CWQMN Data Collection Summaries – Pecos River near Coyanosa, TX

TCEQ installed the first CWQMN network s in 2001. Multiprobe data collection and data quality assessment protocols evolved over the years. TCEQ develops CWQMN Data Collection Summaries to provide information about historical data collection and potential data quality issues. The current revision of the CWQMN QAPP details the most recent data collection procedures, data quality assessment procedures, data quality objectives, and data validation procedures for each network.
The Pecos River Basin CWQMN sub-network includes nine (9) stations from near Red Bluff, NM, to near Langtry, TX. The sub-network collects continuous water quality monitoring data to support the Pecos River Watershed Protection Plan, the Pecos River Interstate Compact Commission, and TCEQ data needs. The Pecos River sub-network includes:

- CAMS 788 – Pecos River near Red Bluff, NM
- CAMS 798 – Pecos River near Orla, TX
- CAMS 807 – Pecos River at FM3398
- CAMS 710 – Pecos River near Pecos, TX
- CAMS 709 – Pecos River near Coyanosa, TX
- CAMS 785 – Pecos River near Girvin, TX
- CAMS 735 – Pecos River near Sheffield, TX
- CAMS 729 – Pecos River at Brotherton Ranch, TX
- CAMS 764 – Independence Creek at Caroline T-5 Spring, TX
- CAMS 799 – Pecos River near Langtry, TX

Go to station data for Pecos River near Coyanosa.

CAMS 709 Pecos River near Coyanosa, TX: Real-time water quality monitoring since 9/22/2004

- Multiprobe Measurement Parameters:
  Dissolved Oxygen, pH, Specific Conductance, and Temperature
- Multiprobe Measurement Equipment:
  Greenspan CS4-1200 multiprobe - 9/22/2004 - 8/11/2010. CS4-1200 multiprobes do not correct dissolved oxygen measurements for the effects of salinity on the solubility oxygen in water. Dissolved oxygen data collected with CS4-1200 are corrected for this effect using calculations found in Standard Methods. Corrected data are identified as Corrected Dissolved Oxygen (2).
  YSI 6-Series multiprobe (optical dissolved oxygen sensor) - 8/17/2011 – present
- Multiprobe Data Collection Information:
  No records of deployment tube being cleaned with chimney brush prior to 10/18/2005.
  In 2004, TCEQ deployed the multiprobe in a PVC tube in the stream channel. The original deployment tube included relatively small widely spaced circulation holes. Over time, silt and aquatic vegetation inundated the deployment tube.
  TCEQ temporarily suspended data collection beginning 8/11/2010.
  On 8/17/2010, TCEQ installed a new deployment tube with 48 evenly spaced 1-inch diameter holes per linear foot at the lower two feet of the deployment tube. Deployment tube employed in the stream channel. Data collection resumed on 8/17/2011.
  On 9/1/2011 USGS began operating the according to USGS procedures (TM1D3).
- Multiprobe Data Quality Measurement Information:

Multiprobe sensors and deployment tubes deployed on the Pecos River can experience sediment fouling. Fouling can compromise data quality.
On9/1/2011, USGS began measuring sensor/deployment tube fouling as part of service visits. Prior to 9/1/2011, only sensor calibration drift measurements were made for data validation purposes.

CAMS 709 Pecos River near Coyanosa, TX: Real-time gage height and Discharge since 3/9/2005

- Measurement Equipment:
  SonTek Side Looking Acoustic Doppler Current Profiler (ADCP) – 3/9/2005 – 10/1/2007
  Design Analysis H350/355 Bubbler – 10/1/2007 - Present
- Data Collection Information:
  Beginning 3/9/2005 until 10/1/2007 a vendor was contracted to collect stream discharge data. No written procedures are available. As part of station service, the operator cleaned sediment and aquatic vegetation off the ADCP.
  Beginning July 2007, USGS started collecting stream discharge data according to USGS procedures.
- Data Quality Measurement Information:
  No data quality assessment information is available for data collected by ADCP. These data have not been validated.
  Beginning 10/1/2007, USGS started processing and validating data according to their procedures.