Pima-Maricopa Irrigation Project Education Initiative

2002-2003

Restoring water to ensure the common continuity of the Akimel O'otham and Pee Posh tradition of agriculture

The Pimas continued to resist the use of groundwater, asserting that such water would destroy their crops. Pima leaders such as Antonito Azul, Lewis Nelson and others were adamant that groundwater, with its high alkalinity, would reduce crop productivity and eventually wear out the soil. Herbert Marten, an outspoken advocate of Pima rights and financial clerk at the Pima Agency, testified before the House Committee on Indian Affairs, in 1911, that groundwater was not only expensive but also "contain[ed] dangerous quantities of alkali." If groundwater were used exclusively, Marten predicted, "it will undoubtedly ruin the lands" within a few years.



The Congressional

Investigations: 1911-1912

The University of Arizona conducted the analyses for Marten in October 1911. According to Professor W.H. Ross, "a supply of water containing 100 parts ... of soluble salts per 100,000 parts of water would carry on to the land 8,167 pounds of salts per acre in one year.... It is evident that in a very few years such a water would bring harmful amounts of alkali upon the soil." Even as little as 68 parts of salt per 100,000 parts of water could damage the soil. Two of seven wells tested exceeded this level, with the remaining five averaging around 52 parts per hundred thousand.

Indian Commissioner Robert Valentine remained convinced the water was of a good quality. The reports, Valentine told Congress, "have indicated the absolute safety of using pump water." Lewis Hill admitted that the "water in the river below is salty." Nonetheless, Hill informed Congress, the water was safe for irrigation purposes, especially if taken "in conjunction with the flood waters." Azul and other Pimas—including missionary Charles Cook—continued to object. Azul told Indian Commissioner Francis Leupp that the Pima experience at Gila Crossing using groundwater had resulted in crop failure.

By 1911, Valentine reported that over 4,500 acres were being irrigated on the north bank of the river in the Santan district and that "the main canals are now built above 10,000 acres." When the Indian Rights Association took up the Pima cause, Congress was forced to examine the irrigation issue. In June, the House Committee on Expenditures opened hearings on the affairs of all the central Arizona reservations impacted by the Salt River project. Former Commissioner Leupp and current Commissioner Valentine both spoke of their belief the Pimas had lost their rights to the Gila River waters because others were making a "beneficial use" of the water above the reservation. Despite the 1908 Winter's ruling, by which the federal court agreed that the United States had impliedly reserved water on behalf of Indian tribes and that this implicit claim superceded later non-Indian claims, Valentine held to his belief that the Pimas no longer had a legal claim to the waters of the Gila River—other than the flood waters and any potential storage water.

Indian Irrigation Engineer William Code informed Congress that in his opinion "it was impossible to ever recover those low water rights" now that they had been used for more than 25 years by upstream users. While admitting that he "had as much authority, and probably more, than anybody else in the field" over water matters, and despite being charged with providing the Pimas with water, Code "never regarded it as feasible to attempt to fight for water rights that had been taken away so many years before."

It was the hearings before the Committee on Indian Affairs that received the attention of Congress. Herbert Marten informed the Committee that the entire pumping scheme had been expensive and unnecessary. Besides the injurious nature of the groundwater, Marten stated only a few pumps had been installed. "Water," Marten further informed the Committee, "can be conducted down [canals] for

the irrigation of Indian lands on the Gila River Reservation." Despite Congressional beliefs that all the Pima had been or would be provided with water, Marten informed the Committee that only about 800 Pimas had water. Seventy-five percent of the Pima and Maricopa were yet without a dependable supply of water.

Furthermore, while \$540,000 had already been appropriated for the wells, Marten explained that another \$1,000,000 would be needed to complete the project. Add the estimated \$35,500 annual expense of operating the pumps (estimated at \$3.55 per acre) and the costs were staggering. "It will be a great hardship and it is believed a practical impossibility for the Indians to meet the annual payments for electricity alone." Add in the operation and maintenance costs and the Pima, "instead of being made self-supporting, as the government contemplates, are likely to be pauperized and ruined." While the Government paid the expenses upfront, when the Pima and Maricopa received their allotments in fee simple "they will have to meet similar huge payments." The Pimas would be forced to pay for the water they had always received at no cost. Could it be, Marten inquired, that the pumping scheme was more for the "interests of the [Salt River Valley] Water Users Association than of the Government or Indians?"

That same month the Pima Business Committee spelled out in a letter to the United States Senate why they continued to oppose the well scheme. Not only would the water "ruin" the land, Kisto Morago, Lewis Nelson, Harvey Cawker and Jackson Thomas wrote, but the entire system was also expensive. "[W]e had no voice in the matter.... The water rights in the Gila River appear by consensus of legal opinion to be still ours, and such water would cost us nothing." Just a month earlier, 444 Pimas signed a petition appealing to the Senate to restore "our river water." As a result of these hearings and petitions, Congress suspended all irrigation works on the reservation.

Three months later a House Subcommittee on Expenditures in the Interior Department investigated the Reclamation activities in the Gila and Salt River Valleys. What they uncovered was the Interior Department's investigations of Pima water rights "read like a juvenile effort at administrative government." Besides implicating A.J. Chandler and a score of other Salt River Valley speculators, the Committee concluded that the Reclamation Service "went into the hands of big land speculators." After two months of testimony, the Subcommittee saw the Gila River example as significant enough to instigate a "thorough investigation of the operations of the Reclamation Service in connection with all Indian reservations." As a result, the Reclamation Service ended its contract with the Indian Office in 1913.

Marten was once again called to testify before the Subcommittee. The Subcommittee learned that the Pima continued to refuse well water because of fears over the alkalinity. The expensive wells put down in Santan had a ten-year life expectancy, necessitating another future expense. The Pimas also questioned the need for the new Santan Canal, which appeared to be headed to Chandler's Ranch, when they already had a floodwater canal in the area at a lower elevation. This \$286,126 Santan Canal was a waste of money unless it was designed to provide "a large supply of water" to the Chandler Ranch.

The Subcommittee also questioned the Sacaton Contract, by which the Salt River project furnished "excess" power to operate the wells in Santan. It was the use of this contract that nearly led to the removal of 180,000 of reservation land. "The effect of the contract," the Subcommittee concluded, "is to render all of the reservation, with the exception of 10,000 acres, entirely valueless to the Indians so that they will in self-defense have to sell this excess." The fulfillment of the contract would be "a burden the Indians cannot bear."

Two recommendations were made as a result of the investigation. The first was to resurrect a study of the San Carlos Reservoir site, something the Reclamation Service had opposed based on their assertion of a "silting problem." Pending the construction of "a dam on the Gila River," the Subcommittee recommended that the Consolidated Canal should be extended to the reservation and the "Indians furnished with water from the Roosevelt Reservoir."

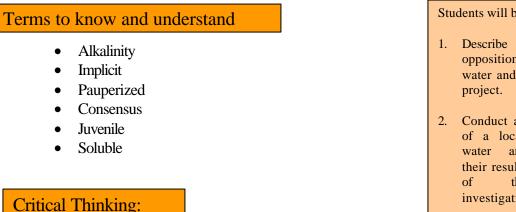
Who's Who in the Congressional Investigation?

Fill in the missing last names of the people listed below. Then find the last names in the word search. Words can go horizontally, vertically and diagonally in all eight directions.

1. Antonio	2. Harvey
3. William	4. Charles
5. Louis C	6. Herbert
7. Kisto	8. Lewis
9. Jackson	10. Robert

Μ	E	G	J	Ν	С	L	Р	W	Y
Х	Ν	Х	С	L	R	0	Ν	R	Μ
K	Ι	K	А	U	М	Q	0	Ν	Т
D	Т	R	W	Z	Т	L	0	K	С
D	Ν	Y	K	А	С	S	L	0	L
Х	Е	М	E	J	L	K	D	Ι	Q
Y	L	Ν	R	E	Н	E	G	L	Н
Q	А	L	Ν	Ν	E	Т	R	А	Μ
Т	V	Х	М	0	R	А	G	0	R
Т	Н	0	М	А	S	Т	F	Т	Н

Teacher Plan for "The Congressional Investigations: 1911-1912"



Students will be able to:

- Pima well opposition to water and the pumping
- 2. Conduct an evaluation of a local source of water and compare their results with those the 1911 investigation.

Objectives

• How does alkalinity affect crops? Based on P-MIP analysis, water sample data from seven wells drilled as part of the Sacaton Project (1906-1911) and reported in 1912 were of a medium hazard level for alkalinity. These same samples compared similarly with modern day samples taken within the Community. Nonetheless, it is safe to conclude that the well water of 1911 was probably far inferior to the natural flow of the Gila River, which is why the Pimas have always desired the return of Gila River waters.

Activities

• Conduct a mineral assessment of a water source near your school. If possible, test well water and river water. How do they compare? Compare the salt and sodium carbonate contents with those collected from seven wells in 1911 (shown below).

<u>Mineral</u>	Well 1	Well 2	Well 3	Well 4	Well 5	Well 6	Well 7
NaCl (Sodium Chloride)	480	538	562	521	526	780	690
CaSo4 (Calcium Sulphate)	152	82	168	136	168	250	272

(in parts per million)

About P-MIP

The Pima-Maricopa Irrigation Project is authorized by the Gila River Indian Community to construct all irrigation systems for the Community. When fully completed, P-MIP will provide irrigation for up to 146,330 acres of farmland. P-MIP is dedicated to three long-range goals:

- Restoring water to the Akimel O'otham and Pee Posh. •
- Putting Akimel O'otham and Pee Posh rights to the use of water to beneficial use. •
- Demonstrating and exercising sound management to ensure continuity of the Community's • traditional economy of agriculture.