



# Archaeology Southwest

September 25, 2020

Ms. Jillian Aragon, BLM Project Manager  
RE: RMPA Comment Submission  
Bureau of Land Management  
6251 College Blvd, Suite A  
Farmington, NM 87402

Mr. Robert Begay, BIA Project Manager  
BIA Navajo Regional Office  
RE: RMPA Comment Submission  
PO Box 1060  
Gallup, NM 87301

Dear Ms. Aragon and Mr. Begay:

This letter represents Archaeology Southwest's organizational comments to the Agencies on the RMPA and DEIS planning processes currently being undertaken by BIA-Gallup Region and BLM-Farmington Field Office. For more than three decades, Archaeology Southwest has practiced a holistic, conservation-based approach that we call Preservation Archaeology. By conducting low-impact investigations of big-picture questions, sharing our findings with the public, consulting with and advocating for Tribes, and developing powerful site protection strategies, we create meaningful connections to the past and respectfully protect its increasingly endangered resources.

Since early 2014, Archaeology Southwest has been involved in this planning process for northwest New Mexico, in the area called the Greater Chaco Landscape. Our involvement has focused on different strategies to protect the area from the encroachment of oil-gas development in the Mancos Shale formation. We have attended dozens of meetings, organized workshops and public forums, and organized meetings with leaders at every level of BLM, BIA, NPS, and other Federal Agencies. We have coordinated our efforts closely with the All Pueblo Council of Governors (APCG) since 2016. We have initiated close contact and interaction with many of New Mexico's Pueblo Nations, particularly Acoma, Zuni, Santa Ana, Santa Clara, and Tesuque, and with the Hopi Tribe of Arizona. We have met with Navajo Nation officials in Arizona and in Washington, DC. Outreach and consultation with State of New Mexico officials has included the SHPO, State Land Office, and the Energy, Minerals and Natural Resources. Our efforts over the last nearly seven years have convinced us that many, many Tribes, organizations, and people are heavily invested in protecting Chaco and the Greater Chaco Landscape.

Before making specific points below, we want to go on the record clearly stating that we offer input on this public planning process only under protest. The ongoing COVID-19 pandemic has prevented in-person public meetings and interaction since mid-March 2020 in New Mexico. Despite this crisis, this

planning process has hardly slowed down. Extension of the original late May 2020 deadline was welcomed, but the current September 25 deadline we are forced to respond to here is problematic. Most of the Tribes and Pueblos directly affected by the Agencies' plans for this vast area around Chaco Canyon lack broadband internet capability, and were therefore prevented from taking part in the Agencies' virtual meetings in May and September. This planning process should be immediately halted until the pandemic is over and New Mexico has returned to a more normal state of daily life.

Archaeology Southwest is part of a larger group effort with our partners to submit comments on this planning process to the Agencies. We have participated in the development of the detailed comments and attachments included with that group's submission. We do not intend to reiterate specific content from that package here.

Rather, we want to emphasize the most important lessons learned over the last seven years and the most pressing concerns for the protection of Greater Chaco and its amazing and irreplaceable cultural and historic resources. We enumerate our comments below.

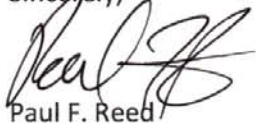
1. The Agencies must do a much better job consulting with the Pueblos and Tribes who are the descendant communities to the ancient sites and landscapes across the Greater Chaco Landscape and the primary residents of the region subject to oil-gas development. Over and over during meetings over the last seven years, Tribal representatives have made this specific point. The Federal Agencies have a specific responsibility to consult with Tribes under both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA), among other laws and regulations. We know that the Tribes speak for themselves on this matter and all others, but we wish to support and amplify their voices nevertheless.
2. Given the long timeframe under which this planning process has unfolded, from 2014 to 2020, over seven calendar years, and the importance of the Greater Chaco Landscape to many Pueblos and Tribes, it is unfathomable for the Agencies to rush to complete this process in the absence of ethnographic-cultural data. The Tribes have pushed for years to have the Agencies complete a detailed study, and the funding was finally procured in 2018 by BLM. Unfortunately, it is now 2020, and very little work has been completed with the project funds. Additional funding came through the 2019 Department of Interior appropriations bill, with \$1 million earmarked for Tribal cultural-ethnographic work. Because of the pandemic, however, no work has been completed with these funds. We are compelled to ask: Why not wait to finish the current planning process until at least some results are available from these studies? Our work with the Pueblo of Acoma in 2018 revealed dozens of Acoma TCPs across different locales of Greater Chaco. A summary of the Acoma report will be made available as an attachment to this letter. It seems very likely that many additional cultural sites and TCPs of concern to Tribes will be identified over the next few years. These findings will undoubtedly impact oil-gas leasing patterns in the area.
3. The RMPA mentions the use of LiDAR to detect ancient roads and other subtle landscape features across Greater Chaco. We urge the BLM and BIA to make use of all available LiDAR on each and every lease parcel at the evaluation stage. We recommend that this detailed LiDAR assessment at the leasing level be written into the RMPA document.

4. Of the alternatives detailed in the planning documents, the Agencies have signaled a preference for Alternative C. No subalternative has been identified as preferred, so it is unclear which C variation might be chosen. We think Alternative C is a bad choice from a preservation standpoint. We would encourage the Agencies to choose Alternative B-1. This option is not all that we would recommend. Still, Alternative B-1 most closely approximates the zone of protection that was passed in the US House in 2019 and is pending in the Senate.
5. Regarding the 10-mile protection zone around Chaco Park, Archaeology Southwest recently completed a reconnaissance project in the area. The preliminary report is attached to this letter. The basic finding of the project is that the 10-mile zone contains numerous clusters of sites, some of which form discrete spatially-temporal communities, that merit greater protection. The project focused on locales in the north, northwest, and northeast portions of the 10-mile zone and identified six site clusters or communities (including Pierre's and Escavada). These areas represent just a sample of the site clusters and communities that exist in the 10-mile zone and for which adequate assessment of indirect and cumulative effects has **not** been completed. This leads logically, then, to the next point—the Agencies must choose Alternative B-1 in their final RMPA and EIS document. B-1 is the only alternative that would provide the protection that sites, site clusters, and communities in the 10-mile zone merit. None of these site clusters or communities will be adequately protected if the 10-mile zone is reduced to 0, 2, or 4 miles (part of the range of options in the RMPA alternatives). Further, BLM lacks any ethnographic information about the importance of these site clusters and communities to modern-day Pueblos and Tribes—information that the ongoing ethnographic studies funded by BLM and DOI-BIA will provide.
6. Building on the concerns raised under Item 5 (10-mile protection zone), the RMPA document fails to address the indirect and cumulative effects of the oil-gas industrial intrusion into the sacred landscapes of Greater Chaco. Van Dyke's 2017 study clearly shows the impacts to the Pierre's Community, even though it was supposed to be protected by a specific ACEC. Our work in the 10-mile zone shows that many other site clusters and communities are present across Greater Chaco. As the density of oil-gas well pads, pipelines, and other infrastructure is expected to increase over the next decade, these communities and clusters will continue to see effects, and the integrity of these places, as defined under the NHPA, will decline.
7. We urge the Agencies to make use of the extensive site database that exists for Greater Chaco at the leasing level. Our 10-mile protection zone study drew on these data. In our view, instead of being reactive to the lease parcels that are nominated by oil-gas companies, the Agencies should be *proactive* on leasing. This would entail completing a pre-leasing assessment of locales across Greater Chaco, drawing upon the NMCRIS and BLM site database to identify areas that have high cultural site densities. This process would also involve careful assessment of the LiDAR data that are already in hand. The final part of this process would involve use of ethnographic data and would allow for Tribal team members

to visit potential lease areas. This proactive process could then exclude culturally sensitive areas and would point to potential lease areas that are not of cultural concern.

Our preliminary report on work in the Chaco 10-mile zone is attached. The effort continues beyond this planning process deadline. Ultimately, Archaeology Southwest will submit a formal proposal to BLM to create additional zones of protection, either ACECs or another designation, focused on cultural-historic communities and site clusters across Greater Chaco.

Sincerely,



Paul F. Reed

Preservation Archaeologist  
Chaco Scholar at Salmon Ruins Museum

Attachments (2)

Cc:

Alicia Ortega, Executive Director, All-Pueblo Council of Governors  
Jeff Pappas, PhD, New Mexico State Historic Preservation Officer  
Michelle Ensey, New Mexico Deputy State Historic Preservation Officer, State Archaeologist  
Denise Robertson, Superintendent, Chaco Culture National Historical Park  
Bill Marzella, Marzella, Program Analyst-BLM Liaison, Advisory Council on Historic Preservation  
Erik Simpson, Archaeologist, BLM-FFO

## **An Archaeological Reconnaissance of Chaco's 10-Mile Zone of Protection**

Paul F. Reed, Archaeology Southwest

September 2020

The 10-mile protection zone in the Greater Chaco Landscape surrounding Chaco Culture National Historic Park (henceforth, Chaco Park) contains roughly 4,200 known archaeological and historic sites (Figure 1). The 2019 House bill (HR 2181) and pending Senate companion bill, known as the Chaco Cultural Heritage Protection Act, will offer permanent protection for these areas, once passed.

The 4,200 sites speak to episodic use of the area by diverse cultural groups (Paleoindian, Archaic, Puebloan, Navajo, and others) from roughly 10,000 BCE to the present. Because less than 20 percent of the area enclosed by the 10-mile zone of protection put forth in the legislation has been surveyed, the actual site count is undoubtedly much higher. In addition, very little recent ethnographic work has been undertaken with any Tribal groups, aside from the Pueblo of Acoma's 2018 project with Archaeology Southwest. Given the dozens of traditional cultural properties (TCPs) revealed during Acoma's pilot project, there are probably hundreds, if not thousands, of TCPs and other Tribal cultural sites that have not yet been identified across Greater Chaco.

At least 10 significant ancient Chacoan-Pueblo communities are known to lie within and just beyond the 10-mile zone around Chaco Park. These include the Bis san'ni Community, located a few miles northeast of Chetro Ketl, and the Pierre's Community, located up the Great North Road, at about the edge of the 10-mile protection zone. A linear community lies along the Ah-Shi-Sle-Pah road, which originates at Penasco Blanco and trends to the northwest for more than 25 kilometers (19 miles). Most of this linear ancient community lies within the 10-mile protection zone. Additional Chacoan communities within the 10-mile zone include Casa del Rio, Bee Burrow, Kin Indian-Escavada-Greasy Hill, Greenlee, Indian Creek, Mesa Tierra, and Tse Lichii'. As described below, these are significant sites—the characteristics and condition of which the Bureau of Land Management (BLM) has an obligation to fully document during this RMPA process:

- The ancient Pueblo community at Bis san'ni comprises at least 40 sites in a roughly 4 km-square or roughly 1000-acre area. Other groups, including Archaic period peoples and Navajo residents, have contributed sites to the community total of about 60. This community lies about 5 miles northeast of Pueblo Bonito. The core of the site is a Chaco great house with about 40 rooms and 5 kivas. Pueblo sites in the community around Bis san'ni contain about 50 rooms and several kivas. In addition, the community contains resource procurement sites and other sites of limited use.
- The Pierre's site complex is the largest community on Chaco's Great North Road. Pierre's contains three small Chacoan great houses with perhaps 50 total rooms, single and second-story, and several kivas. The community also incorporates a watchtower-like feature called El Faro (the lighthouse). In the community around Pierre's core, at least 75 rooms are present at numerous small pueblo habitation or field house sites. Additional sites include artifact scatters, the Great North Road, and rock features. Additional discussion of Pierre's is provided below.
- Mesa Tierra is a Chacoan great house with 30 rooms and 5 kivas located southwest of Pueblo Bonito. The site was built on a mesatop and includes a small community of surrounding sites with perhaps 20 additional rooms.

- Casa del Rio lies along Chaco's West Road and comprises a great house with perhaps 140 rooms and several large, dense midden areas. An ancient reservoir lies south of the great house. The community around Casa del Rio is largely unknown, due to the lack of archaeological survey.
- Greenlee lies southeast of the Chaco park boundary and consists of a Chacoan great house with 15 rooms and one kiva. It sits on a low mesatop. A Chacoan road segment runs to the east of the site. A probable community of small sites surrounds Greenlee but its nature is unclear due to limited archaeological investigation.
- Bee Burrow is a small Chacoan great house with 11 rooms and 2 kivas located south of Pueblo Bonito and the Park boundary. Chaco's South Road passes by the site to the east. Petroglyphs are present along a cliff face southwest of the great house. The community surrounding Bee Burrow is poorly understood but contains dozens of small pueblo sites and perhaps 500 total rooms.
- The Indian Creek community lies west of Chaco and includes two small Chacoan great houses – Casa Cielo and Casa Abajo – and a community of 20 small pueblo sites with over 100 rooms. In addition to the communities listed above, there are others—clusters of sites that may constitute distinct communities and have not yet received detailed examination.

To better understand the nature and extent of cultural resources in the 10-mile zone, Archaeology Southwest undertook a reconnaissance project focusing on the northwest, north, and northeast portions of the 10-mile area. Given the approximately 700,000-acre area encompassed by the zone, completing a pedestrian survey of even a sample of the territory was going to require months of fieldwork. Instead, our focus was twofold: 1) using the New Mexico NMCRIS site database to identify and plot cultural sites in the 10-mile zone; and 2) targeted fieldwork to visit a sample of previously recorded sites and communities.

A primary goal of the work was to identify or confirm cultural communities in the 10-mile zone, with the main criterion being spatial proximity. In several cases, the mix of sites across time periods was substantial. For these areas, then, the geographically proximate sites were not described as discrete communities, but rather as site clusters. Further work will allow greater parsing of the spatial and other data to delineate additional, temporally and culturally distinct communities from the past.

A larger objective in this work is connected to the currently ongoing RMPA and EIS planning process undertaken by the BLM and the Bureau of Indian Affairs (BIA). This goal involved looking at the Greater Chaco Landscape in a new manner, at a different scale than is usually pursued by the Agencies. Typically, Federal Agencies in the western United States treat cultural sites as single phenomena during the Section 106 process. Thus, archaeological contractors identify sites or TCPs during projects, and the projects are redesigned, in most cases, to avoid the resources by 50–100 feet. In rarer cases, such as higher or road construction projects or oil-gas pipelines, the decision is made to conduct test excavations to mitigate effects on the cultural resources.

This primary avoidance policy has spared many cultural resources from outright destruction, but has also resulted in a highly fragmented cultural landscape across many places of the American West, and in particular, across the Greater Chaco Landscape. As a result, many indirect and cumulative effects have built up across Greater Chaco, as the ancient Chacoan-Puebloan landscape has been slowly but persistently in-filled by the industrial infrastructure of the oil-gas industry.

In my view, a better perspective looks at cultural sites not in isolation, but as pieces of larger communities on the landscape. This community- or landscape-based approach has been part of archaeological research for nearly 25 years, but it has not appeared in the Agencies' playbook. Although the BLM-Farmington Field Office lands in Greater Chaco are currently leased at more than 90 percent, this landscape-level approach can be implemented to protect communities and site clusters that have not yet seen impacts, such as those seen at the Pierre's Community (see Van Dyke 2017).

In the pages below, I summarize the preliminary findings of the 2020 Chaco 10-Mile Study, highlighting several of the ancient communities and site clusters that were revealed. These findings, in addition to the other communities discussed above, make clear that the 10-mile protection zone contains abundant sites, communities, and poorly understood site clusters that require special protection by the BLM and BIA. However, the Agencies' preferred Alternative C (we are not sure which subalternative may be chosen) offers no protection for any of these sites, site clusters, or communities. Alternative B-1 would offer some protection for this community and all cultural sites on BLM lands in a 10-mile zone around Chaco.

To add to what Van Dyke's study has revealed and what prior BLM GIS-based analysis also showed, I compiled a map of the Pierre's Community and then overlaid the current BLM area of critical environmental concern (ACEC) that was put in place years ago in an effort to protect the community and keep oil-gas development away. Again, as Van Dyke has clearly illustrated, the number and density of oil-gas well pads and other facilities has compromised the viewshed and soundscape around the Pierre's Community. This study and the mapping exercise amplify this message.

Figure 2 shows the exterior boundaries of the ancient Pierre's Community, encompassing at least 160 sites of varying ages (primarily Chacoan with some Archaic, Early Navajo, and Historic Navajo manifestations), with the BLM's ACEC zones of protection shown. The ACECs were designed to protect Pierre's and two sections of the Great North Road, both north and south of the community. As the map shows, however, the ACECs cut through the middle of the community—protecting some sites but not offering any protection for outlying sites that are part of the ancient and historic community. Although the Pierre's Community is recognized as part of the Chaco Culture World Heritage designation, beyond BLM small ACECs, this amazing place has no special protection from oil-gas or other development.

Moving north of the Pierre's Community, we come to a point that is near the northern margin of the 10-mile zone designated by the 2019 House bill HR 2181 and pending Senate companion bill (Figure 3). This site cluster, which I have called "North of Pierre's," includes more than 100 sites of primarily historic Navajo and Archaic ages that lie on predominantly BLM lands. Beyond the initial recording of these sites on various projects, little additional research has been completed. At present, we do not know whether these sites constitute one or more discrete cultural communities. Additional research is necessary to better understand this very interesting site cluster. We do know that the density of sites in this cluster was the main reason that the 2019 legislation drew the protection boundary where it lies. Currently, with the Department of Interior 2019 moratorium on new oil-gas leasing in the 10-mile protection zone expired, this cluster of sites has no protection.

West of the Pierre's Community, we come to another dense cluster of sites identified as the Split Lip Flats cluster, after a local topographic feature (Figure 4). This very dense cluster contains at least 266 sites that are mostly of Middle-Late Archaic, Basketmaker II, and Pueblo I-III origin, located primarily on BLM-managed lands. The Chacoan road known as the Ah-She-Sle-Pah road is shown on the same map

(in Figure 4), running northwest from just below the Chaco Canyon sites of Penasco Blanco and pointing to the core of the Split Lip Flats cluster. Although it has been scarcely documented, there is a Pueblo II community in this cluster on the road alignment. More research would help us understand this area northwest of Chaco's boundary. As the map figure shows, there is an ACEC that encompasses a small portion of the Ah-She-Sle-Pah road. The bulk of this dense and poorly understood site cluster and community lies on BLM lands and it is not protected in any way beyond normally Agency protocols.

Heading further south and east, we come to an ancient Chacoan-Puebloan community defined by three great houses known as Kin Indian, Escavada, and Greasy Hill (Figure 5). This community encompasses some BLM land but lies mainly on Navajo Nation allotments and tribal trust lands. Forty sites are known to be part of this community, but additional sites could probably be identified; much of the Navajo land has not been archaeologically surveyed. In addition to the Chacoan era community, earlier Archaic sites and Historic Navajo camps and homesteads are present in the area. Although it abuts Chaco Park, this community and site cluster have no special protection under the current land-use strategies of BLM and BIA, nor is any special protection planned in the RMPA and EIS documents.

Next, we move to the east, past Chaco's boundary and to the community known as Bis san'ni (Figure 6). This Chacoan community was well studied in the late 1970s and early 1980s by Cory Breternitz, Mike Marshall, and others. The community encompasses at least 61 sites that are predominantly Pueblo II in age. Earlier and later Pueblo sites are present, as well as Archaic and Historic Navajo age sites. On the north, the community is largely bounded by the wide swath of Escavada Wash. BLM land is but a small percentage in the Bis san'ni area, mostly on the north end of the Chacoan community. Navajo allotted lands comprise the largest majority. Bis san'ni is recognized as unique Chacoan Outlier and, years ago, BLM placed a small ACEC around the great house structure (not shown in Figure 6). Nonetheless, this small ACEC does not protect most of the community and future oil-gas wells and infrastructure could be placed in close proximity to the great house structure and within the community boundaries.

Lastly, we move north of Bis san'ni to a location near the northeast edge of the 2019 Chaco Cultural Protection Bill boundary. This site cluster is the smallest, with 30 sites, and is identified as the Northeast of Chaco site cluster (Figure 7). The sites are split between Historic Navajo camps and settlement dating between 1880 and 1960, and a range of Archaic and likely Archaic camps and scatter sites. Similar to the North of Pierre's site cluster, these sites are known only through limited, survey-level documentation. Data show the presence of a Navajo community in the area, from 1880 to 1960. Nevertheless, additional research is required to better understand the Navajo community and to tease out the parameters of Archaic period settlement in the cluster, from 5500 to 800 BCE. This site cluster is probably the most at-risk of all discussed here, because companies working in the Mancos Shale oil development have placed many wells in the area just beyond the site-cluster boundary and the 10-mile boundary. If the BLM and BIA do not honor the 10-mile protection zone in this area, it is very likely that the sites in this cluster will become mere islands of "preserved" remnants of Navajo and Archaic cultures embedded within a highly industrialized modern landscape.

This group of six ancient and historic communities and site clusters is just a sample of those that lie within the 10-mile protection zone. Along with the 8 previously described Chacoan communities (Pierre's and Bis san'ni are in both groups), they clearly illustrate the high density of cultural and historic sites in this area directly adjacent to Chaco Culture National Historic Park. These findings again reinforce our understanding that the 10-mile zone of protection is not an arbitrary boundary. The 10-mile zone



contains irreplaceable ancient and historic sites and communities that merit much more protection than BLM and BIA policy and regulations currently provide.

In conclusion, I would encourage the Agencies to adopt Alternative B-1, which provides for a 10-mile zone of protection and would protect most of these sites and communities. I also encourage the Agencies to make use of the NMCRIS site database to identify areas where cultural and historic sites do **not** occur in high frequencies and densities, and where modern Navajo families are **not** living, to prioritize these areas for any future oil-gas leases. The current system allowing industry to choose areas they want to develop has clearly not worked well for the protection of cultural sites in Greater Chaco. It has resulted in the impacts described above for the Pierre's Community, as well as other site locations.

Why not manage this highly sensitive cultural landscape with a different approach? BLM and BIA could proactively identify areas of possible leasing where the Mancos Shale formation is present, where no families are currently living, and where sites densities are low. These areas could then be vetted by interested Pueblos and Tribes, and cultural resource concerns could be front-loaded into the process, instead of waiting until oil companies have purchased lease parcels and are committed to specific locales for oil-gas well pads, pipelines, road, and other infrastructure.

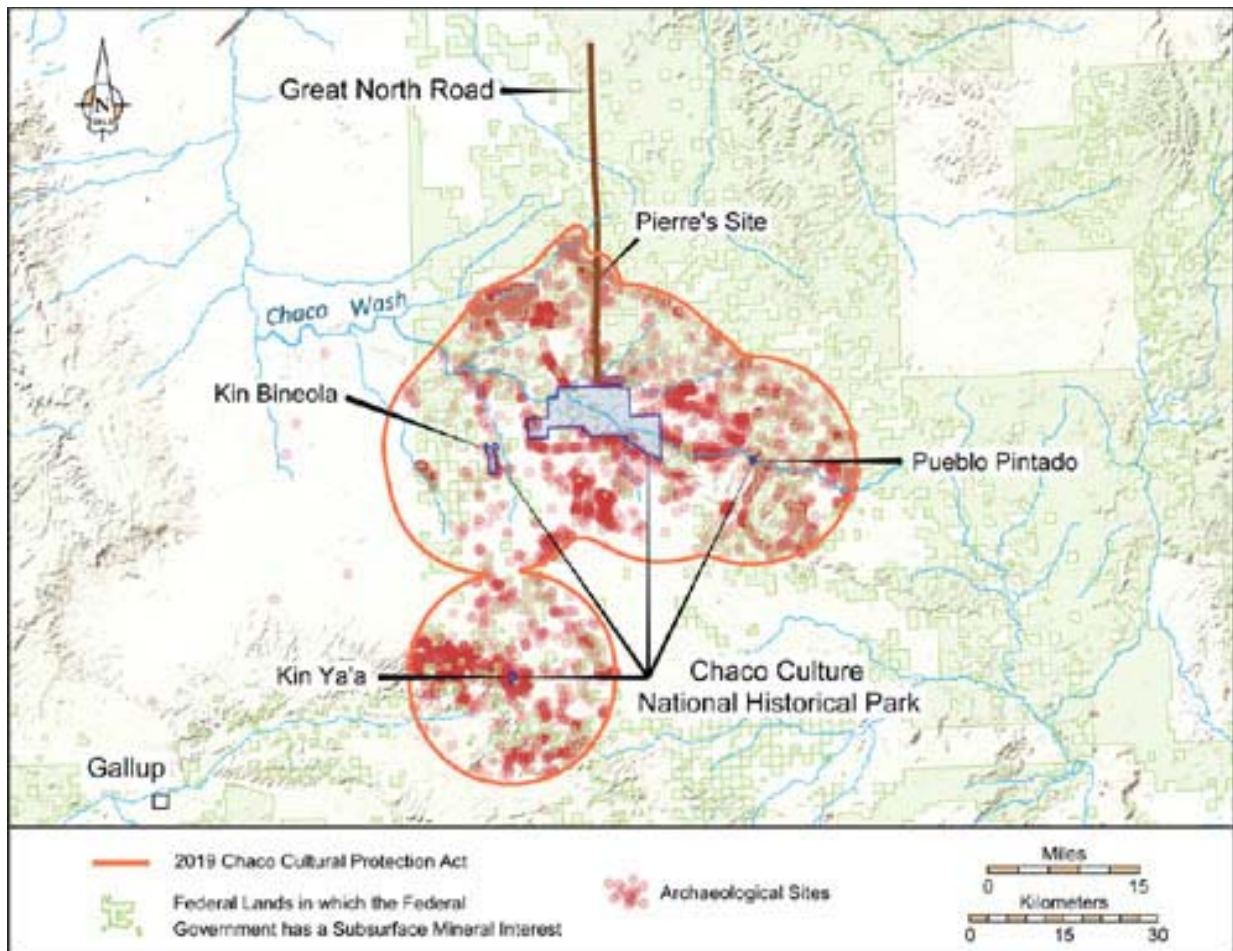


Figure 1. Map of the Greater Chaco Landscape showing boundaries of the 10-mile protection zone and rough site density (200-m offset, trimmed to 10-mile boundary, and blurred).

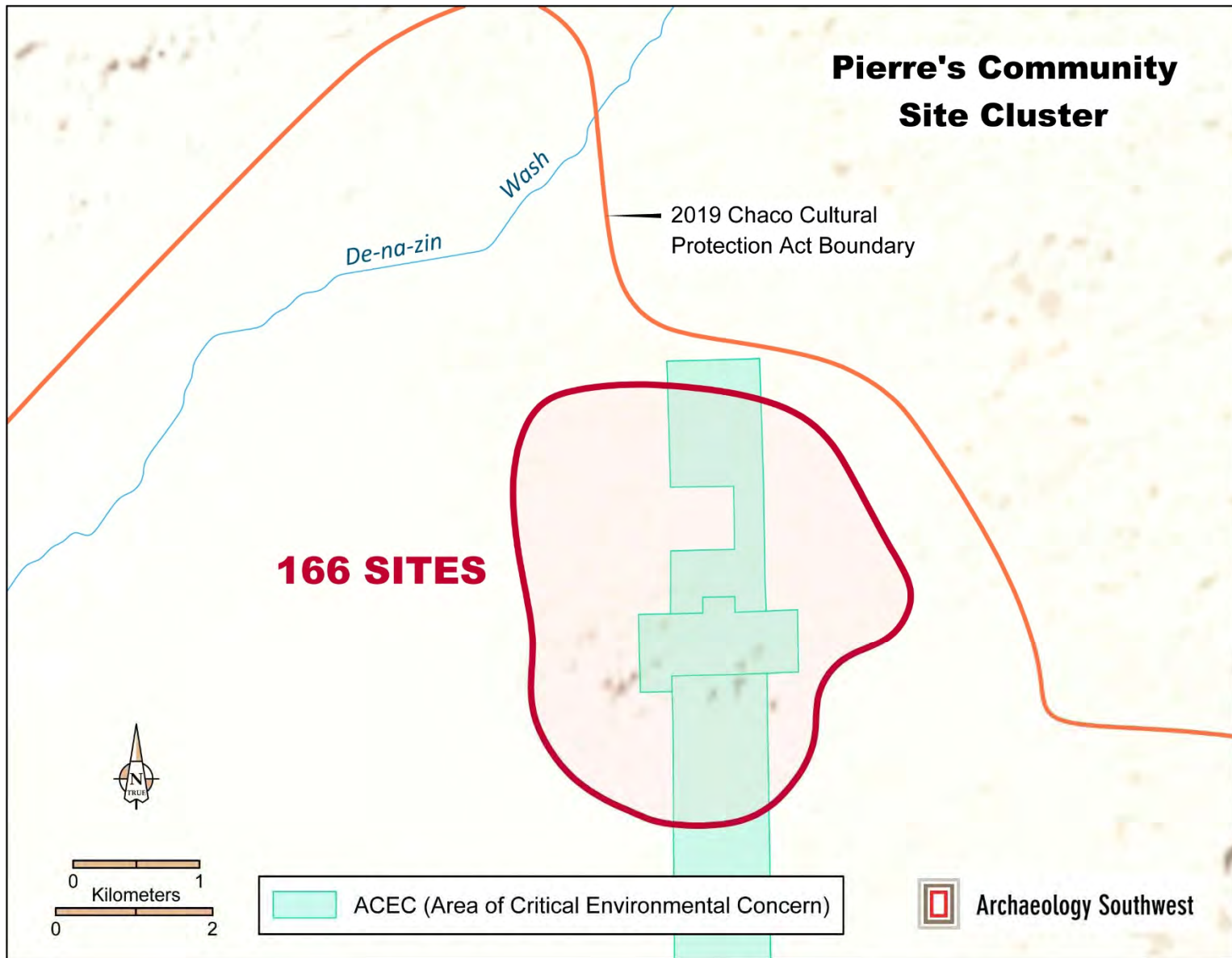


Figure 2. Map showing boundary of Pierre's Community, edge of 10-mile protection zone, and BLM's ACEC zones.

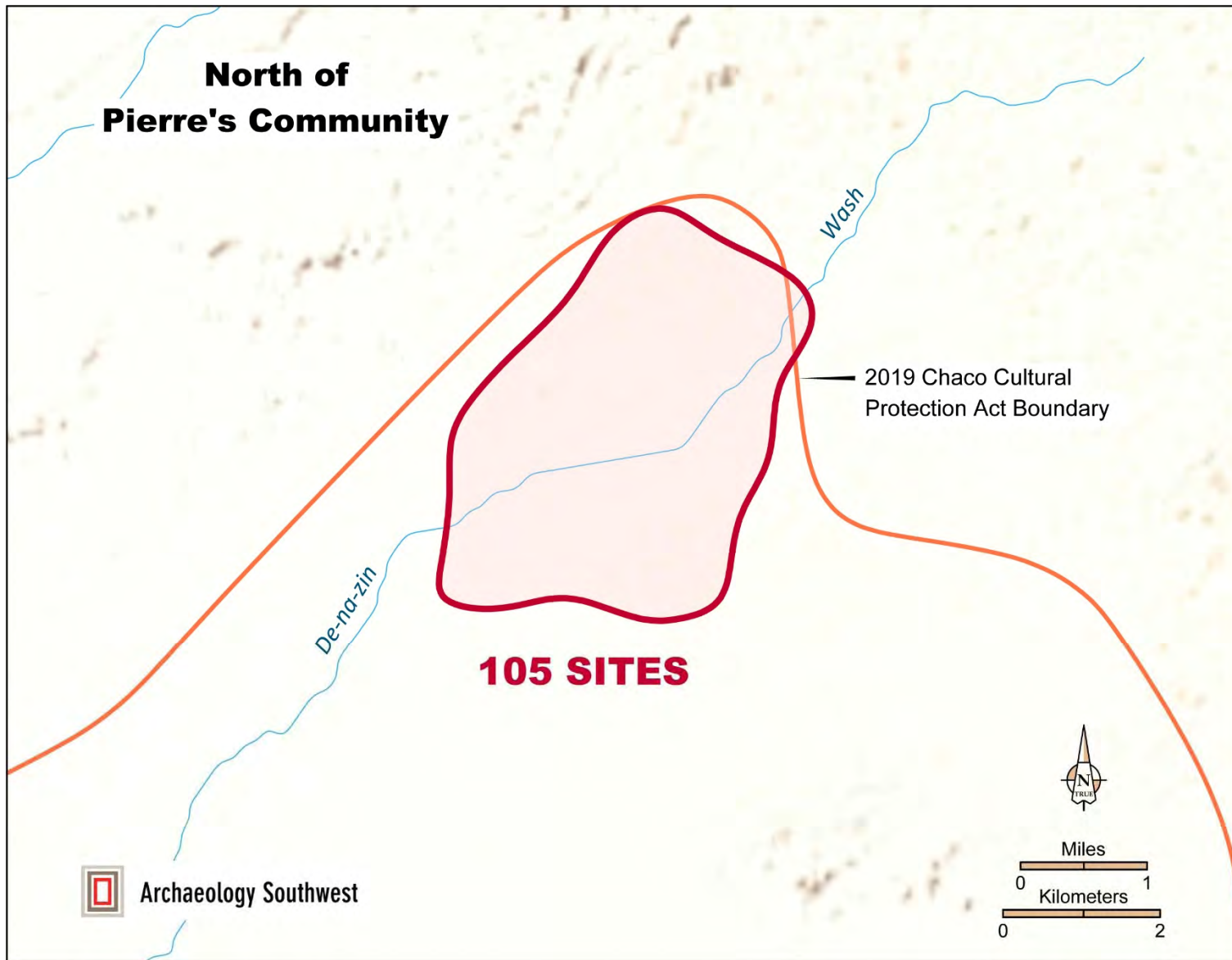


Figure 3. Map showing North of Pierre's site cluster and edge of 10-mile protection zone.

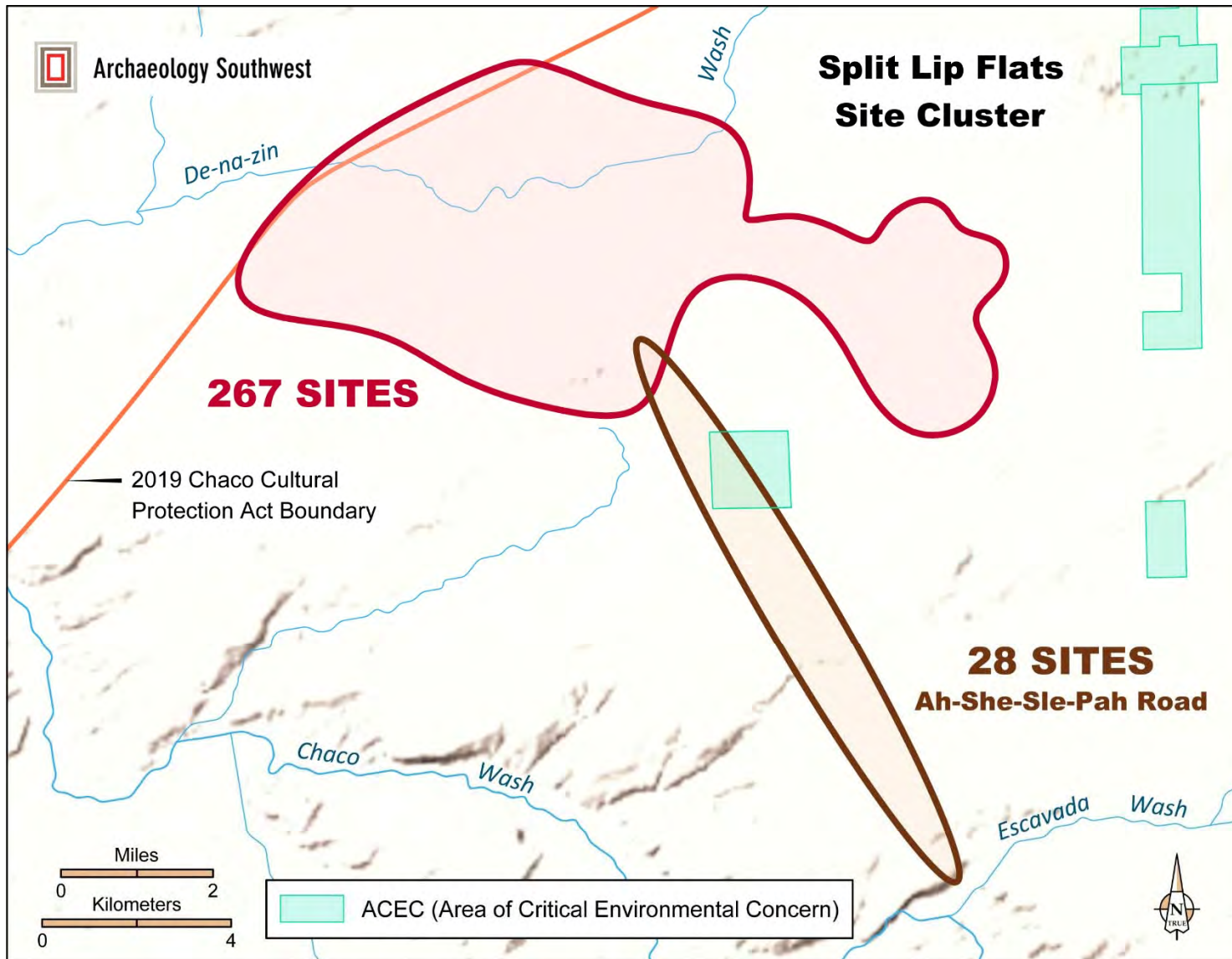


Figure 4. Map showing Split Lip Flat site cluster boundary, Ah-She-Sle-Pah road alignment, and edge of 10-mile protection zone.

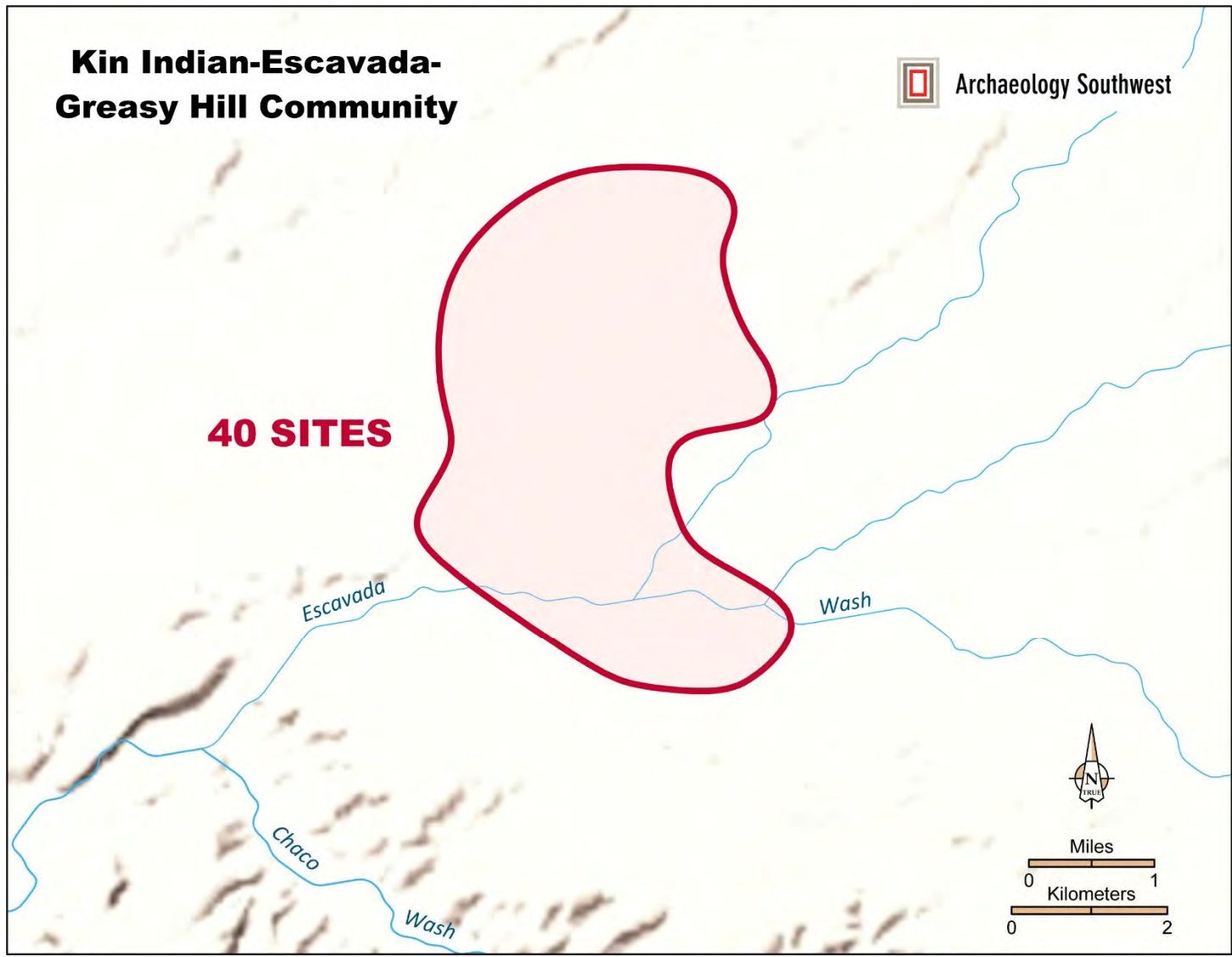


Figure 5. Map showing Kin Indian-Escavada-Greasy Hill community and site cluster boundary and edge of 10-mile protection zone.

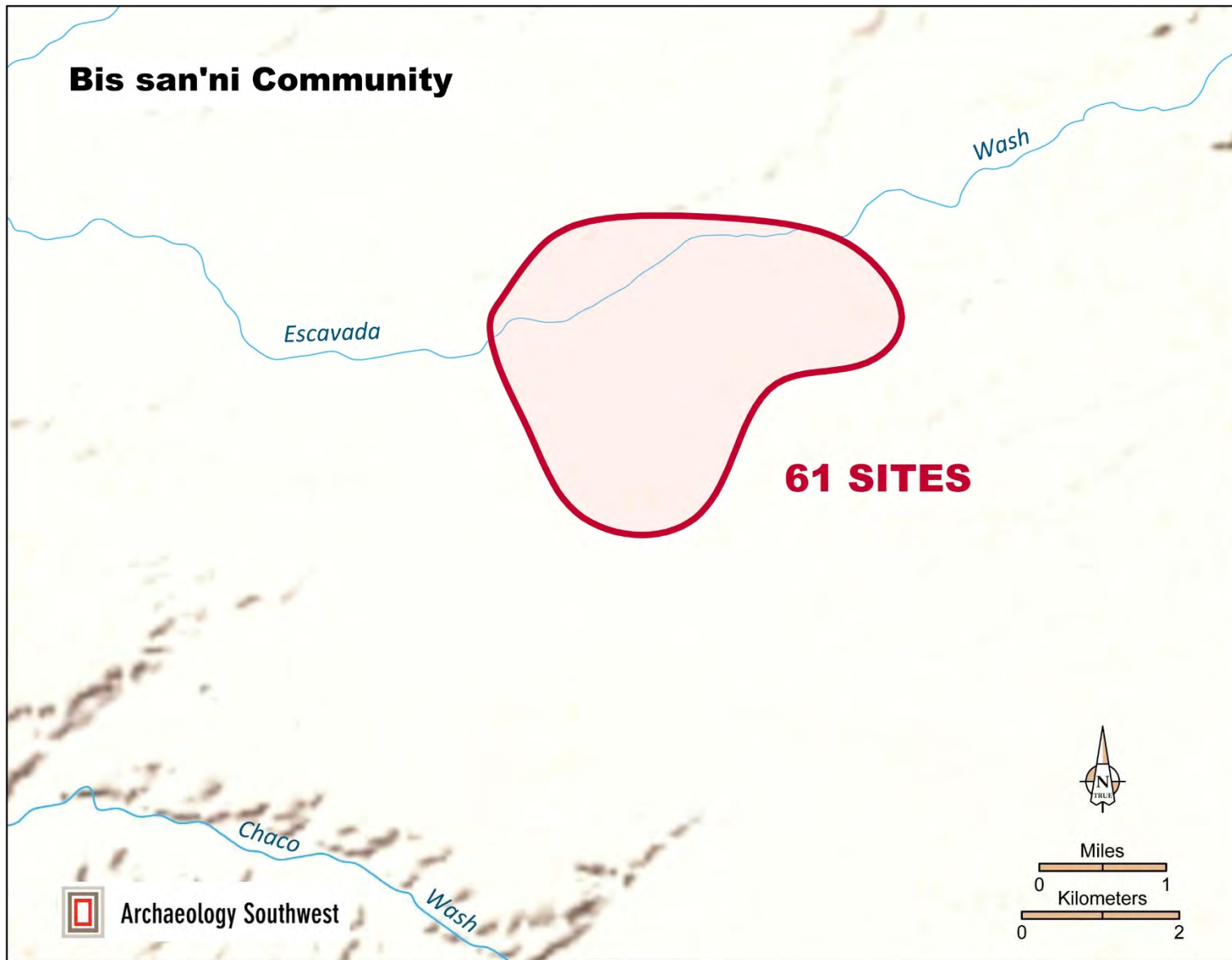


Figure 6. Map showing Bis san'ni Community boundary and edge of 10-mile protection zone.

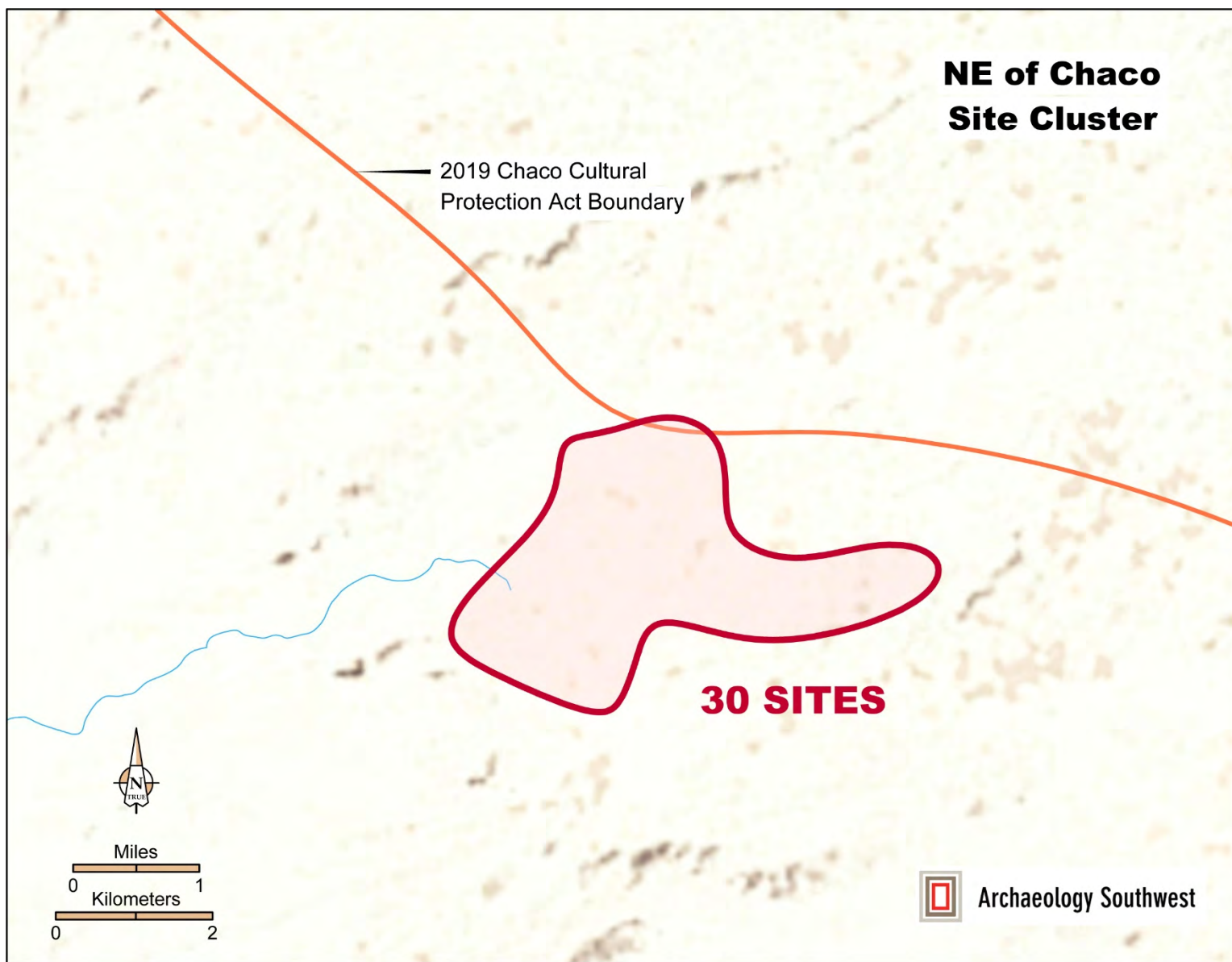


Figure 7. Map showing the boundaries of the Chaco NE site cluster and edge of 10-mile protection zone.