

Using STORET Data to Characterize Your Watershed

Webcast on June 21, 2007



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The Watershed Academy



Webcast sponsored by EPA's Watershed Academy

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What is this Webcast About?

- What is the STORET Program and the National STORET Data Warehouse?
- Why is data management important for watershed protection?
- How do I get data out of the STORET Data Warehouse?
- How can I use STORET data to help characterize my watershed?

The STORET Program

- STORET: STORage and RETrieval of water quality monitoring data

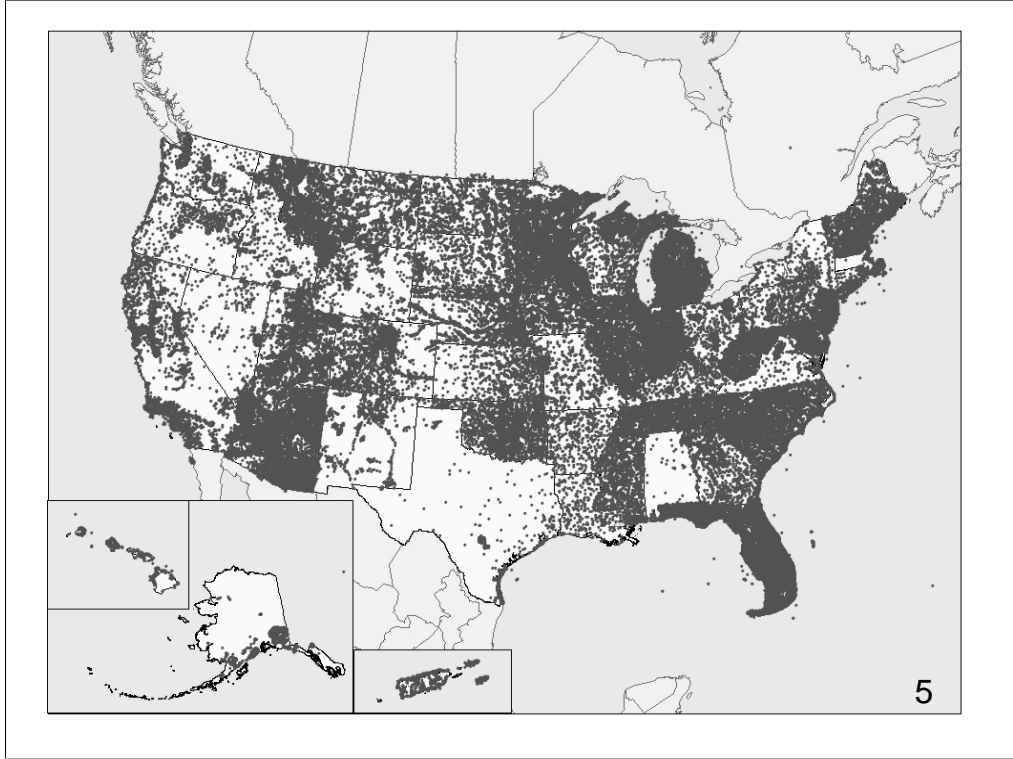


- EPA's STORET Program:
 - promotes sound data management practices
 - stores and maintains water quality data submitted by agencies/groups across the nation in the STORET Data Warehouse

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The National STORET Data Warehouse

- A national repository of water quality monitoring data – “Modernized STORET”
- Stores water data of all types (biological, chemical, physical) submitted by states, tribes, watershed groups, other federal agencies, and universities
- Web-enabled: Data are available -- and can be submitted -- using the Web
- Encourages data sharing at a national level



Legacy and Modern STORET

Browse or Download
Legacy STORET Data

vs.

Browse or Download
Modernized STORET Data

- The Legacy Data Center contains data supplied to EPA prior to 1999
 - LDC contains data of undocumented quality

- Modernized STORET (a.k.a. the National STORET Data Warehouse) contains data supplied to EPA after 1999
 - Data in Modernized STORET are of documented quality

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USGS National Water Information System (NWIS)

- USGS also provides water quality monitoring data via the web through NWISWeb
- USGS manages around 1.5 million sites where water quality monitoring data are collected
- Daily streamflow conditions as well as chemical and physical water quality data are available:
<http://waterdata.usgs.gov/nwis>

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Water Quality Monitoring Data

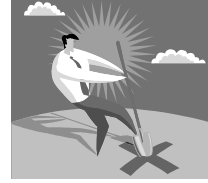
- Raw monitoring results along with information about
 - Where sample/measurement was collected
 - When it was collected
 - What was collected
 - How it was collected
 - Why it was collected
 - Who collected it



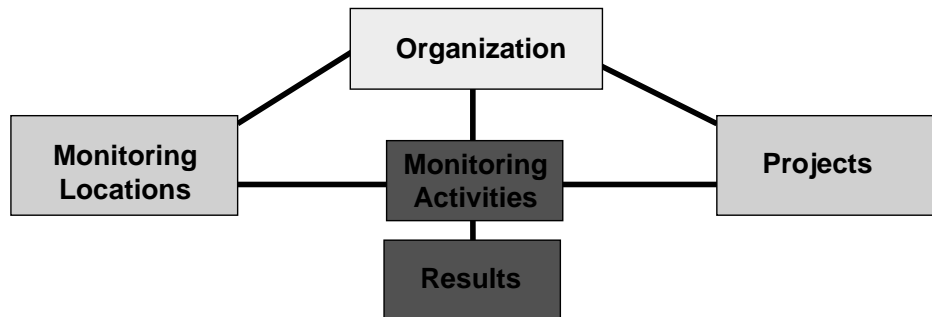
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STORET Terms

- Projects (Why data were collected)
 - Brief summary of monitoring plan
- Stations (Where data were collected)
 - Describe where monitoring takes place
- Results (When, How and What data were collected)
 - Measurements of what was monitored



STORET Warehouse Overview



Who Puts Data in?

- State environmental agencies
- Tribal environmental agencies and groups
- Volunteer groups and watershed organizations
- Universities



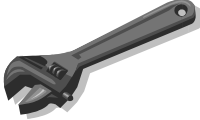
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Volunteer and Watershed Groups Using STORET Include:

- Mystic River Watershed Association (Massachusetts)
- Big Thompson Watershed Forum (Colorado)
- Montana Volunteer Water Quality Monitoring
- Potomac Appalachian Trail Club Monitoring (Virginia and Maryland)
- Water Sentinels Sierra Club (Missouri)
- Iowater (Iowa)

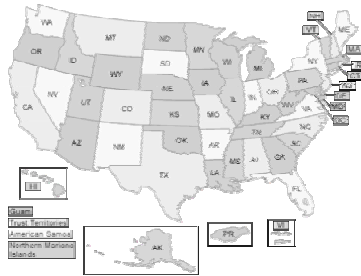
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Sharing Data at a National Level

- Organizations from around the country put data into the STORET Warehouse
- Distributed STORET Database 
- Web tools for data submission to the STORET Warehouse

Managing Data Locally

- Data sharing at a national level benefits from:
 - Well documented data at a local level
 - Well managed data at a local level



What is Data Management?

- The process of converting your monitoring results into a set of useful data that you can use in order to make decisions about your program
- Data re-use is possible if data is current and accurate and in one central place

Well Managed Data

- **Placing data and metadata in a manageable electronic format provides many benefits:**
 - **Electronic input forms can help ensure data are in the correct range or format**
 - **Metadata helps you make comparisons between samples or over time by capturing context of the sampling event**
 - **Quality assurance results can be compared to expected results**
 - **Your data can be used by others and safely stored for future use**

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Who Manages Data?

- Field staff (those who collect samples)
- Lab staff (those who analyze samples)
- Data entry staff (those who enter data in the computer)
- Data assessment and analysis staff (those who make sense of the data)
- IT staff (those who develop the tools to enter and analyze the data)



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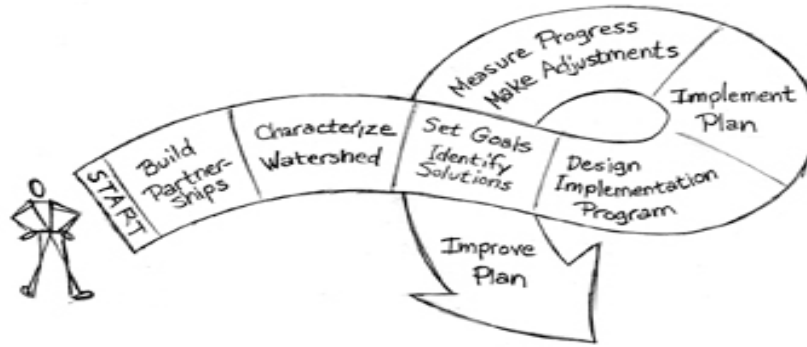
EVERYONE manages data!

Finding the Story of Your Watershed



- The set of water quality indicators your organization chooses to monitor will help you characterize your watershed
- Finding the story of your watershed means moving the results from your sampling efforts from *data* to *information*
- Data assessment and analysis provide a picture into the condition of a water body
- Data management is key to this process

Six Steps for Watershed Planning



Characterizing Your Watershed

➤ Five broad categories of data used to fully characterize a watershed:

- Physical and Natural features
- Land use and population characteristics
- Waterbody conditions
- Pollutant sources
- **Water quality monitoring data (STORET Data!)**



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Types of monitoring results that help characterize your watershed

- Regular results – metals, nutrients, microbiological and physical characteristics of the water
- Biological monitoring results
- Habitat assessment results



Questions?



Dwane Young, IT Specialist, US EPA Monitoring Branch

Ways to Get Data from the STORET Warehouse

- EPA Mapping tools
 - Enviromapper for Water epa.gov/waters/enviromapper
 - Window to My Environment epa.gov/enviro//wme/
- STORET Web site epa.gov/storet
 - Direct data download
 - Watershed Summary tool

Let's Look at a Watershed Around Denver, Colorado

➤ Using Window to My Environment

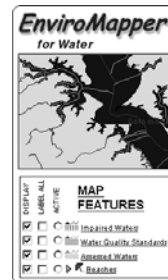
- **Window to My Environment provides comprehensive environmental information about your area of interest**



- **You can choose to show data near your town**

➤ Using Enviromapper

- **Enviromapper for Water shows EPA water program information in the specific area of your choosing**



- **You can choose to show data by 8 digit HUC**

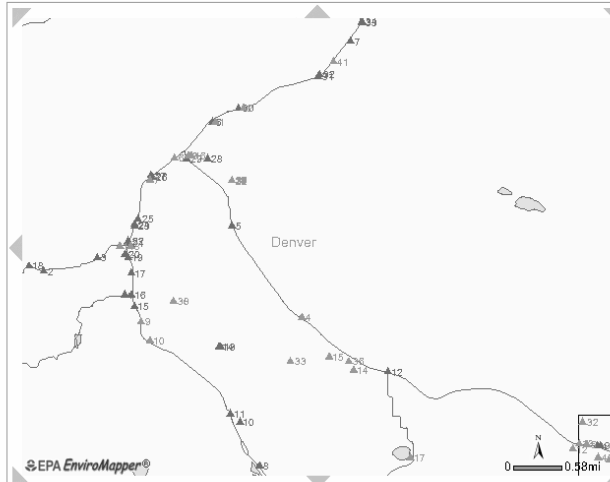
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Window to My Environment

Contact Us | Online Help | Background

EPA Home > Where You Live > Window to My Environment > Mapping Result



Your Window | Your Environment

All features intersecting the map window will appear as part of the information contained in the fact sheet below.

Community (Town,State)	Denver CO
County(s)	Denver CO
Congressional District(s)01(CO)	Denver CO
Urban area	Denver CO
Watershed(s)	Middle South Platte-Cherry Creek, Colorado., Upper Southe Platte, Colorado., Clear, Colorado.
Waterbody(s)	City Park Lake, Duck Lake, Huston Lake
Area / Width of Window	Click here to View

Redraw Map

- Transportation
- Water features
 - Impaired water bodies
 - Impaired streams
 - Water Bodies
 - Streams
- Political boundaries
- Air monitors
- USGS water monitors EXTERNAL
 - Surface water
 - Ground water
 - Others
- EPA water monitors
 - Surface water
 - Ground water
 - Others
- Topographic features EXTERNAL

Zoom In Zoom Out Change background Standard View

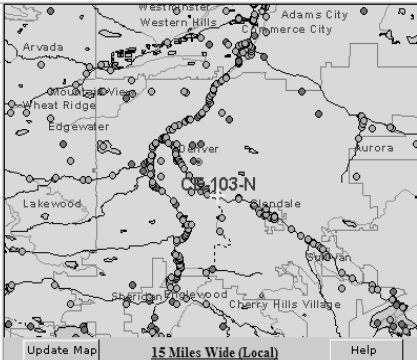
Click map to Zoom In Recenter Identify Select a feature Legend Locator Map

DISPLAY LABEL ALL ACTIVE	MAP FEATURES		
<input type="checkbox"/>	<input type="checkbox"/> Nutrient Stations		
<input type="checkbox"/>	<input type="checkbox"/> Major Roads		
<input type="checkbox"/>	<input type="checkbox"/> Railroads		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Rivers		
<input type="checkbox"/>	<input type="checkbox"/> National Estuary Programs		
<input type="checkbox"/>	<input type="checkbox"/> Congressional Districts		
<input type="checkbox"/>	<input type="checkbox"/> Federal Lands		
<input type="checkbox"/>	<input type="checkbox"/> Watersheds		
<input type="checkbox"/>	<input type="checkbox"/> Tribal Lands		
<input type="checkbox"/>	<input type="checkbox"/> Aggregate Ecoregions		
<input type="checkbox"/>	<input type="checkbox"/> Level III Ecoregions		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Counties		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> States		
<input type="checkbox"/>	<input type="checkbox"/> Impaired Waters Areas		
<input type="checkbox"/>	<input type="checkbox"/> Water Quality Standards Areas		
<input type="checkbox"/>	<input type="checkbox"/> Assessed Waters Areas		
<input type="checkbox"/>	<input type="checkbox"/> Beaches Areas		
<input type="checkbox"/>	<input type="checkbox"/> Sewage No Discharge Zones Areas		
<input type="checkbox"/>	<input type="checkbox"/> Nonpoint Source Projects Areas		

Click on map to:

- Locator Map
- Start New Map
- Zoom In
- Zoom to View
- Recenter Map
- Show Location
- Identify Active Feature
- Add

- MAP FEATURES**
- Facilities
 - Clean Watersheds Needs
 - Community Landmarks
 - Nutrient Stations
 - Water Quality Stations
 - STORET
 - Legacy Data Center
 - Streets
 - Railroads
 - ZIP Codes
 - National Estuary Programs
 - Congressional Districts
 - Federal Lands
 - Watersheds
 - Tribal Lands
 - Aggregate Ecoregions
 - Level III Ecoregions
 - Counties
 - States
 - Surface Waters
 - Impaired Waters
 - Water Quality Standards
 - Assessed Waters
 - Beaches
 - Sewage No Discharge Zones
 - Nonpoint Source Projects



STORET Water Quality Stations Features:

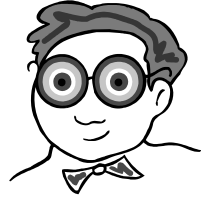
Station Name	Organization ID	Station Type
CE-103-N	DDEH	Other
E12	DDEH	Surfacewater
CE-124-N	DDEH	Other

[List All Reaches](#)

Click on map to:

- Locator Map
- Start New Map
- Zoom In
- By 2X
- Zoom to View
- Local
- Recenter Map
- Show Location
- Printable Map
- Identify Active Feature
- Add Active Feature Label
- Multi-color Menu
- Zoom To Area Menu

Seeing What's in the Warehouse



- Now that we know where we'd like to look for data, let's go to the STORET Watershed Summary tool to see what kinds of data are there

www.epa.gov/storet

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- About STORET
- Data Owner's Corner
- Updates/Downloads
- Obtaining Water Quality Data
- Useful Internet Links
- Commonly Asked Questions
- Recent Additions

Welcome to STORET, EPA's largest computerized environmental data system.

STORET (short for STORage and RETrieval) is a repository for water quality, biological, and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens, and many others. Take a minute to browse around our site or click on the water drop to retrieve monitoring data!



Features

- [Download Data](#)
- [Water Quality](#)
- [WQX - Information about the Future of STORET](#)
- [Tribal Water Quality](#)
- [\(New!\) 2007 Users Conference](#)
- [SIM Software](#)
- [Fact Sheets](#)

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Data Warehouse Access

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STORET Database Access

STORET data available on the Internet is divided into two separate databases, according to when it was originally supplied to EPA, and to which of our two STORET databases it was originally archived. We call the older of these two databases the **STORET Legacy Data Center** (LDC for short), and the more current **Modernized STORET**.

STORET Legacy Data Center

Data supplied to EPA before 1999 were all placed in Legacy STORET. This system, designed in the 1960s, was a pioneer in the long term archival of field water monitoring results.

The Legacy Data Center contains data of undocumented quality. Further, these data are static. The Legacy Data Center does not permit updates, and data here will not change over time. All new data are being entered into Modernized STORET. Because the data do not change over time, it is never necessary to repeat a specific download.

[Browse or Download Legacy STORET Data](#)

Modernized STORET

All data supplied to EPA since January 1, 1999 have been placed in the Modernized STORET System. A full description of the design of this system can be examined on our [ABOUT STORET](#) page.

Modernized STORET is currently receiving new data on a regular basis, and will continue to do so for the foreseeable future. Downloads performed for the same sites may differ over time as a result of the addition of new data by their owners.

[Browse or Download Modernized STORET Data](#)

NOTE:

All data owned by STORET Agency "112WRD" (the United States Geological Survey)

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EPA > STORET > Database Access > STORET Central Warehouse - Microsoft Internet Explorer

Address: http://www.epa.gov/STORET/dw_home.html

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EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Database Access > Data Warehouse

STORET Data Warehouse

Data refreshed as of May 1, 2007

Query Options

[Tell Us What You Think!](#)

STORET Warehouse Watershed Summary

[Summary of Results by Watershed](#)

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](#)

What's New with the STORET Data Warehouse?
This page offers information about the recent changes made to STORET Warehouse.

How to Query and Download Data
This exercise gives step by step instructions on how to generate, download, export (to Microsoft Excel or Access), and analyze a data query from the STORET Data Warehouse as well as the new Watershed Summary.
* Adobe Acrobat® Reader required.

Make a Map
Create a map of monitoring locations from STORET using either EnviroMapper for Water or Window to My Environment.

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EPA > STORET > About STORET - Microsoft Internet Explorer

Address http://www.epa.gov/STORET/wtshd_summary.html


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STORET Warehouse Watershed Summary



The STORET Watershed Summary shows the types of data available in the STORET Warehouse for a selected watershed (such as metals, nutrients, or pesticides data), who has entered the data, the period of record for the data, and how much data are available.

The Watershed Summary shows summary data for 8 digit HUCs, or Hydrologic Unit Codes. An 8-digit HUC is a watershed at a certain scale. If you do not know the 8-digit HUC that you are looking for, or to find the HUC nearest to you, please refer to EPA's [Surf your Watershed](#) website.

NOTE: Please make sure that your browser's Pop-up Blocker is set to **off** in order for the Watershed Summary to function properly. To turn off the Pop-up Blocker in Internet Explorer, go to Tools in the Menu Bar. Choose "Pop-up Blocker" > "Turn Off Pop-up Blocker".

Go to Watershed Summary

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Last updated on Wednesday, March 28th, 2007
URL: http://www.epa.gov/STORET/wtshd_summary.html

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Done Internet

EPA > STORET > Watershed Summary - Microsoft Internet Explorer

Address: <http://iaspub.epa.gov/WatershedSummaryUI/watershed.do>

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Results by Watershed

Drainage Basin/HUC
- SELECT -

Search By
 Organization Characteristic Type

[Help](#)

*Watersheds with data.

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Last updated on Friday 16th March, 2007
URL: <http://iaspub.epa.gov/80/WatershedSummaryUI/watershed.do>

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Done Internet

EPA > STORET > Watershed Summary - Microsoft Internet Explorer

Address: <http://iaspub.epa.gov/WatershedSummaryUI/watershed.do>

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[EPA Home](#) > [Water](#) > [Wetlands, Oceans, & Watersheds](#) > [Monitoring and Assessing Water Quality](#) > STORET > [Data Warehouse](#)

Results by Watershed

Watershed Basin/HUC
10190003 - Middle South Platte-Cherry Creek

Search By
 Organization Characteristic Type

Help

*Watersheds with data.

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Last updated on Friday 16th March, 2007
URL: <http://iaspub.epa.gov:80/WatershedSummaryUI/watershed.do>

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Internet

EPA > STORET > Watershed Summary - Microsoft Internet Explorer

Address: <http://aspub.epa.gov/WatershedSummaryUI/watershed.do;jsessionid=864363a530de82d846db6bc4aaa8a6dad5f7f5917b4.e344mbhq0a3uSby0Qc3uLaxuLaNbn0n6jAmIjGr5>

Results by Watershed

Drainage Basin/HUC
10190003 - Middle South Platte-Cherry Creek

Search By
 Organization Characteristic Type

Query

236 Characteristics, 153998 Records

Characteristic Type	Records
<input type="checkbox"/> Biological	206
<input type="checkbox"/> Habitat	20732
<input type="checkbox"/> Metal	34483
<input type="checkbox"/> Microbiological	5928
<input type="checkbox"/> Nutrient	20093
<input type="checkbox"/> Other	13203
<input type="checkbox"/> Organic	20
<input checked="" type="checkbox"/> Physical	58717
<input type="checkbox"/> Sediment	616

Select All Get Results

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Internet

http://iaspub.epa.gov - EPA > STORET > Watershed Summary > Characteristic Results - Microsoft Internet Explorer

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Characteristic Summary

Hydrologic Unit Code - 10190003

Physical - 58,717 Records

Characteristic	Records
Alkalinity, Bicarbonate as CaCO3	430
Alkalinity, Carbonate as CaCO3	1
Alkalinity, Total (total hydroxide+carbonate+bicarbonate)	3292
BOD, Biochemical oxygen demand	2047
BOD, carbonaceous	1036
COD ***retired*** (use COD, Chemical Oxygen Demand)	395
Color, True	6
Depth	216
Depth, Secchi Disk Depth	602
Dissolved oxygen (DO)	7733
Dissolved oxygen saturation	1025
Elevation, MSL	7
Flow	1758
General Observation (text)	49
Hardness, Ca + Mg	2933

1 2 3 >>

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Internet

Going directly to the Warehouse

- It looks like there are a lot of Dissolved Oxygen readings that were taken in this watershed
- Let's go directly into the Warehouse to pull out some of that data



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EPA > STORET > Database Access > STORET Central Warehouse - Microsoft Internet Explorer

Address: http://www.epa.gov/STORET/dw_home.html

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STORET Data Warehouse

Data refreshed as of May 1, 2007

Query Options

[Tell Us What You Think!](#)

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EPA > STORET > Regular Results by Geographic Location - Microsoft Internet Explorer

Address: http://aspub.epa.gov/stormoda/DW_resultcriteria_geo

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EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse

Regular Results by Geographic Location (stormoda)

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 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 East Limit 0	
<input checked="" type="radio"/> Drainage Basin/HUC	Cataloging Unit ALL	South Limit 0	Look Up

Station Type

Select one or more Station Type(s)

PRIMARY TYPE SECONDARY TYPE

Select: All

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Internet

EPA > STORET > Regular Results by Geographic Location - Microsoft Internet Explorer

Address: http://aspub.epa.gov/stormoda/DW_resultcriteria_geo

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EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse

Regular Results by Geographic Location (stormoda)

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 type="radio"/> State/County	State Name ALL	County Name ALL	<input type="button" value="Look Up"/>
<input type="radio"/> Latitude/Longitude (in decimal degrees)	West Limit 180	North Limit 90	East Limit 0
		South Limit 0	
<input checked="" type="radio"/> Drainage Basin/HUC	Cataloging Unit 10190003		<input type="button" value="Look Up"/>

Station Type

Select one or more Station Type(s)

PRIMARY TYPE SECONDARY TYPE

Select: All

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Internet

- When you go directly to the Warehouse, you can specify what data you want
 - At what type of station the data were collected
 - When the data were collected

- Since we want dissolved oxygen data, we'll choose that

EPA > STORET > Regular Results by Geographic Location - Microsoft Internet Explorer

Address http://aspub.epa.gov/stormoda/DW_resultcriteria_geo

Activity Medium

Select one or more Activity Medium

ACTIVITY MEDIUM

- Select All
- Water
- Sediment
- Soil
- Air
- Other
- Biological Tissue

Characteristic

Use the Characteristic Search to create a list of up to 50 Characteristics (Wildcard = %)

Characteristic Search: %Dissolved Oxygen

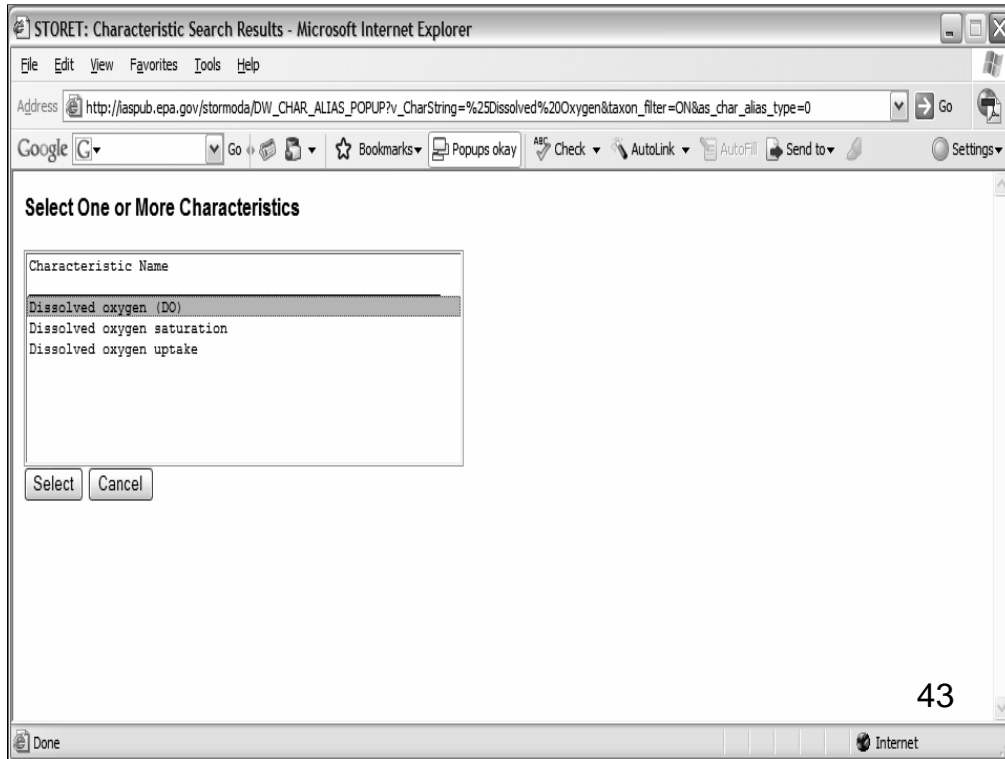
Search By: CHARACTERISTIC NAME

Hide Taxonomic Names

Characteristic Name

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Internet



EPA > STORET > Regular Results by Geographic Location - Microsoft Internet Explorer

Address http://aspub.epa.gov/stormoda/DW_resultcriteria_geo

Google Go

Characteristic

Use the Characteristic Search to create a list of up to 50 Characteristics (Wildcard = %)

Characteristic Search **Search By**

Hide Taxonomic Names

Characteristic Name

Dissolved oxygen (DO)

[Help](#)

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Last updated on January 11, 2007
URL: http://aspub.epa.gov/stormoda/DW_resultcriteria_geo

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Internet

- Now that we've chosen dissolved oxygen, we're going to go download the data
- We'll continue on the next screen...

EPA > STORET > Result Search Summary - Microsoft Internet Explorer

Address: http://aspub.epa.gov/stormoda/DW_RESULT_COUNT

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STORET

Recent Additions | Contact Us | Print Version Search:

EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Data Warehouse

Result Search Summary (stormoda)

Number of Results Returned: 7,733

Search Criteria
HUC: 10190003
Station Type(s): ALL
Activity Start Dates: ALL
Medium: ALL
Characteristic(s): Dissolved oxygen (DO)

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

Please enter your email address:

Please specify three characters to prefix your report name:

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EPA > STORET > Result Search Summary - Microsoft Internet Explorer

Address: http://aspub.epa.gov/stormoda/DW_RESULT_COUNT

Google

Batch Processing

Note: Download files (tilda "~" delimited) will exceed maximum limits for spreadsheet applications (ie. EXCEL - Worksheet size: 65,536 Rows.)

Select Data Elements for Report

<input type="checkbox"/> Org ID	<input type="checkbox"/> Actual Activity Lat/Long*	<input type="checkbox"/> Converted Result Value
<input checked="" type="checkbox"/> Org Name	<input type="checkbox"/> Conv Actual Activity Lat/Long*	<input type="checkbox"/> Converted Result Unit
<input checked="" type="checkbox"/> Station ID	<input type="checkbox"/> Well Number	<input type="checkbox"/> Result Comment
<input type="checkbox"/> Station Name	<input type="checkbox"/> Pipe Number	<input type="checkbox"/> Result Free Text
<input checked="" type="checkbox"/> Station Location Info*	<input type="checkbox"/> Additional Act Location Info*	<input type="checkbox"/> Weight Basis
<input checked="" type="checkbox"/> Station Lat/Long*	<input checked="" type="checkbox"/> Activity Depth	<input type="checkbox"/> Temperature Basis
<input type="checkbox"/> Conv Station Lat/Long*	<input checked="" type="checkbox"/> Activity Depth Unit	<input type="checkbox"/> Duration Basis
<input type="checkbox"/> Station Types*	<input type="checkbox"/> Activity Upper Depth	<input type="checkbox"/> Particle Size Basis
<input type="checkbox"/> S/G/O Indicator	<input type="checkbox"/> Activity Rel Depth	<input type="checkbox"/> Distance Measured From
<input checked="" type="checkbox"/> Visit Num	<input type="checkbox"/> Activity Lower Depth	<input type="checkbox"/> Distance Measured To
<input type="checkbox"/> Visit Start*	<input type="checkbox"/> Upr Lwr Depth Unit	<input checked="" type="checkbox"/> Analytical Proc ID
<input type="checkbox"/> Visit Stop*	<input type="checkbox"/> Activity Depth Ref Point	<input type="checkbox"/> Additional Anal Proc Info*
<input type="checkbox"/> Trip ID	<input type="checkbox"/> Sample Collection ID	<input type="checkbox"/> Lab Remarks
<input type="checkbox"/> Trip Name	<input type="checkbox"/> Field Gear ID	<input type="checkbox"/> Dilution Ind
<input checked="" type="checkbox"/> Activity ID	<input type="checkbox"/> Field Gear Config ID	<input type="checkbox"/> Recovery Ind
<input checked="" type="checkbox"/> Activity Start*	<input type="checkbox"/> Sample Preservation*	<input type="checkbox"/> Correction Ind
<input type="checkbox"/> Activity Stop*	<input type="checkbox"/> Portable Data Logger	<input type="checkbox"/> Other Lab Info*
<input checked="" type="checkbox"/> Activity Medium	<input checked="" type="checkbox"/> Characteristic Name	<input type="checkbox"/> Num of Reps

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Internet

EPA > STORET > Result Data request via Immediate batch process - Microsoft Internet Explorer

Address http://aspub.epa.gov/stormoda/DW_result_hub_custom

U.S. Environmental Protection Agency

STORET

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Result Data request via Immediate batch process (stormoda)

You have requested for a custom result download via Immediate batch processing.
The Request is successfully submitted. A confirmation is sent to the email address you provided.

Request Information

Request ID : 606156
Request Type : Result Download
Record Count : 7733
Request Mode : Immediate batch
File Name : DNV_20070611_172110.tar.gz
URL : http://www.epa.gov/storpubl/modern/downloads/DNV_20070611_172110.tar.gz
E-mail Address : stormoda@epa.gov

You will be notified when the request is processed.

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Last updated on January 11, 2007

Done Internet


STORET data request submitted (PROCESSING). Request_ID: 606156 - Lotus Notes

File Edit View Create Actions Help

Address

Rombel Arquines - Inbox Group Storet - Inbox X STORET data request submitted... X

New Memo Reply Reply To All Forward Delete Folder Copy Into New Chat Tools

 **Group Storet@EPA**
06/11/2007 01:21 PM

To: Group Storet@EPA
cc:
bcc:
Subject: STORET data request submitted (PROCESSING). Request_ID: 606156

Your request for Result Download is submitted for Immediate batch processing.

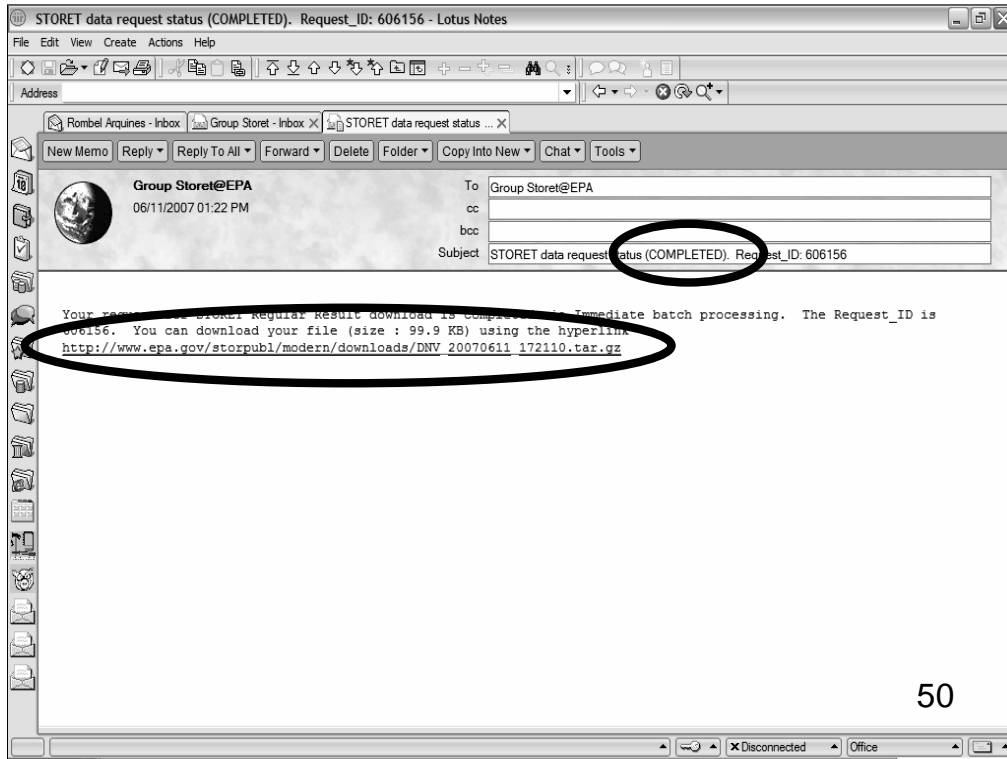
Following is your request information:

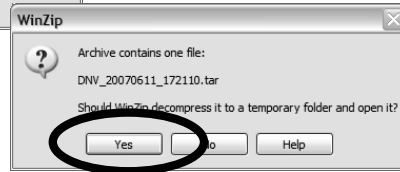
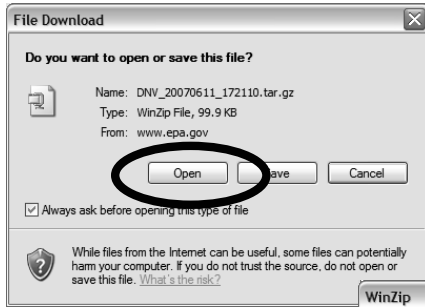
Request ID : 606156
Request Type : Result Download
Record Count : 7733
Request Mode : Immediate batch
File Name : DNV_20070611_172110.tar.gz
URL : http://www.epa.gov/storpubl/modern/downloads/DNV_20070611_172110.tar.gz
Email provided: storet@epa.gov

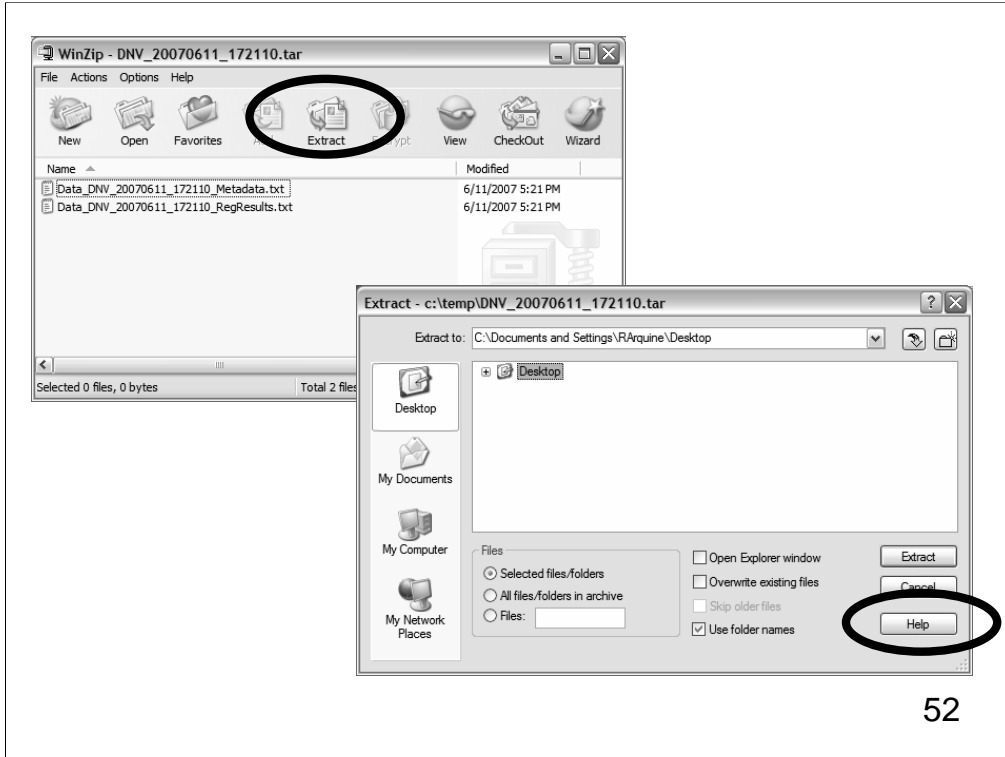
You will be notified when the request is processed.

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X Disconnected Office







52

Questions?

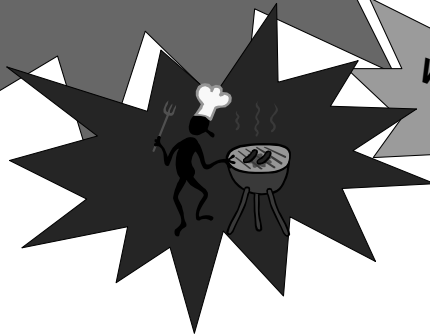


Kristen Gunthardt, IT Specialist, US EPA Monitoring Branch

**Celebrate July by Participating in
the Watershed Academy's 23rd
Webcast:**

AMD&ART, an award-winning
watershed partnership project
combining science and art

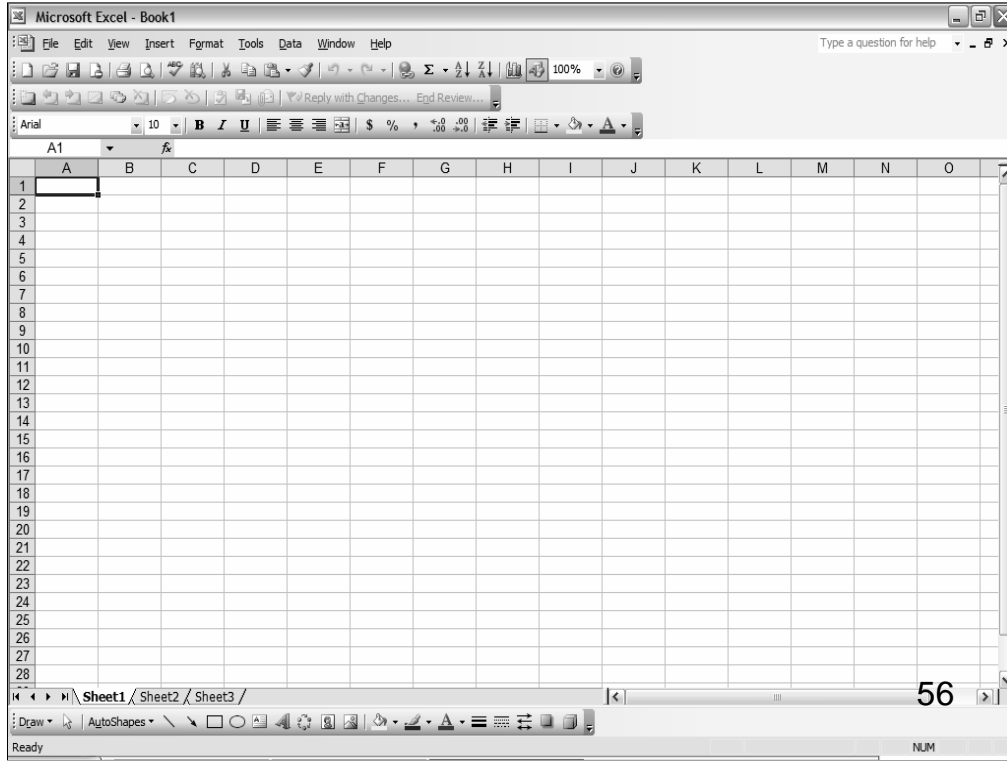
When: July 18th

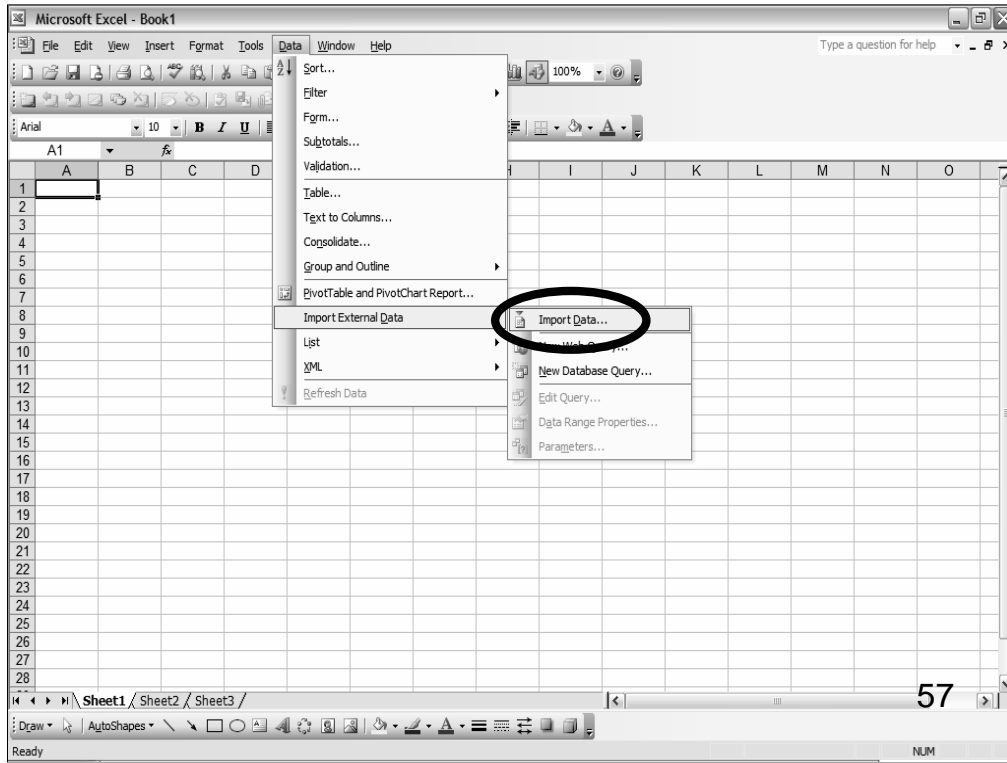


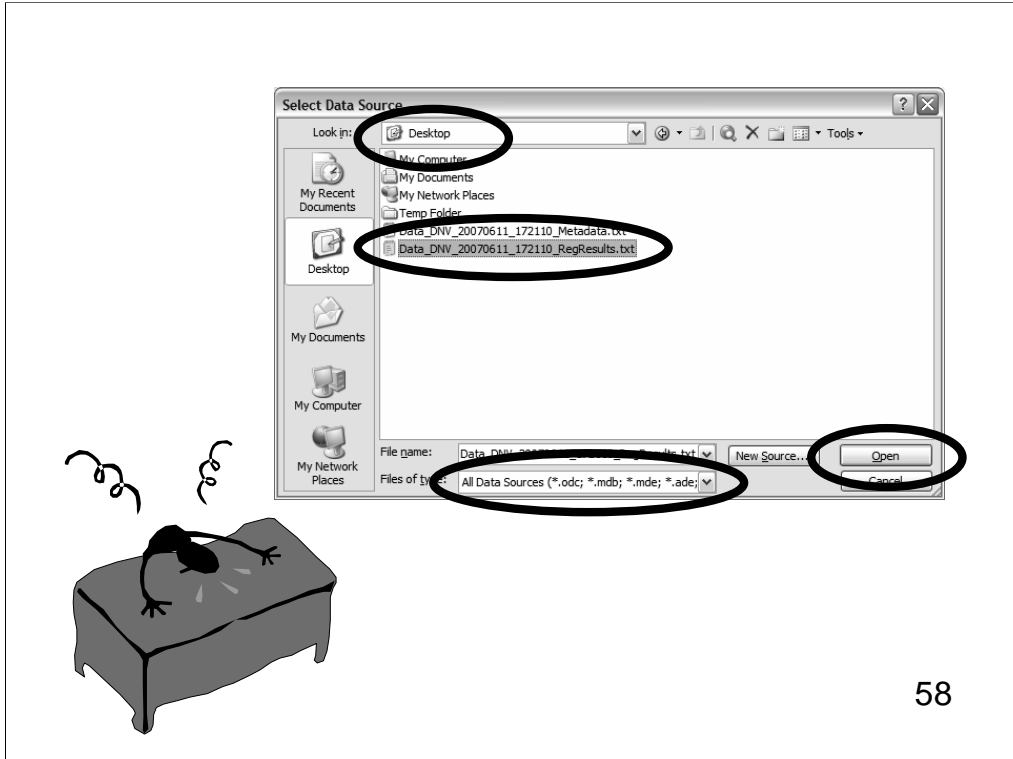
58
54

Now that we have saved the data to our computer, let's move the data into Excel so we can analyze it

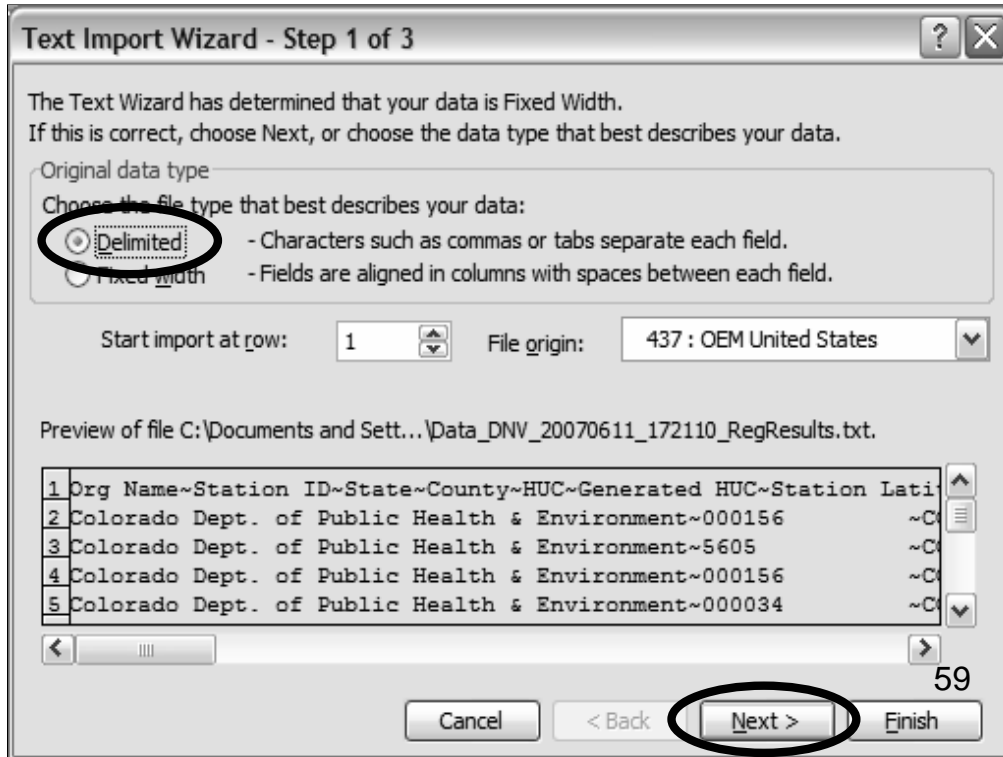
55







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Text Import Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.

Delimiters

Tab Semicolon Comma
 Space Other: ~

Treat consecutive delimiters as one

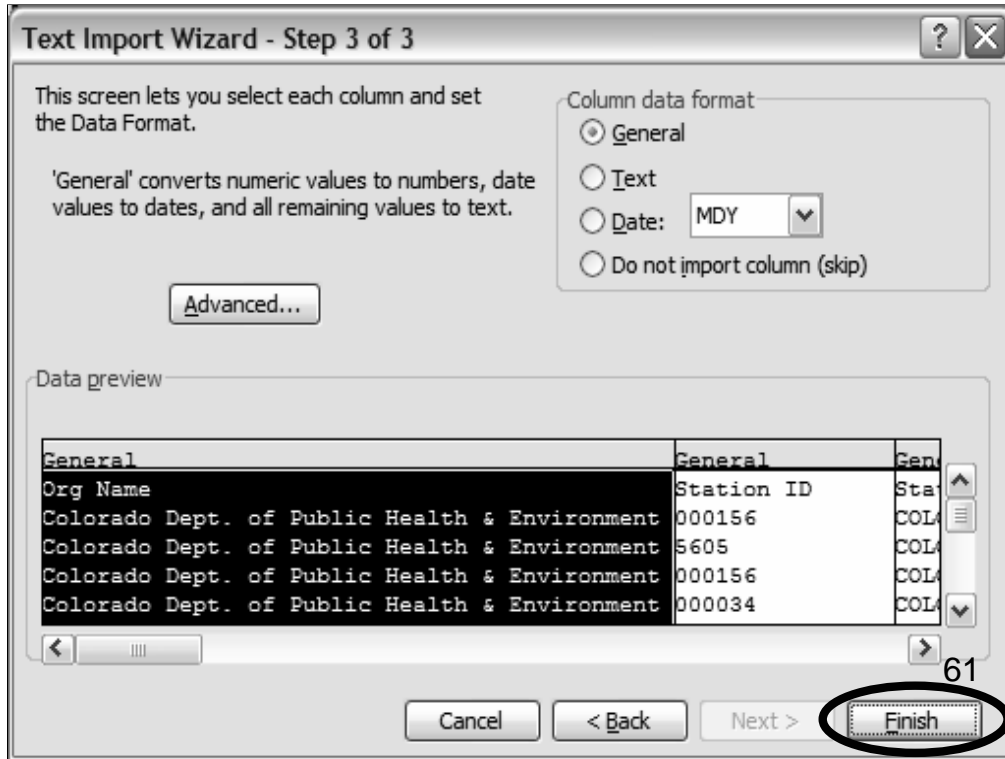
Text qualifier: " ▾

Data preview

Org Name	Station ID	Sta
Colorado Dept. of Public Health & Environment	000156	COLA
Colorado Dept. of Public Health & Environment	5605	COLA
Colorado Dept. of Public Health & Environment	000156	COLA
Colorado Dept. of Public Health & Environment	000034	COLA

60

Cancel < Back **Next >** Finish



Microsoft Excel - 10190003_DO_1990_2007.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

Sort...

Form...
Subtotals...
Validation...
Table...
Text to Columns...
Consolidate...
Group and Outline
PivotTable and PivotChart Report...
Import External Data
List
Mail Merge
Refresh Data

	A	B	C	D	E	F	G	H	I	
	Org Name									
1618	Colorado Dept. of Public Health & Environ		130	COLORADO	WELD	10190003	10190003	40.2252778	-104.8494444	UNK-KWN
1619	Colorado Dept. of Public Health & Environ		130	COLORADO	WELD	10190003	10190003	40.2252778	-104.8494444	UNK-KWN
1620	Colorado Dept. of Public Health & Environ		130	COLORADO	WELD	10190003	10190003	40.2252778	-104.8494444	UNK-KWN
1621	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1622	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1623	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1624	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1625	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1626	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1627	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1628	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1629	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1630	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1631	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1632	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1633	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1634	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1635	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1636	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1637	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1638	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1639	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1640	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1641	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1642	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1643	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1644	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1645	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1646	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1647	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1648	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1649	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1650	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN
1651	Colorado Dept. of Public Health & Environ		156	COLORADO	DENVER	10190003	10190003	39.7597222	-105.0027778	UNK-KWN

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\\Data_req_20070611_131052_RegRes/





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➤ Now that our data is sorted, let's go in and look at an individual station

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Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

Sort... Filter... AutoFilter... Advanced Filter...

	C	D	E	F	G	H
	State	County	HUC	Generated HUC	Station Latitude	Station Longitude
1	Org Name					
2	Colorado Dept. of Public Health & Environ					
3	Colorado Dept. of Public Health & Environ					
4	Colorado Dept. of Public Health & Environ					
5	Colorado Dept. of Public Health & Environ					
6	Colorado Dept. of Public Health & Environ					
7	Colorado Dept. of Public Health & Environ					
8	Colorado Dept. of Public Health & Environ					
9	Colorado Dept. of Public Health & Environ					
10	Colorado Dept. of Public Health & Environ					
11	Colorado Dept. of Public Health & Environ					
12	Colorado Dept. of Public Health & Environ					
13	Colorado Dept. of Public Health & Environ					
14	Colorado Dept. of Public Health & Environ					
15	Colorado Dept. of Public Health & Environ					
16	Colorado Dept. of Public Health & Environ					
17	Colorado Dept. of Public Health & Environ					
18	Colorado Dept. of Public Health & Environ					
19	Colorado Dept. of Public Health & Environ					
20	Colorado Dept. of Public Health & Environ					
21	Colorado Dept. of Public Health & Environ					
22	Colorado Dept. of Public Health & Environ					
23	Colorado Dept. of Public Health & Environ					
24	Colorado Dept. of Public Health & Environ					
25	Colorado Dept. of Public Health & Environ					
26	Colorado Dept. of Public Health & Environ					
27	Colorado Dept. of Public Health & Environ					
28	Colorado Dept. of Public Health & Environ					

66

Sum=5.2616#E+11 NUM

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

Type a question for help

100%

Reply with Changes... End Review...

Arial 10 B I U

A1 Org Name

1	Org Name	Station ID	State	County	HUC	Generated HU	Station Latitud	Station L
2	Colorado Dept. of Public Health & Environment	(All)	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
3	Colorado Dept. of Public Health & Environment	(Top 10...)	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
4	Colorado Dept. of Public Health & Environment	(Custom...)	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
5	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
6	Colorado Dept. of Public Health & Environment	130	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
7	Colorado Dept. of Public Health & Environment	156	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
8	Colorado Dept. of Public Health & Environment	5135	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
9	Colorado Dept. of Public Health & Environment	5145	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
10	Colorado Dept. of Public Health & Environment	5150	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
11	Colorado Dept. of Public Health & Environment	5160	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
12	Colorado Dept. of Public Health & Environment	5165	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
13	Colorado Dept. of Public Health & Environment	5170	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
14	Colorado Dept. of Public Health & Environment	5175	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
15	Colorado Dept. of Public Health & Environment	5185	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
16	Colorado Dept. of Public Health & Environment	5221	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
17	Colorado Dept. of Public Health & Environment	5241	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
18	Colorado Dept. of Public Health & Environment	5245	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
19	Colorado Dept. of Public Health & Environment	5250	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
20	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
21	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
22	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
23	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
24	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
25	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
26	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
27	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104
28	Colorado Dept. of Public Health & Environment	23	COLORADO	ADAMS	10190003	10190003	39.9219444	-104

Sheet1 Sheet2 Sheet3

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Ready Sum=5.2616#E+11 NUM

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

100%

Reply with Changes... End Review...

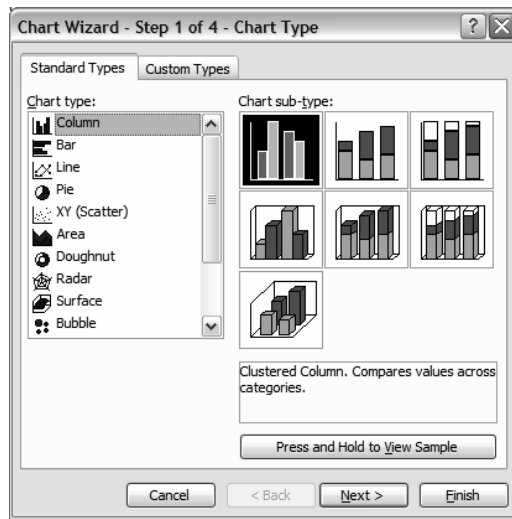
W1109

Chart...

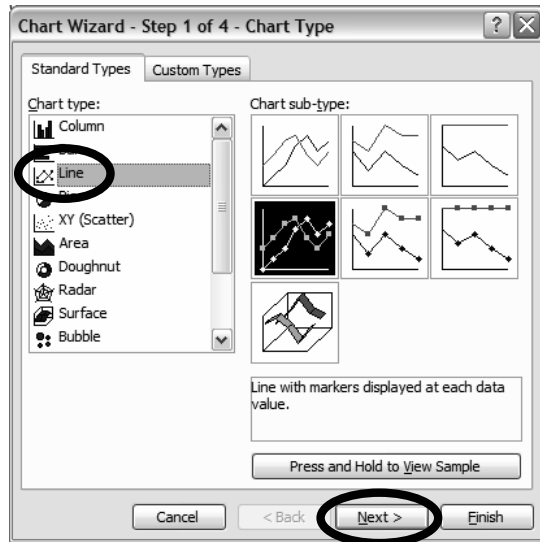
	T	U	V	W	X	Y	Z	AA
1	Activity Depth Uf	Sample Fracti	Value Ty	Statistic Ty	Result Value as	Units	Analytical Proc ID	
951			Actual		10.8	mg/l	USEPA -160.4	
952			Actual		9.5	mg/l	USEPA -160.4	
953			Actual		8.2	mg/l	USEPA -160.4	
954			Actual		7.1	mg/l	USEPA -160.4	
955			Actual		7.6	mg/l	USEPA -160.4	
956			Actual		7	mg/l	USEPA -160.4	
957			Actual		8.5	mg/l	USEPA -160.4	
958			Actual		10	mg/l	USEPA -160.4	
959			Actual		11.2	mg/l	USEPA -160.4	
960			Actual		9.3	mg/l	USEPA -160.4	
961			Actual		12.1	mg/l	USEPA -160.4	
962			Actual		8.4	mg/l	USEPA -160.4	
963			Actual		8.8	mg/l	USEPA -160.4	
964			Actual		8.5	mg/l	USEPA -160.4	
965			Actual		7.5	mg/l	USEPA -160.4	
966			Actual		7.8	mg/l	USEPA -160.4	
967			Actual		8	mg/l	USEPA -160.4	
968			Actual		10	mg/l	USEPA -160.4	
969			Actual		10.8	mg/l	USEPA -160.4	
970			Actual		11.8	mg/l	USEPA -160.4	
971			Actual		12	mg/l	USEPA -160.4	
972			Actual		9.7	mg/l	USEPA -160.4	
973			Actual		10.2	mg/l	USEPA -160.4	
974			Actual		7.9	mg/l	USEPA -160.4	
975			Actual		8.2	mg/l	USEPA -160.4	
976			Actual		8.4	mg/l	USEPA -160.4	
977			Actual		7.5	mg/l	USEPA -160.4	

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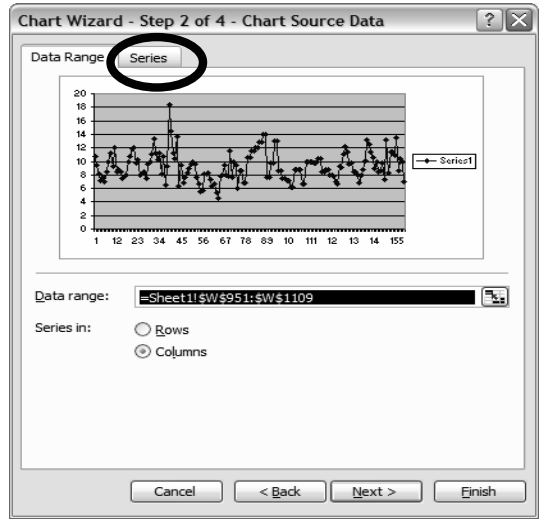
Sum=1477.10999 NUM



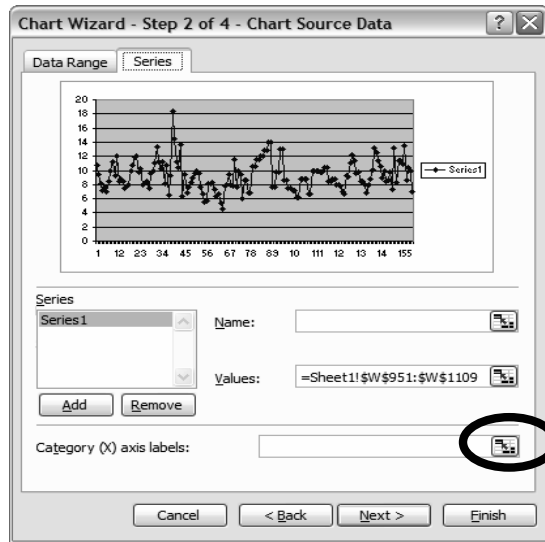
69



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Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help

Type a question for help

100%

Reply with Changes... End Review...

Arial 10 B I U

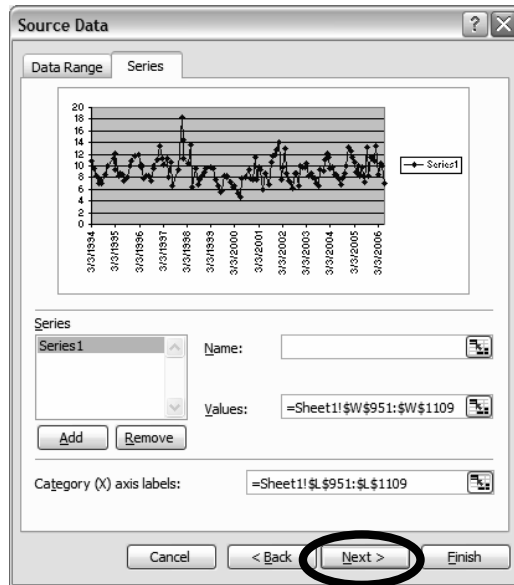
L1109 6/7/2006 4:15:00 PM

	I	J	K	L	M	N	O	P	Q
	Station Horizontal Datum	Visit Number	Activity ID	Activity Start	Activity Start Zone	Activity Medium	Activity Type	Activity Category-Rep Number	Activity Department
951	UNKWN		1 1994-01299LV	3/3/1994 13:17	MST	Water	Sample	Routine Sample	
952	UNKWN		2 1994-01306LV	4/12/1994 12:46	MST	Water	Sample	Routine Sample	
953	UNKWN		3 1994-01305LV	5/12/1994 14:04	MST	Water	Sample	Routine Sample	
954	UNKWN		4 1994-01300LV	6/21/1994 12:34	MST	Water	Sample	Routine Sample	
955	UNKWN		5 1994-01304LV	7/14/1994 13:40	MST	Water	Sample	Routine Sample	
956	UNKWN		6 1994-01303LV	8/10/1994 14:10	MST	Water	Sample	Routine Sample	
957	UNKWN		7 1994-01302LV	9/20/1994 14:35	MST	Water	Sample	Routine Sample	
958	UNKWN					Water	Sample	Routine Sample	
959	UNKWN					Water	Sample	Routine Sample	
960	UNKWN					Water	Sample	Routine Sample	
961	UNKWN		3 1995-01069LV	3/2/1995 12:47	MST	Water	Sample	Routine Sample	
962	UNKWN		4 1995-01068LV	4/17/1995 13:54	MST	Water	Sample	Routine Sample	
963	UNKWN		5 1995-01067LV	5/8/1995 13:25	MST	Water	Sample	Routine Sample	
964	UNKWN		6 1995-01066LV	6/19/1995 12:21	MST	Water	Sample	Routine Sample	
965	UNKWN		7 1995-01065LV	7/17/1995 13:28	MST	Water	Sample	Routine Sample	
966	UNKWN		8 1995-01064LV	8/11/1995 11:40	MST	Water	Sample	Routine Sample	
967	UNKWN		9 1995-01063LV	9/11/1995 14:38	MST	Water	Sample	Routine Sample	
968	UNKWN		10 1995-01062LV	10/5/1995 12:49	MST	Water	Sample	Routine Sample	
969	UNKWN		11 1995-01061LV	11/6/1995 11:21	MST	Water	Sample	Routine Sample	
970	UNKWN		12 1995-01060LV	12/29/1995 13:01	MST	Water	Sample	Routine Sample	
971	UNKWN		1 1996-01948LV	2/28/1996 13:35	MST	Water	Sample	Routine Sample	
972	UNKWN		2 1996-01947LV	3/26/1996 12:39	MST	Water	Sample	Routine Sample	
973	UNKWN		3 1996-01946LV	4/9/1996 11:20	MST	Water	Sample	Routine Sample	
974	UNKWN		4 1996-01945LV	5/16/1996 12:45	MST	Water	Sample	Routine Sample	
975	UNKWN		5 1996-01944LV	6/18/1996 11:06	MST	Water	Sample	Routine Sample	
976	UNKWN		6 1996-01953LV	7/25/1996 13:15	MST	Water	Sample	Routine Sample	
977	UNKWN		7 1996-01949LV	8/27/1996 11:12	MST	Water	Sample	Routine Sample	

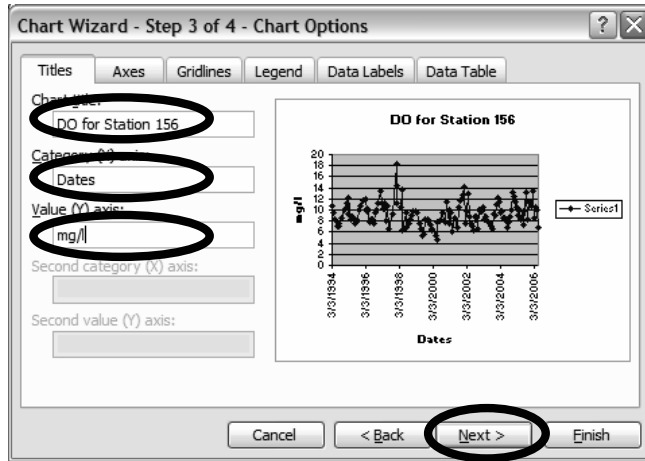
Source Data - Category (X) axis labels:
=Sheet1!\$A\$951:\$A\$1109

73

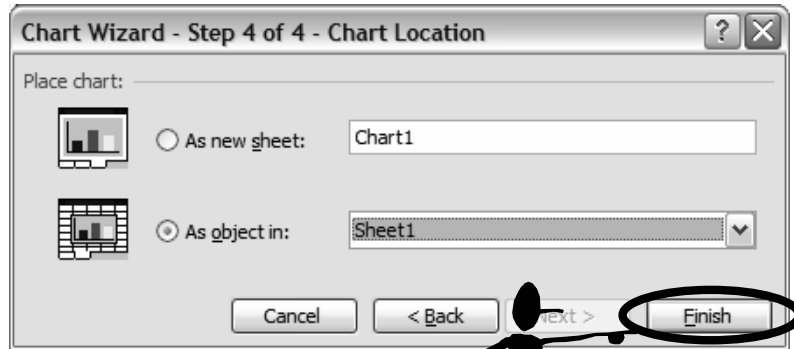
NUM



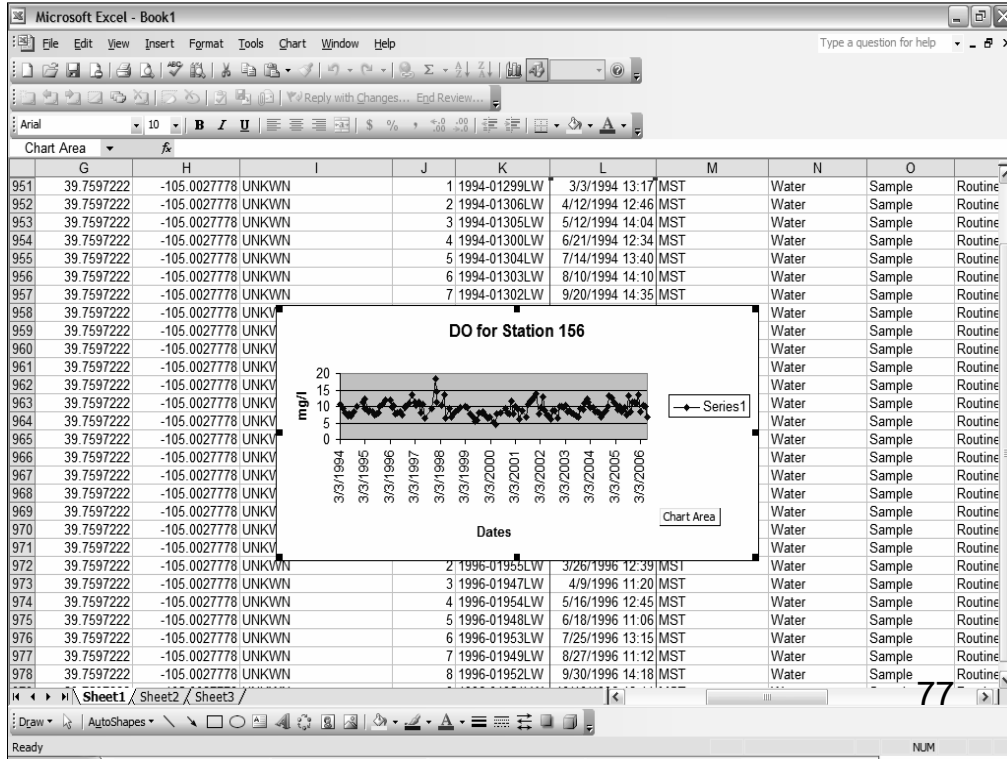
74

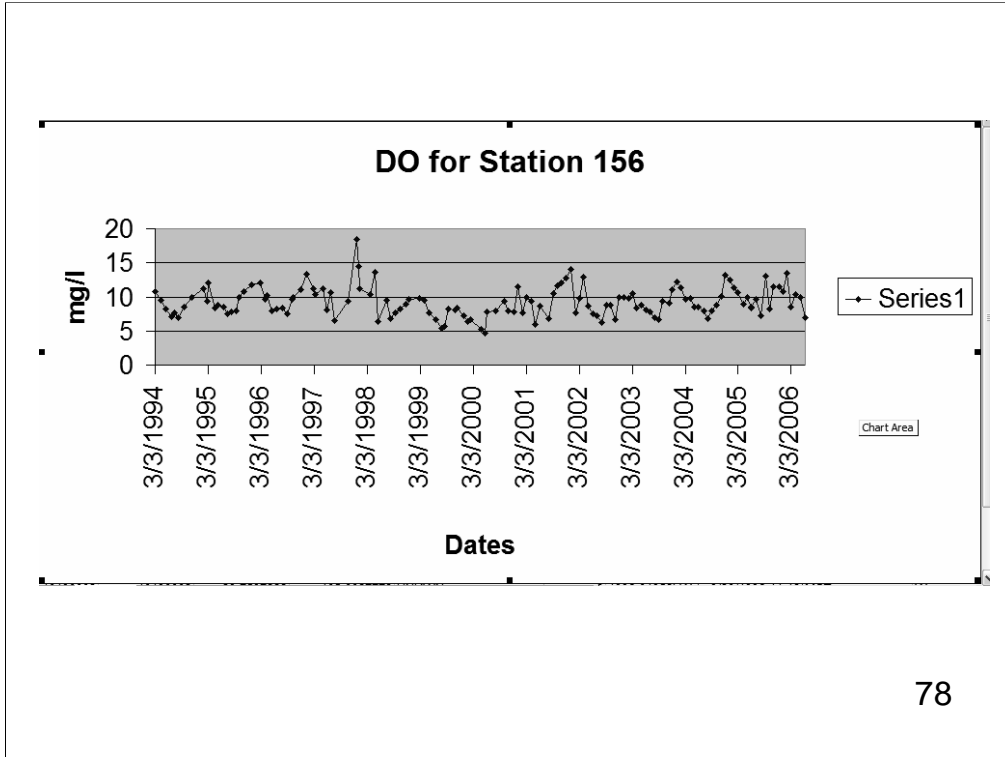


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What Can We Say About This Graph?

- For this station, the DO is seasonal and it looks like there was some type of event in early 1998 that caused a DO spike.
- For context, maybe we should look at the other types of data that are available at this station.
- We can use the Watershed Summary tool again to do just that!

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EPA > STORET > Watershed Summary - Windows Internet Explorer
http://aspub.epa.gov/WatershedSummaryUI/watershed.do

U.S. Environmental Protection Agency

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Results by Watershed

Drainage Basin/HUC
10190003 - Middle South Platte-Cherry Creek

Search By:
 Organization Characteristic Type

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*Watersheds with data.

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Last updated on Friday 16th March, 2007
URL: <http://aspub.epa.gov/80/WatershedSummaryUI/watershed.do>

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EPA > STORET > Watershed Summary - Windows Internet Explorer

http://aspub.epa.gov/WatershedSummaryUI/watershed.do;sessionId=664363a5300e7b136d200768424f9d31c131949c6f72.e34f4b20a3u50y0Qc3LxLuLhN06AmjG5X0q

water monitoring pictures

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EPA > STORET > Waters... X Getting Started in Volunteer ... Page Tools

Results by Watershed

Drainage Basin/HUC
10190003 - Middle South Platte-Cherry Creek

Search By
 Organization Characteristic Type

Query

10 Organizations, 109 Stations, 486 Characteristics, 153,998 Results

Organization

All Organizations of the Watershed

21COU01 - Colorado Dept. of Public Health & Environment 01/01/1901 - 06/07/2006 (54037) Records

- 66 Stations
- 13094 Metal, 2703 Microbiological, 9836 Nutrient, 5268 Other, 20 Pesticide, 21900 Physical, 616 Radiation


AURORA - City of Aurora (Colorado) 10/07/1998 - 12/15/2004 (6807) Records

- 3 Stations
- 1408 Metal, 696 Microbiological, 1157 Nutrient, 378 Other, 3168 Physical

BRIGHTON - City of Brighton (Colorado) 02/03/1999 - 12/15/1999 (495) Records

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EPA > STORET > Watershed Summary > Station Summary - Windows Internet Explorer
 http://iaspub.epa.gov/WatershedSummaryUI/stationSummary.do?orgid=21COL001&huc=10190003



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Station Summary

Hydrologic Unit Code - 10190003
 21COL001 - Colorado Dept. of Public Health & Environment


66 Stations

Station Information

000023 - SOUTH PLATTE R AT HENDERSON	01/01/1901 - 07/11/2001 (14214) Records
3785 Metal , 706 Microbiological , 2202 Nutrient , 1464 Other , 5868 Physical , 189 Radiation .	
000034 - CLEAR CREEK NEAR MOUTH	01/01/1901 - 05/03/2006 (9133) Records
2247 Metal , 503 Microbiological , 1491 Nutrient , 1054 Other , 20 Pesticide , 3671 Physical , 147 Radiation .	
000130 - SOUTH PLATTE RIVER NEAR PLATTEVILLE	05/31/1979 - 09/01/1994 (2939) Records
832 Metal , 103 Microbiological , 512 Nutrient , 289 Other , 1046 Physical , 157 Radiation .	
000156 - SOUTH PLATTE R AT 19TH ST. IN DENVER	03/03/1994 - 06/07/2006 (4908) Records
2091 Metal , 201 Microbiological , 790 Nutrient , 265 Other , 1445 Physical , 115 Radiation .	
0112053796-1 - INLET AFTER HUDSON OFF O'BRIAN	05/02/1975 - 05/16/1975 (44) Records
4 Microbiological , 14 Nutrient , 6 Other , 20 Physical .	

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EPA > STORET > Watershed Summary > Station Summary - Windows Internet Explorer
 http://iaspub.epa.gov/WatershedSummaryUI/stationSummary.do?orgid=21COL001&huc=10190003



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Station Summary

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EPA > STORET > STORET Station Home Page - Windows Internet Explorer
 http://aspub.epa.gov/storpub/storet_wme_pkg.Display_Station/p_station_id=0001568p_org_id=21COL001

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EPA Home > Water > Wetlands, Oceans, & Watersheds > Monitoring and Assessing Water Quality > STORET > Station Information

	Number of Results	Date Range
Iron	334	1994-03-03 2006-06-07
Copper	198	1994-03-03 2006-06-07
Manganese	198	1994-03-03 2006-06-07
Zinc	198	1994-03-03 2006-06-07
Cadmium	197	1994-03-03 2006-06-07
Nitrogen, Nitrite (NO2) + Nitrate (NO3) as N	197	1994-03-03 2006-06-07
Nitrogen, ammonia (NH3) + ammonium (NH4)	197	1994-03-03 2006-06-07
Sulfur, sulfate (SO4) as SO4	197	1994-03-03 2006-06-07
Hardness, Ca + Mg	195	1994-03-03 2006-06-07
Lead	195	1994-03-03 2006-06-07
Phosphorus as P	195	1994-03-03 2006-06-07
Nitrogen, Kjeldahl	172	1994-03-03 2006-06-07
Silver	172	1994-03-03 2006-06-07
Selenium	170	1995-01-31 2006-06-07
Solids, Dissolved	167	1994-03-03 2005-02-02
Solids, Total Suspended (TSS)	167	1994-03-03 2005-02-02
Alkalinity, Total (total hydroxide+carbonate+bicarbonate)	166	1994-03-03 2006-06-07
Dissolved oxygen (DO)	159	1994-03-03 2006-06-07
Temperature, water	159	1994-03-03 2006-06-07
pH	145	1994-03-03 2006-06-07
Mercury	142	1994-03-03 2005-02-02
Temperature, air	138	1994-03-03 2006-02-01
Aluminum	134	1995-11-06 2005-05-04
Arsenic	117	1998-04-29 2005-02-02
Uranium	115	1999-02-23 2005-02-02

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Watershed Characterization

- We've pulled some site specific water quality monitoring data from the STORET Warehouse
- This type of data, used along with other information about your watershed, can help you characterize it

Future Developments

- Soon, you will be able to submit data to the STORET Warehouse with an easy to use Web tool for smaller organizations
- This tool will be available in early 2008 for physical and chemical parameters, and later in 2008 for biological parameters

What Will You Need to Use the Tool?

- An Internet connection

- Your data organized in these categories
 - Projects (Why data was collected)
 - Stations (Where data was collected)
 - Results (When, How and What was collected)

An Invitation

- EPA is developing this tool so that users can walk through the process of submitting a simple file to the STORET Warehouse
- As we develop this tool, we'd like your feedback as to how it works
- Watch for future Webcasts where you can share your thoughts

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Questions?



Randy E. Hill, IT Specialist, US EPA Monitoring Branch

Dwane Young, IT Specialist, US EPA Monitoring Branch



Kristen Gunthardt, IT Specialist, US EPA Monitoring Branch

www.epa.gov/storet
Email us: storet@epa.gov
Call us: 1800-424-9067

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Now That You've Seen the Webcast, Let Us Know What You Thought...

<http://www.clu-in.org/conf/tio/owstoret/feedback.cfm>

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<http://www.clu-in.org/conf/tio/owstoret/resource.cfm>

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