

# TEXAS CLEAN RIVERS PROGRAM FOR THE RIO GRANDE BASIN

## PECOS RIVER COORDINATED MONITORING MEETING

April 28, 2011  
10:00 a.m. – 12:00 p.m.  
Midland, Texas

### Meeting Participants:

Commissioner JW Thrasher Jr., Pecos River  
Compact Commission  
Mitch Conine, TSSWC  
Amy Porter, Upper Pecos SWCD  
Robin Prewit, Red Bluff WPCD  
Cary D. Carman, USGS San Angelo  
Alan R Zeman  
Michael McCulloch  
Gary Bryant, Texas AgriLife  
Jared H. Basurto, TCEQ Midland  
Michael Edminston, TCEQ Midland

Greg Larson, TCEQ Midland  
Liz Verdecchia, USIBWC CRP  
Leslie Grijalva, USIBWC CRP  
Julie McEntire, TCEQ CRP  
Christine Kolbe, TCEQ SWQM  
Patrick Dearen, Pecos River Resolution Corp.  
Darryl L. Dippel, Property Owners Association,  
Pandale Area  
Aaron Hoff, TWRI (on phone)  
Lucas Gregory, TWRI (on phone)

### Meeting Notes:

- Welcome/ Introductions. Apologies for any inconvenience with meeting time changes.
- Watershed Protection Plan (WPP)
  - Gary provided an overview of the WPP. This is part of the 319 Grant program and is aimed at the producers – what can be done to eliminate the source of pollution, such as moving cattle out of the river, watering areas, etc. The individual producers can clean up their section of the river through the cost-share program, thereby having an overall improvement effect.
  - The salt cedar beetles are still out but haven't been seen this year yet.
  - Burning program for the Girvin south area – plan to burn salt cedar that has been sprayed previously.
  - Will also be spraying additional salt cedar patches in August/September 2011. (EPA and TSSWC is funding the spraying.)
  - DO modeling for impairment through 2010 – get an idea of what needs to be done to improve the DO.
  - Aaron is analyzing the data from 2006 to 2010. EC and TDS are not paralleling as they should. Need to get correlation in order to accurately calculate salt loading. Conversion factors are ranging from 0.71 to 0.73 for the Pecos. He is verifying

with TCEQ data. Questioned CWQM data, which seems to “drift” after a week of deployment, dipping to lower numbers that are not as accurate. Greg says he validates data every other week at Cohanosa and Girvin, and every 3 weeks for the lower Pecos. Aaron wants to have an extremely accurate salt load calculation so he will look at what data to clip from the CWQM dataset. Currently using hour dataset, and he can still have a good dataset even after drift data is clipped.

- DO discussion: With a higher EC, the limit of saturation for DO is less, but DO is also affected by other things. DO drops first thing in the morning. Biological effects result in adequate DO during the day but drops in the early morning. There are 2 predominant salt-tolerant algae species in the Pecos: cladophora (filamentous algae) and chara. How far back does the historical DO data go? Probably 1960's or later.
- Can sulfur be causing problems and not the high conductivity? Stakeholder indicated that in Salt Creek, the salinity is extremely high and algae growth is limited. Some algae grow in high salinity, such as golden algae, which is on the Concerns list but actually hasn't been found in a while.
- CWQM Site update:
  - The Cohanosa site is down this fiscal year. It was silted up and the site will have to be re-engineered.
  - The Pecos site will be moved to the bridge for a logistically better site.
  - Girvin site will be operated by TCEQ Midland. Waiting for the project plan to be signed for this. Sites will also have new instruments.
  - USGS NM will operate Red Bluff site. On May 9 they will install the structure then they will need monitoring equipment as well as the QAPP document outlining all the CWQM changes.
  - Red Bluff is releasing now.
- Pecos Aquatic Life Monitoring. TCEQ, IBWC and TPWD conducted aquatic life monitoring this past winter in the Upper Pecos. Results of the study should be available by the end of this year. Previous reports are available on the USIBWC CRP Studies page. Showed 9 minute video which is available on the USIBWC CRP Gallery website at <http://www.ibwc.gov/CRP/gallery.htm#videogallery>, or directly on YouTube at <http://www.youtube.com/watch?v=YYZNYoCt65s>. Everything mentioned in the video is native except for the carp.
- Christine mentioned that she participated in the Lower Pecos monitoring this winter, which also took place this winter. The study includes CWQM site data as well as benthics and fish.
- Senate Bill 3 (Environmental Flows) Process is not going on in the Rio Grande Basin. Gary is on the scientific committee, along with Alan and Michael, and Ping Sheng from AgriLife. Directed to concentrate on Presidio to Amistad, which includes the Pecos and Devils River. Might recommend that they divide that into

river and estuarine. Liz mentioned that there is a binational group already working on the environmental flows with NPS, TWPS, WWF, USFWS and suggested they coordinate. They are looking at the flows from the Conchos, since that makes up most of flow below Presidio. Yes, they are on the scientific committee including Jeff Bennett from NPS and Aimee Roberson from USFWS.

- Other projects briefly mentioned were a windmill project and rainfall generation over Red Bluff.
- Salinity assessments in the Pecos. Lucas discussed new project plan with USGS and Texas AgriLife to have helicopter electromagnetic surveys. El Paso AgriLife will pair EM data with groundwater assessment and ground-based geophysical data to get a high resolution model that will isolate bulk of salts. Looking at beginning next year; currently working out budget and proposal issues. Going to Soil Board for funding considerations, but will hopefully be funded by EPA with 319 funding. Focus areas are Pecos to Girvan and Red Bluff to Orla.
- Discussion of Standards, Impairments and Concerns.
  - TCEQ uses the data we collect to assess the river basin by comparing to standards. What doesn't meet standards is impaired (303d List). A concern is listed for a parameter that is high but there is no standard (nutrients, chlorophyll) or for a parameter that is almost not meeting the standard.
  - Question: Why is the standard for TDS in the Upper Pecos so high? (15,000 mg/l) How is this # so high and can it be changed? The TCEQ Standards group develops the standard based on historical records. Chris added that when the source is thought to be natural (as in the Pecos which is draining the Permian Sea), the tendency is to bump the standard up. Patrick said he has found historical data showing the salts were not that high. Now though there are groundwater sources feeding river with salt. Greg said that as long as he's been at TCEQ (20+ years), the standard has been 15,000. If you lower the standard, and don't meet it, then the segment winds up on the 303d List. Right now we are voluntarily addressing salt, but if it were on the 303d List we would be required to reduce salt. Standards are reviewed every 3 years by TCEQ and questions/comments can be directed at TCEQ water quality standards work group.
  - Discussion of bacteria concern in 2311\_05. When E. coli testing began they noted that high salinity may be causing problems in the form of false positives. The standards were revised in 2010 to have entero as the bacteria indicator in the Pecos. However, there is currently no data since TCEQ hasn't found a lab to do Entero within 8 hours of collection.
- Watershed Action Planning Process.
  - This is a new state-wide process to determine the strategies for addressing water quality issues. Process involves stakeholder input. The Pecos sub-basin is ahead

of the game because they already have a strategy through the Watershed Protection Plan.

- Commissioner Thrasher asked if IBWC has secured federal funding to assist with salinity in the Pecos River. Liz recommended that he discuss this with Commissioner Drusina.
- Discussion of Coordinated Monitoring Schedule
  - TCEQ Midland said that if the TCEQ regional office loses any more funding or more staff, the sampling will be cut. Christine explained that the signature for the QAPP to operate the CWQM stations was procedural and not contractual. If funding is cut, CWQM stations would be what would be pulled, not the routine stations, since that data is required for the State of Texas to meet Clean Water Act requirements. A contingency plan was requested in the event that Greg left the agency.
  - Discussion of CWQM vs routine monitoring stations. Greg's handout on sampling states that he samples 6 stations on a quarterly basis, 2 more stations at Red Bluff twice a year, and two more stations on Beals Creek twice a year. He also maintains 5 CWQM stations plus he will also maintain the 6<sup>th</sup> station at Girvin. Maintenance varies from once a month to twice a month. He is also doing monthly 24-hour DO at Independence Creek and monthly golden algae sampling at 3 stations. See attachment.
  - Michael asked if the station on his property, Horsehead, was no longer part of the routine sampling. That was included in the special study which ended last year, and the data is being analyzed by TWRI.
  - Can we sample the releases? Not really feasible unless we had advance notice to plan routine monitoring around it.
  - Why are metals being tested quarterly at 2 stations? Just for screening purposes. Data is available on USIBWC CRP webpage in a spreadsheet on metals. Looks like there are not many metals detected except iron.
  - No other changes to CMS
- Other
  - 2011 Basin Highlights Report for the Rio Grande Basin in Texas is finalized and posted on the USIBWC CRP website <http://www.ibwc.gov/CRP/Publications.htm>. Submissions for next year's report, including photographs summaries of projects/research going on in the basin, are welcome. Send to Liz. Thanks to Lucas, Aaron, and Christine for this year's Pecos submissions.

### **Changes to the FY12 Monitoring Schedule**

- None

## **AGENDA**

- 10:00 Welcome/Introductions
- 10:15 Update on Pecos River Studies
- Pecos River Watershed Protection Plan and Implementation (Gary Bryant, Lucas Gregory)
  - Continuous Water Quality Monitoring Stations (Greg Larson, Chris Kolbe)
  - Upper Pecos River Aquatic Life Monitoring
  - Other on-going projects
- 10:55 Watershed Action Planning Process (TCEQ)
- Discussion of TCEQ's Draft 2010 Integrated Report and 2010 Texas Surface Water Quality Standards
  - Identification of water quality issues, data gaps, sources
- 11:20 Monitoring Schedule
- Discussion of current monitoring & FY 2012 Monitoring Schedule
  - Potential future projects and potential new sites
- 11:45 Miscellaneous updates/announcements:
- Updates to the Basin Highlights Report and USIBWC CRP calendars
- 12:00 Final comments and adjourn