



L O G A N S I M P S O N

## Memorandum

To: Kristin Bowen, Lead Archaeologist, Western Colorado Area Office, Bureau of Reclamation  
From: Erick Laurila, Principal, Cultural Resources, Logan Simpson  
Date: February 9, 2018  
Re: Navajo-Gallup Water Supply Project, Cultural Resources Clearance Recommendation for Reach 10

Stipulation XII of The Navajo-Gallup Water Supply Project (NGWSP) Programmatic Agreement (PA) articulates that a Notice to Proceed for construction on any given segment of the project may proceed only after the following conditions have been met:

- Required cultural resources inventories outlined in Stipulation II of the PA have been completed for the construction segment including Class III archaeological survey of the area of potential effects (APE) and consultation to identify Traditional Cultural Properties (TCPs); and
- Consultation with PA parties on the National Register of Historic Places (NRHP) eligibility of historic properties, finding of effect, and adequate completion of mitigation activities to resolve adverse effects to historic properties has occurred.

The following memorandum serves as documentation of the Bureau of Reclamation's (Reclamation) compliance with the stipulations of the NGWSP PA.

### Reach 10 Area of Potential Effects

Reach 10 is located on the San Juan Lateral on Navajo Nation land north of Twin Lakes and southeast of Tohatchi, more specifically between Navajo Route 9 and Navajo Service Route 37. The APE for Reach 10 is defined as a 6.1-mile-long by 400-foot-wide (122-meter-wide) linear corridor. The pipeline construction right-of-way (ROW) measures 150 feet wide (45.72 meters wide), 75 feet wide (23 meters wide) on either side of the pipeline centerline. In some areas, the ROW was restricted to between 80 and 125 feet wide. In five instances, through consultation, the ROW was restricted to a 50-foot-wide corridor, 25 feet wide on either side of the centerline; these narrower ROW locations occurred in the vicinity of NRHP-eligible sites. The pipeline APE encompassed approximately 314 acres.

### Class III Archaeological Inventory

The APE for Reach 10 was surveyed by PaleoWest Archaeology (PaleoWest) and 31 archaeological and historical sites (18 new and 13 previously recorded sites), 1 traditional cultural property (TCP), and 10 isolated occurrences were identified (Chuiyka 2014 and 2015; Kelley and Francis 2014). PaleoWest initially recommended 26 sites eligible for inclusion in the NRHP under Criterion D, and the NRHP-eligibility of 5 sites could not be determined as additional data from subsurface archaeological testing was required in order to evaluate the NRHP-eligibility of these sites. The NRHP eligibility for two sites (NM-Q-14-128 and

NM-Q-14-137) changed after archeological testing. The eligibility status of site NM-Q-14-128 changed from Needs Data to Undetermined and the status of NM-Q-14-137 changed from Eligible to Not Eligible. The 31 sites identified within the Reach 10 APE are listed in the table below along with the management recommendations. Reclamation agreed with PaleoWest's recommendations and determined the sites as outlined in a letter to consulting parties dated April 25, 2016. The final Reach 10 construction ROW crossed 13 of the sites (shown in gray in Table below).

### Archaeological Testing

Archaeological Phase I testing, consisting of hand excavated units, surface artifact collection, and backhoe trenching, occurred at the 13 sites between August and September 2017, and the findings are summarized in a report by Miller et al. (2017). Testing at ten sites—NM-Q-14-118; NM-Q-14-123; NM-Q-14-125; NM-Q-14-127; NM-Q-14-128; NM-Q-14-130; NM-Q-14-137; NM-Q-14-141; NM-Q-14-143; and LA80951—revealed that no substantial subsurface materials were present that could contribute data to address questions in the approved NGWSP Research Design (Potter et al. 2013). Testing at three sites—NM-Q-14-115, NM-Q-14-117, and NM-Q-14-135—revealed that each contained substantial subsurface materials that could provide information to address questions within the approved NGWSP Research Design (Potter et al. 2013). Phase II data recovery work was recommended at these three sites (i.e., NM-Q-14-115, NM-Q-14-117, and NM-Q-14-135) and at site LA80951. Non-destructive data recovery was recommended at LA80951, which involved unmanned aerial vehicle (UAV) photogrammetry and infield pottery analysis. As mentioned above, the construction ROW near five sites (NM-Q-14-115, NM-Q-14-117, NM-Q-14-118, NM-Q-14-130, and NM-Q-14-143) was confined to a 50-foot-wide corridor. Testing occurred within that ROW and construction should be restricted to that ROW only (see footnote in Table below).

| Site Number/Name  | Description                         | NRHP Status  | Management Recommendations  |
|---|-------------------------------------|--------------|---|
| NM-Q-14-115/<br>LA11610/<br>In-Between Site <sup>1and 2</sup> | Prehistoric Structural              | Eligible (D) | Phase I testing completed in ROW – contained substantial subsurface materials; Phase II data recovery completed; Fencing required along both sides of the ROW to avoid damage during construction       |
| NM-Q-14-116/<br>LA2033  | Prehistoric Non-structural          | Need data    | Avoided   |
| NM-Q-14-117/<br>LA2506/<br>Muddy Wash Site <sup>1and 2</sup>  | Prehistoric Structural              | Eligible (D) | Phase I testing completed in ROW – contained substantial subsurface materials; Phase II data recovery completed; Fencing required along the eastern side of the ROW to avoid damage during construction |
| NM-Q-14-118/<br>LA2507/<br>Twin Lakes Site <sup>1</sup>       | Prehistoric and historic Structural | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along both sides of the ROW to avoid damage during construction                                     |
| NM-Q-14-119/<br>LA2508  | Prehistoric Structural              | Eligible (D) | Avoided   |
| NM-Q-14-120/<br>LA6444  | Prehistoric and historic Structural | Eligible (D) | Avoided   |
| NM-Q-14-121/<br>LA80416                                       | Prehistoric and historic Structural | Eligible (D) | Avoided   |
| NM-Q-14-122/<br>LA80422                                       | Prehistoric and historic Structural | Eligible (D) | Avoided   |
| NM-Q-14-123/<br>LA80424                                       | Prehistoric Structural              | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along the western side of the ROW to avoid damage during construction                               |
| NM-Q-14-124/<br>LA80425                                       | Prehistoric Structural              | Eligible (D) | Avoided   |
| NM-Q-14-125/<br>LA80430                                       | Prehistoric and historic Structural | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along the western side of the ROW to avoid  |

|   |   |              |   |
|---|---|--------------|---|
|   |   |              | damage during construction  |
| NM-Q-14-126/<br>LA80432                               | Prehistoric Non-structural  | Need data    | Avoided   |
| NM-Q-14-127/<br>R10-01                                | Prehistoric and historic<br>Structural  | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along the western side of the ROW to avoid damage during construction   |
| NM-Q-14-128/<br>R10-03                                | Prehistoric Non-structural  | Undetermined | Phase I testing completed in ROW – no substantial subsurface materials identified; NRHP status changed from “need data” to “undetermined” after testing; Fencing required along the western side of the ROW to avoid damage during construction |
| NM-Q-14-129/<br>R10-05                                | Prehistoric Structural  | Eligible (D) | Avoided   |
| NM-Q-14-130/<br>R10-11 <sup>1</sup>                   | Prehistoric and historic<br>Structural  | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along both sides of the ROW to avoid damage during construction   |
| NM-Q-14-131/<br>R10-19                                | Historic Structural   | Eligible (D) | Avoided   |
| NM-Q-14-132/<br>R10-21                                | Prehistoric Structural  | Eligible (D) | Avoided   |
| NM-Q-14-133/<br>R10-23                                | Prehistoric Structural  | Eligible (D) | Avoided   |
| NM-Q-14-134/<br>R10-25                                | Prehistoric and historic<br>Structural  | Eligible (D) | Avoided   |
| NM-Q-14-135/<br>R10-27 <sup>2</sup>                   | Prehistoric and historic<br>Structural  | Eligible (D) | Phase I testing completed in ROW – contained substantial subsurface materials; Phase II data recovery completed; Fencing required along the western side of the ROW to avoid damage during construction   |
| NM-Q-14-136/<br>R10-29                                | Prehistoric and historic<br>Structural  | Eligible (D) | Avoided   |
| NM-Q-14-137/<br>R10-31                                | Prehistoric Non-structural  | Not eligible | Phase I testing completed in ROW – no substantial subsurface materials identified; eligibility changed from “Eligible” to “Not eligible” as a result of testing; no fencing needed.   |
| NM-Q-14-138/<br>R10-33                                | Prehistoric Non-structural  | Eligible (D) | Avoided   |
| NM-Q-14-139/<br>R10-35                                | Prehistoric Structural  | Eligible (D) | Avoided   |
| NM-Q-14-140/<br>R10-37                                | Prehistoric Non-structural  | Need data    | Avoided   |
| NM-Q-14-141/<br>R10-39                                | Prehistoric and historic<br>Structural  | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along the eastern side of the ROW to avoid damage during construction   |
| NM-Q-14-142/<br>R10-49                                | Prehistoric Non-structural  | Need data    | Avoided   |
| NM-Q-14-143/<br>R10-57 <sup>1</sup>                   | Prehistoric Structural  | Eligible (D) | Phase I testing completed in ROW – no substantial subsurface materials identified; Fencing required along the eastern side of the ROW to avoid damage during construction   |
| NM-Q-14-144/<br>R10-61                                | Prehistoric Structural  | Eligible (D) | Avoided   |
| LA80951/<br>Red Willow-Los<br>Rayos Road <sup>3</sup> | Prehistoric road connecting<br>Red Willow Great House and<br>the Los Rayos Great Kiva | Eligible     | Phase I testing completed in ROW – no substantial subsurface materials identified; Phase II data recovery involving UAV photogrammetry and infield pottery analysis recommended; no fencing needed  |

<sup>1</sup> ROW narrowed to 50 feet wide, 25 feet on either side of centerline – construction cleared only for that narrowed ROW.

<sup>2</sup> Data recovery recommended.

<sup>3</sup> Non-destructive data recovery (i.e., photogrammetry and infield pottery analysis) recommended.

## **Archaeological Data Recovery**

Testing revealed relatively substantial buried cultural deposits at three sites that were recommended for further data recovery: NM-Q-14-115, NM-Q-14-117, and NM-Q-14-135. In addition to the three sites, Reclamation agreed to conduct non-destructive data recovery (i.e., UAV photogrammetry and infield pottery analysis) at LA80951, the prehistoric Red Willow-Los Rayos Road. Data recovery on these four sites occurred in November and December 2017.

Substantial buried deposits were revealed at NM-Q-14-117 and NM-Q-14-135. No new unrecorded deposits were found at NM-Q-14-115. All features identified during testing were relocated and excavated. A larger artifact assemblage was recovered from the sites and several new features (including two pit structures) were identified. All prehistoric features within the ROW were sampled. No further work within the ROW was recommended prior to construction. It was recommended that the ROW in the vicinity of sites NM-Q-14-115 and NM-Q-14-117 be fenced along both sides of the 50-foot-wide ROW. It was also recommended that the ROW in the vicinity of NM-Q-14-135 be fenced along both sides of the 150-foot-wide ROW during construction. Monitoring should also occur within 50 feet of the sites.

UAV photogrammetry mapping of the Red Willow Great House, Los Rayos Great Kiva, and the road connecting the two and in-field ceramic analysis at the great house and kiva also occurred. This work was completed per the testing plan for site LA80951. The road is visible to the east and west of the NGWSP ROW; but the segment within the ROW does not contribute to the overall eligibility of the entire road.

PaleoWest recommended within the End of Fieldwork Data Recovery Report (Miller and Potter 2017) that there would be no adverse effects resulting from construction activities within the Reach 10 ROW for the 13 sites tested (see shaded rows in table above); the consultation letter included specific information regarding fencing and monitoring of the sites (see section “Construction Mitigation Measures...” below).

## **Traditional Cultural Property Identification**

Reclamation consulted with the Hopi Tribe, the Hualapai Tribe, the Jicarilla Apache Nation, the Navajo Nation, the Ohkay Owingeh, the Pueblo of Acoma, the Pueblo of Jemez, the Pueblo of Pojoaque, the Pueblo of Santa Ana, the Pueblo of Santa Clara, the Pueblo of Zia, the Pueblo of Zuni, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe on the existence of any cultural resources of tribal religious or cultural significance or TCPs within the broader NGWSP project area (letters, dated April 1, 2013 and August 6, 2013).

Ethnographic fieldwork was completed in conjunction with the cultural resources inventory; the fieldwork was completed by Dinetahdoo Cultural Resources Management, LLC (DCRM) (Kelley and Francis 2014). The results of DCRM’s fieldwork is summarized in the inventory report by Chuipka (2015). One TCP was recorded immediately adjacent to the Reach 10 APE but outside of the construction ROW, and it will not be directly impacted by construction (Chuijka 2015:226). The San Juan Lateral Sampling Plan further confirmed that no TCPs were identified within the Reach 10 ROW (Chuijka et al. 2017:38).

Stipulation II(3)(b) of the NGWSP PA indicates that Reclamation will assist each concurring tribal party with conducting a study of the APE to identify TCPs; however, although some studies have occurred, not all TCP studies will be completed in their entirety prior to scheduled construction of Reach 10. In order to account for this, Reclamation engaged in additional consultation with all the consulting tribes to identify TCPs and sacred sites and offered all the consulting tribes opportunities to visit the APE to assist the tribes with reaching decisions about whether any TCPs are present in the APE. These additional consultation efforts, which included field visits, were intended to provide tribes with the opportunity to provide Reclamation with information regarding the presence of any TCPs in the Reach 10 APE.

The Pueblo of Acoma conducted a field visit to excavations in the Reach 10 APE. Their visit was conducted in August 2017 and also during the early part of January 2018. The Pueblo of Zuni conducted site visits in the Reach 10 APE. Their visits were conducted in August 2017 as part of their funded TCP study.

Survey findings, alignment location, sampling strategies, (alternative) mitigation plan, consultation, and concerns were discussed during NGWSP PA Workgroup meetings held on September 10, 2015 (Albuquerque), January 21, 2016 (Bloomfield), March 9, 2016 (Santa Fe), August 12, 2016 (Gallup), January 19-20, 2017 (Albuquerque), April 18-19, 2017 (Farmington), July 19-20, 2017 (Gallup) and November 9, 2017 (Gallup). An invitation was extended by Reclamation during the April 19, 2017 PA Workgroup Meeting (Farmington) to tribes to indicate their interest for field visits to the Reach 10 APE along with the APE for other reaches, if they desired; the Hopi Tribe, the Navajo Nation, and the pueblos of Acoma and Jemez expressed interest in site visits. The Pueblo of Santa Clara expressed interest in field visits several days after the meeting. The PAPM and Reclamation followed up with these tribes to schedule visits. No individual site visits were ultimately requested; however, Reclamation visited the project area and sites NM-Q-14-117, NM-Q-14-118, and NM-Q-14-130 as part of a two-day NGWSP PA Workgroup meeting held on July 19 and 20, 2017.

## **Consultation on NRHP eligibility, Finding of Effect, and Mitigation for Reach 10**

### ***NRHP Eligibility and Finding of Effect***

In response to requests made by participants during the January 2015 PA Workgroup Meeting, Reclamation sent draft results of the cultural resource inventory for this and other reaches on May 29, 2015 to the Hopi Tribe, the Hualapai Tribe, the Jicarilla Apache Nation, the Navajo Nation, the Pueblo of Pojoaque, the Pueblo of Santa Ana, the Pueblo of Santa Clara, the Pueblo of Zia, the Pueblo of Zuni, and the Bureau of Indian Affairs (BIA). The drafts contained raw data with preliminary recommendations for site NRHP-eligibility. The New Mexico Historic Preservation Division (NMHPD) responded with a letter stating they will concur with Reach 10 site eligibility determinations made by the Navajo Nation Tribal Historic Preservation Officer (THPO) (letter dated June 25, 2015).

Reclamation initiated consultation with the BIA, the Bureau of Land Management (BLM), NMHPD, the New Mexico State Land Office, the Hopi Tribe, the Hualapai Tribe, the Jicarilla Apache Tribe, the Navajo Nation, the Ohkay Owingeh, the Pueblo of Acoma, the Pueblo of Jemez, the Pueblo of Pojoaque, the Pueblo of Santa Ana, the Pueblo of Santa Clara, the Pueblo of Zia, the Pueblo of Zuni, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe (consulting parties) on Reach 10 site eligibility via letters dated April 25, 2016. The Hopi Tribe responded on May 9, 2016 and on November 1, 2016 stating that they reviewed the report and look forward to continued consultation. The Pueblo of Santa Ana concurred with the determinations of eligibility via email dated June 1, 2016. The NMHPD responded on May 30, 2016 stating that they concur with Navajo Nation THPO's determination since all the Reach 10 sites are located on Navajo Nation land. The NMHPD sent another letter on November 14, 2016 stating that they look forward to continued consultation. A final draft of the Class III inventory and Ethnographic Summary was distributed to the consulting parties on June 12, 2017.

On September 5, 2017, Reclamation continued consultation by distributing a final draft of the Sampling Plan for the San Juan Lateral, which presented a sampling design for data collection, archaeological testing and data recovery, potential alternative mitigation strategies like ethnography to enhance interpretations based on traditional knowledge, etc. (Potter et al. 2013). The Reach 10 Testing Phase Results and Data Recovery Plan report was distributed to the consulting parties on October 16, 2017. The Hopi Tribe stated in a letter dated October 31, 2017 that they had reviewed the report and looked forward to continued consultation. The Southern Ute Indian Tribe responded via form letter dated November 15, 2017 "regarding the NGWSP Reach 10 project" and concurred.

PaleoWest completed archaeological testing and data recovery at all 13 sites within Reach 10 and therefore recommended a finding of No Adverse Effect for pipeline construction. The investigations have mitigated the adverse effects of Reach 10 construction. PaleoWest recommended no further investigations are required. The Data Recovery End of Fieldwork report (Miller and Potter 2017) was distributed to consulting parties on January 19, 2018. The Navajo Nation had no comments and concurred with the Reach 10 End of Fieldwork report through a phone conversation with Reclamation as documented in an email dated February 8, 2018. The Hopi Tribe stated in a letter dated February 1, 2018 that they had reviewed the report and looked forward to continued consultation. No other comments were received from consulting parties regarding the Reach 10 End of Fieldwork report.

### **Construction Mitigation Measures and Contractor Stipulations**

Archaeological testing and data recovery were conducted at 13 sites along Reach 10, and no further mitigation measures (i.e., archaeological testing or data recovery) are recommended as necessary for construction to proceed along the reach. **NTP for construction is contingent on avoidance of all NRHP-eligible sites. The sites should be fenced and monitored along the ROW to avoid damage to the sites. Monitoring of construction activities will be conducted for all activities within 50 feet of eligible/needs data sites. Fencing to avoid any inadvertent impacts will be required at the following sites:**

- **NM-Q-14-115 (both sides of ROW),**
- **NM-Q-14-117 (eastern side of ROW),**
- **NM-Q-14-118 (both sides of ROW),**
- **NM-Q-14-123 (western side of ROW),**
- **NM-Q-14-125 (western side of ROW),**
- **NM-Q-14-127 (western side of ROW),**
- **NM-Q-14-128 (western side of ROW),**
- **NM-Q-14-130 (both sides of ROW),**
- **NM-Q-14-135 (western side of ROW),**
- **NM-Q-14-141 (eastern side of ROW), and**
- **NM-Q-14-143 (eastern side of ROW).**

**No fencing or monitoring is recommended for sites LA80951 and NM-Q-14-137.**

Reclamation shall coordinate with a cultural resource consultant who holds a Navajo Nation Cultural Resources Protection Act (CRPA) Class C - Type I permit to conduct archaeological monitoring. The consultant will ensure that avoidance measures are implemented prior to construction.

All monitoring and assessment of any discoveries on Navajo Nation land will be consistent with standards established by the Navajo Nation Heritage and Historic Preservation Department (NNHHPD), the CRPA permit, and monitoring plan to be submitted. If there are any discoveries of cultural resources during construction on Navajo Nation land, then the procedures within the submitted and approved monitoring plan shall be implemented. If any human remains, funerary objects, sacred objects, and objects of cultural patrimony are inadvertently encountered during construction on Navajo Nation land, then protocols established within the *Navajo Nation Policy for the Protection of Jishchaa'* will be followed.

## Recommendation

Based upon Logan Simpson's review of the inventory reports and record of consultation conducted for Reach 10, it is our opinion that Reclamation is in compliance with the terms of the NGWSP PA. Although, TCP identification efforts within Stipulation II of the NGWSP PA were not completed in their entirety, Logan Simpson also finds that Reclamation has made a reasonable and good faith effort to identify TCPs and sacred sites in the Reach 10 APE through alternative processes from those stipulated within the PA by following the guidance provided within Executive Orders 13007 and 13175 and NPS Bulletin Number 38, *Guidelines for the Identification and Evaluation of Traditional Cultural Properties*. Logan Simpson recommends Cultural Resources Clearance be issued for Reach 10.

## References:

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