

## Preble lester enternent

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## Water Quality Monitoring Program Here Weiter Come

2011 National Tribal Water Quality Conference November 15, 2011

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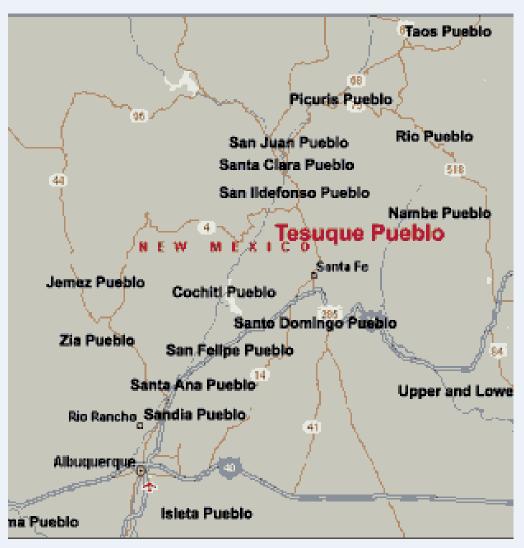


- Overview of Pueblo of Tesuque Environment Department
- Pueblo of Tesuque Water Quality Program
- Aamodt Case
- Future of Pueblo of Tesuque Environment Department



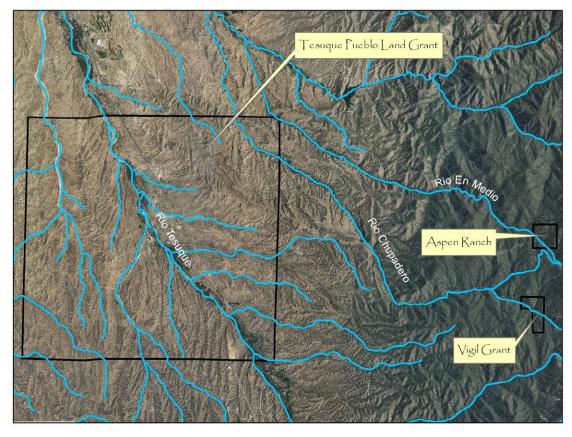
### Tesuque Pueblo

- 🛞 8 Miles North of Santa Fe
- 17,266 acres
- Two grants in the Santa Fe National Forest
- Aspen Ranch & Vigil Grant
- Rio Tesuque major tributary bisecting the reservation





#### Pueblo of Tesuque



0 0.5 1 2 Miles



Tesuque Pueblo Land Grant: 16,961 acres

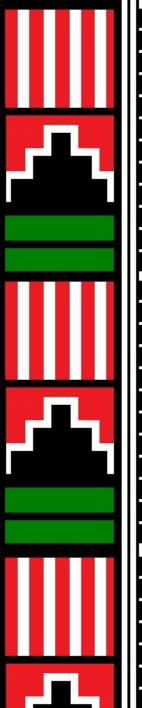
Aspen Ranch: 157 acres

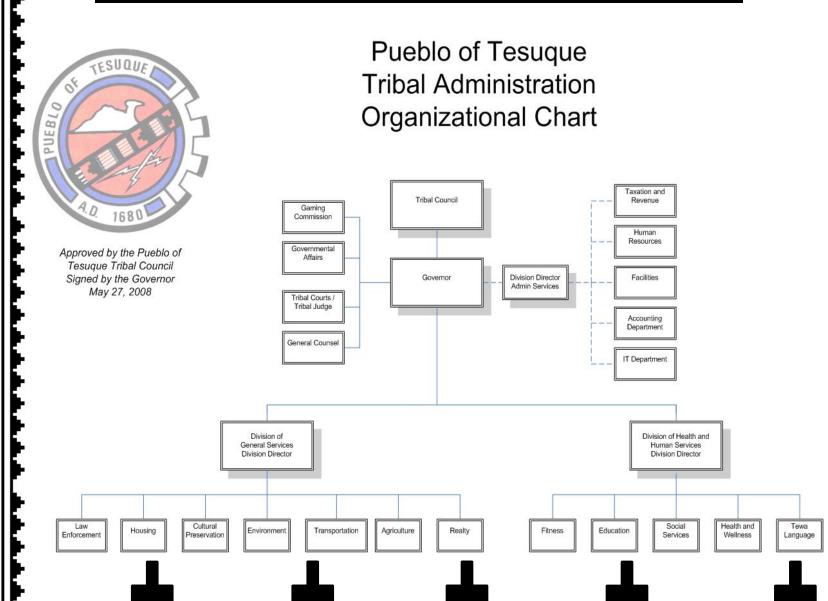
Vigil Grant: 148 acres

Total Acres: 17,266

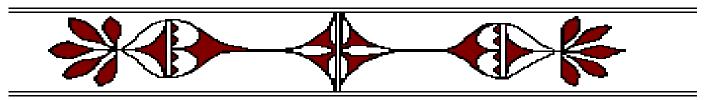


Pueblo of Tesuque Environment Department 2011





## Grants

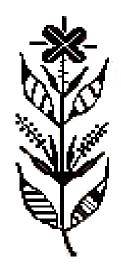


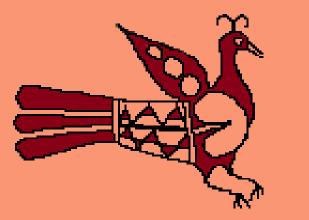


- •US EPA General Assistance Program (GAP)
  - •US EPA Clean Water Act §106
- •US Fish & Wildlife Service Tribal Wildlife Grant (TWG)



- •Bureau of Indian Affairs
- Forest Development (Aspen Ranch)
- Wildland Urban Interface (WUI)
- Intergrated Resource Management Plan (IRMP)





The Pueblo of Tesuque received "Treatment in a similar manner as a State" (TAS) status in 1995.

In November 1996, Water Quality Standards were adopted and approved through EPA. In November 2005 the standards were revised and again approved by EPA.

In 1997, A Quality Management Plan (QMP) was developed and approved by EPA. QMP is revised annually.



In 1997, Quality Assurance Project Plan (QAPP) titled Surface Water Quality Monitoring Program was developed and approved by EPA. QAPP is revised annually.

1998, Pueblo of Tesuque began surface water monitoring program.

In 2009, Quality Assurance Project Plan (QAPP) titled Benthic Macroinverterbrate Monitoring was developed and approved by EPA in September 2010.



## Sampling













- Beginning in 2003, PTED began sampling regularly at 5 locations along the Rio Tesuque.
- In 2010, 3 additional sampling sites were added. 2 along the Rio Chupadero and 1 along the Rio En Medio.
- In 2011, Benthic Macroinvertebrate sampling was added to the program.

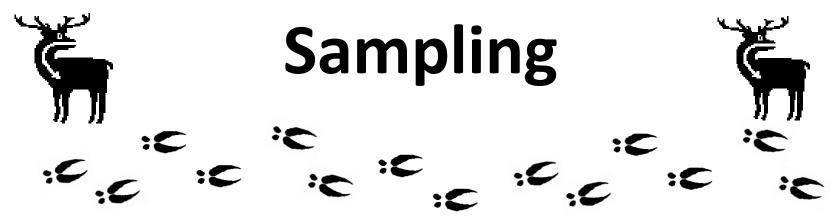












#### Chemical

- Nitrates
- Nitrites
- Orthophosphates
- Kjeldahl Nitrogen
- Phosphorus
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chromium
- Cobalt

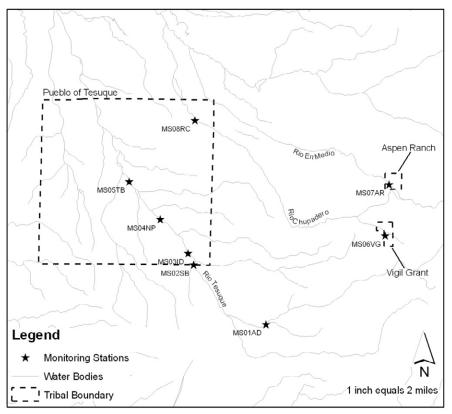
- Copper
- Iron
- Lead
- Magnesium
- Manganese
- Nickel
- Potassium
- Selenium
- Silver
- Sodium
- Thallium
- Vanadium
- Zinc
- Mercury

#### **Natural Parameters**

- •Temperature
- •Specific Conductance
- •Conductivity
- •Total Dissolved Solids
- •Dissolved Oxygen
- •pH
- •Turbidity
- •Barometric Pressure
- •Visual Observations

#### **Biological**

- E. Coli
- Total Coliform
- Benthic Macroinverterbrates





#### **Pueblo of Tesuque Sampling Locations**

- •5 on the Rio Tesuque (MS01 MS05)
- •2 on the Rio Chupadero (MS06 & MS08)
- •1 on the Rio En Medio (MS07)









## Non Point Source

PTED will submit an application for 319 funds in FY 2013

NPS sources: •Unmanaged Septic Systems •Sediment Flow

**Other Issues:** 

- Threat from Wildfire
- •Erosion







# Watershed Protection

- Development of Integrated Resource Management Plan
- Development of Watershed Management Plan
- Collaboration with non Tribal entities along the Rio Tesuque.





#### Aamodt Water Rights Settlement



The Aamodt Water Rights Settlement is a 45 year water rights legal battle between four pueblos: Nambe, Pojoaque, San Ildefonso and Tesuque against non-pueblo water users.
1966 NM State Engineer files a lawsuit against more than 900 people and four pueblos with irrigation rights on the Nambe, Pojoaque and Tesuque river systems (NPT).
Aamodt is the first last name of the non-pueblo water users.
The United States has control over the pueblos and their water rights.

•January 2010 – US House of Representatives approves Aamodt water-rights settlement.







October 2010 – US Senate approves a comprehensive Indian-rights bill which authorizes the Aamodt settlement and some funding.
December 8, 2010 – President Barack Obama signs Indian-rights bill.

•Overall – a regional water system will be created to provide water to the pueblos. A diversion in the Rio Grande will be created at San Ildefonso, treating and piping water to the pueblos. Funding has been secured from the US Governmentt but funding from the state is needed.











- Establish Watershed Protection Office utilizing GAP Grant.
- Apply for Wetland Restoration Grant.
- Develop consulting services for area tribes.
- Apply for Ground Water Grants.



