



Taos Soil and Water Conservation District

BOARD OF SUPERVISORS



Maureen Johnson
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(North)



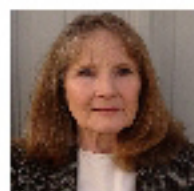
Stephen Trujillo
Vice Chairman
(At-Large)



Anthony Benson
Secretary/Treasurer
(West)

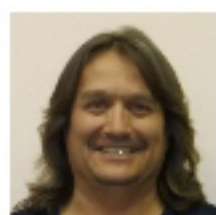


Andy Martinez
Supervisor
(South)



Mary Lane Leslie
Supervisor
(Appointed)

Staff



Peter Vigil
District Manager



Charlotte Martinez
Administrative Assistant



Matthew Valerio
Survey & Design
Technician



Tanya Duncan
Managerial Assistant



Javier Martinez
Field Technician

FY 2013-2014

Taos Soil and Water Conservation District completed a very successful program year. Expenditures for District program for FY 2013-14 totaled approximately **\$873,900**. These funds assisted local landowners in conserving natural resources throughout Taos County. Approximately **55%** of those expenditures were spent on conservation programs, education and capital outlay as opposed to **45%** for administration. During the past year, **51** major cost share conservation projects were completed serving nearly **695** landowners and benefiting approximately **2,913** acres of private land. The following is a financial summary of the conservation effort put forth by Taos Soil and Water Conservation District this past operating year.

Acequia Projects	\$184,300
Animal Damage	\$ 31,900
Fire Prevention	\$ 77,100
GIS Mapping	\$ 10,000
Vegetative Management	\$ 4,800
Rangeland Conservation	\$ 12,000
Stream Restoration	\$ 1,700
Special Projects	\$ 3,600
Water Program	<u>\$ 13,700</u>
Program Total	\$339,100
Education and Outreach	\$ 58,000
Capital Outlay	\$ 79,600
Administrative Costs	\$397,200
Total Expenditures	\$873,900

URANIUM OCCURANCE IN HONDO-SECO GROUNDWATER, TAOS COUNTY, NM

**STONE, W.J. GERVASON, R. AND BENSON, A.L.,
Taos Soil and Water Conservation District**

rongeo45@gmail.com and benson1@newmex.com

Testing for Uranium has been completed in domestic water wells in the Arroyo Hondo, Des Montes, Arroyo Seco and El Salto neighborhoods of central Taos County. Water quality analyses funded by Taos SWCD have found locations south of the Rio Hondo that approach or exceed EPA drinking standards.

Uranium occurrences are in alluvial fan clastic facies extending from the Sangre de Cristo Mountains westward for 10 miles to the Rio Grande Gorge. The uranium source rock is probably the mid-Tertiary granitic plutons or late-stage rhyolitic dikes in the mountain headwaters that eroded into the Tertiary-Quaternary alluvial fan complex.

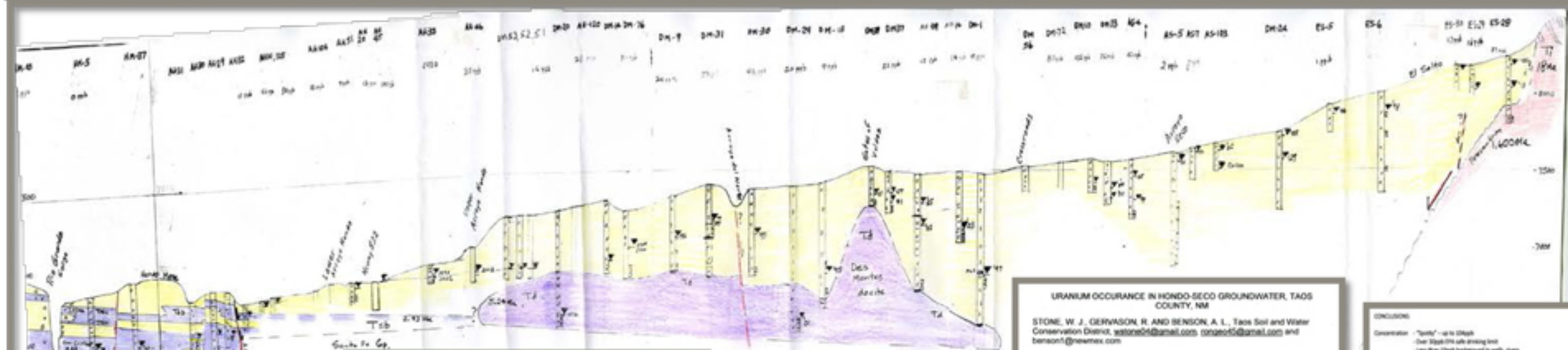
Varying water levels over time may have allowed the phreatic oxidized zone to develop uranium in a soluble form that is carried downward to the reducing aquifer environment similar to commercial uranium deposits elsewhere. The process is complicated by heavy drawdown from local water wells, periods of drought, a fractured underlying dacite volcano, fault zones, acequia recharge, gaining and losing stretches of the adjacent Rio Hondo, mountain-front undercharge or other factors.

Health effects of higher uranium concentration may be remediated depending on amount of concentration and the various treatment methods required. This can be as simple as filters for tap water for domestic use to larger reverse osmosis or ion exchange systems for community mutual domestic wells.

(next page)

URANIUM OCCURANCE IN HONDO-SECO GROUNDWATER TAOS COUNTY, NM

STONE, W. J., GERVASON, R. AND BENSON, A. L., Taos Soil and Water Conservation District, wstone04@gmail.com, rongeo45@gmail.com and benson1@newmex.com



Dacite Dome at
Gates of Valdez



URANIUM OCCURANCE IN HONDO-SECO GROUNDWATER, TAOS COUNTY, NM

STONE, W. J., GERVASON, R. AND BENSON, A. L., Taos Soil and Water Conservation District, wstone04@gmail.com, rongeo45@gmail.com and benson1@newmex.com

Uranium has been tested in domestic water wells in the Arroyo Hondo, Des Montes, Arroyo Seco and El Salto neighborhoods of central Taos County. Analyses funded by the Taos Soil and Water Conservation District have found spots south of the Rio Hondo that approach or exceed EPA drinking standards of 300 mg/L.

Uranium occurrences are in alluvial fan clastic facies extending from the Sangre de Cristo Mountain westward for 10 miles to the Rio Grande Gorge. The uranium source rock is probably the mid-Tertiary granitic plutons or late-stage rhyolitic dikes in the mountain headwaters that eroded into the Tertiary-Quaternary alluvial fan complex.

Varying water levels over time may have allowed the phreatic oxidized zone to develop uranium in a soluble form that is carried downward to the reducing aquifer environment similar to commercial uranium deposits elsewhere. The process is complicated by local wells of heavy drawdown, periods of drought, a fractured underlying dacite volcano, fault zones, aquiclude recharge, gaining and losing stretches of the adjacent Rio Hondo, mountain-front undercharge, or other factors.

Health effects of higher uranium concentration may be remediated depending on concentration and required treatment scale by various methods. These methods can be as simple as filters for tap water for domestic use to larger reverse osmosis treatments or ion exchange systems for community mutual domestic wells.

CONCLUSIONS

- Concentration**
 - "Spots" - up to 100ppb
 - Over 100ppb (EPA drinking limit)
 - Less than 100ppb background in wells, rivers
- Extent**
 - South of Rio Hondo
 - Along Rio Grande
 - To El Salto, New Mexico
 - Not north of Rio Hondo
- Aquifer**
 - In Quaternary - Tertiary, alluvial fan (less than 100ppb)
 - Not in fractured dacite domes
- Source**
 - Granite gneiss eroded from Sangre de Cristo and associated dikes
 - Not in dacite or basalt
- Mechanism**
 - Uranium in phreatic (oxidized) zone carried downward during drought by
 - Aquiclude recharge, surface precipitation
 - Discharge through underlying fractured dacite dome
 - Heavy water use in mutual domestic wells

Recommendations

- Use drinking water filters
- Monitor well water levels for drawdowns, that increase thickness of phreatic zone that produces soluble oxidized forms of uranium



County Fair Water Testing

WHO: Residents of Taos County

WHAT: Water testing for private wells serving homes *not connected to a public water utility.*

WHEN: August 16th and 17th from 9:00 am - 2:00 pm
(During the Taos County Fair)

WHERE: Juan I. Gonzales Agricultural Center (202 Chamisa Rd.)

HOW TO COLLECT THE WATER SAMPLE

- ◆ Get a clean glass jar (with a lid) to fill up that holds a least a quart of water. Do not use containers that have a strong odor, such as citris or pickle jars.
- ◆ Find a faucet that is not connected to a treatment system such as reverse osmosis, water softener or carbon filter.
- ◆ Let the water run for a couple of minutes and fill the glass jar as close to the time as possible of when you will bring in the sample for testing.

Contact the District Office for
more info. 575-751-0584



Contact the Taos County
Extension office for more info.
575-758-3982



August 15th - 17th

Juan I. Gonzales Agricultural Center

(202 Chamisa Rd.)



Best of Luck to all
County Fair
Participants

J. Felix Santistevan



After 32 years of service Mr. Santistevan has decided to retire his position as a Taos SWCD Supervisor. Taos SWCD is highly appreciative of the dedicated service Mr. Santistevan provided during his tenure. Through his efforts many landowners, parciantes, farmers and ranchers were provided with technical and financial support to carry out conservaiton practices/projects throught out Taos County. His leadership has been and will forever be appreciated.

COST-SHARE SIGN-UP

Taos SWCD continues to accept applications for cost-share year round. Taos SWCD will accept applications during two batching periods. The first batching period begins January 1st through June 30th. The second batching period begins July 1st through December 31st. Contact the District Office for detailed information on how to apply for your conservation project.

Congratulations

Taos SWCD was awarded the 2013-14 Region II Outstanding District of the year.

Great job Taos SWCD!

Taos Soil and Water Conservation District

PO Box 2787

Ranchos de Taos, NM 87557