fields for both start and end dates.

Characteristic Section: Titled "Use the Characteristic Search to create a list of up to 50 Characteristics". It features a "Characteristic Search" input field, a "Search By" dropdown menu set to "CHARACTERISTIC NAME", and a "Search" button. A checkbox labeled "Hide Taxonomic Names" is checked. Below the search area is a large empty text box labeled "Characteristic Name". At the bottom of this section are "Clear Selected" and "Clear All" buttons. Below the entire section are "Continue" and "Clear Form" buttons.

At the bottom of the page, there is a "Help" link, a horizontal line, and footer text: "EPA Home | Privacy and Security Notice | Contact Us", "Last updated on November 26, 2003", and "URL: http://oasdev.sdc-moses.com/storet/srdev/DW_hab_resultcriteria_station".

STORET Central Warehouse Specification

SIR: 1530

Package Name: SDW (STORET Data Warehouse)

Procedure Name: DW_Home

Web Page Name: STORET Central Warehouse

Created Date: 4/28/2003

Processing Overview/Description:

This serves as the cover page to the STORET Central Warehouse Web Application. It provides links to the nine Result Search Criteria pages and the two Station Search Criteria pages. It also provides users with the STORET User Assistance 800 number and email address. The STORET 'rain-drop' logo is also displayed on this page.

Tables Used:

None.

Links From:

None.

Input Parameters:

None.

Links To:

Procedure	Web_Page	Button/Text
DW_Selection_Criteria	Station Search Criteria	Stations by Geographic Location

Procedure	Web_Page	Button/Text
DW_Selection_Criteria_Stn	Stations by Organization and Station ID	Stations by Organization and Station ID
DW_Result_Criteria_Geo	Results by Geographic Location	Regular Results by Geographic Location
DW_Result_Criteria_Station	Results by Station	Regular Results by Station
DW_Result_Criteria_Project	Results by Project	Regular Results by Project
DW_Bio_Result_Criteria_Geo	Results by Geographic Location	Regular Results by Geographic Location
DW_Bio_Result_Criteria_Station	Results by Station	Biological Results by Station
DW_Bio_Result_Criteria_Project	Results by Project	Biological Results by Project
DW_Hab_Result_Criteria_Geo	Results by Geographic Location	Habitat Results by Geographic Location
DW_Hab_Result_Criteria_Station	Results by Station	Habitat Results by Station
DW_Hab_Result_Criteria_Project	Results by Project	Habitat Results by Project

Output Parameters:

None.

Internal Procedure Events:**General**

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

This page contains the images included in the EPA Standard Web Template. This page also references the STORET 'rain-drop' logo stored at the location: 'http://www.epa.gov/storet/images/logo.gif'.

Business Rules:

None.

Error Handling:

C A standard Error Page should be displayed when this page does not load upon request.

Code Changes:

None.

Page Print:

EPA > STORET > STORET Central Warehouse - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://oasdev.sdc-moses.com/srpp/DW_home Go

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STORET Central Warehouse



STORET Station Descriptions

- [Stations by Geographic Location](#)
- [Stations by Organization and Station ID](#)

STORET Regular Results
(Non-Biological Physical and Chemical Result Data)

- [Regular Results by Geographic Location](#)
- [Regular Results by Station](#)
- [Regular Results by Project](#)

STORET Biological Results

- [Biological Results by Geographic Location](#)
- [Biological Results by Station](#)
- [Biological Results by Project](#)

STORET Habitat Results

- [Habitat Results by Geographic Location](#)
- [Habitat Results by Station](#)
- [Habitat Results by Project](#)

Comments? If you have a question or comments on this website or on the STORET system, please call STORET User Assistance at 1-800-424-9067, or send us an email at STORET@epa.gov.

[Help](#)

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Last updated on August 27, 2004
URL: http://oasdev.sdc-moses.com/srpp/DW_home

Internet

STORET Central Warehouse Specification**SIR:** 1366**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_HUC_Popup**Web Page Name:** STORET: Select a Hydrologic Unit Code (HUC)**Creation Date:** 10/30/2002**Processing Overview/Description:**

The Select a Hydrologic Unit Code (HUC) page is called by the Station Search Criteria page and the Results By Geographic Location pages, and is used to display a list of all available Hydrologic Unit Names and their associated codes in a pop-up window. The user may select one Hydrologic Unit from this list. The code of the selected Hydrologic Unit is passed to the calling page where the appropriate field is populated.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
HUC Code (DI_DB_CAT)	HYDROLOGIC_UNIT_CODE	Y
	HYDROLOGIC_UNIT_NAME	Y

Note: Although this web page is initially generated from the DI_DB_CAT table, the HUC list is static and must be manually refreshed if changes are made to that table.

Links From:

Procedure	Web_Page	Button/Text
DW_Station_Criteria	Station Search Criteria	<Look Up>

Procedure	Web_Page	Button/Text
DW_Results_Criteria_Geo	Regular Results by Geographic Location	<Look Up>
DW_Bio_Results_Criteria_Geo	Biological Results by Geographic Location	<Look Up>
DW_Hab_Results_Criteria_Geo	Habitat Results by Geographic Location	<Look Up>

Input Parameters:

None.

Links To:

Procedure	Web_Page	Button/Text
DW_Station_Criteria	Station Search Criteria	<Look Up>
DW_Results_Criteria_Geo	Regular Results by Geographic Location	<Look Up>
DW_Bio_Results_Criteria_Geo	Biological Results by Geographic Location	<Look Up>
DW_Hab_Results_Criteria_Geo	Habitat Results by Geographic Location	<Look Up>

Output Parameters:

Natural Language	Parameter
The Hydrologic Unit Code value.	AS_HUC

Internal Procedure Events:

- C 'Select' onclick: Populate the Cataloging Unit text box on the calling page with the HUC code that the user selects from this pop-up window.
- C 'Cancel' onclick: Close this pop-up window and return focus to the calling page. Do not alter the value of the Cataloging Unit text box.

Images:

None.

Business Rules:

- C All Hydrologic Units are displayed.
- C Only one Hydrologic Unit can be selected per search.

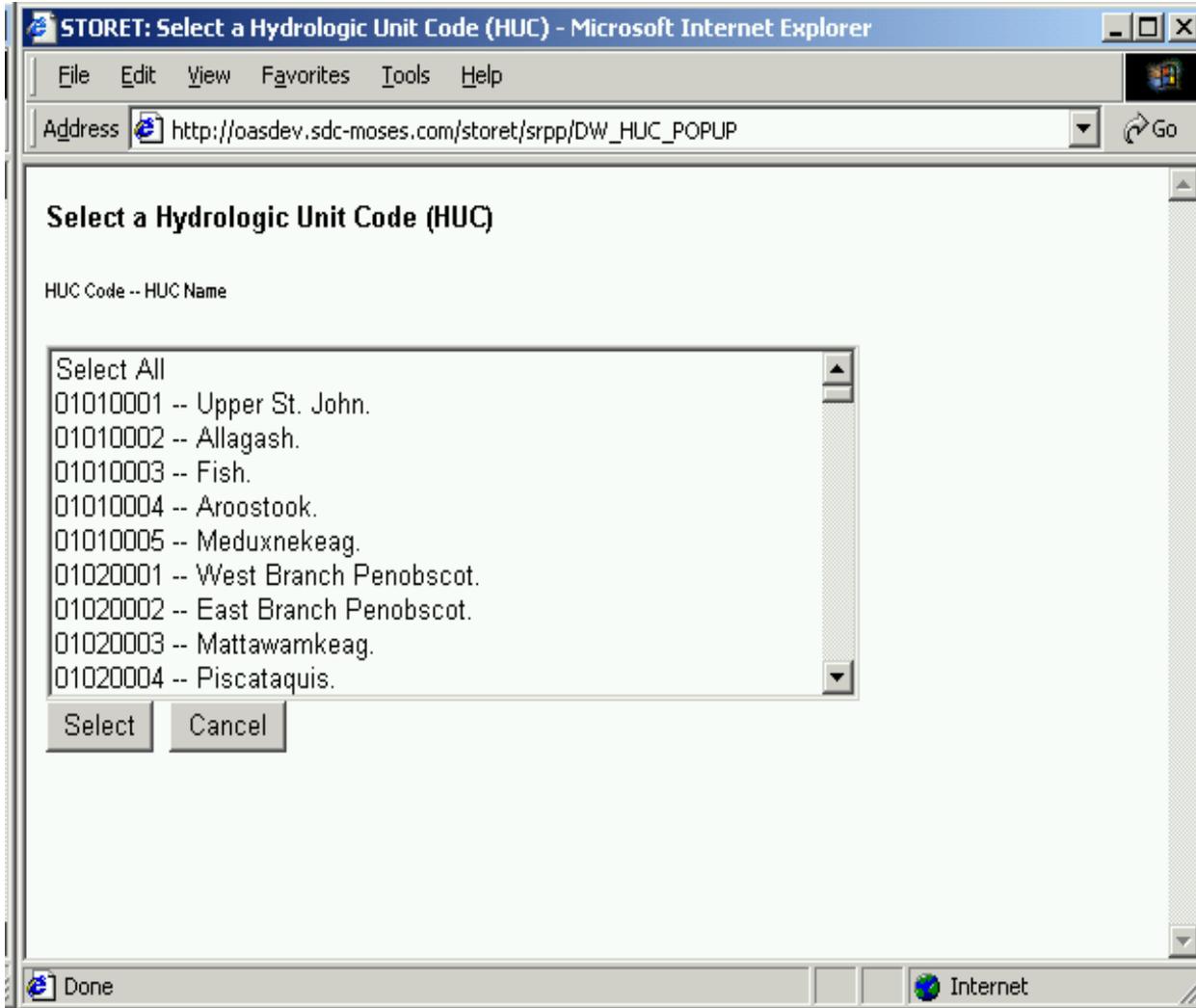
Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C Only valid Hydrologic Unit Codes are returned to the Station Search Criteria page.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1442**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Proj_Popup**Web Page Name:** STORET: Select a Project**Creation Date:** 3/02/2003**Processing Overview/Description:**

The Select a Project page is called by the Results by Project pages and is used to display a list of all available Projects for the Organization the user has selected. The user is able to select a single Project from this list. The name and code of the selected Project are passed to the calling Results by Project page where the appropriate fields are populated with this information.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Project (DI_PROJECT)	PROJECT_CD	Y
	PROJECT_NAME	Y
	PK_ISN	N
	FK_ORG	N
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Project	Regular Results by Project	<Look Up>
DW_Bio_Result_Criteria_Project	Biological Results by Project	<Look Up>
DW_Hab_Result_Criteria_Project	Habitat Results by Project	<Look Up>

Input Parameters:

Natural Language	Parameter
The key of the selected Organizations.	V_ORG

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Project	Regular Results by Project	<Look Up>
DW_Bio_Result_Criteria_Project	Biological Results by Project	<Look Up>
DW_Hab_Result_Criteria_Project	Habitat Results by Project	<Look Up>

Output Parameters:

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST

Internal Procedure Events:

- C 'Select' onclick: Populate the Project Name text area on the calling Results by Project page with the Project name that the user selects from this pop-up window. Write the corresponding Project codes in the hidden field V_PROJ_LIST.

- C 'Cancel' onclick: Close this pop-up window and return focus to the calling Results by Project page. Do not alter the value of the Project Name text area.

Images:

None.

Business Rules:

- C Only one Project may be selected at a time.

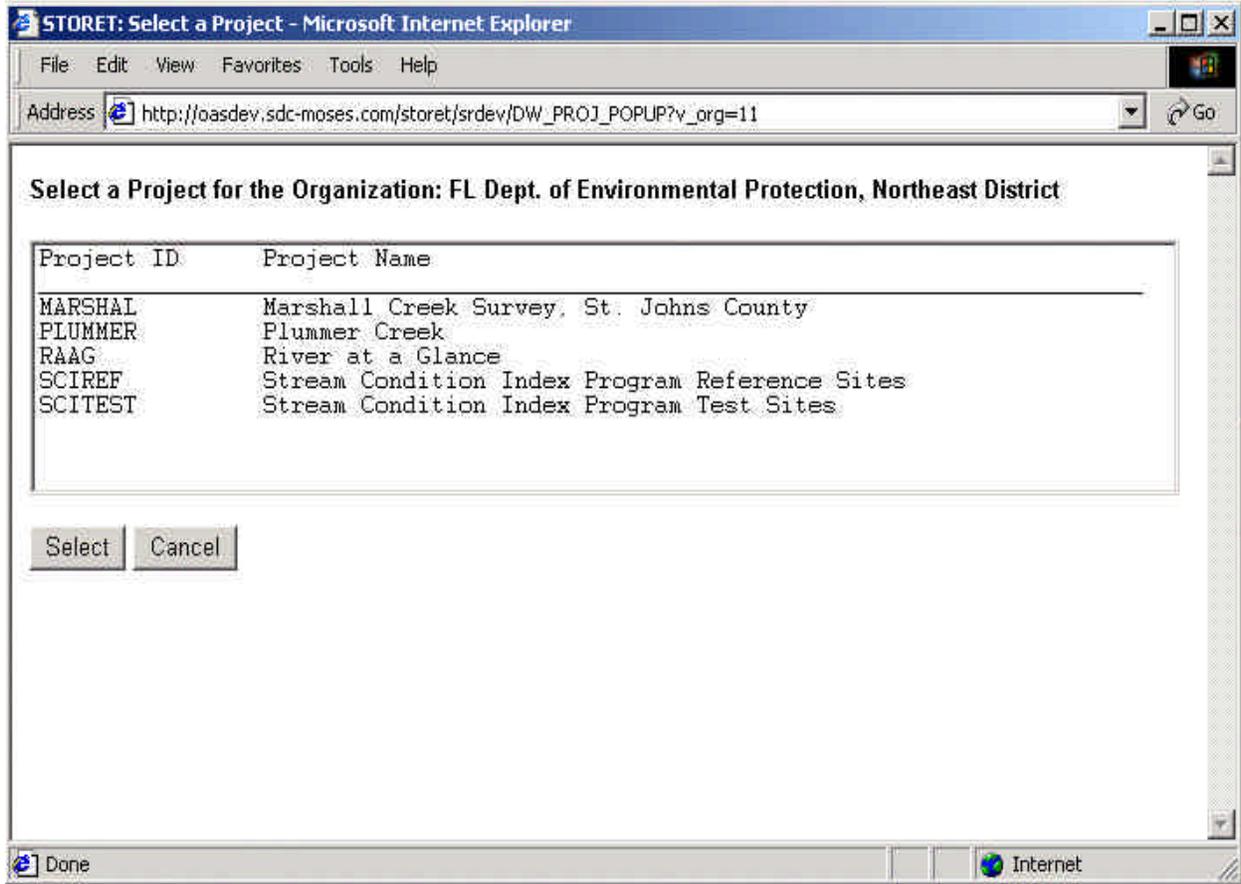
Error Handling:

- C A standard Error Page should be displayed when this page is not loaded upon request.
- C Only valid Project Names and Project Codes are returned to the Results by Project page.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1445, 1500, 1502, 1503**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Count**Web Page Name:** Result Search Summary**Creation Date:** 03/12/2003**Processing Overview/Description:**

The Result Search Summary page receives and processes a user's search parameters from the nine Result Search Criteria pages, displays a summary of this information, and provides a count of the number of Results that satisfy the search criteria. Based on this count, a user is able to decide whether they wish to create a report or return to the Result Search Criteria page to refine their query. This page also allows a user to customize the reports they create by selecting the data elements they wish to include in their report. If a report exceeds the permitted number of Results (currently set at 30,000), the user is told that they must refine their query and is unable to generate a report. If there are no Results for a report, the user is told that they must refine their query and is unable to generate a report.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Date (DI_DATE)	FULL_DATE	Y
	PK_ISN	N
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N
Organization (DI_ORG)	ORGANIZATION_ID	Y
	PK_ISN	N

Entity	Attribute	Display
Project (DI_PROJECT)	PROJECT_CD	Y
	PK_ISN	N
Activity Medium (DI_ACTIVITY_MEDIUM)	PK_ISN	N
	ACTIVITY_MEDIUM	Y
Activity Intent (DI_ACTIVITY_INTENT)	PK_ISN	N
	ACTIVITY_INTENT	Y
Community Sampled (DI_COMMUNITY_SAMPLED)	PK_ISN	N
	ACTIVITY_COMMUNITY	Y
Non-Biological Result (FA_REGULAR_RESULT)	STN_LATITUDE	N
	STN_LONGITUDE	N
	PK_ISN	N
	FK_GEO_COUNTY	N
	FK_GEO_STATE	N
	HYDROLOGIC_UNIT_CODE	N
	FK_DATE_ACT_START	N
	FK_CHAR	N
	FK_ORG	N
	FK_STATION	N
	FK_ACT_MEDIUM	N
REGULAR_RESULT_PROJECT	FK_PROJECT	N
	FK_RESULT	N
Biological Result (FA_BIOLOGICAL_RESULT)	STN_LATITUDE	N
	STN_LONGITUDE	N
	PK_ISN	N
	FK_GEO_COUNTY	N

Entity	Attribute	Display
	FK_GEO_STATE	N
	HYDROLOGIC_UNIT_CODE	N
	FK_DATE_ACT_START	N
	FK_CHAR	N
	FK_ORG	N
	FK_STATION	N
BIOLOGICAL_RESULT_PROJECT	FK_PROJECT	N
	FK_ACT_INTENT	N
	FK_COMMUNITY_SAMPLED	N
	FK_RESULT	N
Habitat Assessment (FA_HABITAT_RESULT)	STN_LATITUDE	N
	STN_LONGITUDE	N
	PK_ISN	N
	FK_GEO_COUNTY	N
	FK_GEO_STATE	N
	HYDROLOGIC_UNIT_CODE	N
	FK_DATE_ACT_START	N
	FK_CHAR	N
	FK_ORG	N
	FK_STATION	N
HABITAT_RESULT_PROJECT	FK_PROJECT	N
	FK_RESULT	N
APP_COLUMN_NAME	ELEMENT_NAME	Y
	REG_REPORT_NUMBER	N
	REG_ELEMENT_DEFAULT	N
	BIO_REPORT_NUMBER	N
	BIO_REPORT_DEFAULT	N

Entity	Attribute	Display
	HAB_REPORT_NUMBER	N
	HAB_REPORT_DEFAULT	N

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Geo	Regular Result by Geographic Location	<Continue>
DW_Result_Criteria_Station	Regular Result by Station	<Continue>
DW_Result_Criteria_Project	Regular Result by Project	<Continue>
DW_Bio_Result_Criteria_Geo	Biological Result by Geographic Location	<Continue>
DW_Bio_Result_Criteria_Station	Biological Result by Station	<Continue>
DW_Bio_Result_Criteria_Project	Biological Result by Project	<Continue>
DW_Hab_Result_Criteria_Geo	Habitat Result by Geographic Location	<Continue>
DW_Hab_Result_Criteria_Station	Habitat Result by Station	<Continue>
DW_Hab_Result_Criteria_Project	Habitat Result by Project	<Continue>

Input Parameters:

Natural Language	Parameter
Identifies the geographic location parameter being used for the search. By default this value is 'StateCounty'.	GEOGRAPHIC
The code of the selected State. By default this value is 0.	AS_STATE
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE

Natural Language	Parameter
The Northern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 90.	MAX_LAT_DD
The Western Limit of a Latitude/Longitude query in decimal degrees. By default this value is 180.	MIN_LONG_DD
The Eastern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MAX_LONG_DD
The Southern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MIN_LAT_DD
The direction of the Northern Limit. By default this value is NULL.	DIR_MAXLAT
The direction of the Southern Limit. By default this value is NULL.	DIR_MINLAT
The direction of the Eastern Limit. By default this value is NULL.	DIR_MAXLONG
The direction of the Western Limit. By default this value is NULL.	DIR_MINLONG
The Hydrologic Unit Code value. By default this value is 'ALL'	AS_HUC
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL or dummy (displayed as "--").	FROM_MON2

Natural Language	Parameter
The day of the month of the beginning date of the second query date range. By default this value is NULL or 0 (displayed as “—”).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL or 0 (displayed as “—”).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL or dummy (displayed as “—”).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL or 0 (displayed as “—”).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL or 0 (displayed as “—”).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL or dummy (displayed as “—”).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL or 0 (displayed as “—”).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL or 0 (displayed as “—”).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL or dummy (displayed as “—”).	END_MON3
The day of the month of the ending date of the third query date range. By default this value is NULL or 0 (displayed as “—”).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL or 0 (displayed as “—”).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL or dummy (displayed as “—”).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL or 0 (displayed as “—”).	FROM_DD4

Natural Language	Parameter
The year of the beginning date of the fourth query date range. By default this value is NULL or 0 (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL or dummy (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL or 0 (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL or 0 (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List).	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
The number (PK_ISN) that identifies the project the user selected. Default is 0.	D_PROJ_LIST
The user selected project name. Default is NULL.	AS_PROJ
The names of the selected Station(s) in a string separated by HTML break tags (). By default this value is NULL.	V_STATION_NAMES
The Station Ids s of the selected Station(s) in a string separated by a break. By default this value is DUMMY.	AS_STATION
A PI/Sql table of selected Stations.	STATION_LIST

Natural Language	Parameter
The search string used to identify available Station Alias Type.	AS_EXTREF
The user selected Station Alias Type.	D_EXTREF_LIST
A Pl/Sql table of selected Activity Mediums (Medium Key List).	D_MEDIUM_LIST
A Pl/Sql table of selected Activity Intents (Intent Key List).	D_INTENT_LIST
A Pl/Sql table of selected Sample Communities (Community Key List).	D_COMMUNITY_LIST
The type of Result being searched (Regular, Biological, or Habitat).	RESULT_TYPE

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Hub_Custom	Download Result Report	<Continue>

Output Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting results.	V_FROMSTMT
The Where clause of the SQL statement that will be used for selecting results.	V_WHERESTMT
A Pl/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS
The number of results matching the search criteria (this is the same number that is displayed on the DW_Result_Count page).	V_RESULTCOUNT
Indicates whether RULE BASED query optimization should be employed (this is for performance tuning).	V_RULE_OPTIMIZATION
The type of Result Report being generated (Regular, Biological, or Habitat).	V_REPORT_TYPE

Internal Procedure Events:**Onload**

- C Display titles and values for the search criteria that the user selected on the previous page.
- C Display the number of Results that match the search criteria that the user selected on the previous page.
- C Display the report elements that comprise the selected Result Report type (defined in the APP_COLUMN_NAMES table).
- C Check the default report element check boxes based on the type of Result Report being generated.

- S For Regular Result Reports: Org Name, Station ID, Station Location Info, Station Lat/Long, Visit Num, Activity Id, Activity Start [date], Activity Medium, Activity Type, Activity Depth, Activity Depth Unit, Characteristic Name, Sample Fraction, Value Type, Statistic Type, Result Value as Text, Units, Analytical Proc ID.

- S For Biological Result Reports: Org Name, Station ID, Station Location Info, Station Lat/Long, Visit Num, Activity Id, Activity Start [date], Activity Medium, Activity Type, Subject Taxon, Biopart, Activity Depth, Activity Depth Unit, Characteristic Name, Sample Fraction, Value Type, Statistic Type, Result Value as Text, Units, Analytical Proc ID.

- S For Habitat Result Reports: Org Name, Station ID, Station Location Info, Station Lat/Long, Visit Num, Activity Id, Activity Start [date], Activity Type, Characteristic Name, Sample Fraction, Value Type, Statistic Type, Result Value as Text, Units, Analytical Proc ID.

Custom Report Section

- C 'Select All' onclick: Check all report element check boxes.
- C 'Clear All' onclick: Uncheck all report element check boxes.
- C 'Restore Defaults' onclick: Check only the default report elements.

Form Level

- C 'Continue>>' onclick: Call the procedure DW_Result_Hub_Custom and pass it the processed Result search criteria (in the form of a SQL From clause and Where clause), the number of results that match the selection criteria, the list of columns that the user has selected for their report, the type of Result Report being requested, and whether

RULE BASED query optimization should be used (this is currently only used for reports that include PROJECT search criteria).

C '<<Back' onclick: Closes the page and returns to the selected Result Criteria page.

General

C See DW_Top_of_Page Specifications for a description of the standard header links on each page.

C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

C Only display location information for the geographic search option that has been selected (State/County (which is the default), Latitude/Longitude, or HUC). Do not display for Station or Project searches.

C Display Organization for Project and Organization searches (these occur on the Project and Station search pages when the user selects an Organization but does not select either a specific Project or specific Stations).

C Always display the Station(s) that have been selected. Display 'All' if the user has not chosen specific Stations to base search on.

C Always display the Date range(s) that have been selected. Display 'All' if the user has selected the default Date values (From = Jan 1, 1900, To =Current date).

C Always display the Characteristics that have been selected. Display 'All' if the user has not chosen specific Characteristics to base search on.

C For Regular Result Searches, always display the Medium that have been selected. Display 'All' if the user has not chosen specific Activity Medium so search based upon.

C For Biological Result Searches, always display the Intents that have been selected. Display 'All' if the user has not chosen specific Activity Intents to search based upon.

C For Biological Result Searches, display the Communities that have been selected if the Activity Intent is 'Taxon Abundance' or 'All'. Display 'All' if the user has not chosen specific Communities to base search on.

Error Handling:

- C A standard Error Page should be displayed when this page is not loaded upon request.
- C An alert is displayed if the user attempts to generate a report without having at least one report element selected.
- C Enforces report size restrictions as directed by the TOPO, which is currently 30,000 records.

Code Changes:

None.

Page Print:

First half of Page:

EPA > STORET > Result Search Summary - Microsoft Internet Explorer

Address: http://oasdev.sdc-moses.com/storet/srpp/DW_RESULT_COUNT

U.S. Environmental Protection Agency

STORET

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Result Search Summary

Number of Results Returned: 3,049

Search Criteria

State: CALIFORNIA

County: ALL

Activity Start Dates: 01-JAN-1990 to 29-AUG-2003

Medium: Water

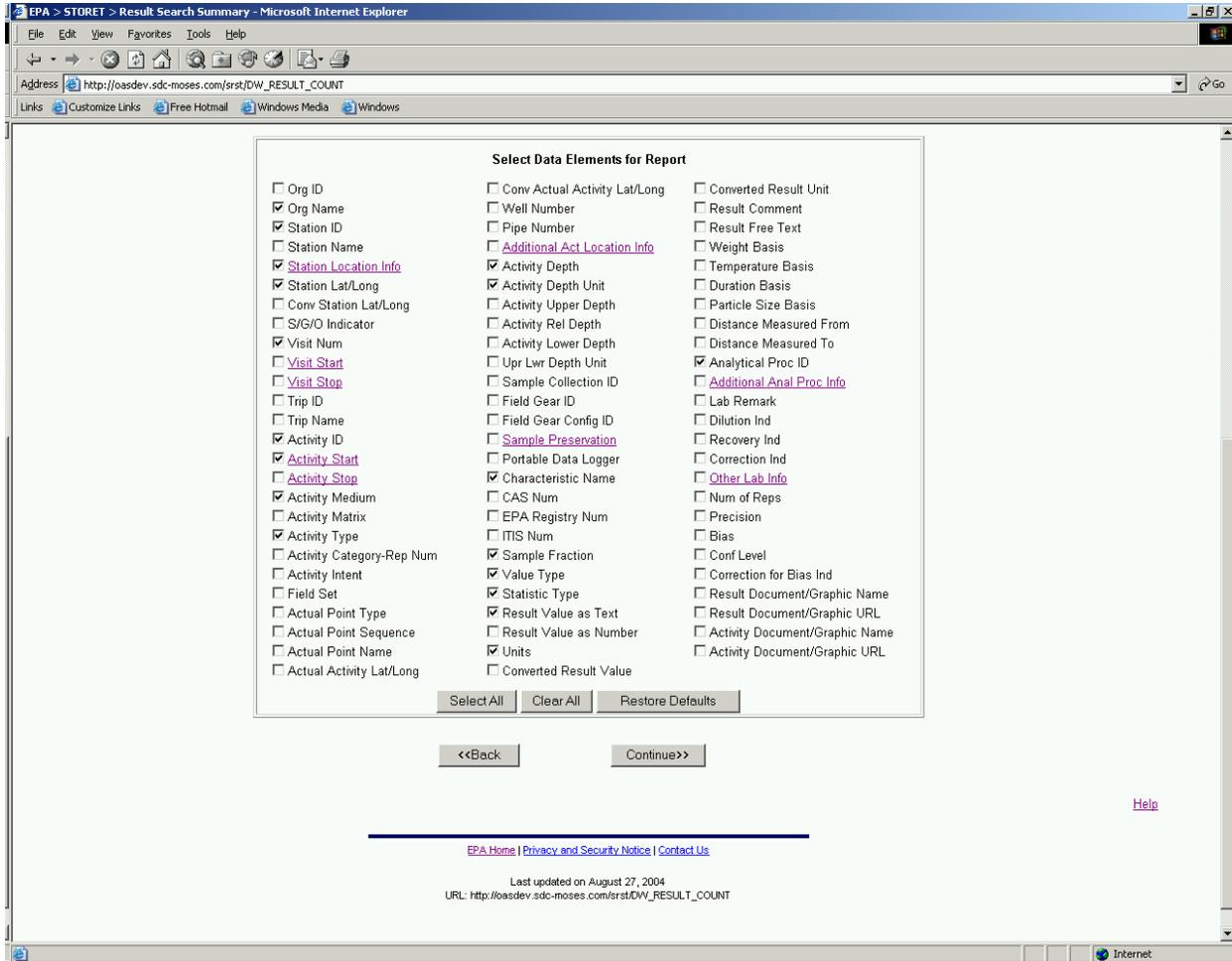
Characteristic(s): Abietylamine
Acenaphthene
Acenaphthylene
Acetaldehyde
Acetaldol
Acetamide
pH
Phenacetin

Select 'Back' to modify search criteria and refine your query.
Select 'Continue' to generate a report based on your current selections.
You may customize the content of your report by selecting Data Elements below.

<<Back Continue>>

Done Internet

Second half of page:



STORET Central Warehouse Specification**SIR:** 1441, 1440, 1439, 1437, 1435, 1443, 1500, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Criteria_GEO**Web Page Name:** Regular Results by Geographic Location**Creation Date:** 3/12/2003**Processing Overview/Description:**

The Regular Results by Geographic Location page is the first Regular Result search page of the STORET Central Warehouse and provides four major search areas: Geographic Location, Date, Activity Medium, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. In addition, the Geographic Location dimension is divided into three sub-dimensions: State/County, Latitude/Longitude, and Hydrologic Unit Code (HUC). The user is able to select one of these three location sub-dimension per Result query. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Regular Results by Geographic Location

Input Parameters:

These parameters are passed from the three Popup windows (DW_County_Popup, DW_HUC_Popup, and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Hydrologic Unit Code value. By default this value is 'ALL'.	AS_HUC
A Pl/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_County_Popup	STORET: Select Counties	Look Up
DW_HUC_Popup	STORET: Select a Hydrologic Unit Code (HUC)	Look Up
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
Identifies the geographic location parameter being used for the search. By default this value is 'StateCounty'.	GEOGRAPHIC
The name of the selected State. By default this value is 'ALL'.	AS_STATE
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Northern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 90.	MAX_LAT_DD
The Western Limit of a Latitude/Longitude query in decimal degrees. By default this value is 180.	MIN_LONG_DD
The Eastern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MAX_LONG_DD
The Southern Limit of a Latitude/Longitude query in decimal degrees. By default this value is 0.	MIN_LAT_DD
The direction of the Northern Limit. By default this value is N.	DIR_MAXLAT
The direction of the Southern Limit. By default this value is N.	DIR_MINLAT
The direction of the Eastern Limit. By default this value is W.	DIR_MAXLONG
The direction of the Western Limit. By default this value is W.	DIR_MINLONG
The Hydrologic Unit Code value. By default this value is 'ALL'	AS_HUC
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1

Natural Language	Parameter
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as “—”).	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as “—”).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—”).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—”).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—”).	END_MON3

Natural Language	Parameter
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags(). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER

Natural Language	Parameter
A Pl/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE
A Pl/Sql table of selected Activity Mediums (Medium Key List).	D_MEDIUM_LIST

Internal Procedure Events:

Onload

- C Populate the State Name list box with State Names organized alphabetically by country (with the U. S. first followed by Mexico and Canada).
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Populate the Activity Medium list box.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Geographic Location Section

- C State/County 'Lookup' onclick: Display a pop-up window showing the available counties for the state currently selected from the drop-down list. Populate the County Name(s) textarea with the Counties that the user selects from the pop-up window.
- C HUC 'Lookup' onclick: Display a pop-up window showing all available HUC codes and their corresponding names. Populate the Cataloging Unit text box with the HUC code that the user selects from the pop-up window.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search

string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.

- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user selects 'All' State/Counties, all result records are included in the search.
- C If the user selects 'All' HUCs, all result records are included in the search.
- C If the user selects defaults latitude/longitude values (i.e., N=90, S=0, E=0, W=180), all result records are included in the search.

- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To Date = current date), all result records are included in the search.
- C If a list of Activity Mediums is selected that includes 'Select All', all Activity Mediums are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C The user will not be allowed to proceed to the next page if a non-numeric character is entered in the latitude/longitude fields or if the entry is outside the Latitude/Longitude permitted value range.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
 - An alert is displayed if the user attempts to perform a County look-up before selecting a State.
 - The county field is reset to 'All' if the selected State is changed.
 - The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g. Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First half of page.

The screenshot shows the EPA STORET web application interface. The browser title is "EPA > STORET > Regular Results by Geographic Location - Microsoft Internet Explorer". The address bar shows "http://oasdev.sdc-moses.com/storet/srpp/DW_resultcriteria_geo". The page header includes the EPA logo and the text "U.S. Environmental Protection Agency". Below the header is a navigation bar with links: "Recent Additions", "Contact Us", "Print Version", and a search box with a "GO" button. The main content area is titled "Regular Results by Geographic Location" and contains three sections: "Geographic Location", "Date", and "Activity Medium".

Geographic Location
Select a single type of location search that you wish to perform (state/county, latitude/longitude, or HUC). Then enter the corresponding search criteria.

State/County
State Name: ALL
County Name: ALL
Look Up

Latitude/Longitude (in decimal degrees)
North Limit: 90 N
West Limit: 180 W
East Limit: 0 W
South Limit: 0 N

Drainage Basin/HUC
Cataloging Unit: ALL
Look Up

Date
Specify Activity Start Date range(s)

Date Range 1: JAN 1 1900 To AUG 29 2003
Date Range 2: --- -- ---- To --- -- ----
Date Range 3: --- -- ---- To --- -- ----
Date Range 4: --- -- ---- To --- -- ----

Activity Medium
Select one or more Activity Medium
ACTIVITY MEDIUM

Second half of page.

The screenshot shows a web browser window with a toolbar at the top. The main content area is divided into two sections:

- Activity Medium:** A box titled "Select one or more Activity Medium" containing a dropdown menu. The menu is open, showing options: "Select All", "Water", "Sediment", "Soil", "Air", and "Other".
- Characteristic:** A box titled "Use the Characteristic Search to create a list of up to 50 Characteristics". It contains:
 - A "Characteristic Search" input field.
 - A "Search By" dropdown menu set to "CHARACTERISTIC NAME".
 - A "Search" button.
 - A checked checkbox labeled "Hide Taxonomic Names".
 - A large empty text area labeled "Characteristic Name".
 - "Clear Selected" and "Clear All" buttons below the text area.
 - "Continue" and "Clear Form" buttons below the "Search" button.

At the bottom of the page, there is a horizontal line, a "Help" link on the right, and footer text: "EPA Home | Privacy and Security Notice | Contact Us", "Last updated on November 26, 2003", and "URL: http://oasdev.sdc-moses.com/storet/srdev/DW_resultcriteria_geo".

STORET Central Warehouse Specification**SIR:** 1435, 1436, 1437, 1442, 1443, 1500, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Criteria_Project**Web Page Name:** Regular Results by Project**Creation Date:** 3/28/2003**Processing Overview/Description:**

The Regular Results by Project page is the third Regular Result search page of the STORET Central Warehouse and provides four major search areas: Organization/Project, Date, Activity Medium, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select a single Project from a single Organization. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	ORGANIZATION_ID	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Regular Results by Project

Input Parameters:

These parameters are passed from the two Popup windows (DW_Project_Popup and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Project_Popup	STORET: Select Project	Look Up
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Project. By default this value is 'Select a Project'.	AS_PROJ
The key of the selected Project. By default this value is 0.	D_PROJ_LIST
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1

Natural Language	Parameter
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as “—“).	END_YYYY2
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_MON3

Natural Language	Parameter
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is ‘DUMMY’.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is ‘ON’.	TAXON_FILTER

Natural Language	Parameter
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE
A PI/Sql table of selected Activity Mediums (Medium Key List).	D_MEDIUM_LIST

Internal Procedure Events:

Onload

- C Populate the Organization list box with Organization IDs and Names organized by Organization ID.
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Populate the Activity Medium list box.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Organization/Project Section

- C Project 'Lookup' onclick: Display a pop-up window showing the available Projects for the Organization currently selected from the drop-down list. Populate the Project Name textbox with the Project that the user selects from the pop-up window and populate the hidden variable D_PROJ_LIST with the corresponding key.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics

the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.

- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user has selected an Organization but does not select a Project, data for the selected Organization is retrieved for the report.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To = current date), all result records are included in the search.
- C If a list of Activity Mediums is selected that includes 'Select All', all Activity Mediums are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- An alert is displayed if the user attempts to perform a Project look-up before selecting an Organization.
- The Project field is reset to 'Select a Project' if the selected Organization is changed.
- The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g., Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First half of page.

The screenshot shows a web browser window titled "EPA > STORET > Regular Results by Project - Microsoft Internet Explorer". The address bar shows the URL: http://oasdev.sdc-moses.com/storet/srpp/DW_resultcriteria_project. The page header features the U.S. Environmental Protection Agency logo and the text "STORET". Navigation links include "Recent Additions", "Contact Us", and "Print Version". A search bar with a "GO" button is present. The breadcrumb trail reads: "EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse".

Regular Results by Project

Project

Step 1: Select a Single Organization from the List

ORG ID	ORGANIZATION NAME
Select an Organization	

Step 2: Select a Single Project by Clicking "Look Up"

Select a Project

Date

Specify Activity Start Date range(s)

Date Range 1:	JAN	1	1900	To	AUG	29	2003
Date Range 2:	---	---	---	To	---	---	---
Date Range 3:	---	---	---	To	---	---	---
Date Range 4:	---	---	---	To	---	---	---

Activity Medium

Select one or more Activity Medium

ACTIVITY MEDIUM
Select All
Water
Sediment
Soil
Air
Other

Second half of page.

The screenshot shows a web browser window with a toolbar at the top. The main content area is divided into two sections:

- Activity Medium:** A box titled "Select one or more Activity Medium" containing a dropdown menu. The menu is open, showing "ACTIVITY MEDIUM" at the top, followed by "Select All" (highlighted in blue), "Water", "Sediment", "Soil", "Air", and "Other".
- Characteristic:** A box titled "Use the Characteristic Search to create a list of up to 50 Characteristics". It contains:
 - A "Characteristic Search" input field.
 - A "Search By" dropdown menu set to "CHARACTERISTIC NAME".
 - A "Search" button.
 - A checked checkbox labeled "Hide Taxonomic Names".
 - A large empty text area labeled "Characteristic Name".
 - "Clear Selected" and "Clear All" buttons at the bottom of the box.

Below the "Characteristic" section are "Continue" and "Clear Form" buttons. A "Help" link is located to the right of the "Continue" button.

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Last updated on November 26, 2003
URL: http://oasdev.sdc-moses.com/storet/srdev/DW_resultcriteria_project

STORET Central Warehouse Specification**SIR:** 1435, 1436, 1437, 1438, 1443, 1500, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Criteria_Station**Web Page Name:** Regular Results by Station**Creation Date:** 4/02/2003**Processing Overview/Description:**

The Regular Results by Station page is the second Regular Result search page of the STORET Central Warehouse and provides four major search areas: Organization/Station, Date, Activity Medium and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select Stations from multiple Organizations, but is limited to selecting a maximum of 100 Stations per query. The user is able to select up to four date ranges and 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	ORGANIZATION_ID	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Regular Results by Station

Input Parameters:

These parameters are passed from the three Popup windows (DW_Extref_Popup, DW_Station_Popup and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Type. By default this value is 0.	D_EXTREF_LIST
A PI/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Extref_Popup	STORET: Select a Station Alias Type	Look Up
DW_Station_Popup	STORET: Station Search Results	Search Stations
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Result_Count	Result Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Types. By default this value is 0.	D_EXTREF_LIST
The search string used to find Stations within the Organization. By default this value is 'DUMMY'.	AS_STATION

Natural Language	Parameter
A Pl/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
The names of the selected Station(s) string separated by HTML break tags (). By default this value is NULL.	V_STATION_NAMES
The month of the beginning date of the first query date range. By default this value is Jan.	FROM_MON1
The day of the month of the beginning date of the first query date range. By default this value is 1.	FROM_DD1
The year of the beginning date of the first query date range. By default this value is 1900.	FROM_YYYY1
The month of the ending date of the first query date range. By default this value is the current month.	END_MON1
The day of the month of the ending date of the first query date range. By default this value is the current day of the month.	END_DD1
The year of the ending date of the first query date range. By default this value is the current year.	END_YYYY1
The month of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_MON2
The day of the month of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_DD2
The year of the beginning date of the second query date range. By default this value is NULL (displayed as "--").	FROM_YYYY2
The month of the ending date of the second query date range. By default this value is NULL (displayed as "--").	END_MON2
The day of the month of the ending date of the second query date range. By default this value is NULL (displayed as "--").	END_DD2
The year of the ending date of the second query date range. By default this value is NULL (displayed as "--").	END_YYYY2

Natural Language	Parameter
The month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_MON3
The day of the month of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_DD3
The year of the beginning date of the third query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY3
The month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_MON3
The day of the month of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_DD3
The year of the ending date of the third query date range. By default this value is NULL (displayed as “—“).	END_YYYY3
The month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_MON4
The day of the month of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_DD4
The year of the beginning date of the fourth query date range. By default this value is NULL (displayed as “—“).	FROM_YYYY4
The month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_MON4
The day of the month of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_DD4
The year of the ending date of the fourth query date range. By default this value is NULL (displayed as “—“).	END_YYYY4
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES

Natural Language	Parameter
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
The Characteristic naming convention being used for the Characteristic Search. By default this value is 0 (STORET DEFAULT).	AS_CHAR_ALIAS_TYPE
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST
Boolean flag used to signal whether taxonomic names should be included in characteristic searches. By default this value is 'ON'.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST
Used to identify which type of result data to query against.	RESULT_TYPE
A PI/Sql table of selected Activity Mediums (Medium Key List).	D_MEDIUM_LIST

Internal Procedure Events:

Onload

- C Populate the Organization list box with Organization IDs and Names organized by Organization ID.
- C For Date Range 1, select default values of FROM = 'Jan-1-1900' and TO = the current date. The other three date values should be unselected by default and will contain line spaces (i.e., '—') to denote this.
- C Populate the Activity Medium list box.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Station Section

- C 'Look Up' onclick: Display a popup window showing the Station Alias Types that match the Organization selected by the user. If the user has not selected an Organization, display an alert message prompting them to do so. Populate the Station Alias Type display field with the Station Alias Type the user selects from the pop-up window.

- C 'Search Stations' onclick: Display a pop-up window showing the Stations that match the search string, search type, Station Alias Type, and Organization entered by the user. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Station listbox with the Stations the user selects from the pop-up window. No more than 100 Stations can be added to the Selected Stations list.
- C 'Clear Selected' onclick: All selected Stations are removed from the stations selected list.
- C 'Clear All' onclick: All Stations are removed from the stations selected list.

Date Section

- C Block the selection of invalid dates by altering the day list box to reflect the correct number of days in the month each time the month or year is changed.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for a description of the standard header links on each page.
- C See DW_Bottom_of_page Specifications for a description of the standard footer links on each page.

Images:

The only images used on the STORET Central Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user has selected an Organization but does not select any Stations, data for the selected Organization is retrieved for the report.
- C Stations can not be added to the Selected Stations list more than once.
- C If the user selects 'Search by Station Alias Type' but does not change the selected Station Alias Type (i.e., default of 'STANDARD'), then Stations will be searched by ID.
- C The user may add no more than 100 Stations to the Selected Stations list. The attempted addition of Stations in excess of this limit is blocked and an alert is displayed.
- C If the user selects default date values (i.e., From Date = Jan 1, 1900, To = current date), all result records are included in the search.
- C If a list of Activity Mediums is selected that includes 'Select All', all Activity Mediums are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before selecting an Organization.
- C An alert is displayed if the user attempts to perform a Station Alias Type lookup before selecting an Organization.

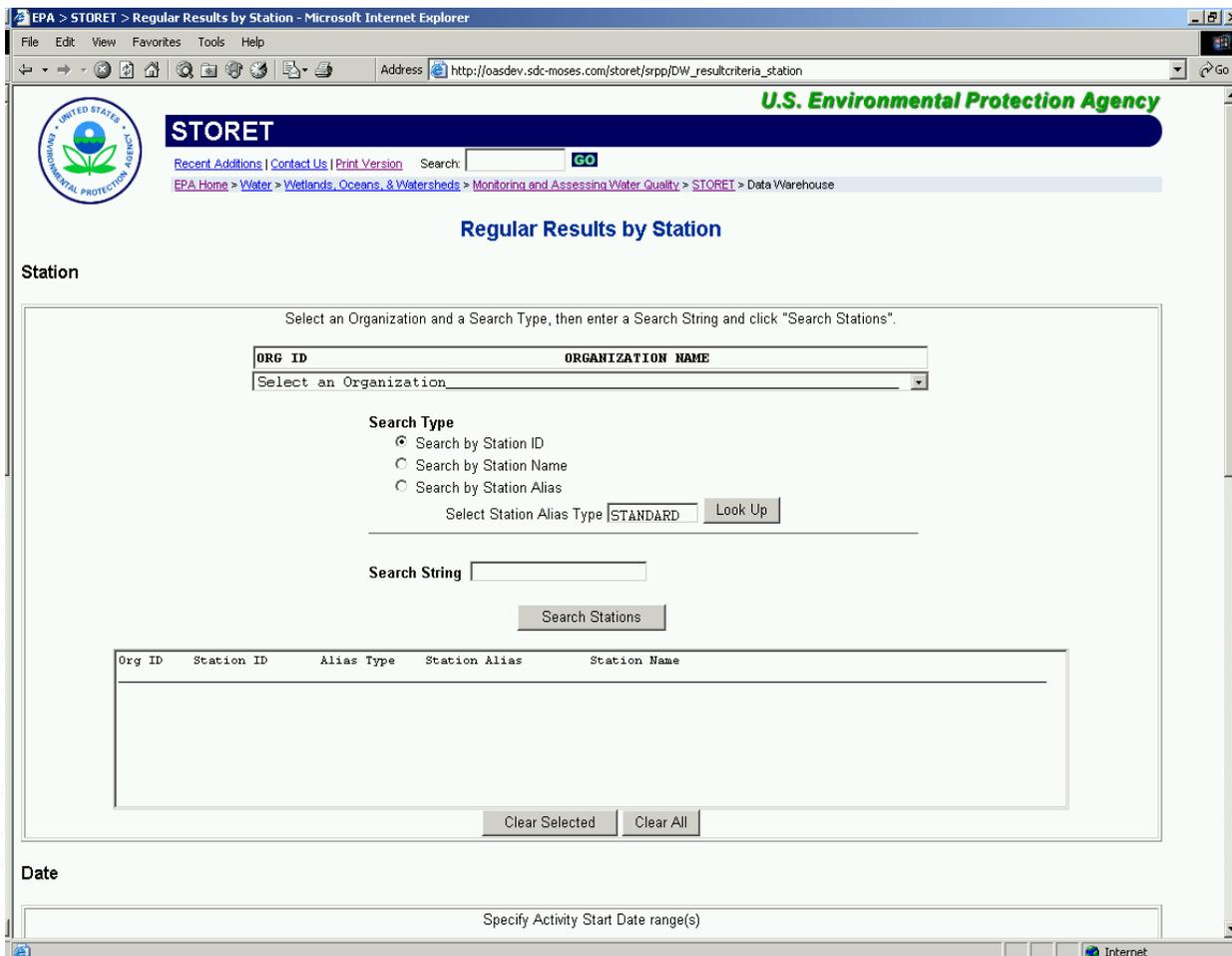
- C The user will not be allowed to proceed to the next page if an invalid date range is entered in the month-day-year selection boxes (e.g., Jan 1, 2003 - Jan 1, 1900).

Code Changes:

None.

Page Print:

First part of page.



Second part of page.

The screenshot shows a web browser window with a toolbar at the top. The main content area is divided into three sections:

- Date:** A section titled "Specify Activity Start Date range(s)" containing four rows of date range selectors. The first row is populated with "Date Range 1: JAN 1 1900 To NOV 20 2003". The other three rows are empty, showing "Date Range 2:", "Date Range 3:", and "Date Range 4:" with empty dropdown menus.
- Activity Medium:** A section titled "Select one or more Activity Medium" with a dropdown menu. The menu is open, showing options: "Select All", "Water", "Sediment", "Soil", "Air", and "Other".
- Characteristic:** A section titled "Use the Characteristic Search to create a list of up to 50 Characteristics". It includes a "Characteristic Search" input field, a "Search By" dropdown menu set to "CHARACTERISTIC NAME", a "Search" button, and a checked checkbox for "Hide Taxonomic Names". Below this is a large empty text area labeled "Characteristic Name". At the bottom are "Clear Selected" and "Clear All" buttons.

Third part of page.

The screenshot shows a web browser window with a standard toolbar at the top. The main content area is divided into two sections:

- Activity Medium:** A box with the heading "Select one or more Activity Medium". Below it is a dropdown menu titled "ACTIVITY MEDIUM" with the following options: "Select All", "Water", "Sediment", "Soil", "Air", and "Other".
- Characteristic:** A box with the heading "Use the Characteristic Search to create a list of up to 50 Characteristics". It contains:
 - A "Characteristic Search" text input field.
 - A "Search By" dropdown menu currently set to "CHARACTERISTIC NAME".
 - A "Search" button.
 - A checked checkbox labeled "Hide Taxonomic Names".
 - A large text area labeled "Characteristic Name" for displaying results.
 - "Clear Selected" and "Clear All" buttons below the text area.
 - "Continue" and "Clear Form" buttons below the "Clear Selected" and "Clear All" buttons.

At the bottom of the page, there is a blue horizontal line, a "Help" link, and footer text: "EPA Home | Privacy and Security Notice | Contact Us", "Last updated on November 26, 2003", and "URL: http://oasdev.sdc-moses.com/storet/srdev/DW_resultcriteria_station".

STORET Central Warehouse Specification**SIR:** 1446, 1500, 1502, 1503**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Download_Custom**Web Page Name:** None**Creation Date:** 4/15/2003**Processing Overview/Description:**

The DW_Result_Download_Custom procedure receives processed result search criteria and the list of requested report elements from the DW_Result_Hub_Custom procedure, and generates a tilde delimited text file report based on this information. The name of the text file is returned to DW_Result_Hub_Custom so that a link to the file can be displayed to the user. The created report contains only the columns that correspond to the report elements selected by the user. The titles for these columns are displayed as the first line of text in the report.

Tables:

(Display Fields may be included in user generated reports. See Business Rules section for display order)

Entity	Attribute	Display
County (DI_GEO_COUNTY)	COUNTY_NAME	Y
	PK_ISN	N
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N
Organization (DI_ORG)	ORGANIZATION_NAME	Y
	PK_ISN	N
Horizontal Datum (LU_MAD_HDATUM)	ID_CODE	Y

Entity	Attribute	Display
	PK_ISN	N
Horizontal Method (LU_MAD_HMETHOD)	GEOPOSITIONING_METHOD	Y
	PK_ISN	N
FA_REGULAR_RESULT	ORGANIZATION_ID	Y
	STATION_ID	Y
	STATION_NAME	Y
	STN_LATITUDE	Y
	STN_LONGITUDE	Y
	STN_HDATUM	Y
	STN_STD_LATITUDE	Y
	STN_STD_LONGITUDE	Y
	STN_STD_HDATUM	Y
	HYDROLOGIC_UNIT_CODE	Y
	SGO_INDICATOR	Y
	STATION_VISIT_ID	Y
	VISIT_START_DATE_TIME	Y
	VISIT_START_TIME_ZONE	Y
	VISIT_STOP_DATE_TIME	Y
	VISIT_STOP_TIME_ZONE	Y
	TRIP_ID	Y
	TRIP_NAME	Y
	ACTIVITY_ID	Y
	ACTIVITY_START_DATE_TIME	Y
	ACT_START_TIME_ZONE	Y
	ACTIVITY_STOP_DATE_TIME	Y
	ACT_STOP_TIME_ZONE	Y

Entity	Attribute	Display
	ACTIVITY_MEDIUM	Y
	ACTIVITY_MATRIX	Y
	ACTIVITY_TYPE	Y
	ACTIVITY_CATEGORY	Y
	REPLICATE_NUMBER	Y
	ACTIVITY_INTENT	Y
	FIELD_SET	Y
	LOCATION_POINT_TYPE	Y
	POINT_SEQUENCE_NUMBER	Y
	POINT_NAME	Y
	ACTIVITY_LATITUDE	Y
	ACTIVITY_LONGITUDE	Y
	ACT_STD_LATITUDE	Y
	ACT_STD_LONGITUDE	Y
	ACT_STD_HDATUM	Y
	WELL_NUMBER	Y
	PIPE_NUMBER	Y
	MAP_SCALE	Y
	ACTIVITY_DEPTH	Y
	ACTIVITY_DEPTH_UNIT	Y
	ACTIVITY_UPPER_DEPTH	Y
	ACTIVITY_REL_DEPTH	Y
	ACTIVITY_LOWER_DEPTH	Y
	UPR_LWR_DEPTH_UNIT	Y
	FIELD_PROCEDURE_ID	Y
	FIELD_GEAR_ID	Y
	GEAR_CONFIG_ID	Y

Entity	Attribute	Display
	CONTAINER_DESC	Y
	TEMP_PRESERVN_TYPE	Y
	PRESRV_STRGE_PRCDR	Y
	PORTABLE_DATA_LOGGER	Y
	CHARACTERISTIC_NAME	Y
	CAS_NUMBER	Y
	EPA_REG_NUMBER	Y
	ITIS_NUMBER	Y
	SAMPLE_FRACTION_TYPE	Y
	RESULT_VALUE_TYPE	Y
	STATISTIC_TYPE	Y
	RESULT_VALUE_TEXT	Y
	RESULT_VALUE	Y
	RESULT_UNIT	Y
	STD_VALUE	Y
	STD_UNIT	Y
	RESULT_COMMENT	Y
	TEXT_RESULT	Y
	WEIGHT_BASIS_TYPE	Y
	TEMPERATURE_BASIS_LEVEL	Y
	DURATION_BASIS	Y
	PARTICLE_SIZE	Y
	DISTANCE_MEASURE_FROM	Y
	DISTANCE_MEASURE_TO	Y
	ANALYTICAL_PROCEDURE_SOURCE	Y
	ANALYTICAL_PROCEDURE_ID	Y
	DETECTION_LIMIT	Y

Entity	Attribute	Display
	DETECTION_LIMIT_DESCRIPTION	Y
	LOWER_QUANTITATION_LIMIT	Y
	UPPER_QUANTITATION_LIMIT	Y
	LAB_REMARK	Y
	DILUTION_INDICATOR	Y
	RECOVERY_INDICATOR	Y
	CORRECTION_INDICATOR	Y
	LAB_ID	Y
	LAB_NAME	Y
	LAB_CERTIFIED	Y
	LAB_BATCH_ID	Y
	ANALYSIS_DATE_TIME	Y
	ANALYSIS_TIME_ZONE	Y
	REPLICATE_ANALYSIS_COUNT	Y
	PRECISION	Y
	BIAS	Y
	CONFIDENCE_LEVEL	Y
	CONF_LVL_CORR_BIAS	Y
	FK_ACT_MAD_HDATUM	N
	FK_ACT_MAD_HMETHOD	N
	FK_ORG	N
	FK_GEO_STATE	N
	FK_GEO_COUNTY	N
	FK_DB_CAT	N
	FK_ACT_MEDIUM	N
	PK_ISN	N
	FK_ACT_START_DATE	N

Entity	Attribute	Display
	BLOB_TITLE	Y
	BLOB_ID	Y
	ACT_BLOB_TITLE	Y
	ACT_BLOB_ID	Y
FA_BIOLOGICAL_RESULT	ORGANIZATION_ID	Y
	STATION_ID	Y
	STATION_NAME	Y
	STN_LATITUDE	Y
	STN_LONGITUDE	Y
	STN_HDATUM	Y
	STN_STD_LATITUDE	Y
	STN_STD_LONGITUDE	Y
	STN_STD_HDATUM	Y
	HYDROLOGIC_UNIT_CODE	Y
	SGO_INDICATOR	Y
	STATION_VISIT_ID	Y
	VISIT_START_DATE_TIME	Y
	VISIT_STOP_DATE_TIME	Y
	TRIP_ID	Y
	TRIP_NAME	Y
	ACTIVITY_ID	Y
	ACTIVITY_START_DATE_TIME	Y
	ACTIVITY_STOP_DATE_TIME	Y
	ACTIVITY_MEDIUM	Y
	ACTIVITY_TYPE	Y
	ACTIVITY_CATEGORY	Y
	REPLICATE_NUMBER	Y

Entity	Attribute	Display
	ACTIVITY_INTENT	Y
	ACTIVITY_COMMUNITY	Y
	ACTIVITY_SUBJECT_TAXON	Y
	BIOPART_NAME	Y
	FIELD_SET	Y
	LOCATION_POINT_TYPE	Y
	POINT_SEQUENCE_NUMBER	Y
	POINT_NAME	Y
	ACTIVITY_LATITUDE	Y
	ACTIVITY_LONGITUDE	Y
	ACT_STD_LATITUDE	Y
	ACT_STD_LONGITUDE	Y
	ACT_STD_HDATUM	Y
	WELL_NUMBER	Y
	PIPE_NUMBER	Y
	MAP_SCALE	Y
	ACTIVITY_DEPTH	Y
	ACTIVITY_DEPTH_UNIT	Y
	ACTIVITY_UPPER_DEPTH	Y
	ACTIVITY_REL_DEPTH	Y
	ACTIVITY_LOWER_DEPTH	Y
	UPR_LWR_DEPTH_UNIT	Y
	FIELD_PROCEDURE_ID	Y
	FIELD_GEAR_ID	Y
	GEAR_CONFIG_ID	Y
	CONTAINER_DESC	Y
	TEMP_PRESERVN_TYPE	Y

Entity	Attribute	Display
	PRESRV_STRGE_PRCDR	Y
	CHARACTERISTIC_NAME	Y
	CAS_NUMBER	Y
	EPA_REG_NUMBER	Y
	ITIS_NUMBER	Y
	SAMPLE_FRACTION_TYPE	Y
	RESULT_VALUE_TYPE	Y
	STATISTIC_TYPE	Y
	RESULT_VALUE_TEXT	Y
	RESULT_VALUE	Y
	RESULT_UNIT	Y
	STD_VALUE	Y
	STD_UNIT	Y
	RESULT_COMMENT	Y
	TEXT_RESULT	Y
	WEIGHT_BASIS_TYPE	Y
	TEMPERATURE_BASIS_LEVEL	Y
	DURATION_BASIS	Y
	PARTICLE_SIZE	Y
	DISTANCE_MEASURE_FROM	Y
	DISTANCE_MEASURE_TO	Y
	ANALYTICAL_PROCEDURE_SOURCE	Y
	ANALYTICAL_PROCEDURE_ID	Y
	DETECTION_LIMIT	Y
	DETECTION_LIMIT_DESCRIPTION	Y
	LOWER_QUANTITATION_LIMIT	Y
	UPPER_QUANTITATION_LIMIT	Y

Entity	Attribute	Display
	LAB_REMARK	Y
	DILUTION_INDICATOR	Y
	RECOVERY_INDICATOR	Y
	CORRECTION_INDICATOR	Y
	LAB_ID	Y
	LAB_NAME	Y
	LAB_CERTIFIED	Y
	LAB_BATCH_ID	Y
	ANALYSIS_DATE_TIME	Y
	ANALYSIS_TIME_ZONE	Y
	REPLICATE_ANALYSIS_COUNT	Y
	PRECISION	Y
	BIAS	Y
	CONFIDENCE_LEVEL	Y
	CONF_LVL_CORR_BIAS	Y
	TR_START_POINT_NAME	Y
	TR_START_LATITUDE	Y
	TR_START_LONGITUDE	Y
	TR_START_HDATUM	Y
	TR_START_STD_LATITUDE	Y
	TR_START_STD_LONGITUDE	Y
	TR_START_STD_HDATUM	Y
	TR_START_DEPTH	Y
	TR_STOP_POINT_NAME	Y
	TR_STOP_LATITUDE	Y
	TR_STOP_LONGITUDE	Y
	TR_STOP_HDATUM	Y

Entity	Attribute	Display
	TR_STOP_STD_LATITUDE	Y
	TR_STOP_STD_LONGITUDE	Y
	TR_STOP_STD_HDATUM	Y
	TR_STOP_DEPTH	Y
	FISHED_DURATION	Y
	BOAT_SPEED	Y
	FISHED_DISTANCE	Y
	REL_CURRENT_DIR	Y
	REL_WIND_DIR	Y
	TRAWL_COMMENT	Y
	VOLTAGE_MEASURE	Y
	CURRENT_TYPE_CODE	Y
	AMPERAGE_MEASURE	Y
	PASS_COUNT	Y
	PASS_LENGTH	Y
	PULSE_RATE	Y
	ELECTROSHOCK_COMMENT	Y
	TOTAL_ENERGZD_TIME	Y
	SAMPLING_DURATION	Y
	ORIENTATION_TO_CURRENT	Y
	REL_CURRENT_DIR	Y
	REL_WIND_DIR	Y
	TRAP_NET_COMMENT	Y
	BIO_GROUP_ID	Y
	BIO_GROUP_TYPE	Y
	BIO_GROUP_SUBJECT_TXN	Y
	BIO_GROUP_DESCRIPTION	Y

Entity	Attribute	Display
	FEEDING_GROUP	Y
	POLLUTION_TOLERANCE	Y
	TROPHIC_LEVEL	Y
	HABIT	Y
	VOLTINISM	Y
	CELL_SHAPE	Y
	CELL_FORM	Y
	NUMBER_IN_GROUP	Y
	BIO_GROUP_COUNT_TYPE	Y
	PHYS_BIO_INDICATOR	Y
	GROUP_DESC_SEX	Y
	GROUP_DESC_LIFESTAGE	Y
	COMMON_CLASS_DESC	Y
	PRIMARY_CLASS_DESC	Y
	SECONDARY_CLASS_DESC	Y
	LOWER_BOUND_AMOUNT	Y
	UPPER_BOUND_AMOUNT	Y
	BIO_RCI_UNITS	Y
	NUMBER_IN_GROUP	Y
	INDIVIDUAL_NUMBER	Y
	FK_ACT_MAD_HDATUM	N
	FK_ACT_MAD_HMETHOD	N
	FK_ORG	N
	FK_GEO_STATE	N
	FK_GEO_COUNTY	N
	FK_DB_CAT	N
	FK_ACT_INTENT	N

Entity	Attribute	Display
	PK_ISN	N
	FK_ACT_START_DATE	N
	FK_COMMUNITY_SAMPLED	N
	BLOB_ID	Y
	BLOB_TITLE	Y
	ACT_BLOB_ID	Y
	ACT_BLOB_TITLE	Y
FA_HABITAT_RESULT	ORGANIZATION_ID	Y
	STATION_ID	Y
	STATION_NAME	Y
	STN_LATITUDE	Y
	STN_LONGITUDE	Y
	STN_HDATUM	Y
	STN_STD_LATITUDE	Y
	STN_STD_LONGITUDE	Y
	STN_STD_HDATUM	Y
	HYDROLOGIC_UNIT_CODE	Y
	SGO_INDICATOR	Y
	STATION_VISIT_ID	Y
	VISIT_START_DATE_TIME	Y
	VISIT_START_TIME_ZONE	Y
	VISIT_STOP_DATE_TIME	Y
	VISIT_STOP_TIME_ZONE	Y
	TRIP_ID	Y
	TRIP_NAME	Y
	ACTIVITY_ID	Y
	ACTIVITY_START_DATE_TIME	Y

Entity	Attribute	Display
	ACT_START_TIME_ZONE	Y
	ACTIVITY_STOP_DATE_TIME	Y
	ACT_STOP_TIME_ZONE	Y
	ACTIVITY_TYPE	Y
	FIELD_SET	Y
	LOCATION_POINT_TYPE	Y
	POINT_SEQUENCE_NUMBER	Y
	POINT_NAME	Y
	ACTIVITY_LATITUDE	Y
	ACTIVITY_LONGITUDE	Y
	ACT_STD_LATITUDE	Y
	ACT_STD_LONGITUDE	Y
	ACT_STD_HDATUM	Y
	WELL_NUMBER	Y
	PIPE_NUMBER	Y
	MAP_SCALE	Y
	CHARACTERISTIC_NAME	Y
	HABITAT_CLASS_NAME	Y
	EPA_REG_NUMBER	Y
	SAMPLE_FRACTION_TYPE	Y
	RESULT_VALUE_TYPE	Y
	STATISTIC_TYPE	Y
	RESULT_VALUE_TEXT	Y
	RESULT_VALUE	Y
	RESULT_UNIT	Y
	STD_VALUE	Y
	STD_UNIT	Y

Entity	Attribute	Display
	RESULT_COMMENT	Y
	TEXT_RESULT	Y
	WEIGHT_BASIS_TYPE	Y
	TEMPERATURE_BASIS_LEVEL	Y
	DURATION_BASIS	Y
	DISTANCE_MEASURE_FROM	Y
	DISTANCE_MEASURE_TO	Y
	ANALYTICAL_PROCEDURE_SOURCE	Y
	ANALYTICAL_PROCEDURE_ID	Y
	DETECTION_LIMIT	Y
	DETECTION_LIMIT_DESCRIPTION	Y
	LOWER_QUANTITATION_LIMIT	Y
	UPPER_QUANTITATION_LIMIT	Y
	LAB_REMARK	Y
	DILUTION_INDICATOR	Y
	RECOVERY_INDICATOR	Y
	CORRECTION_INDICATOR	Y
	LAB_ID	Y
	LAB_NAME	Y
	LAB_CERTIFIED	Y
	LAB_BATCH_ID	Y
	ANALYSIS_DATE_TIME	Y
	ANALYSIS_TIME_ZONE	Y
	REPLICATE_ANALYSIS_COUNT	Y
	PRECISION	Y
	BIAS	Y
	CONFIDENCE_LEVEL	Y

Entity	Attribute	Display
	CONF_LVL_CORR_BIAS	Y
	FK_ACT_MAD_HDATUM	N
	FK_ACT_MAD_HMETHOD	N
	FK_ORG	N
	FK_GEO_STATE	N
	FK_GEO_COUNTY	N
	FK_DB_CAT	N
	FK_ACT_MEDIUM	N
	PK_ISN	N
	FK_ACT_START_DATE	N
	BLOB_ID	Y
	BLOB_TITLE	Y
	ACT_BLOB_ID	Y
	ACT_BLOB_TITLE	Y
Column Names (APP_COLUMN_NAME)	PRINT_NAME	Y
	COL_NAME	N
	REG_COL_ORDER	N
	REG_REPORT_NUMBER	N
	BIO_COL_ORDER	N
	BIO_COL_NUMBER	N
	HAB_COL_ORDER	N
	HAB_COL_NUMBER	N

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Hub_Custom	Download Result	None (called automatically during load)

Input Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting results.	V_FROMSTMT
The Where clause of the SQL statement that will be used for selecting results.	V_WHERESTMT
A Pl/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS
Used to pass a report file name to this procedure. This is set to 'NONE' for non-batched reports.	FILENAME
Indicates whether RULE BASED query optimization should be employed (this is for performance tuning).	V_RULE_OPTIMIZATION
The type of Result Report being generated (Regular, Biological, or Habitat).	REPORT_TYPE

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Hub_Custom	Download Result	None (called automatically during load)

Output Parameters:

Natural Language	Parameter
The file name used for report generation. This is passed so that a link to the report can be created.	OUT_FILE

Internal Procedure Events:**Onload**

C Generate report based on received parameters, and return file name.

Images:

None.

Business Rules:

- C Display Column Titles based on the report elements selected and the contents of the APP_COLUMN_NAME table. See chart below for a list of these titles.
- C Display only the columns that correspond to the list of selected report elements.
- C Separate all report columns with the tilde sign ('~').
- C Do not return the name of the report file created until report generation has completed.
- C Display report columns in the order listed below.
- C Display Converted Result Values in scientific notation with 4 decimal places (for example 9.9999E-12).
- C Display dates in the format YYYY-MM-DD HH24:MI:SS (for example 1973-04-11 13:30:00),

For Regular Result Report:

Column Title	Table Name	Column Name
Org ID	FA_REGULAR_RESULT	ORGANIZATION_ID
Org Name	DI_ORG	ORGANIZATION_NAME
Station ID	FA_REGULAR_RESULT	STATION_ID
Station Name	FA_REGULAR_RESULT	STATION_NAME
State Name	DI_GEO_STATE	STATE_NAME
County Name	DI_GEO_COUNTY	COUNTY_NAME
HUC	FA_REGULAR_RESULT	HYDROLOGIC_UNIT_CODE
Station Latitude	FA_REGULAR_RESULT	STN_LATITUDE
Station Longitude	FA_REGULAR_RESULT	STN_LONGITUDE

Column Title	Table Name	Column Name
Station Horizontal Datum	FA_REGULAR_RESULT	STN_HDATUM
Converted Station Latitude	FA_REGULAR_RESULT	STN_STD_LATITUDE
Converted Station Longitude	FA_REGULAR_RESULT	STN_STD_LONGITUDE
Converted Station Horizontal Datum	FA_REGULAR_RESULT	STN_STD_HDATUM
S/G/O Indicator	FA_REGULAR_RESULT	SGO_INDICATOR
Visit Num	FA_REGULAR_RESULT	STATION_VISIT_ID
Visit Start	FA_REGULAR_RESULT	VISIT_START_DATE_TIME
	FA_REGULAR_RESULT	VISIT_START_TIME_ZONE
Visit Stop	FA_REGULAR_RESULT	VISIT_STOP_DATE_TIME
	FA_REGULAR_RESULT	VISIT_STOP_TIME_ZONE
Trip ID	FA_REGULAR_RESULT	TRIP_ID
Trip Name	FA_REGULAR_RESULT	TRIP_NAME
Activity ID	FA_REGULAR_RESULT	ACTIVITY_ID
Activity Start	FA_REGULAR_RESULT	ACTIVITY_START_DATE_TIME
	FA_REGULAR_RESULT	ACT_START_TIME_ZONE
Activity Stop	FA_REGULAR_RESULT	ACTIVITY_STOP_DATE_TIME
	FA_REGULAR_RESULT	ACT_STOP_TIME_ZONE
Activity Medium	FA_REGULAR_RESULT	ACTIVITY_MEDIUM
Activity Matrix	FA_REGULAR_RESULT	ACTIVITY_MATRIX
Activity Type	FA_REGULAR_RESULT	ACTIVITY_TYPE
Activity Category-Rep Num	FA_REGULAR_RESULT	ACTIVITY_CATEGORY
	FA_REGULAR_RESULT	REPLICATE_NUMBER
Activity Intent	FA_REGULAR_RESULT	ACTIVITY_INTENT
Field Set	FA_REGULAR_RESULT	FIELD_SET
Actual Location Point Type	FA_REGULAR_RESULT	LOCATION_POINT_TYPE
Actual Point Sequence Num	FA_REGULAR_RESULT	POINT_SEQUENCE_NUMBER
Actual Point Name	FA_REGULAR_RESULT	POINT_NAME

Column Title	Table Name	Column Name
Actual Activity Latitude	FA_REGULAR_RESULT	ACTIVITY_LATITUDE
Actual Activity Longitude	FA_REGULAR_RESULT	ACTIVITY_LONGITUDE
Actual Activity Horizontal Datum	LU_MAD_HDATUM	ID_CODE
Converted Actual Activity Latitude	FA_REGULAR_RESULT	ACT_STD_LATITUDE
Converted Actual Activity Longitude	FA_REGULAR_RESULT	ACT_STD_LONGITUDE
Converted Actual Activity Horizontal Datum	FA_REGULAR_RESULT	ACT_STD_HDATUM
Well Number	FA_REGULAR_RESULT	WELL_NUMBER
Pipe Number	FA_REGULAR_RESULT	PIPE_NUMBER
Geopositioning Method	LU_MAD_HMETHOD	GEOPOSITIONING_METHOD
Map Scale	FA_REGULAR_RESULT	MAP_SCALE
Activity Depth	FA_REGULAR_RESULT	ACTIVITY_DEPTH
Activity Depth Unit	FA_REGULAR_RESULT	ACTIVITY_DEPTH_UNIT
Activity Upper Depth	FA_REGULAR_RESULT	ACTIVITY_UPPER_DEPTH
Activity Rel Depth	FA_REGULAR_RESULT	ACTIVITY_REL_DEPTH
Activity Lower Depth	FA_REGULAR_RESULT	ACTIVITY_LOWER_DEPTH
Upr Lwr Depth Unit	FA_REGULAR_RESULT	UPR_LWR_DEPTH_UNIT
Sample Collection ID	FA_REGULAR_RESULT	FIELD_PROCEDURE_ID
Field Gear ID	FA_REGULAR_RESULT	FIELD_GEAR_ID
Field Gear Config ID	FA_REGULAR_RESULT	GEAR_CONFIG_ID
Container Desc	FA_REGULAR_RESULT	CONTAINER_DESC
Temp Pres Type	FA_REGULAR_RESULT	TEMP_PRESERVN_TYPE
Pres Storage Proc	FA_REGULAR_RESULT	PRESRV_STRGE_PRCDR
Portable Data Logger	FA_REGULAR_RESULT	PORTABLE_DATA_LOGGER
Characteristic Name	FA_REGULAR_RESULT	CHARACTERISTIC_NAME
CAS Num	FA_REGULAR_RESULT	CAS_NUMBER
EPA Registry Num	FA_REGULAR_RESULT	EPA_REG_NUMBER

Column Title	Table Name	Column Name
ITIS Num	FA_REGULAR_RESULT	ITIS_NUMBER
Sample Fraction	FA_REGULAR_RESULT	SAMPLE_FRACTION_TYPE
Value Type	FA_REGULAR_RESULT	RESULT_VALUE_TYPE
Statistic Type	FA_REGULAR_RESULT	STATISTIC_TYPE
Result Value as Text	FA_REGULAR_RESULT	RESULT_VALUE_TEXT
Result Value as Number	FA_REGULAR_RESULT	RESULT_VALUE
Units	FA_REGULAR_RESULT	RESULT_UNIT
Converted Result Value	FA_REGULAR_RESULT	STD_VALUE
Converted Result Unit	FA_REGULAR_RESULT	STD_UNIT
Result Comment	FA_REGULAR_RESULT	RESULT_COMMENT
Result Free Text	FA_REGULAR_RESULT	TEXT_RESULT
Weight Basis	FA_REGULAR_RESULT	WEIGHT_BASIS_TYPE
Temperature Basis	FA_REGULAR_RESULT	TEMPERATURE_BASIS_LEVEL
Duration Basis	FA_REGULAR_RESULT	DURATION_BASIS
Particle Size Basis	FA_REGULAR_RESULT	PARTICLE_SIZE
Distance Measured From	FA_REGULAR_RESULT	DISTANCE_MEASURE_FROM
Distance Measured To	FA_REGULAR_RESULT	DISTANCE_MEASURE_TO
Analytical Proc ID	FA_REGULAR_RESULT	ANALYTICAL_PROC_SOURCE
	FA_REGULAR_RESULT	ANALYTICAL_PROCEDURE_ID
Detection Limit	FA_REGULAR_RESULT	DETECTION_LIMIT
Detection Limit Descript	FA_REGULAR_RESULT	DETECTION_LIMIT_DESCRIPTION
Lower Quantification Limit	FA_REGULAR_RESULT	LOWER_QUANTITATION_LIMIT
Upper Quantification Limit	FA_REGULAR_RESULT	UPPER_QUANTITATION_LIMIT
Lab Remark	FA_REGULAR_RESULT	LAB_REMARK
Dilution Ind	FA_REGULAR_RESULT	DILUTION_INDICATOR
Recovery Ind	FA_REGULAR_RESULT	RECOVERY_INDICATOR
Correction Ind	FA_REGULAR_RESULT	CORRECTION_INDICATOR

Column Title	Table Name	Column Name
Lab ID	FA_REGULAR_RESULT	LAB_ID
Lab Name	FA_REGULAR_RESULT	LAB_NAME
Lab Cert	FA_REGULAR_RESULT	LAB_CERTIFIED
Lab Batch ID	FA_REGULAR_RESULT	LAB_BATCH_ID
Analysis Date	FA_REGULAR_RESULT	ANALYSIS_DATE_TIME
	FA_REGULAR_RESULT	ANALYSIS_TIME_ZONE
Num of Reps	FA_REGULAR_RESULT	REPLICATE_ANALYSIS_COUNT
Precision	FA_REGULAR_RESULT	PRECISION
Bias	FA_REGULAR_RESULT	BIAS
Conf Level	FA_REGULAR_RESULT	CONFIDENCE_LEVEL
Correction for Bias Ind	FA_REGULAR_RESULT	CONF_LVL_CORR_BIAS
Result Document/Graphic Name	FA_REGULAR_RESULT	BLOB_TITLE
Result Document/Graphic URL	FA_REGULAR_RESULT	BLOB_ID
Activity Document/Graphic Name	FA_REGULAR_RESULT	ACT_BLOB_TITLE
Activity Document/Graphic URL	FA_REGULAR_RESULT	ACT_BLOB_ID

For Biological Result Report:

Column Title	Table Name	Column Name
Org ID	FA_BIOLOGICAL_RESULT	ORGANIZATION_ID
Org Name	DI_ORG	ORGANIZATION_NAME
Station ID	FA_BIOLOGICAL_RESULT	STATION_ID
Station Name	FA_BIOLOGICAL_RESULT	STATION_NAME
State Name	DI_GEO_STATE	STATE_NAME
County Name	DI_GEO_COUNTY	COUNTY_NAME
HUC	FA_BIOLOGICAL_RESULT	HYDROLOGIC_UNIT_CODE
Station Latitude	FA_BIOLOGICAL_RESULT	STN_LATITUDE
Station Longitude	FA_BIOLOGICAL_RESULT	STN_LONGITUDE

Column Title	Table Name	Column Name
Station Horizontal Datum	FA_BIOLOGICAL_RESULT	STN_HDATUM
Converted Station Latitude	FA_BIOLOGICAL_RESULT	STN_STD_LATITUDE
Converted Station Longitude	FA_BIOLOGICAL_RESULT	STN_STD_LONGITUDE
Converted Station Horizontal Datum	FA_BIOLOGICAL_RESULT	STN_STD_HDATUM
S/G/O Indicator	FA_BIOLOGICAL_RESULT	SGO_INDICATOR
Visit Num	FA_BIOLOGICAL_RESULT	STATION_VISIT_ID
Visit Start	FA_BIOLOGICAL_RESULT	VISIT_START_DATE_TIME
	FA_BIOLOGICAL_RESULT	VISIT_START_TIME_ZONE
Visit Stop	FA_BIOLOGICAL_RESULT	VISIT_STOP_DATE_TIME
	FA_BIOLOGICAL_RESULT	VISIT_STOP_TIME_ZONE
Trip ID	FA_BIOLOGICAL_RESULT	TRIP_ID
Trip Name	FA_BIOLOGICAL_RESULT	TRIP_NAME
Activity ID	FA_BIOLOGICAL_RESULT	ACTIVITY_ID
Activity Start	FA_BIOLOGICAL_RESULT	ACTIVITY_START_DATE_TIME
	FA_BIOLOGICAL_RESULT	ACT_START_TIME_ZONE
Activity Stop	FA_BIOLOGICAL_RESULT	ACTIVITY_STOP_DATE_TIME
	FA_BIOLOGICAL_RESULT	ACT_STOP_TIME_ZONE
Activity Medium	FA_BIOLOGICAL_RESULT	ACTIVITY_MEDIUM
Activity Type	FA_BIOLOGICAL_RESULT	ACTIVITY_TYPE
Activity Category-Rep Num	FA_BIOLOGICAL_RESULT	ACTIVITY_CATEGORY
	FA_BIOLOGICAL_RESULT	REPLICATE_NUMBER
Activity Intent	FA_BIOLOGICAL_RESULT	ACTIVITY_INTENT
Community Sampled	FA_BIOLOGICAL_RESULT	ACTIVITY_COMMUNITY
Subject Taxon	FA_BIOLOGICAL_RESULT	ACTIVITY_SUBJECT_TAXON
Biopart	FA_BIOLOGICAL_RESULT	BIOPART_NAME
Field Set	FA_BIOLOGICAL_RESULT	FIELD_SET
Actual Location Point Type	FA_BIOLOGICAL_RESULT	LOCATION_POINT_TYPE

Column Title	Table Name	Column Name
Actual Point Sequence Num	FA_BIOLOGICAL_RESULT	POINT_SEQUENCE_NUMBER
Actual Point Name	FA_BIOLOGICAL_RESULT	POINT_NAME
Actual Activity Latitude	FA_BIOLOGICAL_RESULT	ACTIVITY_LATITUDE
Actual Activity Longitude	FA_BIOLOGICAL_RESULT	ACTIVITY_LONGITUDE
Actual Activity Horizontal Datum	LU_MAD_HDATUM	ID_CODE
Converted Actual Activity Latitude	FA_BIOLOGICAL_RESULT	ACT_STD_LATITUDE
Converted Actual Activity Longitude	FA_BIOLOGICAL_RESULT	ACT_STD_LONGITUDE
Converted Actual Activity Horizontal Datum	FA_BIOLOGICAL_RESULT	ACT_STD_HDATUM
Well Number	FA_BIOLOGICAL_RESULT	WELL_NUMBER
Pipe Number	FA_BIOLOGICAL_RESULT	PIPE_NUMBER
Geopositioning Method	LU_MAD_HMETHOD	GEOPOSITIONING_METHOD
Map Scale	FA_BIOLOGICAL_RESULT	MAP_SCALE
Activity Depth	FA_BIOLOGICAL_RESULT	ACTIVITY_DEPTH
Activity Depth Unit	FA_BIOLOGICAL_RESULT	ACTIVITY_DEPTH_UNIT
Activity Upper Depth	FA_BIOLOGICAL_RESULT	ACTIVITY_UPPER_DEPTH
Activity Rel Depth	FA_BIOLOGICAL_RESULT	ACTIVITY_REL_DEPTH
Activity Lower Depth	FA_BIOLOGICAL_RESULT	ACTIVITY_LOWER_DEPTH
Upr Lwr Depth Unit	FA_BIOLOGICAL_RESULT	UPR_LWR_DEPTH_UNIT
Sample Collection ID	FA_BIOLOGICAL_RESULT	FIELD_PROCEDURE_ID
Field Gear ID	FA_BIOLOGICAL_RESULT	FIELD_GEAR_ID
Field Gear Config ID	FA_BIOLOGICAL_RESULT	GEAR_CONFIG_ID
Container Desc	FA_BIOLOGICAL_RESULT	CONTAINER_DESC
Temp Pres Type	FA_BIOLOGICAL_RESULT	TEMP_PRESERVN_TYPE
Pres Storage Proc	FA_BIOLOGICAL_RESULT	PRESRV_STRGE_PRCDR
Characteristic Name	FA_BIOLOGICAL_RESULT	CHARACTERISTIC_NAME
CAS Num	FA_REGULAR_RESULT	CAS_NUMBER

Column Title	Table Name	Column Name
EPA Registry Num	FA_BIOLOGICAL_RESULT	EPA_REG_NUMBER
ITIS Num	FA_BIOLOGICAL_RESULT	ITIS_NUMBER
Sample Fraction	FA_BIOLOGICAL_RESULT	SAMPLE_FRACTION_TYPE
Value Type	FA_BIOLOGICAL_RESULT	RESULT_VALUE_TYPE
Statistic Type	FA_BIOLOGICAL_RESULT	STATISTIC_TYPE
Result Value as Text	FA_BIOLOGICAL_RESULT	RESULT_VALUE_TEXT
Result Value as Number	FA_BIOLOGICAL_RESULT	RESULT_VALUE
Units	FA_BIOLOGICAL_RESULT	RESULT_UNIT
Converted Result Value	FA_BIOLOGICAL_RESULT	STD_VALUE
Converted Result Unit	FA_BIOLOGICAL_RESULT	STD_UNIT
Result Comment	FA_BIOLOGICAL_RESULT	RESULT_COMMENT
Result Free Text	FA_BIOLOGICAL_RESULT	TEXT_RESULT
Weight Basis	FA_BIOLOGICAL_RESULT	WEIGHT_BASIS_TYPE
Temperature Basis	FA_BIOLOGICAL_RESULT	TEMPERATURE_BASIS_LEVEL
Duration Basis	FA_BIOLOGICAL_RESULT	DURATION_BASIS
Particle Size Basis	FA_BIOLOGICAL_RESULT	PARTICLE_SIZE
Distance Measured From	FA_BIOLOGICAL_RESULT	DISTANCE_MEASURE_FROM
Distance Measured To	FA_BIOLOGICAL_RESULT	DISTANCE_MEASURE_TO
Analytical Proc ID	FA_BIOLOGICAL_RESULT	ANALYTICAL_PROC_SOURCE
	FA_BIOLOGICAL_RESULT	ANALYTICAL_PROCEDURE_ID
Detection Limit	FA_BIOLOGICAL_RESULT	DETECTION_LIMIT
Detection Limit Descript	FA_BIOLOGICAL_RESULT	DETECTION_LIMIT_DESCRIPTION
Lower Quantification Limit	FA_BIOLOGICAL_RESULT	LOWER_QUANTITATION_LIMIT
Upper Quantification Limit	FA_BIOLOGICAL_RESULT	UPPER_QUANTITATION_LIMIT
Lab Remark	FA_BIOLOGICAL_RESULT	LAB_REMARK
Dilution Ind	FA_BIOLOGICAL_RESULT	DILUTION_INDICATOR
Recovery Ind	FA_BIOLOGICAL_RESULT	RECOVERY_INDICATOR

Column Title	Table Name	Column Name
Correction Ind	FA_BIOLOGICAL_RESULT	CORRECTION_INDICATOR
Lab ID	FA_BIOLOGICAL_RESULT	LAB_ID
Lab Name	FA_BIOLOGICAL_RESULT	LAB_NAME
Lab Cert	FA_BIOLOGICAL_RESULT	LAB_CERTIFIED
Lab Batch ID	FA_BIOLOGICAL_RESULT	LAB_BATCH_ID
Analysis Date	FA_BIOLOGICAL_RESULT	ANALYSIS_DATE_TIME
	FA_BIOLOGICAL_RESULT	ANALYSIS_TIME_ZONE
Num of Reps	FA_BIOLOGICAL_RESULT	REPLICATE_ANALYSIS_COUNT
Precision	FA_BIOLOGICAL_RESULT	PRECISION
Bias	FA_BIOLOGICAL_RESULT	BIAS
Conf Level	FA_BIOLOGICAL_RESULT	CONFIDENCE_LEVEL
Correction for Bias Ind	FA_BIOLOGICAL_RESULT	CONF_LVL_CORR_BIAS
Trawl Start Point Name	FA_BIOLOGICAL_RESULT	TR_START_POINT_NAME
Trawl Start Latitude	FA_BIOLOGICAL_RESULT	TR_START_LATITUDE
Trawl Start Longitude	FA_BIOLOGICAL_RESULT	TR_START_LONGITUDE
Trawl Start Datum	FA_BIOLOGICAL_RESULT	TR_START_HDATUM
Conv Trawl Start Latitude	FA_BIOLOGICAL_RESULT	TR_START_STD_LATITUDE
Conv Trawl Start Longitude	FA_BIOLOGICAL_RESULT	TR_START_STD_LONGITUDE
Conv Trawl Start Datum	FA_BIOLOGICAL_RESULT	TR_START_STD_HDATUM
Trawl Start Depth	FA_BIOLOGICAL_RESULT	TR_START_DEPTH
Trawl Stop Point Name	FA_BIOLOGICAL_RESULT	TR_STOP_POINT_NAME
Trawl Stop Latitude	FA_BIOLOGICAL_RESULT	TR_STOP_LATITUDE
Trawl Stop Longitude	FA_BIOLOGICAL_RESULT	TR_STOP_LONGITUDE
Trawl Stop Datum	FA_BIOLOGICAL_RESULT	TR_STOP_HDATUM
Conv Trawl Stop Latitude	FA_BIOLOGICAL_RESULT	TR_STOP_STD_LATITUDE
Conv Trawl Stop Longitude	FA_BIOLOGICAL_RESULT	TR_STOP_STD_LONGITUDE
Conv Trawl Stop Datum	FA_BIOLOGICAL_RESULT	TR_STOP_STD_HDATUM

Column Title	Table Name	Column Name
Trawl Stop Depth	FA_BIOLOGICAL_RESULT	TR_STOP_DEPTH
Fished Duration Measure	FA_BIOLOGICAL_RESULT	FISHED_DURATION
Boat Speed	FA_BIOLOGICAL_RESULT	BOAT_SPEED
Fished Distance	FA_BIOLOGICAL_RESULT	FISHED_DISTANCE
Rel Current Dir	FA_BIOLOGICAL_RESULT	REL_CURRENT_DIR
Rel Wind Dir	FA_BIOLOGICAL_RESULT	REL_WIND_DIR
Trawl Comment	FA_BIOLOGICAL_RESULT	TRAWL_COMMENT
Voltage Measure	FA_BIOLOGICAL_RESULT	VOLTAGE_MEASURE
Current Type Code	FA_BIOLOGICAL_RESULT	CURRENT_TYPE_CODE
Amperage Measure	FA_BIOLOGICAL_RESULT	AMPERAGE_MEASURE
Pass Count	FA_BIOLOGICAL_RESULT	PASS_COUNT
Pass Length Measure	FA_BIOLOGICAL_RESULT	PASS_LENGTH
Pulse Rate Measure	FA_BIOLOGICAL_RESULT	PULSE_RATE
Electroshock Comment	FA_BIOLOGICAL_RESULT	ELECTROSHOCK_COMMENT
Total Energzd Time	FA_BIOLOGICAL_RESULT	TOTAL_ENERGZD_TIME
Sampling Duration	FA_BIOLOGICAL_RESULT	SAMPLING_DURATION
Orientation to Current	FA_BIOLOGICAL_RESULT	ORIENTATION_TO_CURRENT
Rel Current Dir	FA_BIOLOGICAL_RESULT	REL_CURRENT_DIR
Rel Wind Dir	FA_BIOLOGICAL_RESULT	REL_WIND_DIR
Trap Net Comment	FA_BIOLOGICAL_RESULT	TRAP_NET_COMMENT
Bio Result Group ID	FA_BIOLOGICAL_RESULT	BIO_GROUP_ID
Bio Result Group Type	FA_BIOLOGICAL_RESULT	BIO_GROUP_TYPE
Bio Result Group Subj Txn	FA_BIOLOGICAL_RESULT	BIO_GROUP_SUBJECT_TXN
Bio Result Group Desc	FA_BIOLOGICAL_RESULT	BIO_GROUP_DESCRIPTION
Feeding Group	FA_BIOLOGICAL_RESULT	FEEDING_GROUP
Pollution Tolerance	FA_BIOLOGICAL_RESULT	POLLUTION_TOLERANCE
Trophic Level	FA_BIOLOGICAL_RESULT	TROPHIC_LEVEL

Column Title	Table Name	Column Name
Habit	FA_BIOLOGICAL_RESULT	HABIT
Voltinism	FA_BIOLOGICAL_RESULT	VOLTINISM
Cell Shape	FA_BIOLOGICAL_RESULT	CELL_SHAPE
Cell Form	FA_BIOLOGICAL_RESULT	CELL_FORM
Number in Group	FA_BIOLOGICAL_RESULT	NUMBER_IN_GROUP
Group Count Type	FA_BIOLOGICAL_RESULT	BIO_GROUP_COUNT_TYPE
Phys/Bio Ind	FA_BIOLOGICAL_RESULT	PHYS_BIO_INDICATOR
Bio Result Group ID (sex)	FA_BIOLOGICAL_RESULT	GROUP_DESC_SEX
Bio Result Group ID (lifestage)	FA_BIOLOGICAL_RESULT	GROUP_DESC_LIFESTAGE
Bio Result Group Class Var	FA_BIOLOGICAL_RESULT	COMMON_CLASS_DESC
Class Prim Desc	FA_BIOLOGICAL_RESULT	PRIMARY_CLASS_DESC
Class Sec Desc	FA_BIOLOGICAL_RESULT	SECONDARY_CLASS_DESC
Class Upper Bound	FA_BIOLOGICAL_RESULT	LOWER_BOUND_AMOUNT
Class Lower Bound	FA_BIOLOGICAL_RESULT	UPPER_BOUND_AMOUNT
Units	FA_BIOLOGICAL_RESULT	BIO_RCI_UNITS
Number in Group	FA_BIOLOGICAL_RESULT	NUMBER_IN_GROUP
Bio Individual Number	FA_BIOLOGICAL_RESULT	INDIVIDUAL_NUMBER
Result Document/Graphic Name	FA_REGULAR_RESULT	BLOB_TITLE
Result Document/Graphic URL	FA_REGULAR_RESULT	BLOB_ID
Activity Document/Graphic Name	FA_REGULAR_RESULT	ACT_BLOB_TITLE
Activity Document/Graphic URL	FA_REGULAR_RESULT	ACT_BLOB_ID

For Habitat Results:

Column Title	Table Name	Column Name
Org ID	FA_HABITAT_RESULT	ORGANIZATION_ID
Org Name	DI_ORG	ORGANIZATION_NAME
Station ID	FA_HABITAT_RESULT	STATION_ID

Column Title	Table Name	Column Name
Station Name	FA_HABITAT_RESULT	STATION_NAME
State Name	DI_GEO_STATE	STATE_NAME
County Name	DI_GEO_COUNTY	COUNTY_NAME
HUC	FA_HABITAT_RESULT	HYDROLOGIC_UNIT_CODE
Station Latitude	FA_HABITAT_RESULT	STN_LATITUDE
Station Longitude	FA_HABITAT_RESULT	STN_LONGITUDE
Station Horizontal Datum	FA_HABITAT_RESULT	STN_HDATUM
Converted Station Latitude	FA_HABITAT_RESULT	STN_STD_LATITUDE
Converted Station Longitude	FA_HABITAT_RESULT	STN_STD_LONGITUDE
Converted Station Horizontal Datum	FA_HABITAT_RESULT	STN_STD_HDATUM
S/G/O Indicator	FA_HABITAT_RESULT	SGO_INDICATOR
Visit Num	FA_HABITAT_RESULT	STATION_VISIT_ID
Visit Start	FA_HABITAT_RESULT	VISIT_START_DATE_TIME
	FA_HABITAT_RESULT	VISIT_START_TIME_ZONE
Visit Stop	FA_HABITAT_RESULT	VISIT_STOP_DATE_TIME
	FA_HABITAT_RESULT	VISIT_STOP_TIME_ZONE
Trip ID	FA_HABITAT_RESULT	TRIP_ID
Trip Name	FA_HABITAT_RESULT	TRIP_NAME
Activity ID	FA_HABITAT_RESULT	ACTIVITY_ID
Activity Start	FA_HABITAT_RESULT	ACTIVITY_START_DATE_TIME
	FA_HABITAT_RESULT	ACT_START_TIME_ZONE
Activity Stop	FA_HABITAT_RESULT	ACTIVITY_STOP_DATE_TIME
	FA_HABITAT_RESULT	ACT_STOP_TIME_ZONE
Activity Type	FA_HABITAT_RESULT	ACTIVITY_TYPE
Field Set	FA_HABITAT_RESULT	FIELD_SET
Actual Location Point Type	FA_HABITAT_RESULT	LOCATION_POINT_TYPE
Actual Point Sequence Num	FA_HABITAT_RESULT	POINT_SEQUENCE_NUMBER

Column Title	Table Name	Column Name
Actual Point Name	FA_HABITAT_RESULT	POINT_NAME
Actual Activity Latitude	FA_HABITAT_RESULT	ACTIVITY_LATITUDE
Actual Activity Longitude	FA_HABITAT_RESULT	ACTIVITY_LONGITUDE
Actual Activity Horizontal Datum	LU_MAD_HDATUM	ID_CODE
Converted Actual Activity Latitude	FA_HABITAT_RESULT	ACT_STD_LATITUDE
Converted Actual Activity Longitude	FA_HABITAT_RESULT	ACT_STD_LONGITUDE
Converted Actual Activity Horizontal Datum	FA_HABITAT_RESULT	ACT_STD_HDATUM
Well Number	FA_HABITAT_RESULT	WELL_NUMBER
Pipe Number	FA_HABITAT_RESULT	PIPE_NUMBER
Geopositioning Method	LU_MAD_HMETHOD	GEOPOSITIONING_METHOD
Map Scale	FA_HABITAT_RESULT	MAP_SCALE
Characteristic Name	FA_HABITAT_RESULT	CHARACTERISTIC_NAME
Habitat Class Name	FA_HABITAT_RESULT	HABITAT_CLASS_NAME
EPA Registry Num	FA_HABITAT_RESULT	EPA_REG_NUMBER
Sample Fraction	FA_HABITAT_RESULT	SAMPLE_FRACTION_TYPE
Value Type	FA_HABITAT_RESULT	RESULT_VALUE_TYPE
Statistic Type	FA_HABITAT_RESULT	STATISTIC_TYPE
Result Value as Text	FA_HABITAT_RESULT	RESULT_VALUE_TEXT
Result Value as Number	FA_HABITAT_RESULT	RESULT_VALUE
Units	FA_HABITAT_RESULT	RESULT_UNIT
Converted Result Value	FA_HABITAT_RESULT	STD_VALUE
Converted Result Unit	FA_HABITAT_RESULT	STD_UNIT
Result Comment	FA_HABITAT_RESULT	RESULT_COMMENT
Result Free Text	FA_HABITAT_RESULT	TEXT_RESULT
Weight Basis	FA_HABITAT_RESULT	WEIGHT_BASIS_TYPE
Temperature Basis	FA_HABITAT_RESULT	TEMPERATURE_BASIS_LEVEL

Column Title	Table Name	Column Name
Duration Basis	FA_HABITAT_RESULT	DURATION_BASIS
Distance Measured From	FA_HABITAT_RESULT	DISTANCE_MEASURE_FROM
Distance Measured To	FA_HABITAT_RESULT	DISTANCE_MEASURE_TO
Analytical Proc ID	FA_HABITAT_RESULT	ANALYTICAL_PROC_SOURCE
	FA_HABITAT_RESULT	ANALYTICAL_PROCEDURE_ID
Detection Limit	FA_HABITAT_RESULT	DETECTION_LIMIT
Detection Limit Descript	FA_HABITAT_RESULT	DETECTION_LIMIT_DESCRIPTION
Lower Quantification Limit	FA_HABITAT_RESULT	LOWER_QUANTITATION_LIMIT
Upper Quantification Limit	FA_HABITAT_RESULT	UPPER_QUANTITATION_LIMIT
Lab Remark	FA_HABITAT_RESULT	LAB_REMARK
Dilution Ind	FA_HABITAT_RESULT	DILUTION_INDICATOR
Recovery Ind	FA_HABITAT_RESULT	RECOVERY_INDICATOR
Correction Ind	FA_HABITAT_RESULT	CORRECTION_INDICATOR
Lab ID	FA_HABITAT_RESULT	LAB_ID
Lab Name	FA_HABITAT_RESULT	LAB_NAME
Lab Cert	FA_HABITAT_RESULT	LAB_CERTIFIED
Lab Batch ID	FA_HABITAT_RESULT	LAB_BATCH_ID
Analysis Date	FA_HABITAT_RESULT	ANALYSIS_DATE_TIME
	FA_HABITAT_RESULT	ANALYSIS_TIME_ZONE
Num of Reps	FA_HABITAT_RESULT	REPLICATE_ANALYSIS_COUNT
Precision	FA_HABITAT_RESULT	PRECISION
Bias	FA_HABITAT_RESULT	BIAS
Conf Level	FA_HABITAT_RESULT	CONFIDENCE_LEVEL
Correction for Bias Ind	FA_HABITAT_RESULT	CONF_LVL_CORR_BIAS
Result Document/Graphic Name	FA_REGULAR_RESULT	BLOB_TITLE
Result Document/Graphic URL	FA_REGULAR_RESULT	BLOB_ID
Activity Document/Graphic Name	FA_REGULAR_RESULT	ACT_BLOB_TITLE

Column Title	Table Name	Column Name
Activity Document/Graphic URL	FA_REGULAR_RESULT	ACT_BLOB_ID

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C Capture standard file creation (disk I/O) errors and display customized messages if they occur.

Code Changes:

None.

Page Print:

None. See DW_Result_Hub_Custom.

STORET Central Warehouse Specification**SIR:** 1557**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Download_Zip**Web Page Name:** Download Results**Creation Date:** 11/17/2003**Process Overview/Description:**

The DW_Result_Download_Zip procedure takes a report download file and replaces it with a new report download file in gzip format. A link to this file is then presented to the requesting user.

Tables:

(Display Fields are listed in the order they are displayed)

None.

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Hub_Custom	Download Results	Continue

Input Parameters:

Natural Language	Parameter
The name of the report download file.	OUT_FILE

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Download_Custom	Download Site Description	Called automatically when page is loaded.
DW_Result_Download_Zip	Create Report Download in Zip Format	Called when <Continue> button is pressed.

Output Parameters:

Natural Language	Parameter
The name of the report download file in gzip format.	OUT_FILE

Internal Procedure Events:**Onload**

- C Call DW_Exec_OS Java procedure that executes the Unix cp command to make a copy of the OUT_FILE created by DW_Result_Download_Custom.
- C Call DW_Exec_OS Java procedure that executes the Unix gzip command to make a gzip formatted version of the file copy. Display a link to the gzip format report file.
- C Display the size of the gzip format report file in kilobytes (KB) if the file has been created.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_Page Specifications for standard footer links on each page.

Images:

See General Design guidelines for standard images on each page. The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

None.

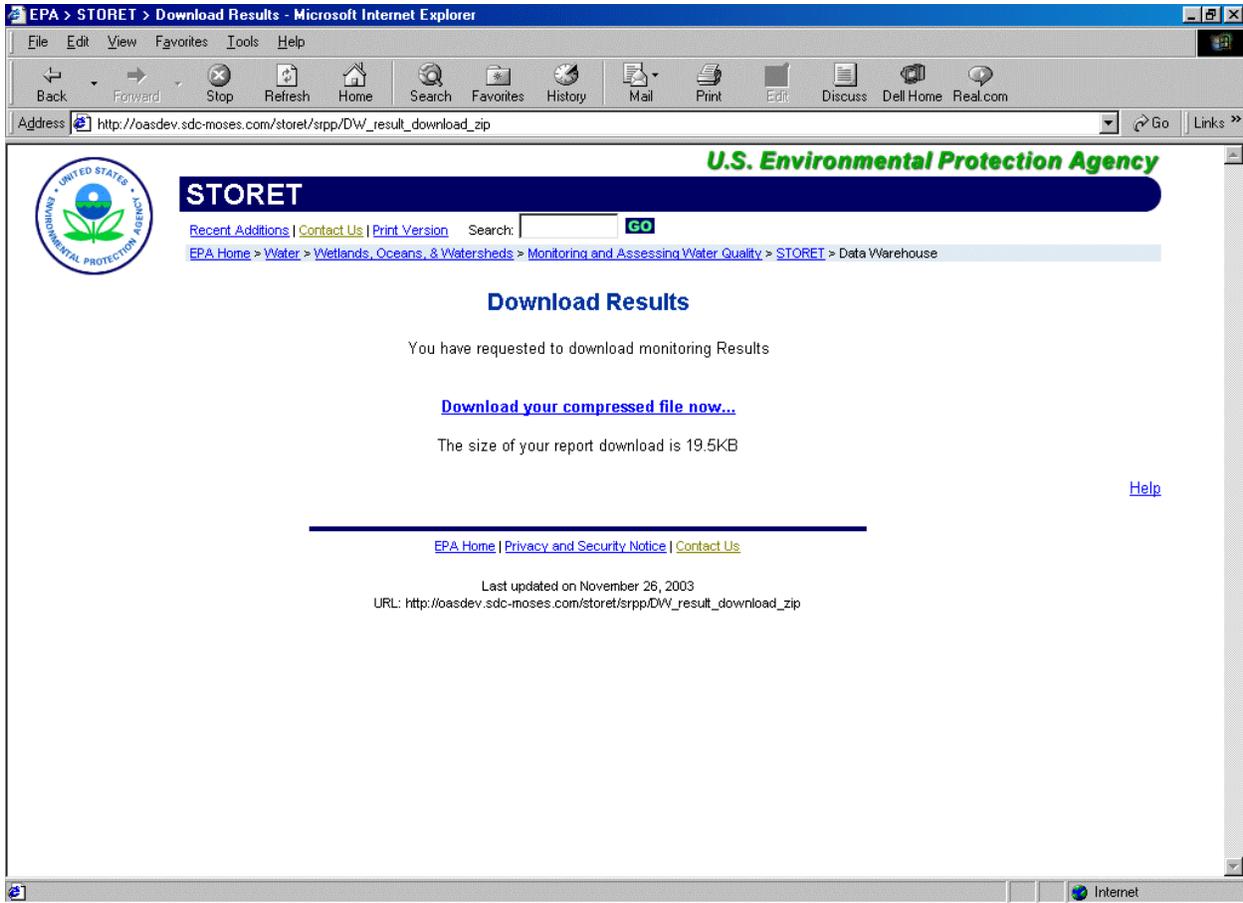
Error Handling:

- If the attempt to gzip the report download file is unsuccessful, an error message will be displayed rather than a link to the gzip format report file.
- A standard Error Page should be displayed when this page is not loaded upon request.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1446, 1557**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Result_Hub_Custom**Web Page Name:** Download Results**Creation Date:** 3/2/2003**Processing Overview/Description:**

The DW_Result_Hub_Custom procedure serves as a gatekeeper that generates the page header and footer, then passes control to the DW_Result_Download_Custom procedure and passes the required parameters to create a report. See the Web Page Development Specification for DW_Result_Download_Custom for a description of the report format.

Tables:

(Display Fields are listed in the order they are displayed)

None.

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Count	Result Search Summary	<Continue>

Input Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting Results.	V_FROMSTMT

Natural Language	Parameter
The Where clause of the SQL statement that will be used for selecting Results.	V_WHERESTMT
The number of results matching the search criteria.	V_RESULTCOUNT
A PI/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS
Indicates whether RULE BASED query optimization should be employed (this is for performance tuning).	V_RULE_OPTIMIZATION
Identifies the type of report the user wishes to generate. At this point in time the only valid option is 'CUSTOM,' but additional reports may be added in the future.	REPORT_TYPE
The file name used for report generation [This is passed from the report generating procedure (DW_RESULT_DOWNLOAD_CUSTOM) back to this procedure after the report is complete.]	OUT_FILE
The type of Result Report being generated (Regular, Biological, or Habitat).	V_REPORT_TYPE

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Download_Custom	Download Result Description	Called automatically when page is loaded.
DW_Result_Download_Zip	Download Results	Called when <Compress Data File now> button is clicked.

Output Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting results.	V_FROMSTMT
The Where clause of the SQL statement that will be used for selecting results.	V_WHERESTMT
A PI/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS

Natural Language	Parameter
Used to pass a file name to the report generating procedure (DW_RESULT_DOWNLOAD_CUSTOM). This is set to 'NONE' for non-batched reports.	FILENAME
Indicates whether RULE BASED query optimization should be employed (this is for performance tuning).	V_RULE_OPTIMIZATION
The type of Result Report being generated (Regular, Biological, or Habitat).	V_REPORT_TYPE
The name of the download data file created. Used to pass to procedure that will create the report download in gzip format. (DW_Result_Download_Zip)	OUT_FILE

Internal Procedure Events:

Onload

- C Call DW_Result_Download_Custom and pass all the Output Parameters listed above.
- C Display a link to the report file that is created using the value of OUT_FILE that is returned from DW_Result_Download_Custom.
- C Display the size of the report download file in kilobytes (KB).
- C See DW_Result_Download_Custom for more details.

Form Level

- C 'Compress Data File now' onclick: Call the procedure DW_Result_Download_Zip and pass it the name of the report file that is to be created in gzip format.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_page Specifications for standard footer links on each page.

Images:

The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Use the following name prefixes for reports: SDB for Biological Results, SDR for Regular Results, and SDH for Habitat Results.

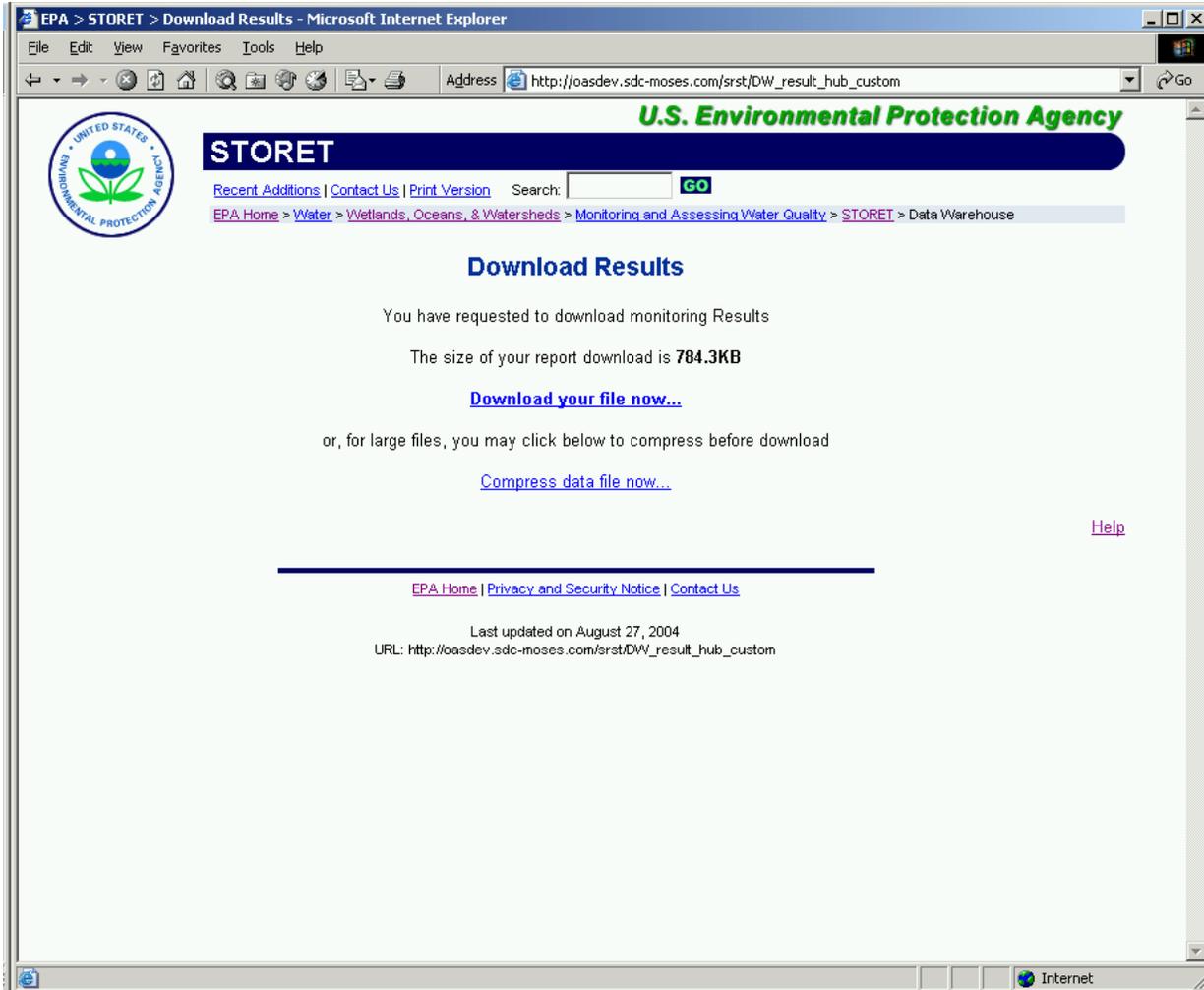
Error Handling:

- A standard Error Page should be displayed when this page is not loaded upon request.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1363, 1364, 1365, 1366, 1367, 1369, 1475, 1563**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Criteria (DW_Selection_Criteria)**Web Page Name:** Station Search Criteria**Creation Date:** 10/28/2002**Processing Overview/Description:**

The Station Search Criteria page provides a single point for data entry of the Station selection parameters that a user is most likely to query. The page is divided into four major areas: Geographic Location, Station Type, Characteristic, and Organization. A user is able to accept a default value or enter specific selection criteria for each of these query dimensions. In addition, the Geographic Location dimension is divided into three sub-dimensions: State/County, Latitude/Longitude, and Hydrologic Unit Code (HUC). The user is able to select one of these three location sub-dimension per Station query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N
	SORT_ORDER	N
Station Types (DI_STATN_TYPES)	PRIMARY_TYPE	Y
	SECONDARY_TYPE	Y
	PK_ISN	N
	SORT_ORDER	N
Organization (DI_ORG)	ORGANIZATION_ID	Y

Entity	Attribute	Display
	ORGANIZATION_NAME	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Stations by Geographic Location

Input Parameters:

These parameters are passed from the three Popup (DW_County_Popup, DW_HUC_Popup, and DW_Char_Popup) windows back to this procedure.

Natural Language	Parameter
The names of the selected County(s) in a comma separated string. By default this value is 'ALL'.	AS_COUNTY
The codes of the selected County(s) in a comma separated string. By default this value is 'ALL'.	V_COUNTY_CODE
The Hydrologic Unit Code value. By default this value is 'ALL'.	AS_HUC
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
A PI/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_County_Popup	STORET: Select Counties	Look Up
DW_HUC_Popup	STORET: Select a Hydrologic Unit Code (HUC)	Look Up

Procedure	Web_Page	Button/Text
DW_Char_Popup	STORET: Characteristic Search Results	Search
DW_Station_Count	Station Search Summary	Continue

Output Parameters:

Natural Language	Parameter
Identifies the geographic location parameter being used for the search.	GEOGRAPHIC
The name of the selected State.	AS_STATE
The names of the selected County(s) in a comma separated string.	AS_COUNTY
The codes of the selected County(s) in a comma separated string.	V_COUNTY_CODE
The Northern Limit of a Latitude/Longitude query in decimal degrees.	MAX_LAT_DD
The Western Limit of a Latitude/Longitude query in decimal degrees.	MIN_LONG_DD
The Eastern Limit of a Latitude/Longitude query in decimal degrees.	MAX_LONG_DD
The Southern Limit of a Latitude/Longitude query in decimal degrees.	MIN_LAT_DD
The direction of the Northern Limit.	DIR_MAXLAT
The direction of the Southern Limit.	DIR_MINLAT
The direction of the Eastern Limit.	DIR_MAXLONG
The direction of the Western Limit.	DIR_MINLONG
The Hydrologic Unit Code value.	AS_HUC
A Pl/Sql table of selected Station Types (Station Type Key List).	D_STYPE_LIST
Flag to identify whether a user wishes to filter stations based on Characteristic.	CHARACTERISTIC
The names of the selected Characteristic(s) in a comma separated string.	V_CHAR_NAMES

Natural Language	Parameter
The search string used to identify available Characteristics.	AS_CHAR
A PI/Sql table of selected Characteristics (Characteristic Key List) .	CHAR_LIST
The type of Characteristic naming convention used for the Characteristic search.	AS_CHAR_ALIAS_TYPE
Boolean flag used to signal whether taxonomic names should be included in characteristic searches.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST2

Internal Procedure Events:

Onload

- C Populate and format the Station Types list box with Primary and Secondary Station Type Names.
- C Populate and format the Organization list box with Organization IDs and Organization Names.
- C Populate the empty Selected Characteristics list box with a title and format with blank spaces.

Geographic Location Section

- C State/County 'Lookup' onclick: Display a pop-up window showing the available counties for the state currently selected from the drop-down list. Populate the County Name(s) text area with the Counties that the user selects from the pop-up window.
- C HUC 'Lookup' onclick: Display a pop-up window showing all available HUC codes and their corresponding names. Populate the Cataloging Unit text box with the HUC code that the user selects from the pop-up window.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics

the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.

- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_Page Specifications for standard footer links on each page.

Images:

The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C Only Organizations with Stations will be displayed.
- C If the user selects a list of characteristics, Stations will be displayed that have results corresponding to one or more of the characteristics from that list.
- C If the user selects 'All' State/Counties, every station is included in the search regardless of geographic location.
- C If the user selects 'All' HUCs, every station is included in the search regardless of geographic location.

- C If the user selects defaults latitude/longitude values (i.e., N=90, S=0, E=0, W=180), every station is included in the search regardless of geographic location.
- C If a list of Station Types is selected that includes 'Select All', all Station Types are included in the search.
- C If a list of Organizations is selected that includes 'Select All', all Organizations are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C The user will not be allowed to enter non-numeric characters in the latitude/longitude fields.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.
 - An alert is displayed if the user attempts to perform a County look-up before selecting a State.
 - The county field is reset to 'All' if the selected State is changed.

Code Changes:

None.

Page Print:

First half of page.

The screenshot shows the STORET web application interface. At the top, there is a navigation bar with the U.S. Environmental Protection Agency logo and the STORET title. Below this is a search bar with a "GO" button and a breadcrumb trail: EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse.

The main heading is "Stations by Geographic Location". Underneath, there is a section titled "Geographic Location" with the instruction: "Select a single type of location search that you wish to perform (state/county, latitude/longitude, or HUC). Then enter the corresponding search criteria."

There are three radio button options for location search:

- State/County: This option has two dropdown menus for "State Name" and "County Name", both currently set to "ALL". A "Look Up" button is located to the right of the County Name dropdown.
- Latitude/Longitude (in decimal degrees): This option has four input fields with dropdown arrows: "North Limit" (90), "West Limit" (180), "East Limit" (0), and "South Limit" (0). Each field has a dropdown arrow to its right.
- Drainage Basin/HUC: This option has a "Cataloging Unit" dropdown menu set to "ALL" and a "Look Up" button.

Below the location search options is a section titled "Station Type" with the instruction: "Select one or more Station Type(s)". This section contains a table with two columns: "PRIMARY TYPE" and "SECONDARY TYPE".

PRIMARY TYPE	SECONDARY TYPE
Select All	
River/Stream	None
Lake	None
Great Lake	None
Well	None
Facility	Industrial
Facility	Municipal Sewage (POTW)
Facility	Municipal Water Supply (PWS)
Facility	Other/Combined
Facility	Privately Owned non-industrial

At the bottom of the screenshot, there is a section titled "Characteristic" which is currently empty.

Second half of page.

The screenshot shows a web browser window with a search interface. The title bar indicates the URL is http://oasdev.sdc-moses.com/storet/srpp/DW_stationcriteria. The main content area is titled "Find Stations with at least one reported value of the selected Characteristics" and "Use the Characteristic Search to create a list of up to 50 Characteristics".

The search interface includes a "Characteristic Search" text input field, a "Search By" dropdown menu set to "CHARACTERISTIC NAME", a "Search" button, and a checked checkbox for "Hide Taxonomic Names". Below this is a large empty text area labeled "Characteristic Name". At the bottom of the search area are "Clear Selected" and "Clear All" buttons.

Below the search area is a section titled "Organization" with a sub-header "Select one or more Organization(s)". It contains a table with two columns: "ORG ID" and "ORGANIZATION NAME".

ORG ID	ORGANIZATION NAME
Select All	
11113300	New Hampshire Dept. of Environmental Services
1111REG1	USEPA, Region I
1117MBR	US EPA Region 7
1119USBR	Bureau of Reclamation
11DELMOD	Delaware River Basin Commission
211WVOWR	WV Div of Environmental Protection, Office of Water Resource
21ARIZ	Arizona Department of Environmental Quality
21ARIZGW	Arizona Department of Environmental Quality
21COL001	Colorado Dept. of Public Health & Environment

Below the table are "Continue" and "Clear Form" buttons. A "Help" link is located to the right of the "Continue" button. At the bottom of the page, there is a footer with the text "Last updated on November 26, 2003" and "URL: http://oasdev.sdc-moses.com/storet/srpp/DW_stationcriteria".

STORET Central Warehouse Specification**SIR:** 1617**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Criteria_STN (DW_Selection_Criteria_Station)**Web Page Name:** Stations by Organization and Station ID**Creation Date:** 7/28/2004**Processing Overview/Description:**

The Stations by Organization and Station ID page is the second Station search page of the STORET Central Warehouse and provides three search areas: Organization/Station, Station Type, and Characteristic. A user is able to accept default values or enter specific selection criteria for each of these query dimensions. The user is able to select Stations from multiple Organizations, but is limited to selecting a maximum of 100 Stations per query. The user is able to select one or more Station Types and up to 50 Characteristics per query.

Tables Used:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Station Types (DI_STATN_TYPES)	PRIMARY_TYPE	Y
	SECONDARY_TYPE	Y
	PK_ISN	N
	SORT_ORDER	N
Organization (DI_ORG)	ORGANIZATION_ID	Y
	ORGANIZATION_NAME	Y
	PK_ISN	N

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET: Central Warehouse	Stations by Organization and Station ID

Input Parameters:

These parameters are passed from the three Popup windows (DW_Extref_Popup, DW_Station_Popup and DW_Char_Alias_Popup) back to this procedure.

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Type. By default this value is 0.	D_EXTREF_LIST
A Pl/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
A Pl/Sql table of selected Characteristics (Characteristic Key List). By default this value is 'DUMMY'.	CHAR_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Extref_Popup	STORET: Select a Station Alias Type	Look Up
DW_Station_Popup	STORET: Station Search Results	Search Stations
DW_Char_Alias_Popup	STORET: Characteristic Search Results	Search
DW_Station_Count	Station Search Summary	Continue

Output Parameters:

Natural Language	Parameter
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Types. By default this value is 0.	D_EXTREF_LIST
The search string used to find Stations within the Organization. By default this value is 'DUMMY'.	AS_STATION
A PI/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
The names of the selected Station(s) string separated by HTML break tags (). By default this value is NULL.	V_STATION_NAMES
A PI/Sql table of selected Station Types (Station Type Key List).	D_STYPE_LIST
Flag to identify whether a user wishes to filter stations based on Characteristic.	CHARACTERISTIC
The names of the selected Characteristic(s) in a comma separated string.	V_CHAR_NAMES
The search string used to identify available Characteristics.	AS_CHAR
A PI/Sql table of selected Characteristics (Characteristic Key List) .	CHAR_LIST
The type of Characteristic naming convention used for the Characteristic search.	AS_CHAR_ALIAS_TYPE
Boolean flag used to signal whether taxonomic names should be included in characteristic searches.	TAXON_FILTER
A PI/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST

Internal Procedure Events:**Onload**

- C Populate and format the Station Types list box with Primary and Secondary Station Type Names.

- C Populate the Organization list box with Organization IDs and Names organized by Organization ID.
- C Populate the empty Selected Characteristics list box with a title and format with blank spaces.
- C Ensure that all selection criteria and hidden text fields are set to the appropriate default values.

Station Section

- C 'Look Up' onclick: Display a popup window showing the Station Alias Types that match the Organization selected by the user. If the user has not selected an Organization, display an alert message prompting them to do so. Populate the Station Alias Type display field with the Station Alias Type the user selects from the pop-up window.
- C 'Search Stations' onclick: Display a pop-up window showing the Stations that match the search string, search type, Station Alias Type, and Organization entered by the user. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Station listbox with the Stations the user selects from the pop-up window. No more than 100 Stations can be added to the Selected Stations list.
- C 'Clear Selected' onclick: All selected Stations are removed from the stations selected list.
- C 'Clear All' onclick: All Stations are removed from the stations selected list.

Characteristic Section

- C 'Search' onclick: Display a pop-up window showing the characteristics that match the search string and Search By choice entered by the user. The user may choose to hide or display taxonomic name characteristics by selecting the checkbox next to the search string textbox. If the user has not entered a search string, display an alert message prompting them to do so. Populate the Characteristics listbox with the characteristics the user selects from the pop-up window. No more than 50 Characteristics can be added to the Selected Characteristics list.
- C 'Clear Selected' onclick: All selected characteristics are removed from the characteristic select list.
- C 'Clear All' onclick: All characteristics are removed from the characteristic select list.

Form Level

- C 'Continue' onclick: The users inputs are validated and their selection criteria is passed to the next page of the web application for processing.
- C 'Clear Form' onclick: All values on the form are returned to their default values.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_Page Specifications for standard footer links on each page.

Images:

The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only taxonomic characteristics that have been recorded will be displayed.
- C Characteristics can not be added to the Selected Characteristics list more than once (even if the same Characteristic is selected multiple times using different naming conventions).
- C The user may add no more than 50 Characteristics to the Selected Characteristics list. The attempted addition of Characteristics in excess of this limit are blocked and an alert is displayed.
- C If the user has selected an Organization but does not select any Stations, data for the selected Organization is retrieved for the report.
- C Stations can not be added to the Selected Stations list more than once.
- C If the user selects 'Search by Station Alias Type' but does not change the selected Station Alias Type (i.e., default of 'STANDARD'), then Stations will be searched by ID.
- C The user may add no more than 100 Stations to the Selected Stations list. The attempted addition of Stations in excess of this limit is blocked and an alert is displayed.
- C If the user selects a list of characteristics, Stations will be displayed that have results corresponding to one or more of the characteristics from that list.
- C If a list of Station Types is selected that includes 'Select All', all Station Types are included in the search.

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C An alert is displayed if the user attempts to perform a Characteristic search before entering a search string.

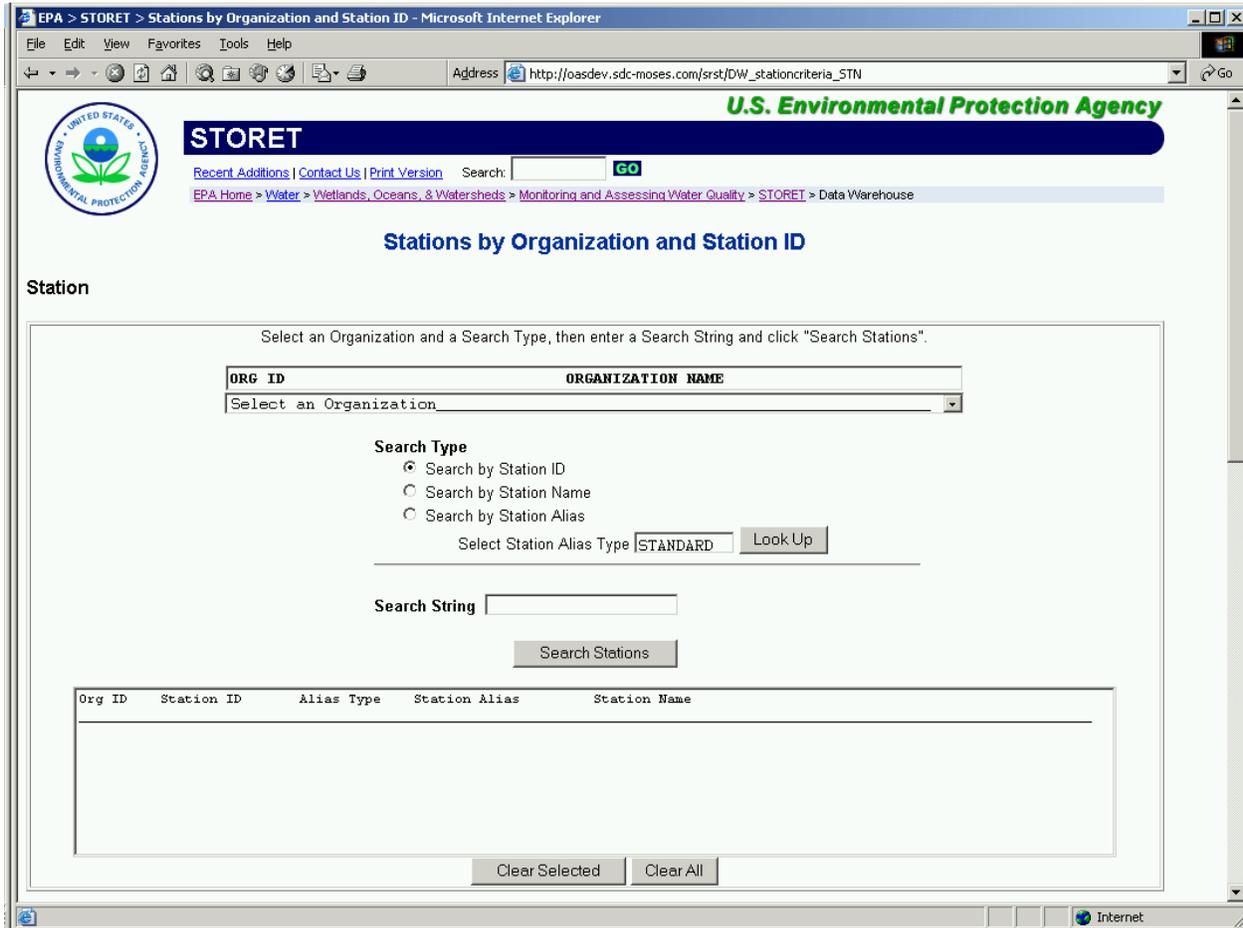
- An alert is displayed if the user attempts to perform a Station search before entering a search string.
- C An alert is displayed if the user attempts to perform a Station search before selecting an Organization.
- C An alert is displayed if the user attempts to perform a Station Alias Type lookup before selecting an Organization.

Code Changes:

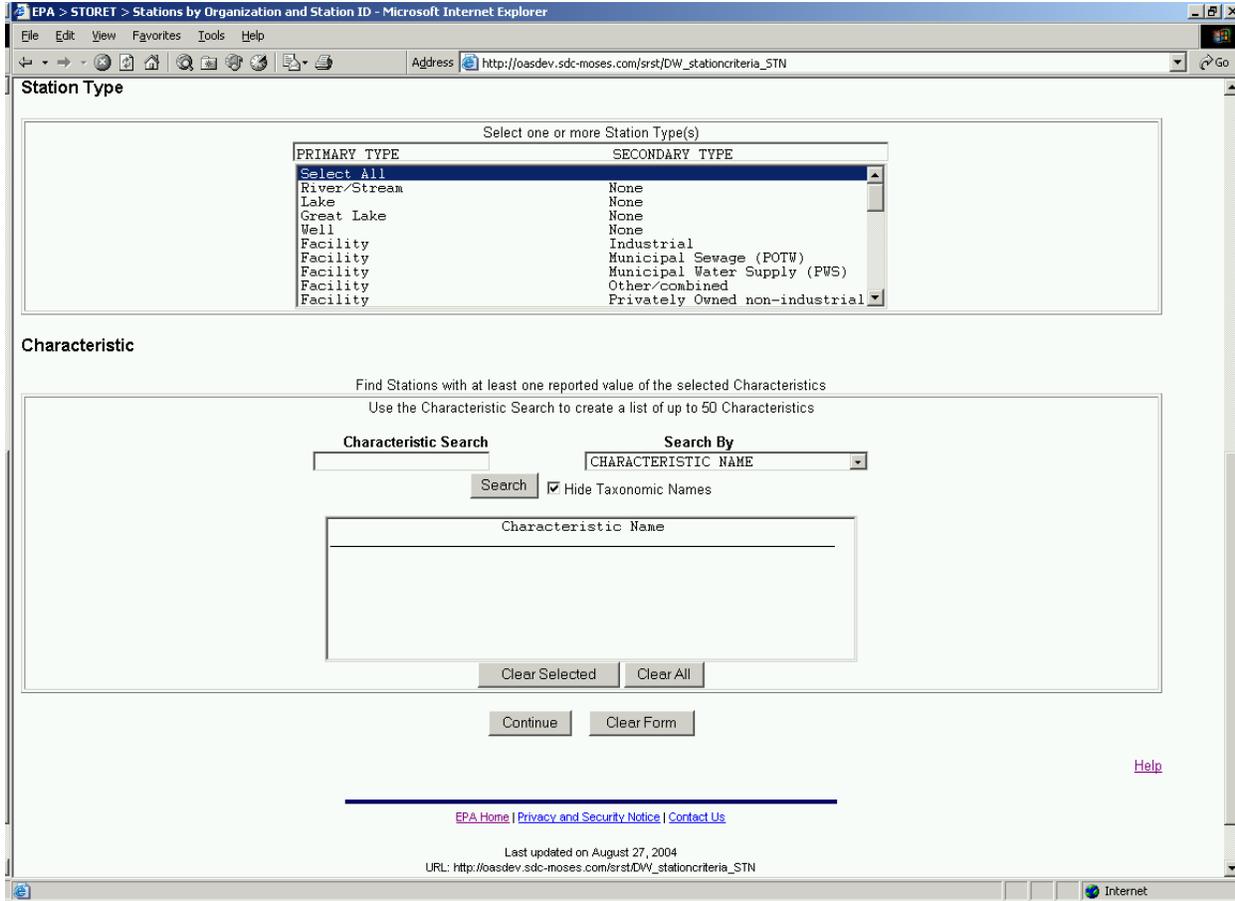
None.

Page Print:

First half of page.



Second half of page.



STORET Central Warehouse Specification**SIR:** 1371, 1501, 1617**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Count**Web Page Name:** Station Search Summary**Creation Date:** 10/31/2002**Processing Overview/Description:**

The Station Search Summary page receives and processes a user's search parameters from the two Station Search Criteria pages, displays a summary of this information, and provides a count of the number of Stations that satisfy the search criteria. Based on this count, a user is able to decide whether they wish to create a report or return to the Station Search Criteria page to refine their query. This page also allows a user to customize the reports they create by selecting the data elements they wish to include in their report. If a report exceeds the permitted number of Stations (currently set at 40,000), the user is told that they must refine their query and is unable to generate a report. If there are no Stations for a report, the user is told that they must refine their query and is unable to generate a report.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
State (DI_GEO_STATE)	STATE_NAME	Y
	PK_ISN	N
Station (FA_STATION)	LATITUDE	Y
	LONGITUDE	Y
	PK_ISN	N
	FK_GEO_STATE	N

Entity	Attribute	Display
	FK_GEO_COUNTY	N
	FK_STATN_TYPER	N
	FK_FA_STATN	N
	FK_ORG	N
HUC Code	HYDROLOGIC_UNIT_CODE	Y
Station Types (DI_STATN_TYPER)	PRIMARY_TYPE	Y
	SECONDARY_TYPE	Y
	PK_ISN	N
Characteristic (STATION_CHAR)	FK_CHAR	N
Organization (DI_ORG)	ORGANIZATION_ID	Y
	PK_ISN	N
APP_COLUMN_NAME	ELEMENT_NAME	Y
	STN_REPORT_NUMBER	N
	STN_ELEMENT_DEFAULT	N

Links From:

Procedure	Web_Page	Button/Text
DW_Station_Criteria	Station Search Criteria	<Continue>
DW_Station_Criteria_STN	Stations by Organization and Station ID	<Continue>

Input Parameters:

Natural Language	Parameter
Identifies the geographic location parameter being used for the search.	GEOGRAPHIC
The internal sequence number of the selected State.	AS_STATE

Natural Language	Parameter
The names of the selected County(s) in a comma separated string.	AS_COUNTY
The codes of the selected County(s) in a comma separated string.	V_COUNTY_CODE
The Northern Limit of a Latitude/Longitude query in decimal degrees.	MAX_LAT_DD
The Western Limit of a Latitude/Longitude query in decimal degrees.	MIN_LONG_DD
The Eastern Limit of a Latitude/Longitude query in decimal degrees.	MAX_LONG_DD
The Southern Limit of a Latitude/Longitude query in decimal degrees.	MIN_LAT_DD
The direction of the Northern Limit.	DIR_MAXLAT
The direction of the Southern Limit.	DIR_MINLAT
The direction of the Eastern Limit.	DIR_MAXLONG
The direction of the Western Limit.	DIR_MINLONG
The Hydrologic Unit Code value.	AS_HUC
A PI/Sql table of selected Station Types (Station Type Key List).	D_STYPE_LIST
The names of the selected Characteristic(s) in a string separated by HTML break tags (). By default this value is NULL.	V_CHAR_NAMES
The search string used to identify available Characteristics. By default this value is NULL.	AS_CHAR
A PI/Sql table of selected Characteristics (Characteristic Key List).	CHAR_LIST
The type of Characteristic naming convention used for the Characteristic search.	AS_CHAR_ALIAS_TYPE
Boolean flag used to signal whether taxonomic names should be included in characteristic searches.	TAXON_FILTER
The name of the selected Station Alias Type. By default this value is 'STANDARD'.	AS_EXTREF
The key of the selected Station Alias Types. By default this value is 0.	D_EXTREF_LIST

Natural Language	Parameter
The search string used to find Stations within the Organization. By default this value is 'DUMMY'.	AS_STATION
A Pl/Sql table of selected Stations (Station Key List). By default this value is 'DUMMY'.	STATION_LIST
The names of the selected Station(s) string separated by HTML break tags (). By default this value is NULL.	V_STATION_NAMES
A Pl/Sql table of selected Organizations (Organization Key List).	D_ORG_LIST2
The code of the last Organization selected for a Station search.	D_ORG_LIST

Links To:

Procedure	Web_Page	Button/Text
DW_Station_Criteria	Station Search Criteria	<Back>
DW_Station_Criteria_STN	Stations by Organization and Station ID	<Continue>
DW_Station_Hub_Custom	Download Site Description	<Continue> when 'Download Report' is selected.

Output Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting stations.	V_FROMSTMT
The Where clause of the SQL statement that will be used for selecting stations.	V_WHERESTMT
The Number of Stations meeting the selection criteria.	V_STATIONCOUNT
A Pl/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS

Natural Language	Parameter
Identifies whether the user wants to generate a report or first display a list of available stations that match their search criteria.	REPORT_TYPE

Internal Procedure Events:

Onload

- C Display titles and values for the search criteria that the user selected on the previous page.
- C Display the number of Stations that match the search criteria that the user selected on the previous page.
- C Display the report elements that comprise the Station Details Report (defined in the APP_COLUMN_NAMES table).
- C Check the default report element check boxes (Organization ID, Station ID, Station Name, Primary Type, Latitude/Longitude, State Name, County Name).

Custom Report Section

- C 'Select All' onclick: Check all report element check boxes.
- C 'Clear All' onclick: Uncheck all report element check boxes.
- C 'Restore Defaults' onclick: Check only the default report elements.

Form Level

- C 'Continue>>' onclick: Call the procedure DW_Station_Download_Custom and pass it the processed Station search criteria (in the form of a SQL From clause and Where clause) and the list of columns that the user has selected for their report.
- C '<<Back' onclick: Closes the page and returns to the selected Station Criteria page.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_page Specifications for standard footer links on each page.

Images:

See General Design guidelines for standard images on each page. The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

- C Only display location information for the geographic search option that has been selected (State/County, Latitude/Longitude, or HUC).
- C Always display the Station Types that have been selected. Display 'All' if the user has selected 'Select All' from the Station Type list.
- C Always display the Characteristics that have been selected. Display 'All' if the user has chosen not to filter stations based on Characteristic, or has not chosen specific Characteristics to search based upon.
- C Always display the Organizations that have been selected. Display 'All' if the user has selected 'All' from the Organization list.
- C Always display the Station(s) that have been selected. Display 'All' if the user has not chosen specific Stations to base search on.

Error Handling:

- C A standard Error Page should be displayed when this page is not loaded upon request.
- C An alert is displayed if the user attempts to generate a report without having at least one report element selected.
- C Enforces report size restrictions as directed by the TOPO, which is currently 40,000 Stations.

Code Changes:

None.

Page Print:

First half of page:

The screenshot shows a web browser window titled "EPA > STORET > Station Search Summary - Microsoft Internet Explorer". The address bar shows "http://oasdev.sdc-moses.com/storet/srpp/DW_STATION_COUNT". The page header includes the EPA logo and the text "STORET" and "U.S. Environmental Protection Agency". A navigation menu contains links for "Recent Additions", "Contact Us", "Print Version", and a search box with a "Go" button. Below the menu, the breadcrumb trail reads "EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse".

Station Search Summary

Number of Stations Returned: 11

Search Parameter Values

North Limit: 90 NORTH
South Limit: 45 NORTH
East Limit: 0 WEST
West Limit: 180 WEST

Station Type(s): Well-None
Facility-Industrial
Facility-Municipal Sewage (POTW)
Facility-Municipal Water Supply (PWS)
Facility-Other/combined

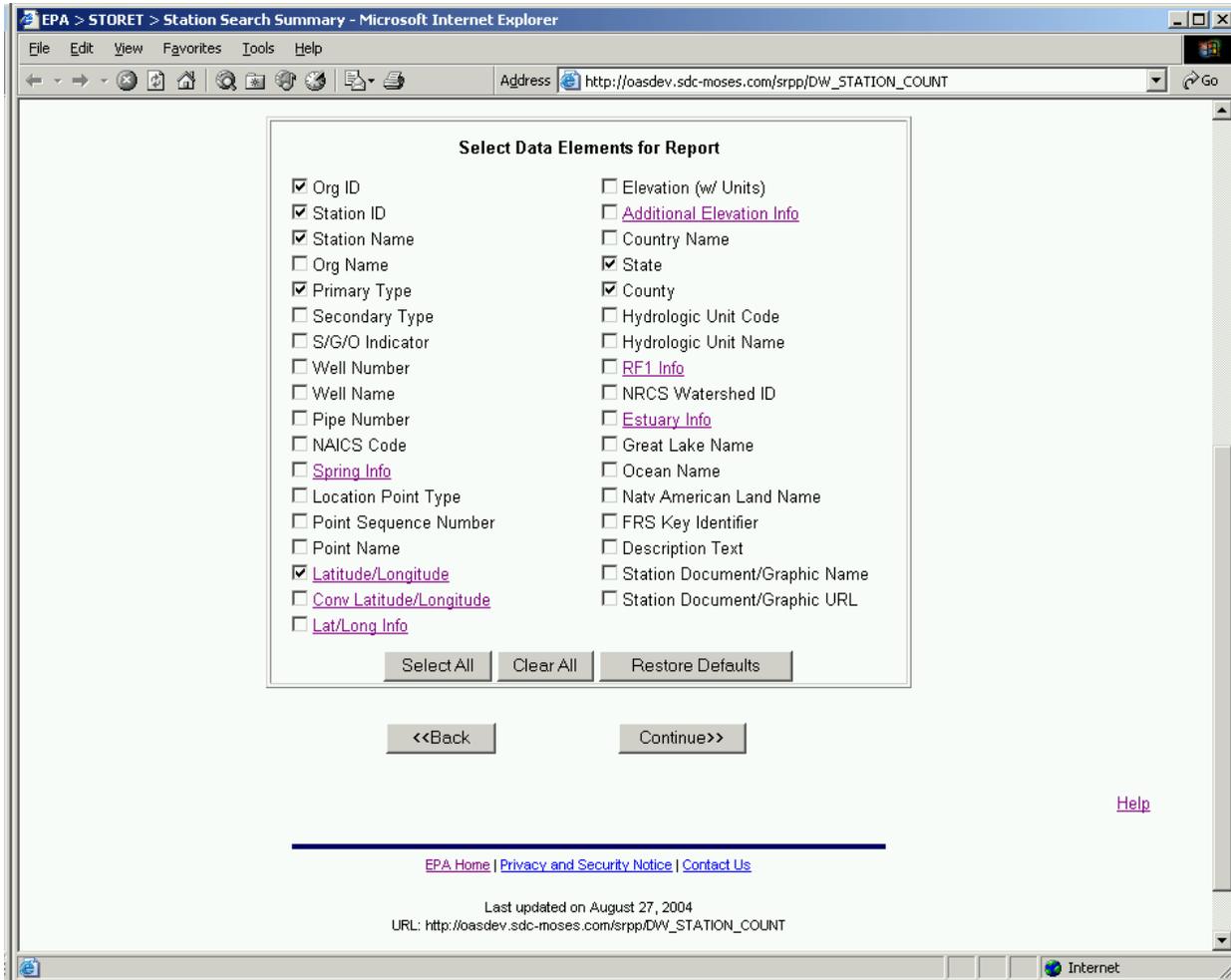
Characteristic(s): ALL

Organization(s): 11113300
1111REG1
1117MBR
1119USBR
11DELMOD

Select 'Back' to modify search parameters and refine your query.
Select 'Continue' to generate a report based on your current selections.
You may customize the content of your report by selecting Data Elements below.

Select Data Elements for Report

Second half of page



STORET Central Warehouse Specification**SIR:** 1370, 1501, 1507, 1558, 1559**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Download_Custom**Web Page Name:** None.**Creation Date:** 11/4/2002**Processing Overview/Description:**

The DW_Station_Download_Custom procedure receives processed search criteria and the list of requested report elements from the DW_Station_Hub_Custom procedure, and generates a tilde delimited text file report based on this information. The name of the text file is returned to DW_Station_Hub_Custom so that a link to the file can be displayed to the user. The created report contains only the columns that correspond to the report elements selected by the user. The titles for these columns are displayed as the first line of text in the report.

Tables:

(Display Fields may be included in user generated reports. See Business Rules section for display order)

Entity	Attribute	Display
HUC Code (DI_DB_CAT)	HYDROLOGIC_UNIT_NAME	Y
Station Types (DI_STATN_TYPES)	PRIMARY_TYPE	Y
	SECONDARY_TYPE	Y
Organization (DI_ORG)	ORGANIZATION_NAME	Y
State (DI_GEO_STATE)	STATE_NAME	Y
	COUNTRY_NAME	Y
County (DI_GEO_COUNTY)	COUNTY_NAME	Y
Station (FA_STATION)	ORGANIZATION_ID	Y

Entity	Attribute	Display
	STATION_ID	Y
	STATION_NAME	Y
	SGO_INDICATOR	Y
	WELL_NUMBER	Y
	WELL_NAME	Y
	PIPE_NUMBER	Y
	NAICS_CODE	Y
	SPRING_TYPE_IMPROVEMENT	Y
	SPRING_PERMANENCE	Y
	SPRING_USGS_GEOLOGIC_UNIT	Y
	SPRING_OTHER_NAME	Y
	SPRING_USGS_LITHOLOGIC_UNIT	Y
	LOCATION_POINT_TYPE	Y
	POINT_SEQUENCE_NUMBER	Y
	POINT_NAME	Y
	LATITUDE	Y
	LONGITUDE	Y
	STD_LATITUDE	Y
	STD_LONGITUDE	Y
	MAP_SCALE	Y
	ELEVATION	Y
	HYDROLOGIC_UNIT_CODE	Y
	RF1_SEGMENT_CODE	Y
	RF1_SEGMENT_NAME	Y
	RF1_MILEAGE	Y
	ON_REACH_IND	Y
	NRCS_WATERSHED_ID	Y

Entity	Attribute	Display
	OTHER_ESTUARY_NAME	Y
	GREAT_LAKE_NAME	Y
	OCEAN_NAME	Y
	NATV_AMERICAN_LAND_NAME	Y
	FRS_KEY_IDENTIFIER	Y
	BLOB_TITLE	Y
	FK_DB_CAT	N
	FK_GEO_STATE	N
	FK_GEO_COUNTY	N
	FK_MAD_HMETHOD	N
	FK_MAD_HDATUM	N
	FK_STD_HDATUM	N
	FK_MAD_VMETHOD	N
	FK_MAD_VDATUM	N
	FK_ORG	N
	FK_STATN_TYPES	N
	FK_ESTRY_PRIMARY	N
	FK_ESTRY_SECONDARY	N
	DESCRIPTION_TEXT	N
	BLOB_ID	Y
Horizontal Datum (LU_MAD_HDATUM)	ID_CODE	Y
Horizontal Method (LU_MAD_HMETHOD)	GEOPOSITIONING_METHOD	Y
Vertical Datum (LU_MAD_VDATUM)	ELEVATION_DATUM	Y
Vertical Method (LU_MAD_VMETHOD)	ELEVATION_METHOD	Y
Primary Estuary (LU_ESTRY_PRIMARY)	PRIMARY_ESTUARY	Y

Entity	Attribute	Display
Secondary Estuary (LU_ESTRY_SECONDARY)	SECONDARY_ESTUARY	Y
Column Names (APP_COLUMN_NAME)	COL_NAME	N
	PRINT_NAME	N
	STN_REPORT_NUMBER	N
	STN_COL_ORDER	N

Links From:

Procedure	Web_Page	Button/Text
DW_Station_Hub_Custom	Download Site Descriptions	None (called automatically during load)

Input Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting stations.	V_FROMSTMT
The Where clause of the SQL statement that will be used for selecting stations.	V_WHERESTMT
A Pl/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS
Used to pass a report file name to this procedure. This is set to 'NONE' for non-batched reports.	FILENAME

Links To:

Procedure	Web_Page	Button/Text
DW_Station_Hub_Custom	Download Site Descriptions	None (called automatically during load).

Output Parameters:

Natural Language	Parameter
The file name used for report generation. This is passed so that a link to the report can be created.	OUT_FILE

Internal Procedure Events:**Onload**

- C Generate report based on received parameters, and return file name.

Images:

None.

Business Rules:

- C Display Column Titles based on the report elements selected and the contents of the APP_COLUMN_NAME table. See chart below for a list of these titles.
- C Display only the columns that correspond to the list of selected report elements.
- C Separate all report columns with the tilde sign ('~').
- C Do not return the name of the report file created until report generation has completed.
- C Display report columns in the order listed below.
- C Include all location point types in station reports.

Column Title	Table Name	Column Name
Org ID	FA_STATION	ORGANIZATION_ID
Station ID	FA_STATION	STATION_ID
Station Name	FA_STATION	STATION_NAME
Org Name	DI_ORG	ORGANIZATION_NAME
Primary Type	DI_STATN_TYPES	PRIMARY_TYPE
Secondary Type	DI_STATN_TYPES	SECONDARY_TYPE
S/G/O Indicator	FA_STATION	SGO_INDICATOR

Column Title	Table Name	Column Name
Well Number	FA_STATION	WELL_NUMBER
Well Name	FA_STATION	WELL_NAME
Pipe Number	FA_STATION	PIPE_NUMBER
NAICS Code	FA_STATION	NAICS_CODE
Spring Type Improvement	FA_STATION	SPRING_TYPE_IMPROVEMENT
Permanence	FA_STATION	SPRING_PERMANENCE
USGS Geologic Unit Code-Name	FA_STATION	SPRING_USGS_GEOLOGIC_UNIT
Spring Other Name	FA_STATION	SPRING_OTHER_NAME
USGS Lithologic Unit Code-Name	FA_STATION	SPRING_USGS_LITHOLOGIC_UNIT
Location Point Type	FA_STATION	LOCATION_POINT_TYPE
Point Sequence Number	FA_STATION	POINT_SEQUENCE_NUMBER
Point Name	FA_STATION	POINT_NAME
Latitude	FA_STATION	LATITUDE
Longitude	FA_STATION	LONGITUDE
Horizontal Datum	LU_MAD_HDATUM	ID_CODE
Converted Latitude	FA_STATION	LATITUDE
Converted Longitude	FA_STATION	LONGITUDE
Converted Horizontal Datum	LU_MAD_HDATUM	ID_CODE
Geopositioning Method	LU_MAD_HMETHOD	GEOPOSITIONING_METHOD
Map Scale	FA_STATION	MAP_SCALE
Elevation	FA_STATION	ELEVATION
Elevation Datum	LU_MAD_VDATUM	ELEVATION_DATUM
Elevation Method	LU_MAD_VMETHOD	ELEVATION_METHOD
Country Name	DI_GEO_STATE	COUNTRY_NAME
State	DI_GEO_STATE	STATE_NAME
County	DI_GEO_COUNTY	COUNTY_NAME
Hydrologic Unit Code	FA_STATION	HYDROLOGIC_UNIT_CODE

Column Title	Table Name	Column Name
Hydrologic Unit Name	DI_DB_CAT	HYDROLOGIC_UNIT_NAME
RF1 Segment Code	FA_STATION	RF1_SEGMENT_CODE
RF1 Segment Name	FA_STATION	RF1_SEGMENT_NAME
RF1 Mileage	FA_STATION	RF1_MILEAGE
On Reach Ind	FA_STATION	ON_REACH_IND
NRCS Watershed ID	FA_STATION	NRCS_WATERSHED_ID
Primary Estuary	LU_ESTRY_PRIMARY	PRIMARY_ESTUARY
Secondary Estuary	LU_ESTRY_SECONDAR Y	SECONDARY_ESTUARY
Other Estuary Name	FA_STATION	OTHER_ESTUARY_NAME
Great Lake Name	FA_STATION	GREAT_LAKE_NAME
Ocean Name	FA_STATION	OCEAN_NAME
Natv American Land Name	FA_STATION	NATV_AMERICAN_LAND_NAME
FRS Key Identifier	FA_STATION	FRS_KEY_IDENTIFIER
Description Text	FA_STATION	DESCRIPTION_TEXT
Station Document/Graphic Name	FA_STATION	BLOB_TITLE
Station Document/Graphic URL	FA_STATION	BLOB_ID

Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C Capture standard file creation (disk I/O) errors and display customized messages if they occur.

Code Changes:

None.

Page Print:

None. See DW_Station_Hub_Custom.

STORET Central Warehouse Specification**SIR:** 1557**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Download_Zip**Web Page Name:** Download Site Descriptions**Creation Date:** 11/07/2003**Process Overview/Description:**

The DW_Station_Download_Zip procedure takes a report download file and replaces it with a new report download file in gzip format. A link to this file is then presented to the requesting user.

Tables:

(Display Fields are listed in the order they are displayed)

None.

Links From:

Procedure	Web_Page	Button/Text
DW_Station_Hub_Custom	Download Site Descriptions	Continue

Input Parameters:

Natural Language	Parameter
The name of the report download file.	OUT_FILE

Links To:

Procedure	Web_Page	Button/Text
DW_Station_Download_Custom	Download Site Description	Called automatically when page is loaded.
DW_Station_Download_Zip	Create Report Download in Zip Format	Called when <Continue> button is pressed.

Output Parameters:

Natural Language	Parameter
The name of the report download file in gzip format.	OUT_FILE

Internal Procedure Events:**Onload**

- C Call DW_Exec_OS Java procedure that executes the Unix cp command to make a copy of the OUT_FILE created by DW_Station_Download_Custom.
- C Call DW_Exec_OS Java procedure that executes the Unix gzip command to make a gzip formatted version of the copy file. Display a link to the gzip format report file.
- C Display the size of the gzip format report file in kilobytes (KB) if the file has been created.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_Page Specifications for standard footer links on each page.

Images:

See General Design guidelines for standard images on each page. The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

None.

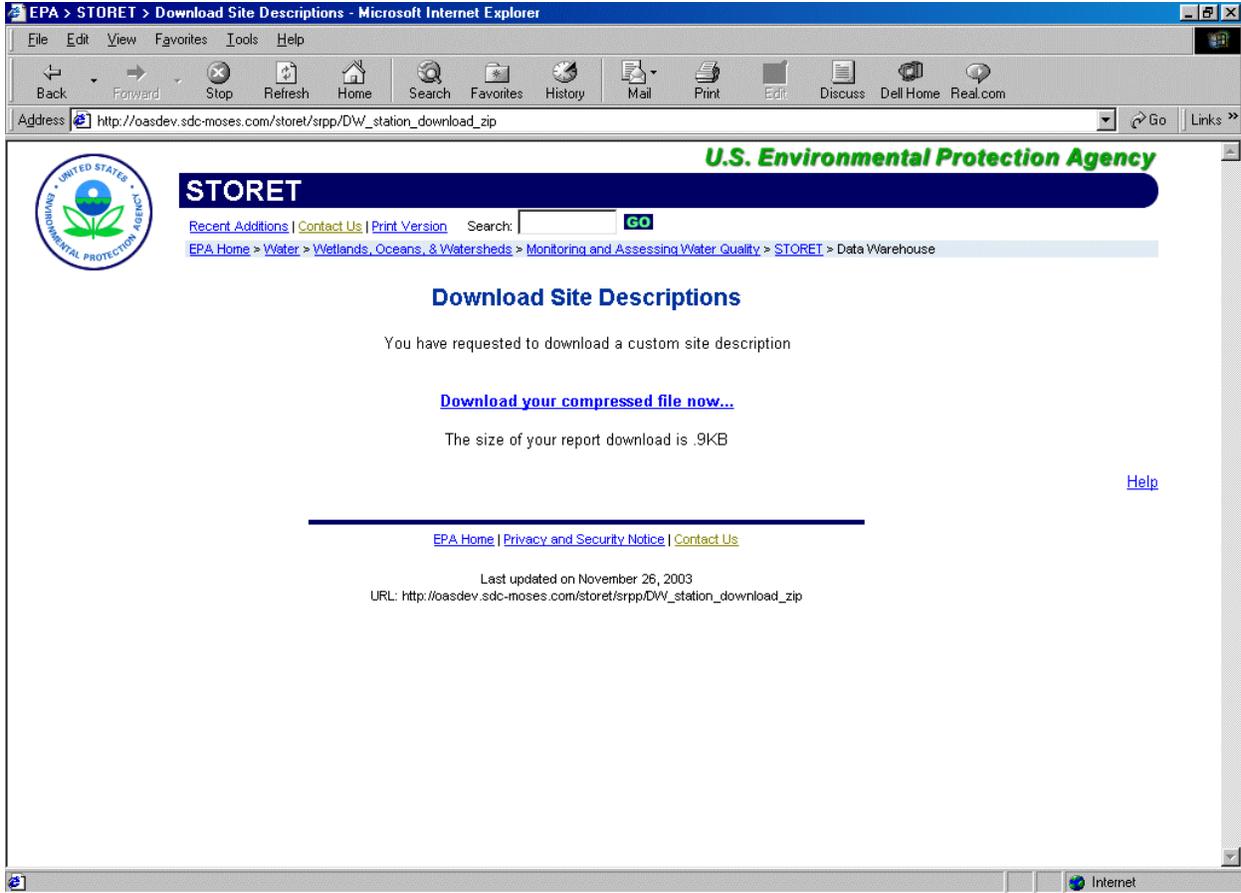
Error Handling:

- If the attempt to gzip the report download file is unsuccessful, an error message will be displayed rather than a link to the gzip format report file.
- A standard Error Page should be displayed when this page is not loaded upon request.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1370, 1378, 1557**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Hub_Custom**Web Page Name:** Download Site Descriptions**Creation Date:** 11/4/2002**Process Overview/Description:**

The DW_Station_Hub_Custom procedure serves as a gatekeeper that generates the page header and footer, then passes control to the procedure DW_Station_Download_Custom with the required parameters.

Tables:

(Display Fields are listed in the order they are displayed)

None.

Links From:

Procedure	Web_Page	Button/Text
DW_Station_Count	Station Search Summary	Continue

Input Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting stations.	V_FROMSTMT

Natural Language	Parameter
The Where clause of the SQL statement that will be used for selecting stations.	V_WHERESTMT
The number of Stations that fulfilled the selection criteria.	V_STATIONCOUNT
A Pl/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS
Identifies whether the user wants to generate a report or first display a list of available stations that match their search criteria.	REPORT_TYPE
The file name used for report generation [This is passed from the report generating procedure (DW_STATION_DOWNLOAD_CUSTOM) back to this procedure after the report is complete.]	OUT_FILE

Links To:

Procedure	Web_Page	Button/Text
DW_Station_Download_Custom	Download Site Description	Called automatically when page is loaded.
DW_Station_Download_Zip	Download Site Description	Called when <Compress Data File now> button is clicked.

Output Parameters:

Natural Language	Parameter
The From clause of the SQL statement that will be used for selecting stations.	V_FROMSTMT
The Where clause of the SQL statement that will be used for selecting stations.	V_WHERESTMT
A Pl/Sql table of selected Columns for the report (Column Name List).	V_COLUMNS
Used to pass a file name to the report generating procedure (DW_STATION_DOWNLOAD_CUSTOM). This is set to 'NONE' for non-batched reports.	FILENAME

Natural Language	Parameter
The name of the download data file created. Used to pass to procedure that will create the report download in gzip format. (DW_Station_Download_Zip)	OUT_FILE

Internal Procedure Events:

Onload

- C Call DW_Station_Download_Custom and pass all the Output Parameters listed above.
- C Display a link to the report file that is created using the value of OUT_FILE that is returned from DW_Station_Download_Custom.
- C Display the size of the report download file in kilobytes (KB).
- C See DW_Station_Download_Custom for more details.

Form Level

- C 'Compress Data File now' onclick: Call the procedure DW_Station_Download_Zip and pass it the name of the report file that is to be created in gzip format.

General

- C See DW_Top_of_Page Specifications for standard header and sidebar links on each page.
- C See DW_Bottom_of_page Specifications for standard footer links on each page.

Images:

See General Design guidelines for standard images on each page. The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

None.

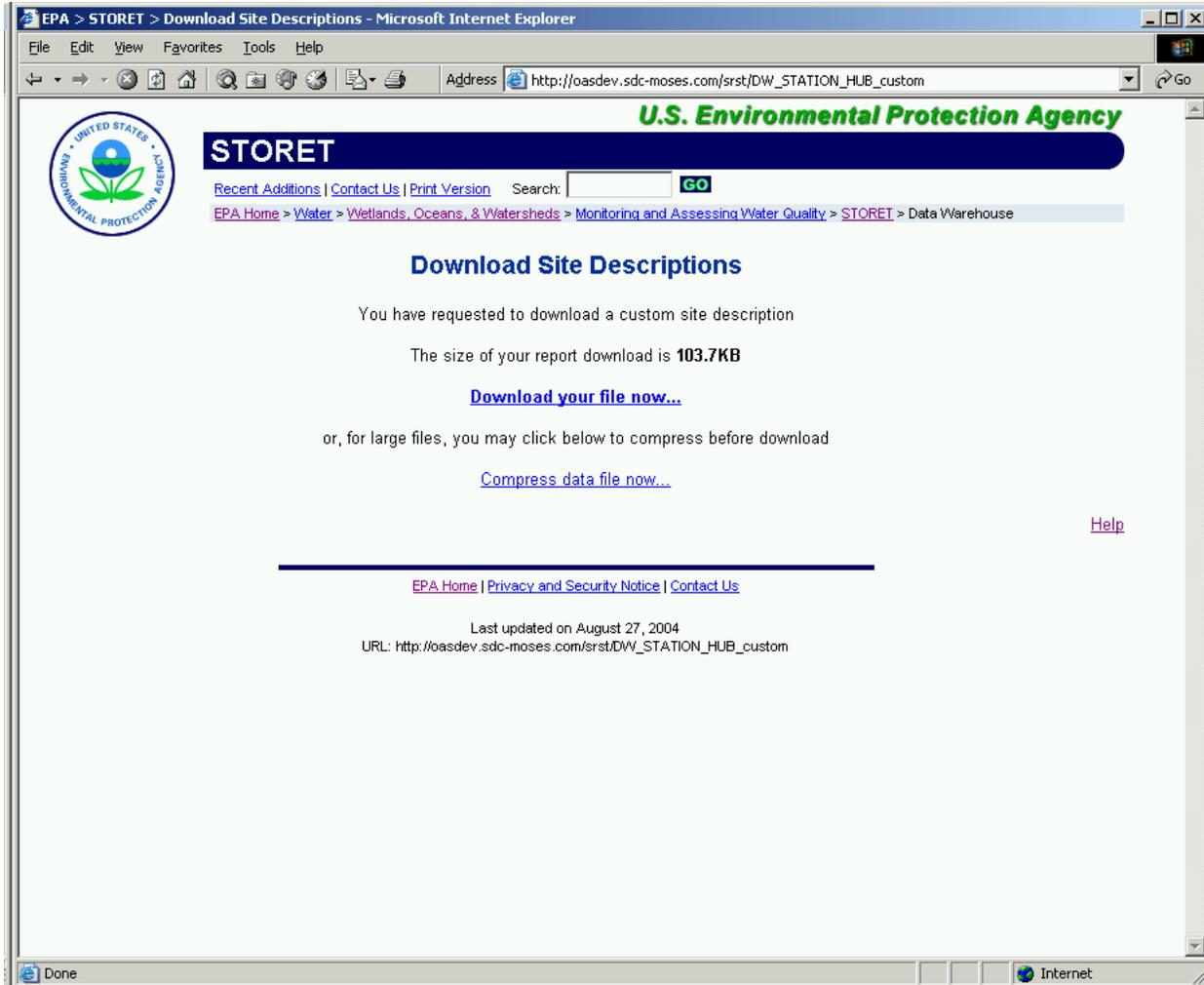
Error Handling:

- A standard Error Page should be displayed when this page is not loaded upon request.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** 1438, 1489**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Station_Popup**Web Page Name:** STORET: Station Search Results**Date:** 4/16/2003**Processing Overview/Description:**

The Station Search Results pop-up is called by the Result by Station pages and is used to display a list of available Stations for the selected Organization that conform to the user's search string. The user is able to select one or more Stations from this list. The Station ID and the Station Name of the selected Stations are passed to the calling Result by Station page where the appropriate fields are populated.

Tables:

(Display Fields are listed in the order they are displayed)

Entity	Attribute	Display
Station (FA_STATION)	ORGANIZATION_ID	Y
	STATION_ID	Y
	PK_ISN	N
	LOCATION_POINT_TYPE	N
	FK_ORG	N
Station Alias Type (LU_EXTERNAL_REF_SCHEME)	REF_SCHEME_ACRONYM	Y
	PK_ISN	N

Entity	Attribute	Display
	ORGANIZATION_ID	N
Station Alias (LU_STATION_ALIAS)	STATION_LABEL	Y
	FK_STATION	N
	FK_REF_SCHEME	N
Station(FA_STATION)	STATION_NAME	Y

Links From:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Station	Regular Results by Station	Look Up
DW_Bio_Result_Criteria_Station	Biological Results by Station	Look Up
DW_Hab_Result_Criteria_Station	Habitat Results by Station	Look Up

Input Parameters:

Natural Language	Parameter
The text string used to search available Stations.	V_STATIONSTRING
The Organization number that uniquely identifies the selected Organization.	V_ORG
The code indicating whether to search for Stations by Station ID, Name, or Label.	V_SEARCHTYPE
The Station Alias Type used in the search for Station.	V_EXTREF

Links To:

Procedure	Web_Page	Button/Text
DW_Result_Criteria_Station	Regular Results by Station	Look Up
DW_Bio_Result_Criteria_Station	Biological Results by Station	Look Up

Procedure	Web_Page	Button/Text
DW_Hab_Result_Criteria_Station	Habitat Results by Station	Look Up

Output Parameters:

Natural Language	Parameter
A PL/SQL table of selected Stations.	STATION_LIST
The names of the selected Station(s) in a string separated by an HTML break.	V_STATION_NAMES

Internal Procedure Events:**Onload**

- C Populate the select list with the Stations that conform to the Station Search Criteria.

Form Level

- C 'Select' onclick: Populate the Selected Stations list on the calling Results by Station page with the Organization IDs, Station IDs, Alias Type, Station Alias, and Station names that the user selects from this pop-up window. If Stations were previously added, insert the new Stations at the end of the existing Selected Stations list.
- C 'Cancel' onclick: Close this pop-up window and return focus to the calling Results by Station page. Do not alter the value of the Selected Stations list.

Images:

None.

Business Rules:

- C Only display Stations for the selected Organization.
- C Allow multiple Stations to be selected.
- C If 'Search by Station Alias' is selected and Station Alias Type is 'STANDARD', then Stations will be searched by Station ID.

- C If a Station is selected multiple times, include it only once on the calling Results by Station page.

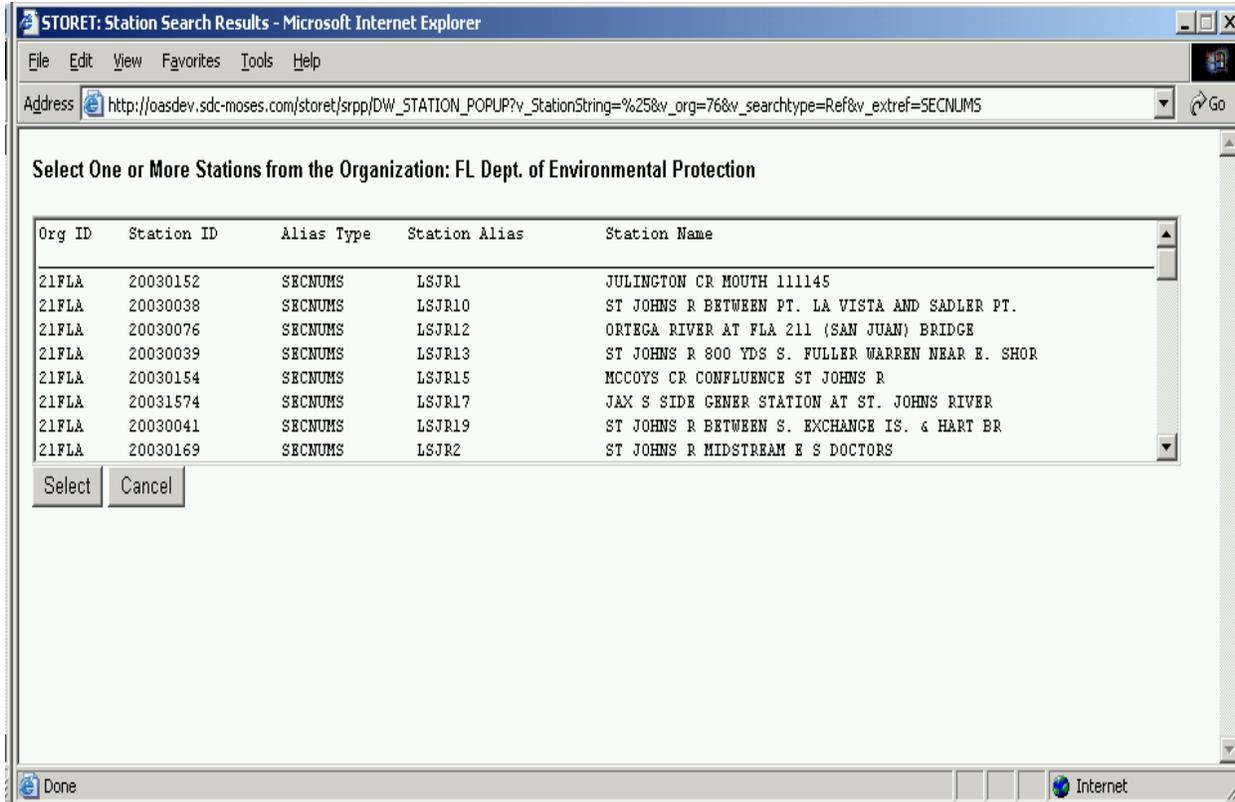
Error Handling:

- C A standard Error Page should be displayed when this page does not load upon request.
- C Only valid Organization IDs, Station IDs, Station Alias Types, Station Aliases, and Station names are returned to the Results by Station page. If Search by ID or Search by Name is selected, then 'N/A' is used to indicate that the Station Alias Types and Station Aliases are not applicable.

Code Changes:

None.

Page Print:



STORET Central Warehouse Specification**SIR:** Global**Package Name:** SDW (STORET Data Warehouse)**Procedure Name:** DW_Top_of_Page**Web Page Name:** EPA standard web template header**Creation Date:** 11/27/2002**Process Overview/Description:**

The DW_top_of_page procedure is used to create the standard header used by all pages of the Central Warehouse application. This header provides a search engine for the EPA web site and several links. The search engine parameters and links used by this procedure mirror those of the STORET homepage.

In addition, this procedure establishes the link to the JavaScript library used by the application and calls any JavaScript functions that should be executed at the time a page is loaded.

Tables:

(Display Fields are listed in the order they are displayed)

None.

Links From:

Procedure	Web_Page	Button/Text
DW_Home	STORET Central Warehouse	onLoad
DW_Result_Criteria_Geo	Regular Results by Geographic Location	onLoad
DW_Result_Criteria_Station	Regular Results by Station	onLoad
DW_Result_Criteria_Project	Regular Results by Project	onLoad

Procedure	Web_Page	Button/Text
DW_Result_Count	Result Search Summary	onLoad
DW_Result_Hub_Custom	Download Results	onLoad
DW_Station_Criteria	Station Search Criteria	onLoad
DW_Station_Count	Station Search Summary	onLoad
DW_Station_Hub_Custom	View Station List/Download Report	onLoad
DW_Bio_Result_Criteria_Geo	Biological Results by Geographic Location	onLoad
DW_Bio_Result_Criteria_Station	Biological Results by Station	onLoad
DW_Bio_Result_Criteria_Project	Biological Results by Project	onLoad
DW_Hab_Result_Criteria_Geo	Habitat Results by Geographic Location	onLoad
DW_Hab_Result_Criteria_Station	Habitat Results by Station	onLoad
DW_Hab_Result_Criteria_Project	Habitat Results by Project	onLoad

Input Parameters:

Natural Language	Parameter
The title of the Web Page calling the procedure.	PAGE_TITLE
A list of JavaScript functions that should be ran at the time the Web Page is loaded.	BODY_ON_LOAD

Links To:

Uniform Resource Locator	Web_Page	Hyperlink Text
http://www.epa.gov/storet/whats_new.html	STORET recent additions page	'Recent Additions'
http://www.epa.gov/storet/contact.html	STORET contact us page	'Contact Us'
http://www.epa.gov/cgi-bin/epaprintonly.cgi	Returns authorization message	'Print Version'
http://www.epa.gov/	EPA home page	'EPA Home'
http://www.epa.gov/water/	OW home page	'Water'

Uniform Resource Locator	Web_Page	Hyperlink Text
http://www.epa.gov/owow/	OWOW home page	'Wetlands, Oceans, & Watersheds'
http://www.epa.gov/owow/monitoring/	OWOW's Monitoring and Assessing Water Quality page	'Monitoring and Assessing Water Quality'
http://www.epa.gov/storet/index.html	STORET home page	'STORET'

Output Parameters:

Natural Language	Parameter
script_path	The path of the application's JavaScript library file.
program_path	The path of the Oracle application server.
image_path	The path containing the application's image files.

Internal Procedure Events:**Onload**

- C Display the appropriate page Title.
- C Call the requested JavaScript functions.

Images:

The only images used on the STORET Data Warehouse web site are those that are included in the EPA Standard Web Template.

Business Rules:

None.

Error Handling:

- See specifications for the Web pages that call this procedure.

Code Changes:

None.

Page Print:

The DW_top_of_page procedure produces the standard header found at the top of the Central Warehouse's web pages.

