TCEQ Surface Water Quality Monitoring Stations

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Identification_Information:

Citation:

Citation_Information:

Originator: Texas Commission on Environmental Quality
Publication_Date: 20120220
Title: SW_ADM.TCEQ_SW_SWQM_STATIONS
Geospatial_Data_Presentation_Form: vector digital data
Publication_Information:

Publication_Place: Austin, Texas
Publisher: Texas Commission on Environmental Quality

Online_Linkage:

Description:

Abstract:
This layer contains active and historical TCEQ Surface Water Quality Monitoring Stations for the entire state of Texas. The locations for this layer were obtained from TCEQ surface water quality monitoring programs and from other entities including but not limited to: Texas Commission on Environmental Quality (TCEQ), or predecessor agencies Engineering/Environmental firms U.S. Geological Survey (USGS) Texas Department of Health (TDH) Councils of Governments Local Governments River Authorities and Utility Districts Texas Parks and Wildlife Department (TPWD) Railroad Commission of Texas (RRC) U.S. Army Corps of Engineers (USACE) Texas Institute of Applied Environmental Research (TIAER) University of Texas Marine Science Institute (UTMSI) Texas A & M University Corpus Christi Center for Coastal Studies (TAMUCC CCS) Underground Water Conservation Districts International Boundary and Water Commission (IBWC) This layer was built using the best existing location data available from these sources. All location data has been reviewed by the custodian, but some errors may still remain. If data users identify errors, they are encouraged to provide details to the custodian to facilitate correction.

Purpose:
This dataset is intended for general purpose use, to determine locations of current and historical surface water quality monitoring stations as maintained by TCEQ. It is intended for use in planning future monitoring efforts and for reference when requesting surface water quality monitoring data from the TCEQ.

Time_Period_of_Content:
Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20120220

Currentness_Reference: ground condition

Status:

Progress: In work
Maintenance_and_Update_Frequency: As needed

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_COORDINATE: -106.631111
East_Bounding_COORDINATE: -93.041280
North_Bounding_COORDINATE: 36.468521
South_Bounding_COORDINATE: 25.850000

Keywords:

Theme:

Theme_Keyword_Thesaurus: None
Theme_Keyword: surface water quality monitoring station

Place:

Place_Keyword: Texas

Access_Constraints: None.
Use_Constraints:

None. Acknowledgment of the Texas Commission on Environmental Quality in products derived from this dataset would be appreciated.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Elizabeth Fawcett
Contact_Organization:

Texas Commission on Environmental Quality, Office of Compliance and Enforcement, Monitoring Operations Division, Data Management and Quality Assurance Section

Contact_Position: Monitoring Data/GIS Specialist
Contact_Address:

Address_Type: mailing address
Address: P.O. Box 13087 (MC-165)
City: Austin
State_orProvince: Texas
Postal_Code: 78711-3087
Country: USA

Contact_Voice_Telephone: (512) 239-3966
Contact_Facsimile_Telephone: (512) 239-1605
Contact_Electronic_Mail_Address: efawcett@tceq.state.tx.us

Hours_of_Service:
7:00 AM to 5:30 PM Monday through Thursday, excluding Texas and Federal holidays.

Contact_Instructions: E-mail is preferred.

Native_Data_Set_Environment:
Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.3.1.4000

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:
All records are maintained by the dataset custodian. All known inaccuracies and omissions have been corrected, though some may still exist. Those who identify errors within the dataset are urged to contact the data custodian to initiate a correction.

Logical_Consistency_Report:
All data are generated by request of monitoring entities providing surface water quality monitoring data to the TCEQ. These requests for addition of new or changes to existing station records are reviewed and approved by the custodian of this dataset. These data are not consistent with the station inventory in the TCEQ Regulatory Activities and Compliance System (TRACS) database and in the case of conflicts should be considered primary.

Completeness_Report:
All records are maintained by the dataset custodian. All known inaccuracies and omissions have been corrected, though some may still exist. Those who identify errors within the dataset are urged to contact the data custodian to initiate a correction.

Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:
Beginning in June of 2003, a project to verify and update all SWQM station records to meet TCEQ locational data standards was implemented. A team within the Data Management and Quality Assurance Section at the TCEQ used the most recent available USGS 7.5 minute topographic quadrangles and 1-meter (or better) resolution digital orthophoto quadrangles (DOQQs) to map, verify, correct, and augment the station records from TRACS. This dataset is the result of this review.

Quantitative_Horizontal_Positional_Accuracy_Assessment:

Horizontal_Positional_Accuracy_Value: 25 m
Horizontal_Positional_Accuracy_Explanation:
Assume that the plotted location represents the actual location in the station verbal description within 25 meters.

Lineage:

Source_Information:

Source_Citation:
Citation Information:

Originator: Texas Commission on Environmental Quality
Publication Date: October 18, 2005
Publication Time: Unknown
Title: TCEQ Surface Water Quality Monitoring Stations
Edition: October 18, 2005

Source Scale Denominator: None.
Type_of Source Media: Relational Database
Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: January 12, 2006

Source Currentness Reference: publication date

Source Citation Abbreviation: SWQM Stations
Source Contribution:
All records are maintained by the dataset custodian. All known inaccuracies and omissions have been corrected, though some may still exist. Those who identify errors within the dataset are urged to contact the data custodian to initiate a correction.

Process Step:

Process Description:
Latitude and longitude were corrected to fall in the appropriate location, based on existing site descriptions and original Station Location Request (SLOC) maps. In some cases, where there was no SLOC record, the description lacked specificity, and no record of a monitoring entity using the station recently existed in TRACS, the description was simply enhanced to better describe the existing lat/long. All missing values (most frequently HUC-8, short description, station type, and county information) were added to create complete records. Additional metadata (accuracy and datum information, for example) previously absent were generated to complete the dataset.

Source Used Citation Abbreviation: SWQM Stations
Process Date: 20030601

Process Step:

Process Description:
ArcGIS software is used to create a point shapefile from ASCII or Access data extracted from the TRACS database.

Source Used Citation Abbreviation: SWQM TRACS
Process Date: 20040806

Process Step:

Process Description: Metadata imported.
Source Used Citation Abbreviation: P:\SLOC_stuff\SWQM_Stations_12172005.shp.xml

Process Step:

Process Description: Metadata imported.
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: 9180

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000
Longitude_Resolution: 0.000000
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Vertical_Coordinate_System_Definition:

Altitude_System_Definition:

Altitude_Resolution: 1.000000
Altitude_Encoding_Method:
   Explicit elevation coordinate included with horizontal coordinates

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: SW_ADM.TCEQ_SW_SWQM_STATIONS
Entity_Type_Definition:
   Active and historical surface water quality monitoring stations used by the Texas Commission on Environmental Quality in Texas, surrounding states, and Mexico.

Attribute:
Attribute Label: Shape
Attribute Definition: Feature geometry.
Attribute Definition Source: ESRI
Attribute Domain Values:

Unrepresentable Domain: Coordinates defining the features.

Attribute:

Attribute Label: OBJECTID
Attribute Definition: TCEQ-specific station type.
Attribute Definition Source:
A modified subset of EPA stream station type codes. A valid value list/domain applies.
Attribute Value Accuracy Information:

Attribute Value Accuracy: 100%
Attribute Value Accuracy Explanation: Values have been reviewed by the data custodian.

Attribute:

Attribute Label: STATION_ID

Attribute:

Attribute Label: LAT_DD

Attribute:

Attribute Label: LONG_DD

Attribute:

Attribute Label: HORZ_METH

Attribute:

Attribute Label: HORZ_ACC

Attribute:

Attribute Label: HORZ_REF

Attribute:

Attribute Label: HORZ_DATE

Attribute:

Attribute Label: HORZ_ORG

Attribute:

Attribute Label: HORZ_DATUM

Attribute:

Attribute Label: USGS_GAUGE
Attribute:
  Attribute_Label: EPA_TYPE1
Attribute:
  Attribute_Label: EPA_TYPE2
Attribute:
  Attribute_Label: EPA_TYPE3
Attribute:
  Attribute_Label: EPA_TYPE4
Attribute:
  Attribute_Label: EPA_TYPE5
Attribute:
  Attribute_Label: SHORT_DESC
Attribute:
  Attribute_Label: LONG_DESC
Attribute:
  Attribute_Label: BASIN_ID
Attribute:
  Attribute_Label: CNTY_ID
Attribute:
  Attribute_Label: CNTY_NME
Attribute:
  Attribute_Label: ECO_REGION
Attribute:
  Attribute_Label: HYDR_UNIT
Attribute:
  Attribute_Label: ON_SEG_FLG
Attribute:
  Attribute_Label: SEG_ID
Attribute:
Attribute Label: STREAM_SEQ

Attribute:

Attribute Label: TWC_DIST_I

Attribute:

Attribute Label: stream_seq

Attribute:

Attribute Label: STATION_NU
Attribute Definition: Feature geometry.
Attribute Definition Source: ESRI
Attribute Domain Values:

Unrepresentable Domain: Coordinates defining the features.

Attribute:

Attribute Label: NOTES

Attribute:

Attribute Label: station_id
Attribute Definition: Unique identifier of a monitoring location. A TRACS key field.
Attribute Definition Source: SWQM Stations
Attribute Value Accuracy Information:

Attribute Value Accuracy: 100%
Attribute Value Accuracy Explanation: This is the unique identifier for these records in the SWQM module of the TRACS database.

Attribute:

Attribute Label: lat_dd
Attribute Definition: Latitude in decimal degrees.
Attribute Definition Source: SWQM Stations
Attribute Value Accuracy Information:

Attribute Value Accuracy: 25 m
Attribute Value Accuracy Explanation: These values have been verified as matching the station verbal description within 25 meters.

Attribute:

Attribute Label: long_dd
Attribute Definition: Longitude in decimal degrees.
Attribute Definition Source: SWQM Stations
Attribute Value Accuracy Information:

Attribute Value Accuracy: 25 m
Attribute Value Accuracy Explanation: These values have been verified as matching the station verbal description within 25 meters.
Attribute:

Attribute_Label: horz_meth
Attribute_Definition: Horizontal collection method.
Attribute_Definition_Source: Various. May be noted on request for station creation or maintenance, or may be dictated by the custodian of this dataset during review.
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: All records are assigned a value, either from existing records or through review by the data custodian.

Attribute:

Attribute_Label: horz_acc
Attribute_Definition: Horizontal accuracy.
Attribute_Definition_Source: Determined by the data custodian during review.
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 25 m
Attribute_Value_Accuracy_Explanation: Determined by the data custodian during review; must be 25 meters or greater in accuracy.

Attribute:

Attribute_Label: epa_type5
Attribute_Definition: TCEQ-specific station type.
Attribute_Definition_Source: A modified subset of EPA stream station type codes. A valid value list/domain applies.
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: Values have been reviewed by the data custodian.

Attribute:

Attribute_Label: short_desc
Attribute_Definition: TCEQ-specific station type.
Attribute_Definition_Source: A modified subset of EPA stream station type codes. A valid value list/domain applies.
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: Values have been reviewed by the data custodian.

Attribute:

Attribute_Label: long_desc
Attribute_Definition: TCEQ-specific station type.
Attribute_Definition_Source: A modified subset of EPA stream station type codes. A valid value list/domain applies.
Attribute_Value_Accuracy_Information:
Attribute: horz_ref
- **Attribute Label:** horz_ref
- **Attribute Definition:** Horizontal reference.
- **Attribute Definition Source:** Not applicable for this dataset. Default value is "OTHER."
- **Attribute Value Accuracy Information:**
  - **Attribute Value Accuracy:** 100%
  - **Attribute Value Accuracy Explanation:** Value is always "OTHER" for this dataset. This attribute is irrelevant for TCEQ Surface Water Quality Monitoring Program purposes.

Attribute: usgs_gauge
- **Attribute Label:** usgs_gauge
- **Attribute Definition:** Closest associated TCEQ classified stream segment ID.
- **Attribute Definition Source:** TCEQ, TCEQ
- **Attribute Value Accuracy Information:**
  - **Attribute Value Accuracy:** 100%
  - **Attribute Value Accuracy Explanation:** These values have been 100% reviewed by the data custodian.

Attribute: horz_datum
- **Attribute Label:** horz_datum
- **Attribute Definition:** Horizontal datum.
- **Attribute Definition Source:**
  - Horizontal reference datum of coordinates represented in the lat_dd and long_dd fields. Valid value list/domain applies.
- **Attribute Value Accuracy Information:**
  - **Attribute Value Accuracy:** 100%
  - **Attribute Value Accuracy Explanation:** This value is noted by the requestor and confirmed by the data custodian during review.

Attribute: epa_type1
- **Attribute Label:** epa_type1
- **Attribute Definition:** TCEQ-specific station type.
- **Attribute Definition Source:**
  - A modified subset of EPA stream station type codes. A valid value list/domain applies.
- **Attribute Value Accuracy Information:**
  - **Attribute Value Accuracy:** 100%
  - **Attribute Value Accuracy Explanation:** Values have been reviewed by the data custodian.

Attribute: horz_date
- **Attribute Label:** horz_date
- **Attribute Definition:** Horizontal date
Attribute Definition Source: The date on which the horizontal coordinate was collected.

Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: Value is dictated by the requestor or determined by the data custodian during review.

Attribute:

Attribute_Label: epa_type2
Attribute_Definition: Hydrologic Unit Code, 8-digit
Attribute_Definition_Source: EPA River Reach File 3
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: Values have been reviewed by the data custodian.

Attribute:

Attribute_Label: horz_org
Attribute_Definition: Horizontal organization.
Attribute_Definition_Source: Code representing the organization that measured the latitude/longitude. Valid value list/domain applies.
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: Noted as the organization of the requestor or as the TCEQ if location is determined by the data custodian during review.

Attribute:

Attribute_Label: basin_id
Attribute_Definition: Long description.
Attribute_Definition_Source: Longer narrative description of the station location.
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 25 m
Attribute_Value_Accuracy_Explanation: These values have been verified as matching the station latitude and longitude within 25 meters.

Attribute:

Attribute_Label: cnty_id
Attribute_Definition: Texas river basin number.
Attribute_Definition_Source: TCEQ
Attribute_Value_Accuracy_Information:

Attribute_Value_Accuracy: 100%
Attribute_Value_Accuracy_Explanation: Values for this field have been 100% reviewed by the data custodian.

Attribute:
Attribute Label: cnty_nme  
Attribute Definition: Country name.  
Attribute Definition Source: TCEQ  
Attribute Value Accuracy Information:  
  Attribute Value Accuracy: N/A  
  Attribute Value Accuracy Explanation: Optional field, often blank.

Attribute:  
Attribute Label: station_nu  
Attribute Definition: SWQM TRACS legacy station number.  
Attribute Definition Source: Old tracking number, no longer used.  
Attribute Value Accuracy Information:  
  Attribute Value Accuracy: N/A  
  Attribute Value Accuracy Explanation: Only older station records have a value in this field. New stations should leave this field blank.

Attribute:  
Attribute Label: eco_region  
Attribute Definition: Texas county name.  
Attribute Definition Source: TCEQ  
Attribute Value Accuracy Information:  
  Attribute Value Accuracy: 100%  
  Attribute Value Accuracy Explanation: These values have been 100% reviewed by the data custodian.

Attribute:  
Attribute Label: on_seg_flg  
Attribute Definition: Location description (extra field).  
Attribute Definition Source: TCEQ  
Attribute Value Accuracy Information:  
  Attribute Value Accuracy: N/A  
  Attribute Value Accuracy Explanation: Optional field, rarely used.

Attribute:  
Attribute Label: epa_type3  
Attribute Definition: TCEQ-specific station type.  
Attribute Definition Source: A modified subset of EPA stream station type codes. A valid value list/domain applies.  
Attribute Value Accuracy Information:  
  Attribute Value Accuracy: 100%  
  Attribute Value Accuracy Explanation: Values have been reviewed by the data custodian.

Attribute:  
Attribute Label: on_seg_flg  
Attribute Definition: On/Off TCEQ classified stream segment flag.  
Attribute Definition Source: TCEQ
Attribute Value Accuracy Information:

Attribute Value Accuracy: 100%
Attribute Value Accuracy Explanation: These values have been 100% reviewed by the data custodian.

Attribute:

Attribute Label: seg_id
Attribute Definition: EPA river reach ID.
Attribute Definition Source: EPA, TCEQ
Attribute Value Accuracy Information:

Attribute Value Accuracy: N/A
Attribute Value Accuracy Explanation: This field is maintained for archive purposes and not updated.

Attribute:

Attribute Label: epa_type4
Attribute Definition: TCEQ-specific station type.
Attribute Definition Source: A modified subset of EPA stream station type codes. A valid value list/domain applies.
Attribute Value Accuracy Information:

Attribute Value Accuracy: 100%
Attribute Value Accuracy Explanation: Values have been reviewed by the data custodian.

Attribute:

Attribute Label: SHAPE
Attribute Definition: Feature geometry.
Attribute Definition Source: ESRI
Attribute Domain Values:

Unrepresentable Domain: Coordinates defining the features.

Attribute Value Accuracy Information:

Attribute Value Accuracy: 100%
Attribute Value Accuracy Explanation: Values have been reviewed by the data custodian.

Overview Description:

Distribution Information:

Resource Description: Downloadable Data
Distribution Liability: Cite the TCEQ as data owner and publisher
Standard Order Process:

Digital Form:

Digital Transfer Information:

Transfer Size: 0.231