



CACHE COUNTY SECTION CORNER PROJECT

A GRANT PROPOSAL TO: State of Utah Monument
Replacement and Restoration Committee (MRRC)

APPLICANT: Cache County, Utah

DATE: July 22, 2021

CACHE COUNTY SECTION CORNER PROJECT



State of Utah
Monument Replacement and
Restoration Committee
1 State Office Building, Room 5130
Salt Lake City, UT 84114

For Committee Use Only

Application No. _____

Date Filed: _____

GRANT APPLICATION

Applicant Information

Applicant agency _____
Street _____
City _____ State _____ Zip _____
Contact person _____
Phone _____ Fax _____
Email _____
Presiding official _____
Title _____
Phone _____
Email _____

Proposed Funding

Total project cost _____
Total MRRC funds requested _____
Other project funding (specify) _____

Attachment checklist

1. Description of the problem or situation to be addressed and how the proposed project will remedy the problem. A superior project description will thoroughly address each category of the Committee's Evaluation Criteria.
2. Map of the project area.
3. Cost estimate. Itemization of expenditures is encouraged. Include cost sharing if applicable.

Presiding official signature

I, _____, the _____
(typed name) (typed title)

of _____
(typed name of applicant agency)

do hereby certify the information in this application is accurate and correct to the best of my knowledge and this application has been authorized by the applicant agency.

Matt Phillips _____
(signature) (date)

SUMMARY

Cache County developed a monument preservation program where valley floor monuments are given the highest priority. The valley floor reflects where most of our growth is occurring. However after a few years of working on monument preservation, we soon realized there were other areas within the county that are in great need of monument preservation. These areas are within the private developable properties to the southeast of the dominant valley floor also known as “Priority 2A” or existing section corners in the mountainous areas. See attachment: *Image 1: Cache County Section Corner Summary Map*. Cache County has not been able to sufficiently perpetuate, monument or locate these valuable but in jeopardy corners. This is due to priority focus and budget constraints. With the help of monies from the Survey Monument Replacement and Restoration County Grant Program, Cache County would be able to accomplish significant monument preservation and locating in our priority 2A area.

THE PROBLEM

Many section corners have not been preserved, monumented or located within the private land holdings of Priority 2A. Multiple surveys in the Priority 2A area call out to BLM and other corner locations that have not been verified by the county. Our focus, with this grant, is within the southwest corner of Cache Valley along the bench. And also 2 corners within Priority 1B. One being south of Mendon and the other east of Newton. We anticipate growth in these particular areas. We have also had disputed corner locations along the east bench of Cache Valley. It’s in the County’s best interest to get these southwest bench corners established before corner evidence is potentially destroyed or lost. Locating and verifying these corners will allow us to properly monument and produce tie sheets with measured latitudes and longitudes preserving the corners in the long term. Capturing this valuable information provides clarity and reduces the risk of the corners being disturbed in the future.

THE WORKFLOW

Jeff Nielson P.L.S. of Foresight Surveying will turn in corner data, set forth in “*Attachment C Field Procedures*” of the *Public Land Survey System (PLSS) Grant Program* to the County’s GIS division. The GIS division will be responsible for creating the corner tie sheets See: *Image 2: Tie Sheet 574*. Corner tie sheets meet and will continue to meet tie sheet standards set forth in “*Attachment D*” of the *Public Land Survey System (PLSS) Grant Program*. Corner tie sheets are then published to the public via the County’s Section Corner & Survey Web Mapping Application (<https://gis.cachecounty.org/websites/surveyviewer/>).

OUR GOALS

Cache County has already made significant improvements on perpetuation and preservation within the valley floor. The challenge going forward will become locating corners with little to no information. Through the 2020-2021 year, Cache County has used its own funds to complete perpetuation of monuments already existing on the valley floor. Once existing corners have been perpetuated, the focus will shift to locating corners with limited to no data and/or tie sheet within our Priority Areas 1B and 2B.

1. Complete Priority 1A - Existing section corners on the valley floor in need of perpetuation
 - a. Perpetuation Completed = 805
 - b. Needs to be Perpetuated = 191*
2. Priority 1B - General area of the valley floor where section corners have not as of yet been located and limited to no data exists. Unknown count of section corners that can be reasonably placed (limitations of data, accessibility and usefulness)
3. Priority 2A – Existing section corners in the mountainous areas in need of perpetuation
 - a. Perpetuation Completed = 148
 - b. Needs to be Perpetuated = 287*
4. Priority 2B – General area of the mountainous areas where section corners have not been located and limited to no data exists. Unknown count of section corners that can be reasonably placed (limitations of data, accessibility, and usefulness)

*note: the above “needs to be perpetuated” numbers will fluctuate as more once unknown/missing corners are included.

OUR GOAL FOR THE 2021/2022 GRANT

1. Priority 2A – Existing section corners in the mountainous areas in need of perpetuation
 - a. Perpetuation Completed = 148
 - b. Needs to be Perpetuated = 287
 - c. Perpetuate with 2021/2022 grant = 11

BUDGET

It is estimated that 11 of the 287 section corners within Priority 2A can be perpetuated. The County estimates this can be accomplished at a cost near \$9,000.00.

Priority 2A: Existing damaged/missing corners requiring additional repairs

Materials

1. 4 Rebar Reference Points \$1.67 each (\$6.68)
2. 4 plastic caps \$0.26 each (\$1.04)
3. Aluminum survey caps \$9.80 each

Materials Total - \$17.52 per corner.

Labor

1. Surveying work, data compilation and record of surveys tied to corners research \approx 5 hours each = \$850.00

Materials and Labor Total = \$867.52 per corner.

This project is scalable to the amount of funding made available (more section corners can be added with additional funding and/or less corners with less funding).

County Resources/Match

The County is also putting financial and in kind effort into this project and request. While Cache County is seeking funds to finalize perpetuation of monuments in Priority 2A, the County has allocated funding to 1) pay unique material costs for Priority 2A (concrete, flowable fill, etc.) and 2) in kind staff time for tie sheet creation and 3) cash match.

1. Tie sheet preparation 11 @ \approx 1 hour each @ \$40.00 per hour = \$440.00 (in kind)
2. Cash contribution \$1560.00 + out of pocket expense for unique materials

Match Total = \$2,000.00

For this round of funding Cache County is hoping to repair/perpetuate 11 section corners (*See Image 3: Section Corner Project Area Map*)

The estimated total cost to complete repairs and/or perpetuation on these 11 section corners is \approx \$11,000.

CONCLUSION

Cache County has made significant improvements to existing section corner data and tie sheets among the valley floor. The *Cache County Section Corner & Survey Web Mapping Application* is one of the County's most popular and useful tools to surveyors, realtors, title companies, cities, and the general public. As the County transitions into a more financially burdensome phase of the project the requested financial assistance will greatly improve the project's success. The County hopes to provide the PLSS with better quality section corner data as well as create an environment to receive higher quality land surveys and avoid property disputes.

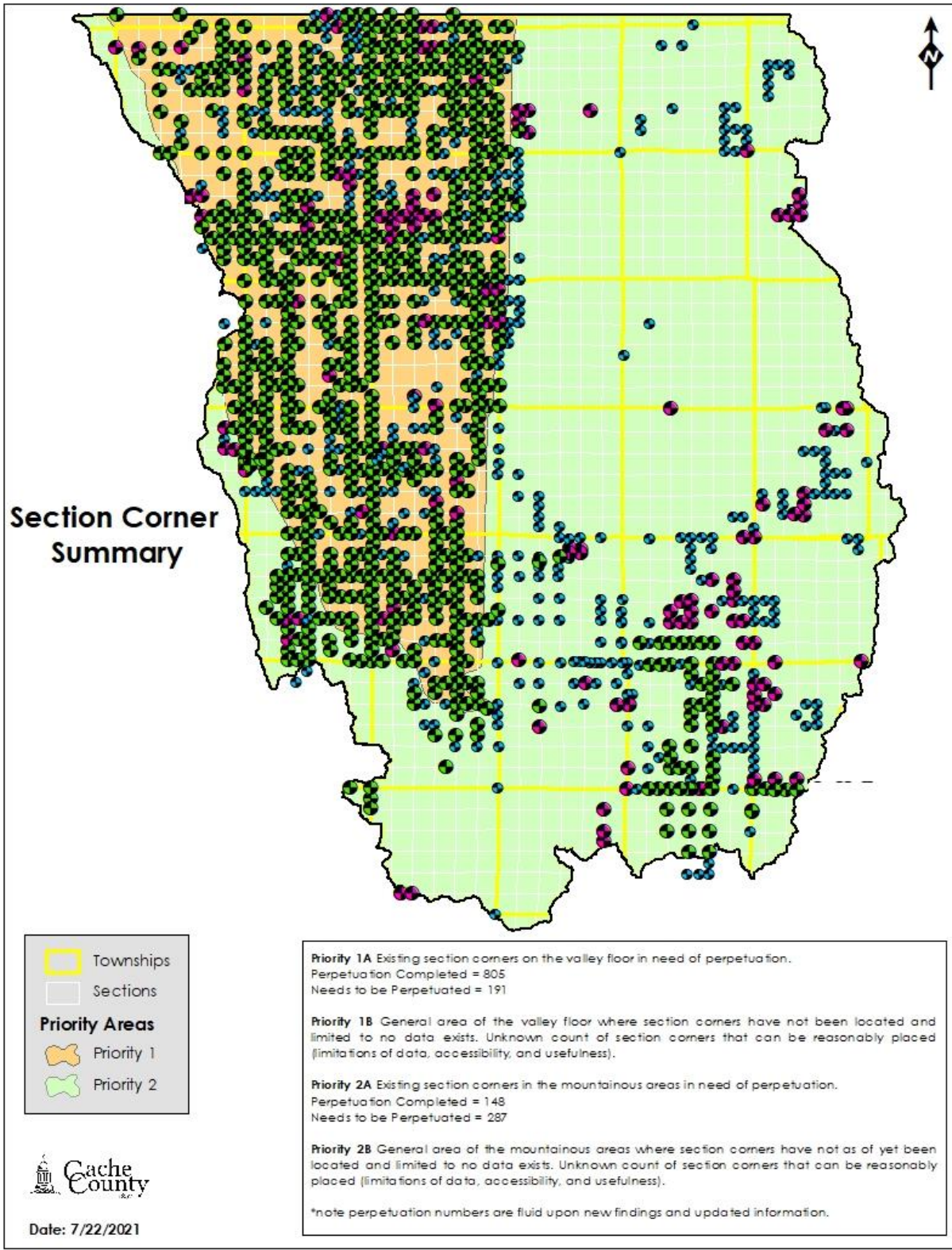


Image 1: Cache County Section Corner Summary Map



Cache County Monument Record Sheet

Cache County
Corner ID # **574**

BLM Point Name		Contact Name	License Number	Date																																																																																											
UT260140N0010W0_300400		Jeff C. Nielsen	5152661	2/27/2015																																																																																											
Corner of Section		Map View Photo or Sketch																																																																																													
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State	County																																																																																														
UT	Cache County																																																																																														
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Latitude (DMS)	41°56'47.4138"N																																																																																														
Longitude (DMS)	-111°58'23.5956"W																																																																																														
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Grid Coordinates																																																																																															
Northing	3868950.9340																																																																																														
Easting	1511674.9840																																																																																														
Horizontal Units	feet																																																																																														
Ortho Elevation	4558.135																																																																																														
Coordinate System	Zone																																																																																														
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		Monument Area Photo 		Monument Close-up Photo 																																																																																											
Monument Description		Found cache county plastic cap on 5/8" rebar, 12" below grade, good condition, reset RPs 1,2&3 with 5/8" x 24" rebar & cache cap.		Cache County makes no guarantees, representations, or warranties of any kind, express or implied, as to the content, accuracy, timeliness, or completeness of any of the data. Cache County reserves the right to make changes to the data at anytime without notice.																																																																																											



Image 2: Tie Sheet 574

Image 3: Section Corner Project Area Map

