Oil-and-Gas Leasing in the West, 2021

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Introduction

As the Biden administration comes up to speed, one of its priorities is to reevaluate fluid mineral leasing in the American West. The previous administration pursued a strategy of "Energy Dominance," with consequent sales of thousands of oil-gas leases across the West. This hard push for oil-gas extraction—although representing a spike from the Obama administration—was not a departure from the overall pattern of Federal oil-gas exploration and production in the West over the last 70 years.

During this decades-long interval, oil-gas extraction and other mining activities have become the dominant use of public lands in the West—this, despite the Bureau of Land Management's oft-stated goal of multiple use, including recreation and other noneconomic pursuits. Moreover, the Bureau of Land Management (BLM) has not prioritized preservation of cultural sites and landscapes.

Accordingly, in places such as New Mexico's Greater Chaco Landscape, Utah's Bears Ears region, and southwestern Colorado, widespread oil-gas development has profoundly fragmented cultural landscapes and disrupted the connections Tribal communities maintain with these places. Furthermore, the BLM has failed to pursue meaningful Tribal consultation and engagement in the oil-gas leasing process, even though this is mandated by the National Historic Preservation Act and other laws.

This paper offers an assessment of the BLM's current approach to oil-gas leasing through the lens of cultural resource management and protection, as well as Tribal consultation.

Historical Context: Cultural Resources in the West

Together, the 12 western States have more than 1.65 million archaeological, historical, and traditional cultural sites in their respective State management databases. These counts range from about approximately 45,000 sites each in Washington and Alaska, to just over 100,000 in Wyoming and Utah, and well over 200,000 sites each in Colorado, New Mexico, and Arizona—and those numbers represent only recorded, documented, and mapped resources. At best, no more than 15 percent of any western State's land has been surveyed. Thus, a conservative estimate would place the total number of cultural resources in the West between 11 and 15 million.

Cultural resources in the 12 western States date from at least 13,000 BCE to the very recent past. Cultural groups encompassed by these resources include hundreds of contemporary Native American Tribes and many that are no longer represented, as well as a variety of Asian-American, African-American, and Euro-American groups whose presence dates after 1500.

A great variety of cultural site-types are represented in official databases from across the West. Types include:

- **Habitation sites**, such as pueblos, longhouses, hogans, villages, houses, and cabins
- **Short-term dwellings**, such as tipi rings, wickiups, brush shelters, fieldhouses, single-room structures, and lean-tos
- **Resource-extraction sites**, such as stone quarries, clay sources, water sources, gathering camps, hunting camps, and food-processing camps
- Ancient and historical **roads, trails (including pilgrimage routes), and other landscape sites**
- **Cemeteries** and burial sites
- **Artifact scatters** of all types
- **Traditional cultural places**, such as plant-gathering areas, rock features, springs, and larger landscape features
- A large variety of highly sensitive **ritual-ceremonial sites**, including shrines

All Agencies of the Federal government are mandated to comply with the Section 106 process of the National Historic Preservation Act (NHPA), as amended. Under Section 106, Agencies are supposed to engage Tribal communities, along with State historic preservation officers and other stakeholders, in "good faith" efforts to identify and evaluate cultural resources and develop measures to "avoid, minimize, or mitigate" adverse effects.

Notably, the types of "adverse effects" Agencies are supposed to account for and address include the material, visual and auditory impact of development projects. Typically, Agencies will direct companies engaging in land-disturbing practices (i.e., construction) to avoid cultural resources by at least 50 feet, and sometimes 100 feet. In some cases, developers are required to employ archaeological and cultural monitors to ensure that sites are not disturbed during construction.

This "identify and avoid" approach has protected the physical footprint of many cultural resources over the last 45 years. Nevertheless, the focus on individual sites, and not the larger landscapes they are a part of, has led to highly fragmented cultural landscapes across the West, particularly in areas where oil-gas development has prevailed. In areas of significant and rampant oil-gas extraction, "protected" cultural sites manifest as islands in a sea of industrial development. A

prime example of how an industrial landscape intrudes upon and dominates an ancient cultural landscape occurs just north of the 10-mile cultural protection zone around Chaco Culture National Historical Park (Reed 2020, 2021).

The destruction of cultural and natural landscapes is a direct result of a failure to embrace a holistic landscape approach to managing and protecting these resources. Although National Environmental Policy Act (NEPA) and NHPA laws require Agencies to address cumulative and indirect effects on resources and landscapes, these effects are, in practice, rarely meaningfully considered, identified, or mitigated.

Summary of Applicable Federal Laws

The **Mineral Leasing Act** (MLA) of 1920 (30 U.S.C. § 181 et seq) is a United States law that authorizes and governs the leasing of U.S. public lands for developing deposits of coal, petroleum, natural gas, and other hydrocarbons, as well as phosphates, sodium, sulfur, and potassium. This law was passed primarily to augment the Federal government's control of oil-gas leasing; prior to this Act, leasing occurred under the weak provisions of the General Mining Act of 1872. The MLA authorizes, but does not require, the BLM to lease public lands for oil and gas development: "All [public] lands…which are known or believed to contain oil or gas deposits may be leased by the Secretary."

The **National Historic Preservation Act** (NHPA) of 1966 (16 U.S.C. ch. 1A, subch. II § 470 et seq; as amended) was passed to protect the nation's historic and cultural resources from unchecked development. Important parts of the Act include setting Federal policy for preserving the nation's heritage; establishing Federal-State and Federal-Tribal partnerships; establishing the National Register of Historic Places and the National Historic Landmarks program; mandating the selection of qualified State Historic Preservation Officers (SHPO); and establishing the Advisory Council on Historic Preservation (ACHP).

The **National Environmental Policy Act** (NEPA) of 1969 (P.L. 91-190; 31 Stat. 852; signed into law in 1970; as amended) was passed to preserve important historical, cultural, and natural aspects of our national heritage. The law requires Federal Agencies to utilize a systematic, interdisciplinary approach to ensure integrated use of the natural and social sciences in planning and decision-making that may have an impact on the environment.

The **Federal Land Policy and Management Act** (FLPMA) of 1976 (43 U.S.C. ch. 35 § 1701 et seq) governs how public lands are administered by the BLM.

The **Archaeological Resources Protection Act** (ARPA) of 1979 (16 U.S.C. 470aa-470mm) was passed to protect archaeological resources on public lands and Tribal lands.

Overview of Oil-Gas Development on Federal Lands

Most of this information comes from the BLM's website: *https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/general-leasing*.

The development process includes three primary steps: planning, leasing, and permitting-drilling. Each is discussed here.

Planning

The BLM planning process typically covers very large tracts of land—hundreds of thousands or millions of acres—and is accomplished through a new Resource Management Plan (RMP) or by an amendment to an existing plan (RMPA). These processes apply to entire field-office areas or large portions thereof. An initial scoping process identifies the issues that will be considered in the RMP or RMPA documents. As part of these processes, a National Environmental Policy Act (NEPA) analysis is conducted, usually resulting in an Environmental Impact Statement (EIS). During the land-use planning process, the BLM determines whether and under what conditions public lands should be available for oil-gas leasing and development.

The BLM's land-use planning process begins with a formal public scoping process to identify planning issues that should be considered in the land-management plan. The BLM analyzes these issues and uses them to develop a range of alternative management strategies.

The range of alternatives is presented in a draft RMP and a draft EIS. The release of the draft RMP and draft EIS is followed by a 90-day public comment period. Once comments have been reviewed and evaluated, the BLM revises the draft plan, as appropriate, and then releases a proposed RMP and final EIS.

As part of the RMP process, the BLM compiles known cultural resource data for the area in question. This is accomplished through BLM and State databases and involves no fieldwork. Because the percentage of surveyed lands in most RMP decision-areas falls far short of even 50 percent, the typical planning process proceeds with incredibly inadequate cultural resource data in hand. For the Farmington Field Office of BLM New Mexico, which includes much of the Greater Chaco Landscape, 15% of the total land area has been surveyed, and 53% of the BLM-managed surface lands have been inventoried.

The release of a proposed RMP and final EIS begins a 30-day protest period for any person who previously participated in the planning process and has an interest that is, or may be, adversely affected by the proposed plan. At the same time, the BLM

provides the proposed RMP and final EIS to the governors of those States included in the RMP for a 60-day review period to identify any inconsistencies that may exist with State and local plans. After inconsistencies and protests have been considered, the BLM State Director typically approves the final RMP.

The result of most RMP and RMPA processes is to allow oil-gas leasing on the vast majority of available lands in a given decision-area. Thus, in the past, the BLM has allocated most of its planning areas to oil-gas leasing without really knowing whether those lands contain cultural resources, and based on limited and insufficient Tribal consultation efforts.

Currently, RMP processes are underway in several western States. In New Mexico, RMPs or RMPAs are underway in the Farmington and Carlsbad offices.

Leasing

The BLM generally issues two types of leases for oil-gas exploration and development on lands owned or controlled by the Federal government: competitive and noncompetitive. The Federal Onshore Oil and Gas Leasing Reform Act of 1987 requires that all public lands available for oil-gas leasing be offered first by competitive leasing. The BLM may issue noncompetitive leases only after the Agency has offered the lands competitively at an auction in which the lands do not receive a bid.

The maximum competitive parcel size is 2,560 acres in the lower 48 States and 5,760 acres in Alaska outside of the National Petroleum Reserve-Alaska. The BLM issues competitive and noncompetitive leases for a 10-year period.

State offices of the BLM typically conduct lease sales quarterly—sometimes more frequently—when parcels are available. Each State office publishes a Notice of Competitive Lease Sale (Sale Notice), which lists parcels to be offered at auction, usually 45 days before the auction. Notice is posted in the National Fluids Lease Sale System and by the State office that administers the sale. The Sale Notice specifies lease stipulations applicable to each parcel. The BLM may conduct lease sales in-person or through Internet-based auctions.

Lease sales occur regardless of the current price of oil or gas, or the state of lease and drilling permit surpluses. *Simply put, lease sales at present do not reflect real-world data or situations.*

Most lands offered in lease-sale notices are nominated through expressions of interest by what the BLM calls "the public." In reality, oil-gas companies nominate the vast majority of parcels. As the policy is implemented today, neither the BLM nor other Federal Agencies have much role in determining which areas are nominated for lease sales. By law, some of the land base in any given field office or

decision-area is not available to lease, including Wilderness Areas, Wilderness Study Areas (WSAs), and Areas of Critical Environmental Concern (ACECs). Areas that are known to be culturally or naturally sensitive but not designated as any of those official categories are not excluded during the lease-sale process.

Importantly, and as at the land-use planning stage, the BLM does not conduct on-the-ground inventories of cultural resources, *even when leases are proposed in areas known to contain sensitive cultural resources or values*. Furthermore, the feasibility of a given lease parcel to actually produce oil-gas is not part of the leasing calculus.

Once a lease is purchased, the lease holder acquires the right to pursue oil-gas activities, which greatly limits the ability to prioritize and manage for the protection of cultural landscapes and other resources. Unlike other mineral leases, such as coal or uranium, among others, oil-gas lease holders are not responsible for completing comprehensive cultural resource or environmental surveys on their leased parcels. Although oil-gas development often impacts much of the landscape of the leased land, cultural resource work is not mandated until the subsequent permitting-drilling phase of work.

As a result, substantial impacts occur that cannot be fully mitigated, in particular so-called "indirect" or "cumulative" effects (Figure 1). These effects occur when development proceeds within or in close proximity to sensitive cultural landscapes and resources. In addition, areas of cultural sensitivity to Native American Tribes are very rarely identified during the leasing stage—because, once again, Tribal consultation is usually limited to sending notifications and letters to Tribes that may have connections to affected areas—and impacts are much more difficult to avoid or mitigate once a lease is approved.

Permitting and Drilling

Once a lease is secured, companies go about the process of determining where oil or gas well pads will be placed, along with access roads, pipelines, storage yards, compressor stations, and other infrastructure. Project areas are staked and surveys completed to determine the presence of cultural resources and threatened/endangered species.

If significant resources are found, oil-gas facilities are moved to avoid and, in theory, protect those resources. But, the commitment to developing the specific lease parcel is locked in by this stage, and it becomes increasingly difficult, if not impossible, to fully avoid many types of impacts, especially visual and auditory impacts. Indirect impacts typically accumulate, as well.

BLM does have the ability to impose new protection measures at the permitting and drilling stage (through conditions of approval and other stipulations), but that authority is infrequently exercised. Thus, by this point, the die has essentially been

Figure 1. Aerial photograph of crisscrossing oil-gas roads and facilities, showing cumulative effects, and impacting the Greater Chaco Landscape, New Mexico (Reed 2021: Figure 16.6).

cast and development is a foregone conclusion, even when concerns are raised by Tribal communities or there will be profound impacts on cultural landscapes and resources.

Conflicts and Problems

The preceding paragraphs provided a brief sketch of the current BLM approach to oil-gas leasing in the West. This approach prioritizes leasing of public lands for mineral extraction at the expense of protecting cultural landscapes and resources, which are an important and coequal part of BLM's multiple use mission. The following section identifies several aspects of the leasing program that are especially problematic, from the standpoint of prioritizing oil and gas activity over making good-faith efforts to identify and protect cultural resources.

Prioritizing Development over Preservation

First, the Federal oil and gas leasing system prioritizes development over preservation.

As discussed, during the planning and leasing stages of oil-gas development, little attention is paid to the identification and protection of cultural resources through on-the-ground work. During planning efforts, cultural site counts are compiled from existing records only; no funds are allocated to undertake new inventory work, however limited.

At the leasing stage, existing records are once again considered adequate to assess the nature of the cultural site record in a given lease. They are not. Frequently, the lease areas in question have had little prior survey work, and there is no basis for projecting cultural site density. Nevertheless, it is very unusual for BLM to initiate any fieldwork or require a successful lease holder to do so prior to the cultural and environmental work completed during the siting of oil-gas infrastructure at the permitting and drilling stage.

Furthermore, lack of cultural resource survey work at the planning and leasing stages of oil-gas development precludes BLM from addressing impacts at a landscape level, because lease issuance gives companies the right to develop their holdings. This, combined with BLM's focus on a simplistic "identify and avoid" strategy, provides absolutely no opportunity to address the cumulative and indirect effects that are key to meaningful compliance with both NEPA and NHPA and subsequent management efforts. Individual sites are typically avoided with the standard BLM approach, but overall landscapes are severely degraded by the accumulation of more and more oil-gas wells, pipelines, access roads, and other infrastructure. Meaningful consideration of these cumulative and indirect effects rarely, if ever, occurs.

Lack of Meaningful and Significant Tribal Consultation

Second, the lack of meaningful and significant Native American input during the planning, leasing, and permitting-drilling stages of development has been and continues to be a real problem.

Although Tribal consultation is part of the amended Section 106 and BLM internal regulations, among other directives, meaningful engagement with Tribes is rarely undertaken during any part of the environmental planning process and during oil-gas development. Typically, Tribes are consulted only after many key decisions have been made, leaving Tribes to suffer the consequences of prior Agency decisions. Consultation often occurs primarily or solely in the form of written letters to Tribal leadership. Follow-up phone calls or email messages with Tribal historic preservation and cultural offices rarely happen, and visits to Tribal council chambers for in-person consultations only occur at the specific request of the Tribe. Tribes are contacted well after Agency planning and other internal processes are well underway, leaving the Tribe little to no recourse in having their concerns

appropriately considered by the Agency. This results in marginalizing and disenfranchising the Tribe from meaningful participation.

In those unusual cases where meaningful Tribal consultation does proceed, it often occurs too late in the Federal process to have any significant effect on Tribal concerns and the resultant impact on the management of cultural resources. Schedules are most commonly determined by Agency priorities, a misconception that lease sales must be held every quarter, and pressure from oil-gas developers, and rarely allow adequate time for overburdened Tribes to engage in substantive ways.

Directly related to the Tribal consultation issue is the total absence of Tribal input during the identification stage of the Section 106 process, which currently occurs during the final permitting-drilling stage. Under Section 106, Agencies are charged with identifying cultural resources that may be impacted by undertakings. Recent work by Acoma Pueblo on the Navajo Gallup Water Supply Project revealed dozens of cultural sites that were not identified during standard archaeological work. This was the result of the Agency privileging the funding of Western archaeological identification over that of the participating Tribes resulting in the disenfranchisement of the Tribes from the Section 106 compliance process.

In contrast, during the Kinder Morgan Los Lobos CO2 project, six Acoma Pueblo cultural practitioners accompanied 12 professional archaeologists in the Class III cultural resource inventory of the project area (Kurt Anschuetz, personal communication, 2021). The archaeologists identified about 65 conventional archaeological sites. Personnel from Acoma, however, recognized more than 90 Traditional Cultural Properties (TCPs). As this example demonstrates, utilizing only Western-trained archaeologists resulted in missed and overlooked important TCPs and other cultural sites which underscores the point that typical identification efforts under Section 106 are often not in compliance with Federal law. These incidents too frequently occur because non-Tribal archaeologists are rarely trained to reliably recognize, accurately evaluate, and report on Tribal and Pueblo TCPs.

Inadequate Identification, Management, and Protection of Cultural Resources

Third, the BLM's policy of deferring all cultural resource inventory work until the final stage of permitting and drilling does not allow for adequate identification, management, and protection of cultural resources.

As noted, by the time an oil-gas project reaches the final permitting and drilling stage, BLM has largely committed to allowing the developer to proceed on the lease, regardless of the cultural resources identified or the extent to which those resources will be harmed by development. Individual sites on a lease often become isolated

zones—which are protected from direct, physical damage—surrounded by a landscape that is heavily impacted by industrial development.

It is well documented that many "individual" sites are connected to other sites ancient trails or roads, or by line-of-sight viewsheds and auditory soundscapes. In these frequently occurring examples, individual site avoidance provides only minimal protection. It is the larger, connected ancient and historic landscapes that are some of the most significant—and at-risk—resources on our public lands. Moreover, management decisions, including mitigation strategies, are typically made from a federal Agency perspective and do not include the psychological, emotional, spiritual and cultural perspectives of the Tribe that ascribes traditional importance to a cultural resource resulting in the final coup de grâce of disenfranchisement.

Unfortunately, BLM's current leasing-management policy does nothing to provide protection for these irreplaceable and historic cultural landscapes. Beyond this, recent BLM planning documents do nothing to address this problem or attempt to alleviate these gaps in compliance. For example, the current Farmington Field Office Draft EIS does not adequately characterize the extent to which prior and ongoing oil-gas development has directly, indirectly, and cumulatively affected cultural resources in the Greater Chaco Landscape. BLM seems to agree in the Draft EIS, stating that "no agency has done a thorough analysis of the actual rate of change [in the condition of cultural resources]" (Draft EIS at 3-119).

This glaring deficiency is just one example of a much broader problem, given the undisputed significance of the Greater Chaco Landscape and the degree to which it has been adversely affected by past and ongoing oil-gas development.

Solutions: Leasing Procedures

Given the substantial problems identified in the prior sections above, our strongest recommendation is that BLM should take a much more active and hands-on role in the planning and execution of oil-gas leasing across the West. The oil-gas industry has been allowed to call the shots in leasing Federal lands across the West for more than 50 years resulting in an emphasis on profit over preservation. Rather than proactively identifying lease parcels based on multiple use criteria, including whether areas have been adequately surveyed for cultural resources and whether sensitive cultural landscapes and resources are present, BLM typically allows industry to nominate parcels with few limits for quarterly lease sales. Here, we offer a number of reasonable solutions.

Take a Proactive Approach to Removing Sensitive Areas from Leasing

First, in place of the current, heavily industry-biased approach, BLM should, prior to accepting any nominations, decide which areas in a given leasing zone should be open for a particular sale.

Such a proactive approach would provide BLM with the opportunity to remove areas from leasing that have cultural concerns. As part of this process, BLM should work much more closely and meaningfully with interested Tribes to address their concerns **prior** to considering lease sales. (We offer additional suggestions on improving Tribal consultation and input below.)

As part of this much more proactive role for BLM in oil-gas leasing, each field office should complete a thorough assessment of unleased lands. These assessments should focus on identifying areas of environmental and cultural concerns that are *not* currently protected as Wilderness tracts or ACECs. To be effective, this work would engage partnership with interested Tribes, environmental and preservation groups, and other interested parties. Depending on the outcomes of individual assessments by the Farmington BLM, one likely result is the establishment of "no go" areas where leasing is prohibited.

Assess Previously Leased Lands that Require Enhanced Rehabilitation

Second, the BLM should complete an assessment of previously leased lands that require enhanced rehabilitation.

This task would focus on portions of the landscape that no longer contain active oil-gas leases or where oil-gas activity could be retired. Work should focus on environmental cleanup of older infrastructure sites, paying special attention to impact cultural landscapes that would benefit from remediation and restoration efforts.

Solutions: Tribal Consultation and Engagement

In the realm of Tribal consultation and engagement, specific recommendations are made in the areas of planning, leasing, and permitting-drilling.

Involve Indigenous Communities from the Beginning

First, the Agencies must meaningfully consult with and involve Native Tribes and Pueblos in the planning process from the beginning, as required by Section 106 of the NHPA, as amended, and NEPA.

On many projects and on the currently in-progress Farmington Mancos-Gallup RMPA/EIS Planning process, Tribes were not adequately or meaningfully consulted at the outset of projects. Initial solicitations of their concerns did not begin until *after* substantive decisions about the locations and methods of land-altering development already have been made.

This delay results in Tribal and Pueblo concerns not being sufficiently expressed or appropriately addressed in engaged and respectful dialogue, despite BLM's stated goal of shared conservation stewardship. As a result, agency planning efforts took shape and moved forward without the appropriate identification and consideration of issues of concern to Tribes.

Listen to Concerns and Consider Contexts

Second, when Tribes and Pueblos are consulted during an expanded planning process, BLM should not only listen to the concerns expressed, but also consider the cultural contexts of the perspectives and information being shared. Not only is it important for BLM to listen to what the Tribes and Pueblos are saying, but the BLM needs to actually "hear" what is being said.

The ideas and guidelines expressed in NHPA language, by their very nature, are prone to narrow interpretation, such that the perceptions, attitudes, and values of historic preservation professionals can be the bases for judging the meaning and importance—even the legitimacy—of traditional Native worldviews (Anschuetz and Dongoske 2018:5; Dongoske and Anschuetz 2016). We encourage Agencies to carefully consider how they might modify their approaches to cultural resource management and planning processes to meaningfully incorporate Tribal and Pueblo concerns.

Solicit Input on Language

Third, Agencies must solicit input on the language used in the conduct and reporting of Section 106 and NEPA processes.

For example, Acoma Pueblo's work on the Greater Chaco Landscape project, the Navajo Gallup Project (Pueblo of Acoma 2018), and on other development undertakings makes clear that use of standard, archaeologically derived language and terminology inhibit Tribal and Pueblo input. Customary use of regulatory language in the Section 106 and NEPA processes depends on narrow, object-oriented, technical jargon—as opposed to a holistic, process-oriented language—that fails to recognize the potential for suppressing the recognition of, and respect for, cultural diversity by privileging a Euro-American worldview over traditional cultural knowledge (Dongoske and Anschuetz 2016).

This bias, however unintentional, results in less-than-satisfactory decisions on cultural resource management that trivialize, marginalize, or flatly dismiss Native perceptions, attitudes, beliefs, and values from further consideration. In doing so, the Agencies' cultural resource management staff and agents are prone to talking and writing about matters of cultural sensitivity with a profound and hurtful lack of respect (Dongoske and Anschuetz 2016).

For example, archaeologists commonly refer to round, subterranean structures found on survey projects as "kivas," which are sacred places within Pueblo communities that should not be talked about casually and without dignified consideration. Tribal and Pueblo consultants object to this usage because these structures had multiple functions in the past, and use of the term "kiva" constrains interpretation by imposing Anglo-American commodification and inappropriate application of a Native term.

We also recommend that Agencies simply *ask* Tribes about the appropriate terminology for different types of archaeological sites, features, artifacts, and other phenomena. Then, respect the answer provided and begin to use these terms when describing and evaluating archaeological resources. This process will help refocus and decolonize cultural resource work and bring Tribal and Pueblo perspectives to the forefront.

Substantively Engage with Tribes Before and During the Leasing Process

Fourth, the BLM must more substantively engage and consult with Tribes *before* and *during* the leasing process.

- Consult and involve Tribes and Pueblos meaningfully **at the beginning** of the leasing process, including **making direct** contact with interested Tribes and sharing maps and documentations
- In advance of leasing, through ethnographic and archival research, **identify the cultural landscapes** important to individual Tribes or groups of Tribes
- If Tribes identify problems or issues with proposed leases, **remove those leases from consideration** pending detailed consultation and discussions with affected Tribes
- Once leases are bought, require oil-gas operators to **fund and expedite field visits and inspections** by interested/affected Tribes
- At the leasing level, **adopt a landscape-scale approach** and treat each potential lease (or adjacent leases) as a landscape to be managed as a whole
- **Extend the overall leasing sale and development period** from its current 6 months to **12 months**, as a 6-month period is insufficient time to ensure that Tribal concerns related to Section 106 are adequately and legally addressed
- **Prohibit** oil-gas operators from developing leases (i.e., moving into the permitting-drilling phase of work) until **all Tribal concerns** are identified and successfully addressed

Involve Tribes in Fieldwork at the Permitting-Drilling Stage

Fifth, Agencies should involve interested Tribes and Pueblos in fieldwork on every project of sufficient size.

Tribal personnel should accompany archaeologists in the field during inventory of oil-gas well pads, access roads, pipelines, and other ground-disturbing infrastructure projects to ensure that assemblages of cultural resources important to Tribal and Pueblo history and identity are completely, accurately, and responsibly identified, evaluated, and reported. Discoveries made by a team from the Acoma Historic Preservation Office on the limited Acoma Greater Chaco Project, as well as those made during the Bureau of Reclamation's much larger Navajo Gallup Water Supply Project, make it clear that Western-trained archaeologists are incapable of identifying all cultural resources in project areas. Because this work is required under Section 106, the costs of having personnel of affiliated Tribes in the field should be borne by developers—in this case, oil-gas operators working across the West.

Additionally, for specific areas with sensitive TCPs and other cultural resources, as identified by Tribes, Agencies should develop new guidelines for oil-gas development that include, at a minimum:

- **Soundscape and viewshed analysis** prior to conducting oil-gas lease sales, such as a study recently completed by Ruth Van Dyke (2018) at the Pierre's Community
- **Field visits by Pueblo and Tribal leaders** to sensitive areas prior to leasing

We also endorse requests by Tribes and Pueblos that Agencies require their agents to provide opportunities to cultural practitioners to oversee their field studies, ideally as active participants in their data treatment investigations, or minimally as engaged observers. Such participation will ensure that Tribal communities' traditional values are heard and respected, and will provide assistance to archaeological field teams in the appropriate identification and handling of cultural resources, such as concretions, fossils, cave deposits, and the like, with which archaeologists are unfamiliar and do not consistently recognize as significant cultural resources.

Involve Tribes in Cultural Resource Evaluation at the Permitting-Drilling Stage

Sixth, as cultural resource projects are completed, BLM should mandate involvement of Tribes in respectful and appropriate evaluation of collections and documentation, including photographs and GIS data.

These measures will ensure the appropriate description, interpretation, and evaluation of cultural resources included in the field inventory. Although these recommendations involve going beyond standard archaeological evaluation of cultural resources under Section 106, they serve to facilitate recognition that Tribes' concerns are, again, related to the goal of "shared conservation stewardship."

For example, cultural resource managers routinely evaluate archaeological sites as potentially eligible to the National Register of Historic Place under Criterion D: for their scientific and/or historic information potential. Many Tribes understand that such a standard evaluation is incomplete, myopic, and disrespectful in many cases, and that Criteria A, B, and C should be employed more frequently utilizing Tribal associative values by archaeologists and recommended by Agencies' reviewers in meaningful engagement with traditional Tribal communities. This is in part due to the fact that *context* and *setting*—in addition to archaeological or informational value—contribute to the historic or cultural significance of many sites across the West.

In addition, NPS Bulletin 38 should be used to evaluate Tribal TCPs, which recognizes that only the cultural practitioners of affiliated communities possess the training and expertise to identify and evaluate. Bulletin 38 was written specifically to aid identification and evaluation of TCPs and other culturally sensitive cultural resources that do not fall into conventional Anglo-American defined site categories. Furthermore, Bulletin 38 specifies that the 50-year age requirement for eligibility to the National Register can be waived for TCPs.

Finally, as part of report-writing and resource-evaluation processes, BLM must support (financially) the review of draft reports by affiliated Tribes prior to preparing draft final documents. This review needs to include reports from all stages of Section 106 work, including survey/inventory, testing, data recovery, ethnographic work, and research-design development. Accordingly, BLM should build a longer review period into this process, allowing a full 90 days for Tribal review with complete documentation.

Changes to Leasing Policy

As part of the lease-sale process, successful industry bidders must be notified that *they are responsible for inventory of the entire leasing area*. Many of the cumulative and indirect effects discussed above are a direct result of the "identify and avoid" policy that has characterized BLM and Federal cultural resource management for 50 years. This has allowed the modern industrial oil-gas industry to intrude into and greatly impact cultural landscapes across the West.

This approach shifts cultural resource work from the final stage of permitting-drilling to the leasing stage, where appropriate decisions can be made regarding individual resource and large landscape management and protection. Entire lease areas will be assessed for cultural resources, with a mixed team of archaeologists and interested/affiliated Tribal members. This will result in a much more complete assessment of all cultural resources in a lease area, and, in turn, enable better decision-making for the long-term preservation of fragile cultural resources.

Conclusion

The current state of oil-gas leasing on BLM lands in the West is in dire need of an overhaul. Cultural resources and landscapes are being impacted, destroyed, or marginalized every year. In 2021, the accumulated impact of 100 years of rampant oil-gas development on public lands in the American West is substantial and appalling. The BLM must substantively modify its approach to every stage of oil-gas leasing, including planning, leasing, and permitting-drilling.

References Cited

Acoma, Pueblo of

2018 A Statement of the Pueblo of Acoma's Perspective and Concerns: Cultural Resource Management for the Navajo Gallup Water Supply Project in an Acoma Homeland. Prepared for Navajo-Gallup Water Supply Project, USDI Bureau of Reclamation by Western Colorado Area, Durango Field Office, Durango, CO. Ms. on file, Pueblo of Acoma Historic Preservation Office, *Acoma* Pueblo, NM.

BLM Leasing Process

2021 https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/general-leasing. Retrieved May 3, 2021.

Dongoske, Kurt E., and Kurt F. Anschuetz

2017 Theory and Praxis in Decolonizing the National Historic Preservation Act, ed. 2.0, by Kurt E. Dongoske and Kurt F. Anschuetz. Workshop presented at the 15th Annual Arizona Historic Preservation Conference, Hilton El Conquistador Hotel, Oro Valley, Arizona.

Reed, Paul F.

2020 Reed, Paul F. 2020. An Archaeological Reconnaissance of Chaco's 10-Mile Zone of Protection. Preliminary report. Archaeology Southwest Report 2020-102.

2021 Protecting the Greater Chaco Landscape: Preservation and Advocacy. In *The Greater Chaco Landscape: Ancestors, Scholarship, and Advocacy*, edited by R. Van Dyke and C. Heitman, pp. 308-330. University Press of Colorado, Louisville.

Van Dyke, Ruth

2017 Impacts of Oil and Gas Drilling on Viewscapes and Soundscapes at the Chaco Outlier of Pierre's, San Juan County, New Mexico. Report submitted to BLM-Farmington Field Office and BIA-Navajo Area Office as part of Resource Management Plan amendment and draft EIS scoping, February 2017.