Ambient-Metals of New Jersey, Series DGS05-2, Edition 20140114

Metadata also available as

Metadata:

Identification_Information:
Citation:
Citation_Information:
Originator:
New Jersey Department of Environmental Protection (NJDEP), NJ Geological and Water Survey (NJGWS)
Publication_Date: 20040315
Title: Ambient-Metals of New Jersey, Series DGS05-2, Edition 20140114
Edition: 20140114
Geospatial_Data_Presentation_Form: vector digital data
Series_Information:
Series_Name: Digital Geodata Series
Issue_Identification: DGS05-2
Publication_Information:
Publication_Place: Trenton, NJ
Publisher: New Jersey Department of Environmental Protection (NJDEP)
Online_Linkage: <http://www.state.nj.us/dep/njgs/geodata/index.htm>
Online_Linkage: <http://www.nj.gov/dep/gis/listall.html>
Description:
Abstract:
Trace elements are inorganic chemicals that generally occur at concentrations less than 1 mg/L in water. Metals and metalloids are classified as trace elements. They occur naturally in ground water but can also be introduced or

mobilized by man's activities. Because of the toxic nature of some trace elements, water managers and scientists across the United States rate trace elements among the highest-priority issues for the National Water-Quality Assessment (NAWQA) program. The trace elements analyzed for in the Ambient Ground Water Quality Monitoring Network include: Arsenic Dissolved as As, Barium Dissolved as Ba, Cadmium Dissolved as Cd, Chromium Dissolved as Cr, Copper Dissolved as Cu, Iron Dissolved as Fe, Lead Dissolved as Pb, Manganese Dissolved as Mn, Silver Dissolved as Ag, Zinc Dissolved as Zn, Selenium Dissolved as Se, Mercury Dissolved as Hg, Beryllium Dissolved as Be, Thallium Dissolved as Tl, Antimony Dissolved as Sb, and Aluminum Dissolved as Al. Concentrations are reported in micrograms per liter, ug/l. This update (2013) includes the data from the completed second sampling cycle of all 150 wells which comprise the redesigned NJAGWQMN.
Purpose:
Ground-water quality data from the Ambient Ground Water Quality Monitoring Network was and is being collected to increase our understanding of water quality as it relates to the geologic character of various aquifers and non-point source impacts from land use. This data set was established to allow all interested parties easy access to the network data in a visual format.
Supplemental_Information:
New Jersey's Ambient Ground-Water Quality Network (AGWQN) is a cooperative program between the New Jersey Department of Environmental Protection (NJDEP) and United States Geological Survey (USGS) that started in 1983 when it was discovered that the ambient ground-water quality data was needed, yet lacking, in New Jersey. Since it's inception, over 500 existing and installed wells have been sampled. Historically, chemical and physical parameters analyzed included: 1) Field parameters such as pH and specific conductance, 2) Major ions, 3) Metals, 4) Nutrients, 5) Radioactivity, and 6) Volatile organic compounds. In the redesigned shallow-well network described below pesticides have also been added. During the first few years an intensive ground-water survey was conducted in a northern valley-fill aquifer system (> 50 wells, data not in this dataset) and some regional sampling was conducted in the coastal plain of southern New Jersey. In 1986 a lack of data in the northern bedrock portion of the state was recognized and finalized goals for the network were established. Those goals were: 1) Determine chemical ranges of ground-water constituents within and between rock types, 2) Determine geochemical reasons for the differences observed, and 3) Determine long term trends in ambient water quality by resampling using an 8 to 20 year cycle.
-99999 implies the constituent was detected but the concentration could not be quantified or was estimated below the reporting limit and the confidence in the concentration determination is not acceptable for standard reporting. Note: an

estimated value can also be designated for other reasons. See the annual USGS Water-Data Reports NJ-(year of interest) for the estimated values and an explanation. The actual estimated value is not shown in this database. A zero (0) implies no sampling was performed for that parameter.
Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1987
Ending_Date: 2013
Currentness_Reference: ground condition
Status:
Progress: Complete
Maintenance_and_Update_Frequency: As needed
Spatial_Domain:
Bounding_Coordinates:
West_Bounding_Coordinate: -75.593271
East_Bounding_Coordinate: -73.890308
North_Bounding_Coordinate: 41.357794
South_Bounding_Coordinate: 38.849424
Keywords:
Theme:
Theme_Keyword_Thesaurus: ISO 19115 Topic Category
Theme_Keyword: environment
Theme:
Theme_Keyword_Thesaurus: EPA GIS Keyword Thesaurus
Theme_Keyword: Ambient
Theme_Keyword: Ground Water
Theme_Keyword: Land Use
Theme_Keyword: Metal
Theme_Keyword: NJDEP
Theme_Keyword: NJGS
Theme_Keyword: Water
Theme_Keyword: Well
Theme:
Theme_Keyword_Thesaurus: User
Theme_Keyword: NJDEP
Theme_Keyword: Water Quality Monitoring Locations
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: State of New Jersey
Access_Constraints: None

Use_Constraints:
New Jersey Department of Environmental Protection (NJDEP)
Data Use and Distribution Agreement
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Point_of_Contact:

Contact_Information:
Contact_Person_Primary:
Contact_Person: Bousenberry, Raymond
Contact_Organization: NJDEP, NJGWS
Contact_Position: Research Scientist 2
Contact_Address:
Address_Type: mailing and physical address
Address: 29 Arctic Pkwy, P.O. Box 420, Mail Code: 29-01
City: Trenton
State_or_Province: NJ
Postal_Code: 08625-0420
Contact_Voice_Telephone: 609-984-6587
Contact_Electronic_Mail_Address: Raymond.Bousenberry@dep.nj.gov
Contact_Instructions: via email
Security_Information:
Security_Classification_System: FIPS Pub 199
Security_Classification: No Confidentiality
Security_Handling_Description: Standard Technical Controls

Data_Quality_Information:
Logical_Consistency_Report: Tests for integrity have not been performed
Completeness_Report:
No information on the features represented regarding omissions, selection criteria, generalization, definitions used, and other rules used to derive the data set.
Positional_Accuracy:
Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report: None
Lineage:
Source_Information:
Source_Citation:
Citation_Information:
Originator: NJDEP, NJ Geological and Water Survey
Publication_Date: 20040315
Title: Ambient-Metals
Edition: 20140114
Series_Information:
Series_Name: NJGS Digital Geodata Series
Issue_Identification: DGS05-2
Publication_Information:
Publication_Place: Trenton, NJ

Publisher: NJDEP, NJ Geological and Water Survey
Online_Linkage: <http://www.state.nj.us/dep/njgs/geodata/dgs05-2.htm>
Type_of_Source_Media: online
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1987
Ending_Date: 2008
Source_Currentness_Reference: publication date
Source_Citation_Abbreviation: Metals
Source_Contribution:
1)U.S. Geological Survey NWIS database: <http://waterdata.usgs.gov/nwis/>
2) U.S. Geological Survey Annual Water Resources Reports for water year (1982-present)
Process_Step:
Process_Description:
This update (2014) includes the data from the completed second sampling cycle of all 150 wells which comprise the redesdigned NJAGWQMN
Process_Date: 2013
Process_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Bousenberry, Raymond
Contact_Organization: NJDEP, NJGWS
Contact_Position: Research Scientist 2
Contact_Address:
Address_Type: mailing address
Address: 29 Arctic Pkwy, Box 420, Mail Code 29-01
City: Trenton
State_or_Province: NJ
Postal_Code: 08625-420
Contact_Voice_Telephone: 609-984-6587
Contact_Electronic_Mail_Address: Raymond.Bousenberry@dep.nj.gov
Contact_Instructions: via email
Process_Step:
Process_Description:
This update (2007) includes the data from the remaining 57 wells (sampled in 2003 and 2004) out of the 150 wells which comprise the redesigned NJAGWQMN. This data completes one full sampling cycle of the network.
Process_Date: 2007
Process_Contact:

Contact_Information:
Contact_Person_Primary:
Contact_Person: Bousenberry, Raymond
Contact_Organization: NJDEP, NJGWS
Contact_Position: Research Scientist 2
Contact_Address:
Address_Type: mailing address
Address: 29 Arctic Pkwy, Box 420, Mail Code 29-01
City: Trenton
State_or_Province: NJ
Postal_Code: 08625-420
Contact_Voice_Telephone: 609-984-6587
Contact_Electronic_Mail_Address: Raymond.Bousenberry@dep.nj.gov
Contact_Instructions: via email

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Entity point
Point_and_Vector_Object_Count: 150

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: State Plane Coordinate System
State_Plane_Coordinate_System:
SPCS_Zone_Identifier: 2900
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 0.000100
Ordinate_Resolution: 0.000100
Planar_Distance_Units: survey feet
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 1980
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222
Vertical_Coordinate_System_Definition:

Altitude_System_Definition:
Altitude_Datum_Name: North American Vertical Datum of 1988
Altitude_Resolution: 0.000100
Altitude_Distance_Units: feet
Altitude_Encoding_Method:
Explicit elevation coordinate included with horizontal coordinates

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Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Entity_Type_Label: Metals
Entity_Type_Definition: Ambient-Metals
Entity_Type_Definition_Source: NJDEP/NJGWS
Attribute:
Attribute_Label: OBJECTID
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain:
Sequential unique whole numbers that are automatically generated.
Attribute:
Attribute_Label: Shape
Attribute_Definition: Feature Geometry
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Coordinates defining the features
Attribute:
Attribute_Label: GWSI_Numbe
Attribute_Definition: Groundwater Site Inventory Number
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: MW
Attribute_Definition: Monitoring Well Number
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Hydroname
Attribute_Definition: Name of Aquifer

Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Land_Use
Attribute_Definition: Land Use Designation
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Geoname
Attribute_Definition: Name of stratigraphic unit
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: GeoAbb
Attribute_Definition: Abbreviation for stratigraphic unit
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: County
Attribute_Definition: County Name
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Municipali
Attribute_Definition: Municipality Name
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Latitude
Attribute_Definition: (DDMMSS)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Longitude

Attribute_Definition: (DDMMSS)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Easting
Attribute_Definition: State Plane Feet
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Northing
Attribute_Definition: State Plane Feet
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: STAID
Attribute_Definition: Station ID Number
Attribute_Definition_Source: USGS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: Dates
Attribute_Definition: Date Sampled
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01000
Attribute_Definition: Arsenic Dissolved as As (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01005
Attribute_Definition: Barium Dissolved as Ba (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:

Attribute_Label: P01010
Attribute_Definition: Beryllium Dissolved as Be (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01020
Attribute_Definition: Boron Dissolved as B (ug/L)
Attribute_Definition_Source: NJDEP/NJGS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01025
Attribute_Definition: Cadmium Dissolved as Cd (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01030
Attribute_Definition: Chromium Dissolved as Cr (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01040
Attribute_Definition: Copper Dissolved as Cu (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01046
Attribute_Definition: Iron Dissolved as Fe (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01049
Attribute_Definition: Lead Dissolved as Pb (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique

Attribute:
Attribute_Label: P01056
Attribute_Definition: Manganese Dissolved as Mn (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01057
Attribute_Definition: Thallium Dissolved as Tl (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01065
Attribute_Definition: Nickel Dissolved as Ni (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01075
Attribute_Definition: Silver Dissolved as Ag (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01090
Attribute_Definition: Zinc Dissolved as Zn (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01095
Attribute_Definition: Antimony Dissolved as Sb (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01106
Attribute_Definition: Aluminum Dissolved as Al (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:

Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P01145
Attribute_Definition: Selenium Dissolved as Se (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Attribute:
Attribute_Label: P71890
Attribute_Definition: Mercury Dissolved as Hg (µg/L)
Attribute_Definition_Source: NJDEP/NJGWS
Attribute_Domain_Values:
Unrepresentable_Domain: Unique
Overview_Description:
Entity_and_Attribute_Overview:
-99999 implies the constituent was detected but the concentration could not be quantified or was estimated below the reporting limit and the confidence in the concentration determination is not acceptable for standard reporting. Note: an estimated value can also be designated for other reasons. See the annual USGS Water-Data Reports NJ-(year of interest) for the estimated values and an explanation. The actual estimated value is not shown in this database. A zero (0) implies no sampling was performed for that parameter.
Note: Attribute headings may be truncated in Shapefile format. Additionally, the attribute OBJECTID is changed to FID in the Shapefile format.
Entity_and_Attribute_Detail_Citation:
For detection limits, analytical methods, etc., reference USGS annual reports "Water Resources Data - New Jersey" for the year of interest.

Distribution_Information:
Distributor:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Bousenberry, Raymond
Contact_Organization: NJDEP, NJGWS
Contact_Position: Research Scientist 2
Contact_Address:
Address_Type: mailing and physical address
Address: 29 Arctic Pkwy, P.O. Box 420, Mail Code: 29-01
City: Trenton
State_or_Province: NJ
Postal_Code: 08625

Contact_Voice_Telephone: 609-984-6587
Contact_Electronic_Mail_Address: Raymond.Bousenberry@dep.nj.gov
Contact_Instructions: via email
Resource_Description: Downloadable Data
Distribution_Liability:
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Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Format_Name: AVSHP
Format_Version_Number: 10.x
Transfer_Size: 0.004
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: <http://www.state.nj.us/dep/njgs/geodata/dgs05-2.htm>
Fees: None

Metadata_Reference_Information:
Metadata_Date: 20140327
Metadata_Future_Review_Date: 20180114
Metadata_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Bousenberry, Raymond
Contact_Organization: NJDEP, NJGWS
Contact_Position: Research Scientist 2
Contact_Address:
Address_Type: mailing and physical address
Address: 29 Arctic Pkwy, P.O. Box 420, Mail Code: 29-01
City: Trenton

State_or_Province: NJ
Postal_Code: 08625-0420
Contact_Voice_Telephone: 609-984-6587
Contact_Electronic_Mail_Address: Raymond.Bousenberry@dep.nj.gov
Contact_Instructions: via email
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Time_Convention: local time
Metadata_Extensions:
Online_Linkage: <http://www.esri.com/metadata/esriprof80.html>
Profile_Name: ESRI Metadata Profile

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