



May 27, 2014

Mancos-Gallup RMP Amendment Comments
c/o Lindsey Eoff
Bureau of Land Management
Farmington Field Office
6251 N. College Boulevard Suite A
Farmington, NM 87402

Dear Ms. Eoff:

Archeology Southwest submits the following comments in response to the Manco-Gallup Resource Management Plan Amendment (RMPA) and Environmental Impact Statement (EIS) scoping. For the past thirty years, Archaeology Southwest, a non-profit organization based in Tucson, has been dedicated to exploring and protecting the places of the past. Archaeology Southwest has practiced a holistic, conservation-based approach that we call Preservation Archaeology. By exploring what makes a place special, sharing this knowledge in innovative ways, and enacting flexible site protection strategies, we foster meaningful connections to the past and respectfully safeguard irreplaceable cultural resources. Towards these ends we appreciate the opportunity to submit these comments for your consideration. Not too surprisingly, most of our comments are directed to the issues identified in your "Guide to Public Input and Commenting", specifically:

"What protections should the new archaeological site complexes and sensitive cultural areas have? What goals and objectives for managing historic properties should BLM consider?"

Background on Cultural Resources

The RMPA planning area encompasses one of the most impressive and important cultural landscapes in North America. The region is characterized by a remarkable time depth with diverse archaeological and historical resources spanning the Clovis era (ca. 13,500 B.P.) to the recent historic period. The planning area also includes a number of important traditional cultural properties and sacred sites of Native Americans and tribal communities throughout the U.S. Southwest. The existing Farmington Resource Management Plan (FRMP) states that the District has the densest concentration of historic resources, arguably in all of North America. In the FRMP, Bureau of Land Management (BLM) has designated a number of Areas of Critical Environmental Concern (ACEC) to protect the significant pre- and post-contact archaeology that we describe below and that is further amplified by several archaeologists who have submitted scoping comments to the RMPA (e.g., Dr. Steve Lekson).

Importantly, the planning area includes a substantial portion of the Chaco World, a center of ancestral Pueblo culture which flourished from the 9th through the 13th centuries in the San Juan Basin and beyond. Chaco culture is world renowned for its monumental architecture including massively built multi-story great houses, great kivas, and expansive landscape features such as roads and shrines which spread across much

of the northern U.S. Southwest. Chaco Culture National Historical Park, Aztec Ruins National Monument, and five other Chacoan Archaeological Protection Sites managed by the BLM within the planning boundary are together designated as UNESCO World Heritage Sites. The broader area of reasonably foreseeable development includes the great house at Salmon Ruins and more than 35 additional Chacoan or related sites, many of which have standing architecture and are listed or eligible for the National Register under multiple criteria (A, B, and D). Many of these large Chacoan architectural complexes are surrounded by extensive but often poorly documented residential communities (see attached map from Peckham 1969) which are essential for understanding the nature of community and economy in the region. Researchers also argue that the physical setting and the visual landscape around these settlements were key considerations in their placement (see Dr. Lekson's RMPA comments for further discussion of this concept) which suggests that landscape-scale considerations are essential to understanding and appreciating the Chacoan culture.

The area of reasonably foreseeable development contains the remains of numerous other important precontact and postcontact historic resources including dense concentrations of settlements as well as large communities contemporary with Chaco, but which lack architectural signatures of this phenomenon. Such sites include large Pueblo I complexes and the extraordinary Pueblo III towers and buildings of the Gallina area.

The Navajo archaeology in the planning area is particularly noteworthy as current thinking is that the eastern portions of the planning area include records of the earliest occupation of Navajo in northwest New Mexico. Largo and Gobernador Canyons encompass the remains of numerous impressive Pueblito structures, mostly dating to the late 17th and 18th centuries. Many of these Pueblito structures are listed or eligible for the National Register of Historic Places and contain often quite fragile standing architecture. These structures document an important period in Diné culture and include areas with material evidence of early campaigns by Europeans in the Southwest such as sites associated with the first major military expeditions led by Roque Madrid into the Dinétah. The planning area also contains extensive remains of more recent historic land use in the region including several well-preserved homesteads. As noted earlier, a number of the significant cultural resources which we describe within the planning area are designated as ACECs, specifically to protect these resources.

Collectively, these resources all provide important opportunities to learn a great deal about human history in the Southwest, to provide a spectrum of educational opportunities to share this learning with the public and to preserve for current and future generations, places of tremendous significance, aesthetic wonder and religious, spiritual and social identity. As noted here and in comments by others, as well as information presented in the FRMP, the significance of this part of the San Juan Basin as a cultural landscape cannot be overstated. The Chacoan system and its' related system of Great House settlements, network of "roads" and line of sight communication features stands out particularly in light of its World Heritage status and the Chaco Culture National Historical Park. Of equal note, is the Navajo archaeology centered in Largo and Gobrenador Canyons and the eight ACECs designated by BLM in recognition of the significance and sensitivity of this Navajo archaeology, most notably Crow, San Rafael, Encinada Mesa-Carrizo Canyons and Frances Mesa ACECs. Although BLM is not a major surface landowner in the Gallina

portion of the planning area, some these lands may merit additional protection measures such as the lower portions of Billy Rice Canyon.

Landscape-Scale Considerations

The anticipated expansion of oil and gas development in this region, with its inherent complex infrastructure is, by its very nature, the antithesis of landscape-scale preservation. The impacts are intense, localized and extensive across a broad geographic area and in this case threaten a region that has been a center of human civilization for thousands of years and remains to this day an area of substantial importance to many Native Americans (see the attached All Pueblo Council of Governors Resolution Number 2014-04). Our recommendations are based on the complexity and fragility of cultural resources in this arid environment which requires a holistic approach toward planning and management focused on avoiding, minimizing and mitigating impacts at a landscape scale. In particular, we draw your attention specifically to recent report to the Secretary of Interior: "A Strategy for Improving Mitigation Policies and Practices of the Department of Interior and Secretarial Order Number 3330 whose purpose "is to establish a Department wide mitigation strategy that will ensure consistency and efficiency in the review and permitting of infrastructure development projects and in conserving our Nation's valuable natural and cultural resources. Central to this strategy will be (1) the use of a landscape-scale approach to identify and facilitate investment in key conservation priorities in a region; (2) early integration of mitigation considerations in project planning and design; (3) ensuring the durability of mitigation measures over time; (4) ensuring transparency and consistency in mitigation decisions; and (5) a focus on mitigation efforts that improve the resilience of our Nation's resources in the face of climate change."

Recommendations

With all of these considerations in mind, Archaeology Southwest requests BLM to consider the following information and recommendations:

1. Undertake a planning area wide effort to identify the most significant cultural resource areas. Archaeology Southwest has demonstrated a leadership role in identifying spatially explicit cultural resource preservation priorities (Laurenzi et. al 2013). Loosely analogous to biodiversity conservation planning, priority cultural resource assessments provide an evolving vision of an archaeological reserve network which, if managed appropriately, could protect a significant part of our cultural heritage. This information complements assessments of individual site eligibility for purposes of listing on the National Register of Historic Places by providing an added layer of regionally contextualized information at larger geographic scales. By establishing priorities, this information can also enhance cultural resource considerations in local, state, and federal land use planning. While our consideration of significance is based on the potential information content of the resource, this planning process can easily incorporate other cultural resource values (i.e. traditional cultural properties) and help to address preservation actions in support of a broader set of values.

Recently, a priority planning assessment was undertaken for the middle San Juan Basin (MSJ). Based on the scoping notice for the RMPA, our planning effort was expanded to include the RMPA planning area. We

convened a panel of experts in Farmington at San Juan College in early May and have subsequently interviewed several other archaeology and tribal experts. Our planning effort is ongoing. We share the preliminary results of our planning and include herein, a CD with GIS shapefiles of identified Priority Areas. All Priority Areas include ACECs designated within the FRMP. We believe that this information meets the intent of the Secretary's call for "use of a landscape-scale approach to identify and facilitate investment in key conservation priorities in a region" in relation to cultural resources. We believe that additional attention focused on traditional cultural properties and sacred sites will provide a comprehensive vision of the priority cultural resource areas of the planning area. As our information is further refined, we will send it out for your consideration.

Specifically we believe that these areas should provide the focus for preservation strategies. Specific considerations should include:

- Establishing no surface occupancy zones that exclude all well drilling and associated infrastructure development. At a minimum ensure no surface occupancy in those areas specifically identified in Public Law 96-550 as amended (the legislation specifically precludes surface occupancy), and within Great House settlement clusters located within Middle San Juan (MSJ) Priority Areas, including the BLM ACECs. The attached figure from Peckham (1969) illustrates the extent of settlement features in the vicinity of the Skunk Springs Great House and provides ample demonstration of the necessity of thinking of Great Houses in a larger preservation context.
- Achieve 100% survey coverage within one mile of Priority Area boundaries. Specific consideration should be given to generating LiDAR radar data as a cost effective means to identify standing architecture and Chaco "roads". There is currently a critical lack of information associated with the Chaco "road" network. Studies since the BLM's early inventory efforts indicate the "road" system is significantly more extensive than previously understood. On-the-ground field surveys are often unable to detect "road" features but recent advances in using LIDAR technology to record the Great North Road, indicate this state-of-the-art technology is an extremely accurate and cost effective way to document Chaco's precontact "roads". Such targeted survey coverage is essential to integrate mitigation considerations into the early phases of planning.
- Target mitigation investments associated with long-term preservation within Priority Areas, including BLM ACECs, by acquiring full fee or conservation easement interests, stabilizing archaeological features, and expanding interpretive opportunities at key locations that complement and expand on the Chaco Culture. Condition project approvals within these Priority Areas, including BLM ACECs, to include both on-site and off-site mitigation measures.
- Manage lands for wilderness characteristics where appropriate and conduct on-the-ground inventory to assess wilderness qualifications within Priority Areas, including BLM ACECs.
- Conditions of Approval should be incorporated for existing leases and commitments not to re-lease expired leases within Priority Areas, including ACECs and a one mile buffer zone around Priority Areas, including ACECs.
- Exclude currently unleased parcels from leasing for the length of the RMPA planning period within Priority Areas, including BLM ACECs and a one mile buffer zone around Priority Areas, including ACECs.
- Develop Master Leasing Plans for Priority Areas, including BLM ACECs.

- Develop Best Management Practices within all Priority Areas, including BLM ACECs. At a minimum consider:
 - ✓ Phased or strategic development - in terms of timing (developing one area, then restoring before moving to another), location (such as avoiding Great House settlement clusters), limiting amount of equipment in use at any given time, limiting amount of surface disturbance on a lease at any given time and requiring successful restoration before permitting additional disturbance;
 - ✓ Directional, cluster or closed loop drilling;
 - ✓ Stabilization requirements, particularly for activities in proximity to standing architecture
 - ✓ Phased reclamation;
 - ✓ restoration standards; and
 - ✓ bond requirements

2. Develop a Programmatic Agreement (PA) as authorized by Section 106 of the National Historic Preservation Act (NHPA) in advance of issuing a Record of Decision for the RMPA. The PA will help to ensure an integrated region-wide approach to cultural resource preservation that considers all historic resources, identifies the areas of potential direct, indirect and cumulative effects and defines specific avoidance, minimization and mitigation strategies. The Secretary's order makes it abundantly clear that mitigation considerations be integrated early in the planning process. Development of a PA is paramount to effectively address the Secretary's recommendations.

A case in point is the Fruitland Archaeological Project that was conducted primarily in the 1990s, with some work finished after 2000. Currently, the Final Synthesis is in nearly complete form. Initially compliance under Section 106 of the NHPA was done for each well permit, road, etc. Over time, the magnitude of the undertakings across a large geographic area and the piecemeal Section 106 consultations led BLM, New Mexico State Historic Preservation Office and the Advisory Council on Historic Preservation to develop a PA that addressed not only the wells but the related infrastructure (e.g. compressor station, roads, pipelines) throughout the project area. This approach provided for a more stream-lined permitting process and a more holistic approach to preservation by assessing the situation in a regional landscape context. The key elements of the PA were a comprehensive research design for the entire project area, targeted excavation based on the research design and alternative mitigation strategies for certain site types. As a result of the project, nearly 200 targets sites were excavated and larger scale landscape issues were addressed in five block-survey projects focused on thematic studies. It is our opinion that the scale of oil development proposed for the Mancos-Gallup shale is similar to that of the Fruitland Project. The proposed number of wells and the miles of pipeline infrastructure necessary to move the oil to market have the potential to create significant impacts to cultural resources and associated landscapes across the San Juan Basin and that these impacts will occur on multiple land jurisdictions. The PA is an excellent vehicle to develop a consistent region-wide approach across jurisdictions and is exactly the kind of tool envisioned by the Secretary's guidance on landscape scale mitigation by providing a more streamlined approach to permitting while ensuring "transparency and consistency in mitigation decisions".

Additional Considerations

1. Seek formal public input on the analysis of management situation and preliminary range of alternatives. An engaged public is the best way to ensure full and meaningful participation.
2. The agency must consider direct, indirect and cumulative impacts from regional oil and gas development throughout the planning area and the areas of reasonable foreseeable development. For example, new or improved roads facilitate access to historic properties. Depending on the nature of the historic properties (i.e. their visibility) a reasonable expectation of increased access is increased vandalism. Horizontal drilling technology associated with fracking is likely to lead to increased levels of microseismic activity and it is essential that the effect of these microseismic events or series of events on standing architecture associated with archaeological remains be evaluated. The importance of addressing cumulative effects and developing appropriate mitigation strategies cannot be overstated in light of past oil and gas development in the region.
3. Compensatory mitigation should be an integral aspect of project approval and typically on-site compensatory mitigation measures are addressed through the Section 106 process. However stronger consideration should be given to off-site mitigation to address indirect and cumulative impacts. Possible mitigation alternatives include development of interpretive materials for existing facilities such as the CCNHP, Salmon and Aztec Ruins along with web-based platforms, and acquisition of property interests to protect key sites on private or tribal lands.

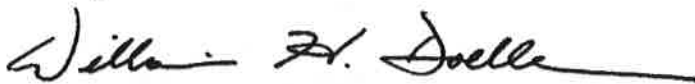
References

Laurenzi, Andy, M. A. Peeples. W.H. Doelle.
2013. Cultural Resources Priority Area Planning in Sub-Mogollon Arizona and New Mexico. *Advances in Archaeological Practice: A Journal of the Society for American Archaeology*.

Peckham, S. L.
1969 An archaeological site inventory of New Mexico, Part I. Manuscript on file, Laboratory of Anthropology, Museum of New Mexico, Santa Fe.

We appreciate the opportunity to provide these comments and we look forward to our continued participation.

Sincerely,



William H. Doelle
CEO and President

Encl: Map of Skunk Springs Great House settlement cluster
CD: Middle San Juan Priority Area shapefiles
All Pueblo Council of Governor's Resolution No. 2014-04