

To: aleeflang@utah.gov[aleeflang@utah.gov]
Cc: Thomas, Nathan D[nthomas@blm.gov]; Ashley Losey[Alosey@blm.gov]; Michael Lundell[mlundell@blm.gov]; Christopher Merritt[cmerritt@utah.gov]; Tyler Ashcroft[tashcrof@blm.gov]
From: Curtis, Aaron
Sent: 2017-06-12T11:27:25-04:00
Importance: Normal
Subject: Fwd: Statewide Estimates
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BENM CRDP Project Proposal 20170608.pdf

Hi, Arie,

Thanks for getting this to us so quickly. Nate and Ashley are both out this week, so I'm forwarding this onto Tyler Ashcroft, who will work with Jared and the Monticello team to figure out the scope of work we'd like accomplished and get back in touch with you. I'm in all week if there's anything else I can do to facilitate this conversation, so no one should hesitate to get in touch. Have a great week, everyone!

AJC

----- Forwarded message -----

From: Arie LeeFlang <aleeflang@utah.gov>
Date: Mon, Jun 12, 2017 at 8:42 AM
Subject: Re: Statewide Estimates
To: "Losey, Ashley" <alosey@blm.gov>
Cc: Nathan Thomas <nthomas@blm.gov>, Aaron Curtis <acurtis@blm.gov>, "Lundell, Michael J" <mlundell@blm.gov>, Christopher Merritt <cmerritt@utah.gov>

Hi Ashley-

Attached is our project proposal for BENM data cleanup. We crafted this up last week to pitch to the CRDP group as it sounded like there was some potential CRDP funding available at the national level. If the proposal looked good we were hoping to send it up the chain through Jared and Nate. But if the State Office was interested it would be amazing.

We built the proposal with various tasks lined out between BENM and San Juan County as a whole (based on the previous VFO database work). The initial pitch was just for the tabular data cleanup for BENM as it fit the dollar amount available from CRDP. But there were some further tasks listed at the bottom of the document if more funding was available. We are definitely open to different approaches or the collection of different data if desired. But hopefully this document will be a good starting point in the discussion.

Thanks!

Arie

Arie LeeFlang

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On Fri, Jun 9, 2017 at 10:17 AM, Losey, Ashley <alosey@blm.gov> wrote:

Arie,

Would you be able to provide us an estimate for just cleaning up the Bears Ears portion of San Juan County?

I've cc'd Nate and Aaron on this email as I'll be out all next week.

Thanks and happy Friday!,

Ashley

On Mon, May 22, 2017 at 1:18 PM, Arie Leeftang <aleeflang@utah.gov> wrote:

Hey Ashley-

Thanks for the call earlier. It was good to chat through some of the specifics and potential issues. Attached is our estimates for data rectification at a FO and/or county level. As we briefly discussed, our previous work estimate to Nate was ~49k for SA county. This spreadsheet has it a bit higher (~\$75k) based upon re-crunching more recent VFO results/costs. It doesn't mean we are expecting the higher amount - I just didn't want to blindside you suddenly with a higher amount.

Before we jump in we'd want to have some conversations about expectations and such. We are a bit nervous because San Juan County is a black hole. We would never want to default and not deliver on expectations - but there are a lot of unknowns in San Juan County. It would be good to just talk about some contingency plans and general expectations before we launch (if there is a launch!).

Best of luck with the roof!

Arie

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Bear Ears National Monument
Archaeological Site Records Cleanup Proposal
June 6, 2017
Prepared for the Bureau of Land Management, Cultural
Resources Data Partnership
Proposal amount: \$14,875
Delivery date: 10 months from project kickoff



Project Proposal Summary

The UTSHPO seeks funds for a data cleanup project for records related to the recently created Bears Ears National Monument (BENM). This would be a subset of an often discussed larger San Juan County cleanup project. This area has some of the highest archaeological site densities in Utah and is a current focus of the Trump Administration in reviewing recent monument designations nationwide. Recent data pulls for this area show UTSHPO database attribute information being largely lacking. The large number of site forms predating the inception of the UTSHPO database has left key site information found only on site forms, not in a database, requiring any summary or exploratory statistics to be gathered from individual site forms. We propose to work through each relevant BENM site form identified within UTSHPO spatial databases, collecting key site attribute data for use in further data exploration of the area. This new data will provide a more accurate snapshot of what is known in the BENM area from the UTSHPO archaeological records.

Project Background

The UTSHPO is continually looking for avenues to update and scrub the legacy archaeological data held in their geospatial and tabular databases which is held according to State of Utah Code (UC 9-8-304) and federal National Historic Preservation Act of 1966 (16 U.S.C. 470a). With the recent (2016) designation of the BENM renewed management interest has been placed upon this area. In April 2017, President Trump ordered the Interior Department to review recent national monument designations, including BENM. Given the BENM designation was partly initiated to protect archaeological resources it is assumed that the Interior Department will look for all available sources of data and information regarding archaeological sites to better understand the resources of this area and the protections required. We expect the UTSHPO will be one of the first agencies to be contacted for such information.

Beyond this review we expect BENM to remain in the management spotlight for years to come. Litigation from pro-monument groups or anti-monument groups is expected no matter the outcome. An accurate knowledge and assessment of recorded archaeological sites are key to better understanding the area and being able to provide accurate, factual data and information about the BENM for the Department of Interior for any planning purposes.

Currently UTSHPO holds approximately 8200 geospatial plots for sites on BLM lands within BENM. An initial query shows approximately 9.2% of the area has been inventoried. A large majority of the records held for this area in UTSHPO database predate the current data systems and have little or no tabular attributes. Further information is only found within the individual archaeological site records. Summary statistics or other queries about site characteristics or legal status are not currently possible.

This project will perform this up-front data collection by individually reviewing each site form and capturing key site data for future queries and summary activities. Part time temporary staff will complete a series of tasks (listed below) to create a more complete, accurate, and robust dataset to empower land management queries in regards to cultural resources. The goal is to know the exact location and nature of all 8500 BENM archaeological sites current found within UTSHPO records collections for future cultural resources management efforts.

Of note, this proposal is only for legacy records which UTSHPO currently retains. Further proposed efforts, including accessing other pertinent collections to obtain missing records is described at the end of this document.

Tasks

At the project outset, Arie Leeftang, Archaeological Record Manager, and Chris Merritt, Antiquities Coordinator, will coordinate a project road map with the BLM Utah State Office and Monticello, Utah Field Office. This road map is anticipated to follow methodologies previously used in the Vernal Field Office (VFO) Data Cleanup Project of 2016/2017. Tasks are anticipated as follows:

- Task 1: Spatial Data Pull. Personnel will complete a spatial query of current UTSHPO datasets to identify archaeological sites found within the current BENM boundary. This will provide a working list for further data entry and records review.
- Task 2: Tabular Data Entry and Initial Geospatial Assessment. Personnel, using a shared Google Sheet, will enter core data for each paper site form on file at the UTSHPO found on BLM lands within BENM. Each site form, including revisits, will receive a unique line in the online data entry sheet. The spreadsheet will be pre-populated with each potential site number previously identified in Task 1. Any site number found on this list, but found to not have an associated paper record, will be logged. Following the tabular data entry personnel will assess each geospatial plot found in UTSHPO's GIS tables and compare them against the map plot found within the paper record. This is a high-level plot check to be later confirmed/fixed by a GIS technician (Task 3). For this task personnel will gather the following core information:
 - Site number: Smithsonian Trinomial with no leading zeros (open text field).
 - Date recorded: date the site was recorded per an individual 'observation' (date field)
 - Recorder name: name of the recorder(s) (open text field).
 - Site Name: proper site name of site, if available (open text field).
 - Project Number: State of Utah Project Number (9 character open text field)
 - National Register eligibility: site eligibility as written on the form (controlled vocabulary).
 - SHPO stamp: presence/absence of a SHPO concurrence stamp (Y/N).
 - Site type: recorder's classification of the site (open text field).
 - Site class: prehistoric, historic, of multicomponent (controlled vocabulary).
 - Comments: any notations to flag issues (open text field).

Rates

Based upon the previous VFO Data Cleanup Project of 2016/2017 we have some expected rates per each task listed above. There is a certain risk in using these numbers from other counties – San Juan County has much older records than VFO counties which may add significant time to collect data from, assess,

and correct (if needed). *Further discussion may be required to more adequately estimate costs for this project.* Based upon the VFO we provide the following estimates.

Task	Records Count	Rate	Total
Task 1: Data Cut	8200	0	0 (negligible)
Task 2: Data Entry and Initial Plot Check	8200	\$1.75/record	\$14,875.00
			Total: \$14,875.00

Deliverables

At completion of the project all UTSHPO databases will be updated with the newly collected data and with any data corrections identified. This will assure all future data cuts and data queries contain the most accurate, up-to-date information. Further, UTSHPO will provide to archaeologists working at the Utah BLM State Office and the Utah Monticello Field Office the following digital products:

- Updated dataset held in UTSHPO master databases
- A final spreadsheet with all tabular data for sites found within BENM.
- A GIS dataset (geodatabase) with updated site locations permanently linked to the spreadsheet listed above.

Products will be delivered within 10 month of project kickoff.

Further Tasks Required/Suggested

This project is specifically focused on the records currently held by UTSHPO. We have identified several other project areas that specifically relate to this project, and would contribute to a more robust and complete dataset, but are beyond the scope of this current proposal and project. If further funding came available we would be excited to tackle these further project components:

- SITLA Site Records Tabular Data Capture: completion of the same Task 1 and Task 2, but for SITLA lands within BENM. Estimated Cost: \$525.00 (300 records, \$1.75/record).
- BLM Geospatial Assessment and Correction: erroneous plots identified will be deleted and correctly reentered by GIS technician. Any missing plots will be added. The goal is to improve the overall quality of the GIS by removing and fixing erroneous geospatial plots and deleting duplicate plots. It is estimated 20% of records will require correction. Estimated cost: \$6560.00 (20% of total record count at \$4.00/ record).
- SITLA Geospatial Assessment and Correction: erroneous plot identified and fixed as outlined in task immediately above. Estimated cost: \$240 (20% of total record count at \$4.00/record).
- Identification of Missing Sites: it is clear that we do not have a complete dataset for this area. Checking and pulling records at each the Edge of the Cedars Museum (EOC), the Manti La Sal Forest Service offices, and the BLM Monticello Field Office would be key to building a complete dataset. An accurate estimate of the percentage of sites currently missing from our dataset is not available but is likely between 10 and 15 percent based upon previous experience. Beyond EOC and the Monticello Field Office it may also be important to contact key local archaeologists with long history in the area to help in the identification of missing records. Such individuals

would, among others, likely include Bill Davis and Winston Hurst. Estimated cost: unknown - further vetting and scoping will be required.

- Complete San Juan County Project: to truly be sure we collected every BENM site it would be key to work through all the site records for San Juan County (n ~26,000). There are many sites that are likely (based upon knowledge of the dataset) plotted incorrectly and would only be identified through a large scale cleanup effort of the entire County. This project would directly mirror the currently proposed BENM Data Cleanup Project. Estimated cost: \$75,410.00 beyond BENM BLM and SITLA tasks above. \$97610.00 total with all BENM included.
- Rasterized Dataset: the building of a generalized archaeological dataset for sharing with non-archaeologist according to State of Utah GRAMA and federal ARPA restrictions would have value. The dataset could be provided to the BLM to share with interested parties that do not meet Secretary of Interior standards but do need access to certain archaeological data for BENM. Estimated cost: depending on the scope, negligible.

Future Tasks	Records Count	Rate	Total
SITLA BENM Tabular Data Capture	300	\$1.75/record	\$525.00
BLM BENM Geospatial Fixes	1640	\$4.00/record	\$6,560.00
SITLA BENM Geospatial Fixes	60	\$4.00/record	\$240.00
Identification of Missing BENM Sites and Acquisition	?	?	?
San Juan County Tabular Collection and Geospatial Corrections beyond BENM	26700	Tabular 1.75/record; Geospatial 20% of records @\$4/records	\$68,085.00
Rasterized BENM Dataset for non-archaeologists	4/hours	60	\$240.00
			\$75,650.00