

Lake Powell Pipeline

Draft Cultural Resources Work Plan

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Section 1 Introduction

The purpose of this work plan is to define the procedures for analyzing impacts on cultural resources for the Lake Powell Pipeline (LPP). This work plan presents the issues and concerns, defines the impact area and significance criteria, describes the analysis methodology, reviews existing data and identifies data needs, references an outline for the cultural resources Technical Report, and identifies dependency items and relationships to other resources. Cultural resources include archaeological sites, burial sites, traditional cultural properties, cultural landscapes, historic standing structures, and archaeological and historic districts.

The analysis will be prepared in compliance with the following federal legislation: the Antiquities Act of 1906 (P.L. 59_209; 34 Stat. 225; 16 U.S.C. 431_433); the Historic Sites Act of 1935 (P.L. 74_292; 49 Stat. 666; 16 U.S.C. 461_467); the National Historic Preservation Act of 1966 (NHRA)(P.L. 89_665; 80 Stat. 915; 16 U.S.C. 470 as amended by P.L. 90_243, P.L. 93_54, P.L. 94_422, and P.L. 94_458); the National Environmental Policy Act of 1969 (NEPA)(P.L. 91_190; 83 Stat. 852; 42 U.S.C. 4321 et seq.); Executive Order 11593 of 1971; the Archaeological and Historical Conservation Act of 1974 (P.L. 86_523, as amended by P.L. 93_291; 16 U.S.C. 469_469c); American Indian Religious Freedom Act of 1978 (AIRFA) (P.L. 95_341); Native American Graves and Repatriation Act of 1990 (NAGPRA) (P.L.101-601); National Register of Historic Places (NRHP), National Register Bulletins; and other pertinent legislation and implementing regulations. Utah state legislation to be complied with consists of the Antiquities Protection Act of 1993 (U.C.A. Sec. 9-8-101-806). Arizona state legislation to be complied with consists of the Arizona Antiquities Act A.R.S. 15-1631 and A.R.S. 41-841.

This work plan presents the issues and concerns raised to date by the public and agencies, defines the impact area and significance criteria, describes the analysis methodology, reviews existing data and identifies data needs, provides an outline of the cultural resources technical report, provides an outline of the cultural resources section of the EIS, identifies dependency items and relationships to other resources, and identifies potential problems and recommendations for resolving problems.

A programmatic agreement will be developed to be signed by primary participating agencies to ensure that all understand and are in agreement with the proposed cultural resources study of the Lake Powell Pipeline alternatives. This agreement will include how a treatment plan (to include guidelines for monitoring and test excavation) will be developed following the identification and evaluation of sites for eligibility to the National Register of Historic Places. Agencies to be included in the programmatic agreement include the State of Utah, Federal Energy Regulatory Commission, Bureau of Land Management, Utah State Historic Preservation Office, Arizona State Historic Preservation Office, and the Advisory Council on Historic Preservation.

Section 2

Issues

Cultural resources- related issues and concerns identified during the formal scoping process will be addressed in the analysis for the LPP alternatives. Related questions raised during the informal scoping process have been consolidated into the following issue(s).

- What impacts would occur on cultural resources from construction and operation of the LPP?
- What impacts would occur on archaeological sites?
- What impacts would occur on historical sites?
- What impacts would occur on Traditional Cultural Properties?
- What impacts would occur on cultural landscapes, archaeological districts, and historical buildings and structures?

Additional issues that arise during the formal scoping process, or during the preparation of the analysis, will be added and addressed.

Section 3

Impact Topics

The cultural resource impact topics include the following:

- Archaeological sites
- Historical sites
- Traditional Cultural Properties
- Cultural landscapes
- Archaeological districts
- Historical buildings and structures

Section 4

Impact Area and Significance Criteria

4.1 Impact Area

The impact area would include the following:

- Any area directly affected by project feature construction or operations, including
 - Pipeline alignments
 - Pumping station locations
 - Hydroelectric facility locations
 - Transmission line corridors and substation locations
 - Power supply facilities
 - Material borrow and spoil areas
- Any stream or river and associated corridor that would be subject to water deliveries or alterations in flow

4.2 Significance Criteria for Each Impact Topic

For this evaluation, impacts on cultural resources are considered significant if resources are eligible for inclusion in the NRHP or have already been listed. Eligibility to the NRHP is determined by federal legislation 36 C.F.R. Part 60.4 which states that consideration is given to “districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and; (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (d) that have yielded, or may be likely to yield, information important in prehistory or history.”

Federal legislation 36 C.F.R. Part 800 states that cultural resource assessments of federal “undertakings” of eligible properties should result in one of three determinations; (a) no effect; (b) no adverse effect, i.e., one or more historic properties will be affected, but the historic qualities that make them significant will not be harmed; or (c) adverse effect, i.e., the undertaking will cause harm to one or more historic properties.

Ultimately, eligibility of sites would be determined by the lead federal agency in consultation with the federal land owning agency (applicable) and the appropriate State Historic Preservation Office (SHPO) in Arizona or Utah (depending upon the location of the site). The lead federal agency, in consultation with the federal land owning agency (as applicable), the SHPO and the Advisory Council on Historic Preservation (ACHP), determines the significance of impacts and treatment planning related to these resources. If the eligibility of a site is not determined, it is assumed for the purpose of this analysis that the site is eligible. Impacts on cultural resources are considered significant if either of the following occurs.

- Disturbance or alteration of cultural resource site surfaces and/or features, including traditional cultural properties; excavation, burial or inundation of any cultural resource that is listed in or is eligible for nomination to the NRHP
- Alteration of surrounding topographic features, cultural features that adversely affects the feeling, setting or association of a significant site

Section 5 Methodology

5.1 Introduction and Overall Approach

The analysis of impacts on cultural resources will involve identifying the properties eligible for, or listed on, the NRHP located within the impact area of influence, defining the characteristics of each property that contribute to their eligibility, and determining the effect of the alternatives and cumulative impacts on each property.

5.1.1 Definition of Baseline Conditions

Cultural resources baseline conditions will be defined by identifying known cultural resource sites, historic sites eligible for, or listed on, the NRHP located within the impact area of influence, and establishing if there are portions of the project area which have been previously adequately inventoried.

5.1.2 Analysis of Alternatives

Impacts on cultural resources will be analyzed for each of the alternatives. The features of each alternative will be superimposed onto the baseline project maps, clearly indicating all areas of proposed ground disturbing activities. Each cultural resource site, including archaeological sites and historical buildings and structures, will be drawn on the project baseline map. Each property will be assessed to determine what characteristics contribute to the eligibility of the property. These characteristics will then be compared to the alternatives, especially in relation to areas of ground disturbing activities and alteration of surrounding topographic features. Potential measures for mitigating impacts on cultural resources will be determined following completion of the impact analysis.

5.1.3. Analysis of Cumulative Impacts

The cultural resources cumulative impacts analysis will address the combined impacts of the alternatives and any past or future proposed or planned actions that have or are likely to affect cultural resources in the impact area. The following inter-related projects may be analyzed for cumulative impacts.

- Proposed St. George Airport
- Southern Corridor Highway Project (St. George to Hurricane Highway)

Section 6 Data Needs and Analysis

6.1 Data Needed

In order to complete the analysis for cultural resources, information will be needed about previously conducted cultural resource investigations and known sites within and near the project area, and background understanding of the prehistory, ethnography and history of the project area. Identified cultural resource sites may include archaeological sites, historic sites, historic buildings and structure sites, and traditional cultural properties. Results of the evaluation studies will also be required for the cultural resources identified as eligible to the NRHP within the impact area of influence.

6.2 Data Available and Adequacy

Cultural resources within the LPP impact area of influence are quite variable. There are portions of the alternative routes where several previous inventories may have been carried out. These include cultural resource reports on various road construction projects along SR 59 in Utah, SR 389 in Arizona, and U.S. 89 and U.S. Alt 89 in both Utah and Arizona. It is possible that some portions of these highway corridors have not been inventoried for cultural resources and also that surveys are dated enough that re-survey will

be necessary. Inventories may be needed in inadequately inventoried areas in order to establish the presence or absence and significance of cultural resources.

There is a need to seek out and review published sources on the prehistory, ethnography and history of the area that will be used in the preparation of the cultural resources report. Many archaeological and ethnographic studies have been carried out in the area of the project. Archaeological studies (both academic and cultural resources studies) include both surveys and excavations covering time periods of occupation by the Anasazi, Southern Paiute, Fremont, and earlier Archaic cultures. This is particularly true in the St. George area where rapid urban growth has occurred in the area of the Virgin River Anasazi. In addition, historic archaeological work has been carried out near the project area. Academic historical studies also continue to be produced in the region. In addition, academic ethnographic studies have recently been published on the Southern Paiute Tribe and many exist concerning various Pueblo tribes, Upper Yuman peoples (Hualapai, Havasupai and Yavapai) and the Navajo Tribe. These studies have produced detailed information about the prehistory, history and ethnography of the area allowing more accurate generalizations about the region as a whole. This information benefits the present study since it provides a broader data base with which to compare.

Prehistoric occupation of the Virgin River Valley, where the western portion of this project is located, was intense, especially during the Anasazi occupation up to about 1300 A.D. Occupation along other portions of the corridor were likely more moderate in intensity, but still prominent. The lower density of occupation was likely due to the fact that this portion of the corridor lies at higher elevations with less water and fewer available food resources. As such, occupation here was more seasonal, though year around occupation was still possible and likely. As a result, archaeological sites in those areas may be somewhat smaller, and more specialized, but will still provide evidence of significant habitation activities. Sites to be expected will include moderately intensive occupation sites, small campsites, lithic procurement sites, perhaps rock art sites, and lithic scatters. Occupation of lower elevation areas, especially along and near the Virgin River and (former) Glen Canyon of the Colorado River (at and near Lake Powell), were much more substantial and occupied year around. As such, large village sites could be encountered, including Archaic, Anasazi and Late Prehistoric sites. Also, Fremont period sites could be encountered in and near the Cedar Valley area.

Historic occupation, which began with trappers in the early to mid 1800s, was far more eclectic in nature. Historic sites include a broad range of feature types and locations. The location of these sites is not restricted by topography or other environmental factors to the same extent as prehistoric sites. Sites expected in the immediate LPP corridors include historic roads and trails, homesteads, irrigation systems and associated features, shepherd sites and, possible historic recreation sites.

The potential to encounter traditional cultural properties is not known. That will be determined in consultation with Federal and State agencies who, in turn, will be asked to make initial contacts with appropriate Native American tribes who traditionally occupied the area, particularly, the Southern Paiute Tribe, various Pueblo and Upper Yuman Tribes and, possibly, the Navajo Tribe. It is possible that the agencies may ask for assistance in this effort, in which case the cultural resources team would be available to help in whatever tasks would be necessary.

In addition to Native American consultation, completion of a cultural resources overview, data gathering of site information and reports, as well as National Register and National Landmark information, and historic information will require close coordination with appropriate Federal and State agencies who control lands on and near the project area as well as those agencies which license and direct cultural resources project work in Utah and Arizona. Thus, the project will require consultation activities in addition to data gathering and analysis.

6.3 Additional Data Needs

6.3.1 Primary

The initial phase of work for the LPP will not require in field survey or recording of archaeological or historic sites. However, it is understood, that once preferred and alternative corridors are chosen, a Class III field inventory of all corridors for pipelines, power lines, roads, surge ponds, and hydroelectric plants and related facilities will be carried out, as necessary. This will involve, not only inventory, but also recording of all sites and isolates encountered as well as evaluation of these resources for eligibility to the NRHP.

6.3.2 Secondary

It will be necessary to carry out several tasks in order to establish the need for and the complexity of the field inventory. These tasks will involve preparation of cultural resource overviews, including prehistory, ethnography and history of the project area, as well as data gathering from a variety of sources. Preparation of the overview and acquisition of site and report data will be required in order to help support the decision to reduce the proposed corridors on the project to only two.

Literature searches of appropriate repositories is an essential task in order to establish a baseline understanding of the nature, types, number, and density and of cultural resources sites located within and near the project corridors and facility locations. It is proposed that site and survey data lying within a two mile wide corridor (one mile either side of the proposed centerline of each pipeline alternative), be obtained in order to help understand the nature of the cultural resources within the area and to help predict the density and types of resources which could be found along any one of the corridors. In order to gather this information it will be necessary to visit a number of state and federal government facilities, to copy appropriate cultural resource report and site information, and then to compile and analyze the data.

Initial research will begin at the State Historic Preservation Office (SHPO) in Salt Lake City and at the Arizona State Museum where a comprehensive database of site information and project reports for Utah and Arizona are housed. Unfortunately, the databases located here are not complete, with many project reports and some site information residing in land management agency offices. Thus, in addition to the SHPO files, it will be necessary to visit and obtain information from Bureau of Land Management Cedar City (Cedar City), St. George (St. George), Kanab (Kanab), Escalante-Grand Staircase (Kanab), and Arizona Strip (St. George) Field Offices. In addition, it is likely that several other government offices will need to be visited for this purpose including the Glen Canyon National Recreation Area office in Page, Arizona, and, possibly, the Utah Department of Transportation Region 4 Office in Richfield, the Bureau of Reclamation, Provo Project Office, and the Arizona State Lands Office in Phoenix.

Historic research on the LPP project area will also be an integral part of the cultural resources investigations. This research is a critical part of the initial overview document which outlines the history of the area encompassed by the ULS, and will provide needed data to help evaluate known historic sites and those located as a result of the inventories carried out during the Class III inventory. It is proposed that the following facilities be researched to help understand historic use of the project area and complete the overview document.

- State Historic Preservation Office, Salt Lake City
- State Historic Library, Salt Lake City
- Arizona Historical Society Library, Tucson

- Southern Utah State University Library, Cedar City
- Cedar City Library, Cedar City
- Washington County Library, St. George
- Dixie College Library, St. George
- Kane County Library, Kanab
- Coconino County Library, Fredonia
- Other identified research facilities later identified

Section 7

Procedures For Developing Mitigation

The analysis of impacts on cultural resources will be based on the standard operating procedures, and measures to avoid or reduce impacts that are included in the project description. The significance criteria for cultural resources will then be applied to determine if the impact would be significant or not. Mitigation measures, where possible, would then be developed for the significant impacts. The mitigation measures would be based on applicable regulations, past experience and best professional judgment. In some cases it may not be possible to mitigate significant impacts. All reasonably foreseeable mitigation options will be evaluated by the Federal Energy Regulatory Commission, Bureau of Land Management, and other responsible federal agencies and factored into the respective decision documents.

Section 8

Technical Report

A technical report will be necessary to document in detail baseline conditions of and potential impacts on cultural resources. The technical report will follow the resource technical report outline common to all resource work plans (see Resource Technical Report Outline).

Section 9

Dependency Items From Other Resources

The following items are required from other MWH Team resource specialists:

- **Socioeconomics:** The extent of socioeconomic impacts on communities and other project impact areas will need to be defined because of potential related impacts on cultural resources.