Saline Survivance: The Life of Salt and the Limits of Colonization in the Southwest

The man had never met Ma’lokỹattsik’i, but he hardly hesitated as he drove a pickaxe through her heart and toted away her salt. Also known as the Salt Woman or Salt Mother, Ma’lokỹattsik’i lived in the form of a salt lake and had long attracted visitors from the pueblos of Zuni, Hopi, Acoma, Laguna, and beyond. These visitors came with care, carrying prayer plumes and gracious sentiments. Puebloan peoples even agreed among one another to leave behind weapons and warfare at their camps and villages whenever they needed salt. Puebloan peoples have long seen the Salt Woman as an animate part of their world. But the man with the pickaxe—a Spanish soldier led by Captain Marcos Farfán de los Godos—saw her as little more than an extractable resource, one that might justify imperial investment and colonial settlement in the continental southwest.

Beginning in the 1530s, Spanish expeditions invaded the North American interior in search of precious metals, profitable lands, and expendable labor. Francisco Vásquez de Coronado, Hernando de Soto, and other conquistadores often failed to find fabled cities of gold and inexhaustible silver supplies. Early Spanish invaders did, however, often find something less intrinsically valuable yet more immediately critical to their fate on the continent: they found salt.
Though mundane relative to more precious minerals like gold or silver and marginal relative to colonial exports such as sugar or tobacco, local salt resources mattered deeply to the Spanish colonial project; salt sustained human and mammalian life, preserved food, and fulfilled other functions essential to survival. Access to these resources could make or break the Spanish Empire’s colonial aspirations in the North American southwest and, by extension, the continent. For most of Spain’s three-hundred-year colonial regime in the southwest, Spanish access to inland salt resources hinged upon existent Indigenous environmental knowledge, political power, and patterns of mobility and labor—precedents that long predated Spanish colonization and several of which continue to outlive it. As sites of contestation and coalescence, local salt resources were critical to the future of Indigenous polities and colonial projects across an increasingly contested corner of the continent.

Native peoples in the southwest have long attached intrinsic value to salt resources. This includes the Zuni Salt Lake, a uniquely revered resource among many pueblos in present-day New Mexico and Arizona. According to one explanation, the Salt Woman (named Ma’lokyattsik’i, Mawa-sitsa, or Ma/k/nan/e in modern Zuni accounts) once resided at Black Rock near the Pueblo of Zuni, but wasteful Zunis who polluted her home prompted her departure. As punishment, Zunis would have to make an arduous trek from the pueblo to a remote volcanic maar some forty miles southward. Another narrative introduces the Salt Woman as a person “made of white powder” who visited the pueblos “to spread her mucous over the food,” a service shunned by the people. She then strayed far from the pueblos and allowed salt collecting rights “only to men who show respect for her.” Other pueblos articulated an affinity for salt resources in similar yet still distinctive ways. During a feast at Santa Clara Pueblo, Salt Old-Woman took human form and donned a white manta, white doeskin boots, and a white abalone shell. The feast, according to the diners, had not been properly seasoned, and so the Salt Old-Woman “rose and blew her nose into the food to salt it.” When the people refused to eat the food, she informed them “that their nearby salt lake would dry up and they would be forced to travel many miles to obtain salt” before vanishing. The Salt Old-Woman went east, past the Manzano Mountains, to live in the Estancia Valley, where over a dozen alkali and saline lakes blanket an ancient seabed. These histories may refer to pressure early Spanish colonization placed upon Puebloan peoples and the salt resources in their homelands, or they might harken to pre-colonial Puebloan pasts during which access to salt was a right to be earned through responsible stewardship. Whatever their exact origin, still-told Puebloan histories of the Zuni Salt Lake, Estancia Valley, and other resources explain the depth, delicacy, and dynamism of salt’s place in the southwest.
Early Spanish entradas took note of these and other salt resources. In 1540, when Francisco Vásquez de Coronado’s expedition attacked and occupied the Zuni village of Hawikku, the colonizers “found what [they] had more need of that gold silver,” as one account put it, “that is, a great quantity of corn, beans, [. . .] and the best and whitest salt I have seen in my whole life.” The invaders soon found the salt’s source, the Zuni Salt Lake. Coronado himself felt the lake—and its superior salt—worthy enough to bring to New Spain’s first viceroy Antonio de Mendoza’s attention. After seizing control of the pueblo, Coronado wrote to the viceroy of the Zuni’s “finest order and cleanliness” in their preparation of food and the “excellent granular salt that they bring from a lake one day’s journey” from the village. Still in search of gold, Coronado pushed northeastward, past Tiguex and onto the high plains. In the summer of 1542, led by Teyes guides, expeditioners reported that “neither gold nor silver was seen among those people, nor [was there] news of it,” but there “were many salt lakes which had [salt] in great quantity.” Exposed to the summer sun and heat, evaporated salt lakes and flats yielded slabs of salt “four and five fingers thick and larger and table-tops.”
By the start of the seventeenth century, Spanish colonizers accumulated and appropriated much knowledge about the location and abundance of salt resources north of Mexico. After becoming governor of New Mexico in 1598, Juan de Oñate leveraged this information to legitimize his effort to colonize and control local peoples and resources. “The wealth of the abundant salines,” Oñate reported in 1599, was among a few “very great treasures”—including some silver mines, Native laborers, and their material tribute payments—that might fill royal coffers. To verify salt’s abundance and its commercial viability, Oñate explained to imperial officials that “salt is the universal article of traffic of all these barbarians.” “Indian herdsmen” from the Salinas district often travelled northwest to Taos and Picuris, “where they sell meat, hides, tallow, suit, and salt in exchange for cotton blankets, pottery, maize, and some small green stones.” The sellers most certainly provisioned their salt from the lakes in the Estancia Valley, which according to Oñate “consist of white salt [and] . . . are seven or eight leagues in circumference.” Salt harvesting could be strenuous, but labor would be no issue; Oñate assured the viceroy that “the said pueblos of the salines and Xumanas [Jumanos] all rendered obedience to his majesty.”

Through the seventeenth century, Spanish officials mobilized the Spanish crown’s absolute sovereignty to incorporate salt resources into the imperial economy. To work these resources, officials used the encomienda, a system of land and labor redistribution that extracted tribute from Native peoples. Between 1659 and 1660, New Mexico governor Bernardo López de Mendizábal ordered Tewas and Tompiros living in the Salinas district to haul salt from the Estancia Valley’s lakes to the Rio Grande and eventually to northern Mexico—shipments and labor that went uncompensated by the Spanish state, presumably by virtue of the legalities surrounding mineral resources within Spanish territorial claims. Harvesting and hauling salt—especially commercial quantities—demanded long hours of physical labor, often conducted during warmer, dryer months when salt lakes and flats reached peak evaporation. Even after López’s especially exploitative tenure ended, salt trafficking between the Estancia Valley and northern Mexico seemed to have continued through at least 1668. In Parral and at other silver manufactory across northern Mexico, New Mexican salt was used as one of several chemical additives to refine silver ores.
Figure 2: A salt lake in the southern Estancia Valley, central New Mexico. Ancestral Puebloan peoples collected salt from the Estancia Valley at least as early as 900. In the mid-seventeenth century, Piro, Tompiro, and Tewa peoples living at and nearby the Salinas pueblos collected salt that was shipped southward to Spanish silver refineries in northern Mexico. Photo by author.

The introduction of livestock to the northern Mexican borderlands further expanded colonial exploitation of salt resources. This was because animals, too, need salt to survive. Sheep flocks in Cerralvo, Neuvo León (near the present-day Texas-Mexico border) strayed from haciendas and “in the midst of the indigenous nations of those frontiers,” where “fine water holes, springs, pastures, and salt licks” were apparently more abundant. That Spanish flocks drifted toward Native-controlled resources concerned some colonial administrators. To manage and secure settler property, Don Antonio Ladrón de Guevara recommended that provincial officials “distribute the land and water rights to the settlers, and [. . .] gather each Indian nation under the direct of the settlers;” Ladrón further advised that “the salt produced on the lands of the heathen tribes [. . .] be used to support” settler commerce, the construction of presidios, and the provisioning of Spanish livestock. To administrators like Ladrón, the management of salt resources and the animals that depended on them hinged upon “[luring] these Indian nations [. . .] to reduction and quietude.”

But Native peoples proved resistant to reduction. Consequently, salt resources became sites where Indigenous nations and agents of the Spanish state asserted increasingly competitive sovereignties. This was especially true in New Mexico’s Salinas district, where the salt flats of the Estancia Valley attracted contention among local salt collectors, expanding Apaches, and exploitative missionaries. By the early 1670s, mounting tensions between Apaches and Spaniards jeopardized saline commerce in and beyond the valley. Tewa salt collectors allegedly complained to missionaries that Apache combatants attacked people travelling to and from the valley’s salt marshes. Apaches also held up southbound Spanish salt shipments as early as 1670. Rather than offering increased protection to Salinas residents, the missions increased
tribute demands to ensure their own survival. Overburdened and under protected by Spanish rulers, Piro, Tompiro, and Tewa salt collectors abandoned the valley. Missionaries soon followed, and the salt flats fell out of regular use for the first time in seven centuries.

The abandonment of the Salinas district signaled a potential end to Spanish rule over the Puebloan world. The 1680 rebellion rocked the upper Rio Grande and the southwestern borderlands at large. At stake was Puebloan religious, political, economic, and territorial autonomy. The participating pueblos made clear that cooperation—not conquest—would dictate Spain’s place in New Mexico. In the years following the Pueblo Revolt, Spanish officials attempted to re-establish some authority by overhauling the tribute system, transferring greater administrative power to alcalde mayors, and issuing new land grants. Yet Spain remained reluctant to relinquish royal control over New Mexico’s few mineral resources. A 1689 grant attributed to Governor Domingo Jironza Pétriz de Cruzate established minimal boundaries formally enclosing the Pueblo of Zuni. The grant did not include the Zuni Salt Lake, the home of the Salt Woman and several shrines and sites central to Zuni subsistence. This omission precipitated several legal struggles by Zunis to protect the lake from repeat colonial encroachments, the most recent of which concluded in 2003 when the Pueblo successfully shut down a strip-mining project that would have disrupted the lake’s aquifer and killed the Salt Woman.
Figures 3a and 3b: Zuni Salt Lake in western New Mexico, circa 1950. A still-sacred resource to Zuni and other Indigenous peoples in western and central New Mexico, the Zuni Salt Lake attracted considerable attention from Spanish and, eventually, American colonial entities who sought to exploit the lake’s quality salt. Still, the Pueblo of Zuni has successfully fought to maintain deep connections to the lake and its salt. Twenty years ago, in the lake’s more recent past, the Pueblo of Zuni won a major legal victory in defeating a strip mine proposal that would have disrupted the lake’s aquifer. National Archives and Records Administration, public domain, via Wikimedia Commons and Zuni Salt Lake. Netherzone, CC BY-SA 4.0, via Wikimedia Commons.

Spain could—and did—dispossess Puebloan peoples of salt resources by claiming those resources as crown property. But claiming salt did not easily equate to controlling it. Through the early eighteenth century, Spanish officials struggled to establish security along the Camino Real del Tierra Adentro; this primary commercial corridor linked remote resources, colonial commerce, and Spanish settlements to Mexican industries and enclaves. But the rise of Comanche and Apache power suffocated Spanish expectations on all sides. Following the abandonment of the Salinas pueblos, Apaches controlled the valley, its resources, and its roadways, definitively foreclosing future colonial efforts to revive the export of salt to Parral. Apache control over salt resources also stymied Spanish survival at El Paso del Norte, where salt flats at the base of the Guadalupe Mountains supplied the small settler enclave. In April 1692, New Mexico Governor Diego de Vargas reported to Viceroy Gaspar de la Cerda that Apaches had taken possession of a local saline, a
freshwater well, and the roads that connected both resources to the settlement at El Paso. "The saline," Vargas explained, was "much needed in this neighborhood"; nearby settlers seemingly depended upon it to store food through the winter, sustain livestock, and more. The flats north of El Paso del Norte were indeed well suited to settler sustenance. After an Apache prisoner-of-war led Vargas and a party of scouts to the flats earlier in 1692 for inspection and assessment, Vargas reported that the salt crusts reproduced themselves only a few days after mining. But settlers were reluctant to make the journey into Apache territory. In the spring of 1709, Spanish administrators at El Paso del Norte reported that 35 "friendly Indians"—escorted by local presidio soldiers—were the sole volunteers for a salt gathering expedition bound for the Hueco Mountains.

Civilian populations and soldiers shared a reliance on salt as a primary preservative. And like civilians, presidios in the Indigenous borderlands found themselves beholden to local Native power and distant Spanish authority alike.
Martín de Alarcón, Governor of Coahuila and Texas, established the presidio at San Antonio de Béxar in the spring of 1718, but the presidio struggled for several years to secure access to salt for provisions. In the fall of 1720, Native informants told Texas officials that the closest exploitable salt flats lay over 300 kilometers south of San Antonio. But to trek that distance was not worth the danger. According to one report, “many tribes of very warlike Indians” controlled the salt flats, “Indians who have repeatedly prevented fifty, and even sixty, armed men from the Nuevo Reino de Leon from taking the salt.” Further east, in the heart of Caddoan lands, Native informants proved equally significant in providing Spanish soldiers with access to salt. “The Indians” near the Spanish settlement of Los Adaes on the lower Sabine River in far eastern Texas “affirmed [. . .] that there were some salt beds nearby.” The governor promptly “dispatched a lieutenant with a party of twenty soldiers and twenty-five mules.” Fifteen leagues from the presidio, the party “brought back loads of a salt earth so fine that when worked it yields 50 percent salt.”

Military officers did not always treat so directly with Native peoples who knew where to find salt. In June 1731, Captain Gabriel Costales, commanding officer at Bahía del Espíritu Santo, requested a license from Viceroy Juan de Acuña to mine salt from Indian lands for the presidio’s use. Brigadier General Pedro de Rivera advised against it, explaining to the viceroy that doing so would only incite rebellion among local indios.

In the heart of New Mexico, too, Spanish officials struggled to secure control over and access to salt well into the eighteenth century. In 1716, New Mexico governor Felix Martinez requested guards and guides to escort an expedition from Santa Cruz to “las salinas atraenzal” near Tiguas villages beyond the southern Estancia Valley. Guarded salt collecting expeditions to the Estancia Valley and nearby saline enclaves persisted through the 1730s and 1740s. For five consecutive summers starting in 1744, Governor Joachín Codallos y Rabal instructed alcalde mayors at Santa Fe, Albuquerque, Santo Domingo, Santa Ana, Laguna, Pecos, and elsewhere to solicit volunteers for salt gathering expeditions into the previously abandoned Estancia Valley. According to Rabal’s orders, the volunteers would be guarded by Spanish soldiers. Over half a century following Spain’s so-called reconquest of New Mexico, salt resources remained situated squarely within Indigenous borderlands, in spaces where Spanish authority still paled in comparison to powerful Native polities.
Once highly valuable, salt affords a new look at life, environment, and sovereignty in the southwest borderlands. Though Spanish entradas claimed to “discover” potentially productive salt flats and lakes, Indigenous—especially Puebloan—peoples possessed deep knowledge about and attachments to life-giving salt resources. Spanish colonialism did, however, alter many Indigenous peoples’ existing relationships to salt resources in their homelands. Exploiting law, labor, and land, Spanish colonizers tried to control salt resources and harness the profits of their products to stabilize Spanish
sovereignty. But rarely did dependence ensure domination. Through much of the Spanish colonial period in the region, Indigenous pasts, peoples, and power dictated Spanish access to salt resources and, therefore, the future and failures of Spanish colonization. And while veritably ancient, the history of salt in the southwest is kept alive by Zuni, Hopi, and other Native peoples today. Thanks to them, Ma’lokyattsik’i lives on.

Further Reading

This essay is partly based on the following archival materials:

Baughman Folklore Collection, Center for Southwest Research, University of New Mexico, Albuquerque, NM.

Manuel Lujan Congressional Papers, Center for Southwest Research, University of New Mexico, Albuquerque, NM.

Ward Alan Minge Papers, Center for Southwest Research, University of New Mexico, Albuquerque, NM.

Sophie Aberle Papers, Center for Southwest Research, University of New Mexico, Albuquerque, NM.

Edith Cherry Historic Preservation Papers, Center for Southwest Research, University of New Mexico, Albuquerque, NM.

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Documents from the Archivo General de las Indias, Center for Southwest Research, University of New Mexico, Albuquerque, NM.

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For published primary sources and relevant secondary sources, see:


Juliana Barr, “There’s No Such Thing as “Prehistory”: What the Longue Durée of Caddo and Pueblo History Tells Us About Colonial America,” *William and Mary Quarterly* 74, no. 2 (2017): 202-42.


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the sixteenth-century Lower Mississippi River Valley for the Scottish Centre for Global History and on salt’s deep history in the Ohio Country for Common-place.

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