

Accessing Produced Water Data in New Mexico: Improving and Updating the NM Produced Water Quality Database and Web Site

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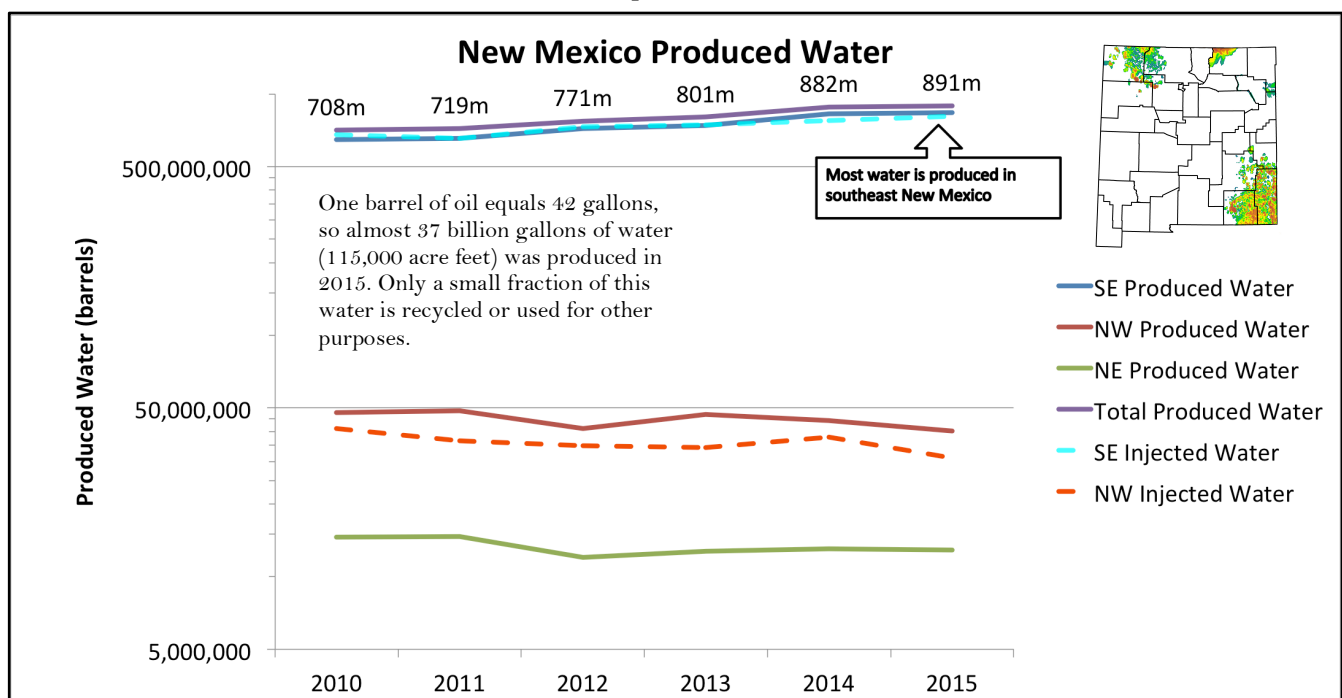
Petroleum Recovery Research Center, at New Mexico Tech
Funding from WRII State Water Assessment

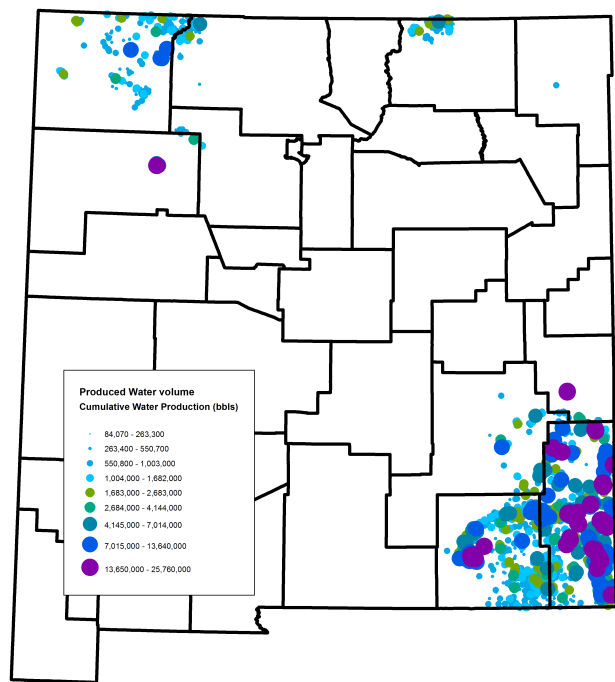
This project has upgraded and expanded the New Mexico Produced Water Quality database (NM PWQD) and has reinstated online availability of the database through both the GO-TECH website and WRII's web mapping interface.

Water produced as a byproduct of oil and gas production represents a large potential water resource in New Mexico. This significant volume of water is a very dispersed, largely uncharacterized, and extremely variable water source. Almost all this water is reinjected; some for pressure maintenance and improved oil recovery, but mostly as a means of disposal. A significant amount of produced water could potentially be diverted to other uses if economic, regulatory, and technological hurdles can be overcome.

In order for produced water to be considered for anything other than disposal, we must first know more about the waters. Some of the questions that must be considered include:

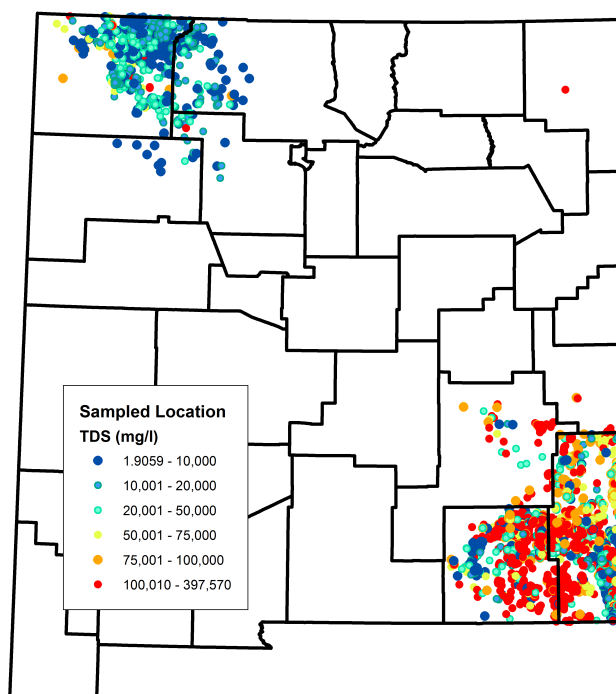
- Where is it being produced?
 - Is production localized or dispersed?
- What amount is being produced?
 - Is the volume in a local area enough to warrant reuse in some other process?
- What is in the water?
 - Most produced water has large amounts of salt or other dissolved minerals that must be removed or are acceptable for the alternative use.





Water volume can be analyzed to find areas where there is more water available. South-eastern New Mexico oil and gas fields produce significantly more water as compared with the northwestern part of the state (left). Areas with high water production might be ideal places to site an industrial process that needed large volumes of water but that were not as concerned with water quality.

Water quality can be a critical factor for any potential use. Some processes can use water with very high total dissolved solids (TDS). For example, many oil service companies can now use high salinity water for their hydraulic fracturing jobs. Agriculture, on the other hand, must have relatively low TDS water. While almost any water can be cleaned to any desired quality, the expense can be too great. The northwestern part of New Mexico clearly has the advantage of lower salinity.



Production Data

Well Data

NM Pricesheet

Projects

Software

Other Links

Help

North American Oil and Gas News

Technight Energy Resources reaches total depth on University Roaders B-19 #1 well

Tecan Well Services announces changes to board of directors and management

S&P Global Platts acquires RigData

Increased field decline on mature fields is becoming visible

Source: Oil Voice

NYMEX LS Crude 49

Waha Hub Gas 2,389

Henry Hub 2,489

Updated: 6/20/16

State Land Office Data Access

OOD well/log image files

PRRC NM-TECH NM-BGMR

PRODUCED WATER DATA SEARCH

Data in the New Mexico Produced Water Quality Database v2 was updated in 2016 for the first time in many years. Data should be used for general informational purposes only. The uncertainties in data collection procedures, analysis quality and specific sample sources make it unusable as a basis for any significant business or policy decisions. Data was gathered from many sources and about 5400 distinct wells in NM are represented. More data exists for most samples than is provided by the results screen; the downloadable spreadsheet contains more information including field, formation, sample source (where available), and latitude/longitude.

Funding for the database was provided by the U.S. DOE, various New Mexico State agencies, NMT, and WRRI.

SEARCH PANEL

API NUMBER Example: 3004511439

WELL NAME (State) TOWNSHIP RANGE SECTION

Too many or not enough results? Change your search criteria and press the Submit button to improve results. There may be more information for these samples. For all available data including lat/long location, press EXPORT to EXCEL to create a downloadable file.

RESULT PANEL

WELLNAME	API	TOWNSHIP	RANGE	SECTION	Tds(Mg/L)	Chloride(Mg/L)
STATE J #004	3002501147	14S	33E	23	36121.6	18249.8
STATE J #006	3002501149	14S	33E	23	36098.3	19649.3
STATE J #007	3002501150	14S	33E	23	35595.2	17163.5
STATE JO #001	3002500354	15S	32E	33	117536	71040
STATE J 2 #008	3002508747	22S	36E	02	7810	3073
STATE J 2 #012	3002508730	22S	36E	02	5968	2828
STATE J #006	3002501149	14S	33E	23	28553	13600
STATE J #006	3002501149	14S	33E	23	64000	35800
STATE J #006	3002501149	14S	33E	23	45720	24600
STATE L#002	3002501150	14S	33E	23	60100	26200

The New Mexico Produced Water Quality Database can be searched from the GO-TECH web site or using the web mapping service at WRRI.

GOTECH:
<http://octane.nmt.edu/gotech/Water/producedwater.aspx>
 WRRI:
http://nmwrri.nmsu.edu/?page_id=4864