U.S. Department of the Interior
Bureau of Land Management

Orosco Range Improvement Project: Madico Well

ENVIRONMENTAL ASSESSMENT

DOI-BLM-AZ-C030-2021-0019-EA

U.S. Department of the Interior
Bureau of Land Management
Colorado River District
Lake Havasu Field Office
1785 Kiowa Ave, Lake Havasu City, AZ 86403
(928) 505-1200

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DOI-BLM-AZ-C030-2021-0019-EA

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CHAPTER 1 INTRODUCTION

1.1 Identifying Information

1.1.1 Title, EA Number, and type of Project:

Orosco Range Improvement Project: Madico Well, BLM-AZ-C030-2021-0019-EA, Well Construction and Corral Expansion Associated with RIP # 072002

1.1.2 Location of Proposed Action:

Orosco Allotment, La Paz County, Arizona
T6N R12W Sec. 24 NW¼ SE ¼
(33.846420°N, 113.459383°W)

1.1.3 Name and Location of Preparing Office:

Lake Havasu Field Office (LHFO), Lake Havasu City, Arizona

1.1.4 Applicant Name:

Thomas McReynolds, Thomas and Barbara McReynolds Family Trust

1.2 Background

Thomas McReynolds, Permittee, on behalf of the Thomas and Barbara McReynolds Family Trust, has applied for the replacement of their current water well and for the expansion of an existing corral on the Orosco Allotment (#01830). Due to agricultural use in the area and a drop in the water table, the Madico range improvement well (RIP# 072002) (recognized by the BLM as the base property (water) with attached grazing preference) is no longer able to supply a reliable amount of water to the Madico facility (RIP# 072003). At 640 ft. in depth, the Madico well is nonfunctional during parts of the year. Water table depth around the well is estimated to be near 600 ft. and data on wells in the surrounding area indicate they extend to depths of 800 ft. or more. Under maintenance responsibility of the Madico well, the Permittee has attempted to deepen the well, however, the deterioration of the plastic casing has prevented a successful outcome. As a result, the Permittee is requesting to replace the existing range improvement well.

The Madico well and facility can be found in La Paz County, Arizona, T6N R12W Sec. 24 NW¼ SE ¼ (33.846420°N, 113.459383°W), five miles east of Wenden along U.S. Route 60 (Appendix C). The well is the only year-round water source in the allotment. It has supported all livestock grazing operations in the allotment since its establishment in 2002 and has also supplied water to a bordering grazing allotment under the administration of the Hassayampa Field Office. The proposed actions include the construction of a well and an expansion of the Madico facility (corral). The site contains the Madico well with a water storage tank and trough, the 11,500 ft^2 Madico facility (corral), and several debris piles and cement pads that are relics of a previous mining operation. A replacement well, would continue to provide supplemental water for both livestock and wildlife to the eastern section of the allotment. The corral expansion would provide the Permitee with a larger, more functional area to gather and manage livestock.

1.3 Purpose and Need for Action

The purpose of the action is to continue providing a reliable source of water for livestock and wildlife on the Orosco Allotment and to improve the existing range improvement Madico Facility for better livestock management.

The BLMs need is to respond to the application in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA) and the grazing regulations found within Title 43 Code of Federal Regulations (CFR) parts CFR 4120 and 4160.

1.4 Decision to be Made

Based on the analysis contained in this EA, the BLM LHFO Field Manager will decide whether:

- To approve the well construction and corral expansion project as submitted;
- To approve the well construction and corral expansion project with additional mitigation added; or
- To deny the well construction and corral expansion.

1.5 Land Use Plan Conformance

Lake Havasu Field Office Resource Management Plan, Date Approved: May, 2007

The proposed action and alternatives described below are in conformance with the Lake Havasu Field Office Resource Management Plan (RMP). The following resource Desired Future Conditions and/or Management Actions apply:

Fish and Wildlife Habitat Management, page 20

- WF-25: Water developments for purposes other than wildlife will include design features that ensure safe and continued access to water by wildlife on year-round basis. If it is not feasible to provide water on a year-round basis, a determination will be made whether to design the feature for wildlife access.

Rangeland Management/Grazing, page(s) 45-46

- GM-1: Provide forage on a sustained yield basis for livestock consistent with meeting Land Health Standards and multiple use objectives. Healthy, sustainable rangeland ecosystems will be maintained or improved to meet Land Health Standards (Arizona's Standards for Rangeland Health [1997a]); and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.

- GM-2: Livestock use and associated management practices will be conducted in a manner consistent with other multiple use needs and objectives to ensure that the health of rangeland resources is preserved or improved so that they are productive for all rangeland values. Where needed, public rangeland ecosystems will be improved to meet objectives.

1.6 Relationship to Statutes, Regulations, Other NEPA Documents

The Proposed Action and Alternatives are consistent with Federal laws and regulations, plans, programs and policies of Federal agencies, State and local governments including, but not limited to, the following:

- Federal Land Policy Management Act of 1976,
- The Taylor Grazing Act of 1934,
- Title 43 CFR Subpart 4100,
- Native American Graves Protection and Repatriation Act, 1990,
- National Historic Preservation Act, and
- Archaeological Resources Protection Act of 1979.

CHAPTER 2 PROPOSED ACTION AND ALTERNATIVES

2.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be authorized. The Madico Facility would not be supplied by a well water at this time. Additionally, the eastern part of the allotment would not be available to support livestock grazing. Without a replacement well there would not be reliable water to supply water to the bordering allotment or supply wildlife with a year-round water source. Without a new reliable source of water in this portion of the allotment, grazing distribution would be more difficult which in turn would not support rangeland health conditions in this area.

2.2 Proposed Action

The permittee for the Orosco Allotment proposes to drill a new water well and expand an existing corral in the eastern portion of the allotment as shown on map 1 of Appendix C. The new proposed well would be located approximately 120 ft. from the original Madico Well, within a 30 ft. radius of the coordinates provided. The location was chosen so that the drilling equipment could utilize an existing cement pad, reducing disturbance to vegetation and soils in the area. The well would be drilled to a depth of 850 ft. with metal casing securing the well interior. It would use a generator-powered, submersible pump, taken from the original Madico Well, and would have the ability to pump 15gal/min. Approximately 150 ft. of buried PVC pipe would be installed to transfer water from the new well to the on-site storage tank which gravity feeds to the water trough inside the corrals. In addition to the new well, the nearby corral would be expanded from 11,500 ft^2 to approximately 23,000 ft^2 by adding roughly 250 ft. of new fencing to the north side of the corral. The new fence would tie into the eastern border fence of the allotment.

Surface disturbance for this project is estimated to be 10,000 ft^2. Itemized disturbance estimates are as follows:

- Well: 4,000 ft^2
- Buried PVC Pipeline: 2,250 ft^2
- Corral Fence: 3,750 ft^2

Costs and labor associated with this project would be provided by the permittee and funding through the Arizona Game and Fish Department (AZGFD) Landowner Relations and Habitat Enhancement Program secured by the permittee. This Program is in effort by AZGFD to build community relations and work

with local communities to enhance and provide wildlife with habitat resources. Construction would take place soon after, and if, the project is approved and all required documentation has been submitted to the BLM and Arizona Department of Water Resources. A Cooperative Agreement would also be submitted and signed by all participating parties. A well project of this scale would take approximately 14 days to complete and would require a 2-3 man crew and two vehicles including the drill rig. Installation of the fence, expanding the Madico Corral, would take about 7 days to complete and would utilize a hydraulic post pounder, steal post, wire material, and would possibly require welding.

In addition, if the replacement of the Madico Well is approved, the grazing preference and AUMs would be transferred to the new well once construction is completed.

2.1.1 Best Management Practices

The following best management practices (BMPs) are included in the proposed action in an effort to minimize the impacts of the proposed action to social and natural environmental resources. The following are practices to be implemented:

- At no time would vehicle or equipment fluids (including motor oil and lubricants) be dumped on public lands. All accidental spills would be reported to the authorized officer and be cleaned up immediately, using best available practices and requirements of the law, and disposed of in an authorized disposal site. All spills of federally or state listed hazardous materials which exceed the reportable quantities would be promptly reported to the appropriate agency and the authorized officer.
- Vehicles and equipment would be power washed off-site before construction activities begin to minimize the risk of spreading noxious weeds. This would include cleaning all equipment before entering the project area.
- Vehicles and equipment will stay on designated roads and equipment will be staged/setup in areas free of vegetation to minimize the risk of potentially destroying present vegetation.
- Any cultural (historic/prehistoric site or object) or paleontological resource (fossil remains of plants or animals) discovered within the project areas would immediately be reported to the LHFO Manager or his designee. All operations in the immediate area of the discovery shall be suspended until written authorization to proceed is issued. An evaluation of the discovery shall be made by a qualified archaeologist or paleontologist to determine appropriate actions to prevent the loss of significant cultural or scientifically important paleontological values.
- If in connection with this work any human remains, funerary objects, sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (Public Law 101-601; 104 Stat. 3048; 25 U.S.C. 3001) are discovered, operations in the immediate area of the discovery would stop, the remains and objects would be protected, and the LHFO Manager (or his designee) would be immediately notified. The immediate area of the discovery would be protected until notified by the LHFO Manager (or his designee) that operations may resume.

2.4 Alternatives Considered but not Analyzed in Detail

A water haul alternative was considered but subsequently eliminated from further consideration. Hauling water would not supply the same amount of functionality as a local, permanent well. It would

be more cumbersome and would not offer a consistent level of support to both livestock and wildlife who utilize the Madico Well and Facility. Additionally, water hauling would lead to greater long-term disturbance impacts due to the increased vehicle traffic. Therefore, this alternative was determined to be impractical and will not be considered further as part of this analysis.

CHAPTER 3 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

The Proposed Action can be found in La Paz County, Arizona, T6N R12W Sec. 24 NW¼ SE ¼ (33.846420°N, 113.459383°W), five miles east of Wenden along U.S. Route 60 (Appendix C). The site occurs at an elevation of 2000 ft. and exhibits typical valley bottom characteristics in the basin and range topographic region. The predominant vegetation consists of a creosote-white bursage scrub community. The site contains the recent nonfunctioning well (Madico well), a water storage tank, a water trough, the 11,500 ft2 Madico facility (corral), and several debris piles and cement pads that are relics of a previous mining operation.

3.1 Scoping and Issue Identification

The project was presented to the BLM Interdisciplinary (ID) Team on February 8, 2021. A pre-application meeting with the proponent was conducted on January 22, 2021.

The BLM considered scoping comments and specialist input to determine issues in accordance with the guidelines found in the BLM National Environmental Policy Act (NEPA) Handbook (BLM 2008). Once issues are identified, impact indicators are selected to assess the impacts of alternatives and used as a basis for future monitoring. The key issues identified are addressed below in the table.

Table 1: Issues Identified for Detailed Analysis

Issue	Issue Statement	Impact Indicator
Issue 1	How would the replacement of the well affect livestock grazing operations and the base property?	Livestock distribution and water availability.
Issue 2	How would the construction equipment and construction activities affect vegetation resources?	Amount of native vegetation loss and invasive species presence within estimated 10,000 ft^2 ground disturbance.

The following resources and issues were evaluated and are not discussed in further detail in this EA for the reasons described in the table below.

Table 2: Issues Not Included for Detailed Analysis in the Environmental Assessment

Issue	Issue Statement	Rationale for Not Further Discussing in Detail in the EA*
	How would the expansion of the corrals affect desert tortoise habitat?	The Madico Well and Facility are not located within any areas classified as desert tortoise habitat.
	How would the drilling to 850 ft. affect ground water quality and source?	The Madico Well has provided good quality water and the proposed well would draw from the same basin. The only means of affecting groundwater would be by punching a hole in an underlying bad water lens and contaminating good water. If only bad water is found, the well would be capped with neat cement and bentonite to prevent further contamination.

Issue	Issue Statement	Rationale for Not Further Discussing in Detail in the EA*
		The water is for a watering trough, the amount drawn would be less than 1 acre foot a year, and it is not expected to contribute to significant water table drawdown.
	How would Cultural Resources be affected by ground disturbing activities and the expansion of the corral fence?	The LHFO has determined that the Madico Well and Facility would have "no adverse effect" to cultural resources. Within the proposed project boundary, inventories have not identified cultural resources.
	How would the construction equipment and construction activities affect Native American Religious Concerns/ Traditional Values?	Native American cultural and religious locations would not be affected by the proposed action as none have been identified in the area.
	How would the construction equipment and construction activities affect soils?	The site is highly disturbed due to past mining activity and the concentrated presence of cattle at the existing facility. To minimize project-related soil compaction, vehicles and drilling equipment would utilize existing roads and cement pads. Best management practices would reduce any impacts from vehicle or equipment fluids as described in section 2.1.1. Using the existing cement pad as a staging area for the drilling equipment would further protect the site from leaks or spills.
	How would construction activities affect OHV access to the area?	Multiple routes are present at this location and construction would not directly block any road.
	How would the use of construction equipment affect air quality?	The drilling of the well would moderately contribute to the Particulate Matter (PM) or particle pollution found in the localized surrounding air, however, it would not be expected to contribute to any exceedance of the National Ambient Air Quality Standards for the area. These impacts would be short-term and cease once the well is drilled and corral expanded.
	How would the well and associated disturbance affect wildlife and T&E species?	The well and corral have been in existence in the allotment for many years. The wildlife habitat in the area is of low quality and has no significant or unique feature that would be diminished in quality because of the improvements to the cattle corral or the installation of the new well. The wildlife that has become acclimated to the presence of the existing water source. Drilling a new well would benefit the local wildlife by continuing to provide a source of water and improving the quality of the water provided. The footprint of the project contains no critical habitat as determined by the USFWS. The footprint of the project does not contain habitat that would be considered of high value to any special status species. No further analysis is necessary.

This section introduces other actions that overlap geographically and temporally with the proposed project and will be considered in the impact analysis. Past, present, and reasonably foreseeable future

actions (RFFAs) are analyzed to the extent that they are relevant and useful in analyzing whether the reasonably foreseeable effects of the Proposed Action and/or Alternatives may have an additive and significant relationship to those effects. Past actions considered are those whose impacts to one or more of the affected resources have persisted to present day. Present actions are those occurring at the time of this evaluation and during implementation of the Proposed Action. RFFAs constitute those actions that are known or could reasonably be anticipated to occur within the analysis area for each resource, within a time frame appropriate to the expected impacts from the Proposed Action

Table 3: Past Present, and RFFAs Incorporated into the AnalysisThe table below provides a listing of past, present and reasonably foreseeable future actions (RFFAs) incorporated into the analysis. All impacts are disclosed within the analysis of each issue.

Table 3: Past Present, and RFFAs Incorporated into the Analysis

Issue	Geographic/ Temporal Scope	Past Action	Present Actions	RFFAs
Issue 1	Wells located on State and Private lands		X	X

3.2 Issues Brought Forward for Detailed Analysis

The ID Team evaluated potential impacts from the Proposed Action and Alternatives to determine which issues warrant detailed analysis. The description of the Affected Environment for the No Action and other Alternatives would be the same as that for the Proposed Action.

3.2.1 Issue 1: How would the replacement of the well effect wildlife, livestock grazing operations, and the base property?

Affected Environment

The Orosco Allotment (AZ01830) is a 15,761 acre (Federal Lands within Orosco boundary) allotment with a livestock Grazing Permit set at 552 Animal Unit Month (AUM) for up to 46 head of livestock for 12 month grazing. Water sources within Orosco consist of dirt tanks distributed mostly across the eastern portion of the allotment. These dirt tanks assist with livestock distribution and provide wildlife with both food and water resources. However, dirt tanks only temporarily hold water during abundant seasonal rains. To provide year-round water, Orosco has one available well, the Madico Well; this well is recognized by the BLM as the base property/water holding a grazing preference. The permittee also has the ability to supplement livestock needs on private property within the Orosco Allotment. This use of private property assists grazing operations in Orosco in a manner that is consistent with appropriate livestock distribution and livestock management efforts.

Environmental Consequence

No Action

Under the No Action alternative:

- The Madico base property well would continue to provide insufficient and unreliable year-round water to the Orosco Allotment, further deteriorate, and become completely ineffectual over time.
- Both livestock and wildlife would not have access to year-round water on either of the grazing allotments that share the well resources.

- The insufficient and unreliable well would result in a reduction of proper grazing distribution for the Orosco Allotment.
- Moreover, the grazing preference and AUMs attached to the Madico well would be lost or required to be transferred to a different water source once completely unusable. If the grazing preference and AUMs cannot be transferred as a result of no other existing year-round water sources, the permittee would lose his grazing preference and therefore his grazing permit until the water is replaced.

Proposed Action

Under the Proposed Action:

- A reliable, functioning well would allow for proper grazing distribution in all seasons.
- Both livestock and wildlife would continue to have water and have access to forage resources in the eastern area of the Orosco Allotment.
- There would be a reliable water source servicing the area for a transfer of grazing preference and attached AUMs, continuing the BLM's ability to authorize grazing permits within the Orosco Allotment.

3.2.2 Issue 2: How would the construction equipment and construction activities effect vegetation resources?

Affected Environment

The Madico Facility project site occurs at an elevation of 2000 ft. and exhibits typical valley bottom characteristics in the basin and range topographic region. The predominant vegetation consists of a creosote-white bursage scrub community. Past mining activities, and current OHV use, livestock presence, and facility maintenance, have altered the vegetation at the project site. It is common and expected for areas surrounding corrals to be considered 'sacrificial zones' or to exhibit a lack of vegetation due to the high concentration of livestock. Removal of vegetation is also an appropriate activity to maintain access and functionality of range improvements. The Madico Facility site depicts this. Invasive species are also present on site and consist of various mustards, with Sahara mustard (*Brassica tournefortii*) being most prevalent.

Environmental Consequences

No Action

Under the No Action alternative:

- There would be no immediate impact to native vegetation nor the potential increase of invasive species as no construction or surface disturbing activities would occur.
- Any present disturbance to native vegetation that currently occurs by local activities would continue.
- The presence of invasive species would continue to emerge through natural occurrences and spread by natural and introduced means.

Proposed Action

Under the Proposed Action:

- Soil disturbance in the project area could result in less vigorous native vegetation and/or recruitment of more invasive species to the site. Presence of U.S. Hwy 60, OHV trails, and surrounding farmland make continued invasive recruitment likely in the area.

- There is the potential to further introduce invasive species as a result of construction equipment and ground disturbance during construction activities.

- There is the potential of native vegetation loss as a result of construction activities within the Madico Facility area caused mainly by the installation of fencing material to expand the corrals. However, all activities would occur within the 'sacrifice zone' and the potential for vegetation loss would not expand beyond this area.

CHAPTER 4 CONSULTATION AND COORDINATION

Briefly describe the opportunities for public involvement provided during the preparation of the EA, including ePlanning postings, letters, public meeting, and other outreach efforts.

If the EA was released to the public for review and comment, summarize the details about this opportunity, including dates, methods, and other pertinent information.

Table 5: Persons, Groups, or Agencies Consulted

AGENCY/GROUP	PERSON(S) CONTACTED

CHAPTER 5 LIST OF PREPARERS

Table 6: BLM Resource Specialists

NAME	TITLE
Sean McNearney	Fisheries Biologist
Daniel Pollard	(Detailed) Outdoor Recreation Planner
Collin Price	Archaeologist
Sheri Ahrens	Realty Specialist
Harry Ford Mauney	Wildlife Biologist
Angelica Rose	Planning and Environmental Coordinator

APPENDICES

Appendix A – Acronyms and Abbreviations
Appendix B - List of References
Appendix C – Maps and Figures

APPENDIX A – ACRONYMS AND ABBREVIATIONS

AGFD	Arizona Game and Fish Department
ARPA	Archeological Resources Protection Act
AUM	Animal Unit Month
BLM	Bureau of Land Management
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DOI	Department of Interior
DR	Decision Record
EA	Environmental Assessment
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy Management Act of 1976, as amended
FONSI	Finding of No Significant Impact
IDT	Interdisciplinary Team
LHFO	Lake Havasu Field Office
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OHV	Off-Highway Vehicle
RFFA	Reasonably Foreseeable Future Action
RIP	Range Improvement Project
RMP	Resource Management Plan
ROD	Record of Decision
T&E	Threatened and Endangered
VRM	Visual Resource Management

APPENDIX B - LIST OF REFERENCES

43 Code of Federal Regulations (CFR) XXXX.

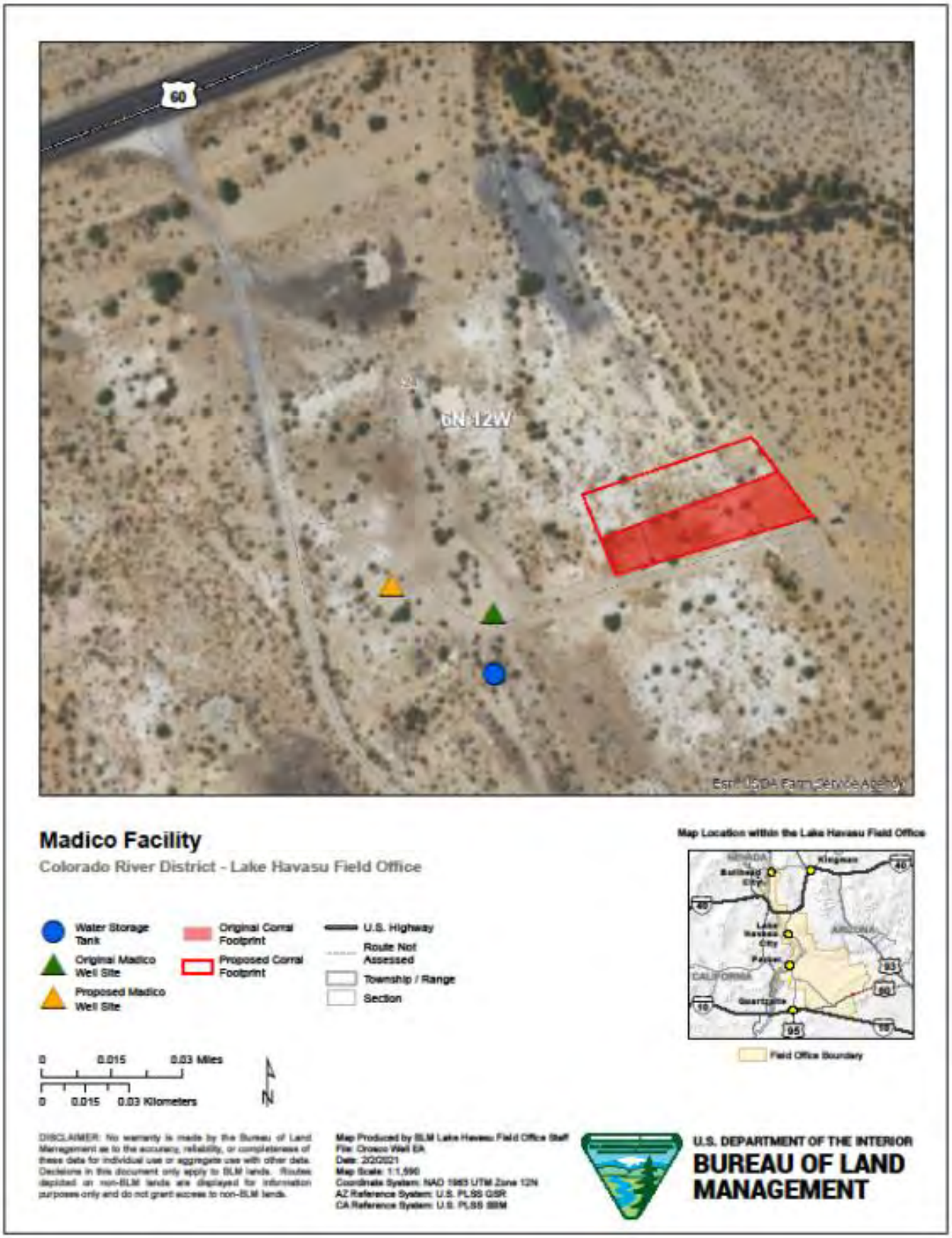
____. 2007a. Appendix C. Final Programmatic Environmental Impact Statement, Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States. U.S. Department of the Interior, Bureau of Land Management, Washington Office, Washington D.C.

____. 2007b. Record of Decision for the Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic EIS. U.S. Department of the Interior, Bureau of Land Management, Washington Office, Washington D.C.

____. 2008a. H-1790-1 National Environmental Policy Act Handbook. Washington D.C.; US Department of the Interior Bureau of Land Management, 2008.

APPENDIX C – MAPS AND FIGURES

Map 1


60
6N 12W
Esri, USDA Farm Service Agency
Madico Facility
Colorado River District - Lake Havasu Field Office
Water Storage Tank
Original Madico Well Site
Proposed Madico Well Site
Original Corral Footprint
Proposed Corral Footprint
U.S. Highway
Route Not Assessed
Township / Range
Section
0 0.015 0.03 Miles
0 0.015 0.03 Kilometers
N
Map Location within the Lake Havasu Field Office
Field Office Boundary
DISCLAIMER: No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Decisions in this document only apply to BLM lands. Routes depicted on non-BLM lands are displayed for information purposes only and do not grant access to non-BLM lands.
Map Produced by BLM Lake Havasu Field Office Staff
File: Crosco Well EA
Date: 2/2/2021
Map Scale: 1:1,590
Coordinate System: NAD 1983 UTM Zone 12N
AZ Reference System: U.S. PLSS GSR
CA Reference System: U.S. PLSS SBM
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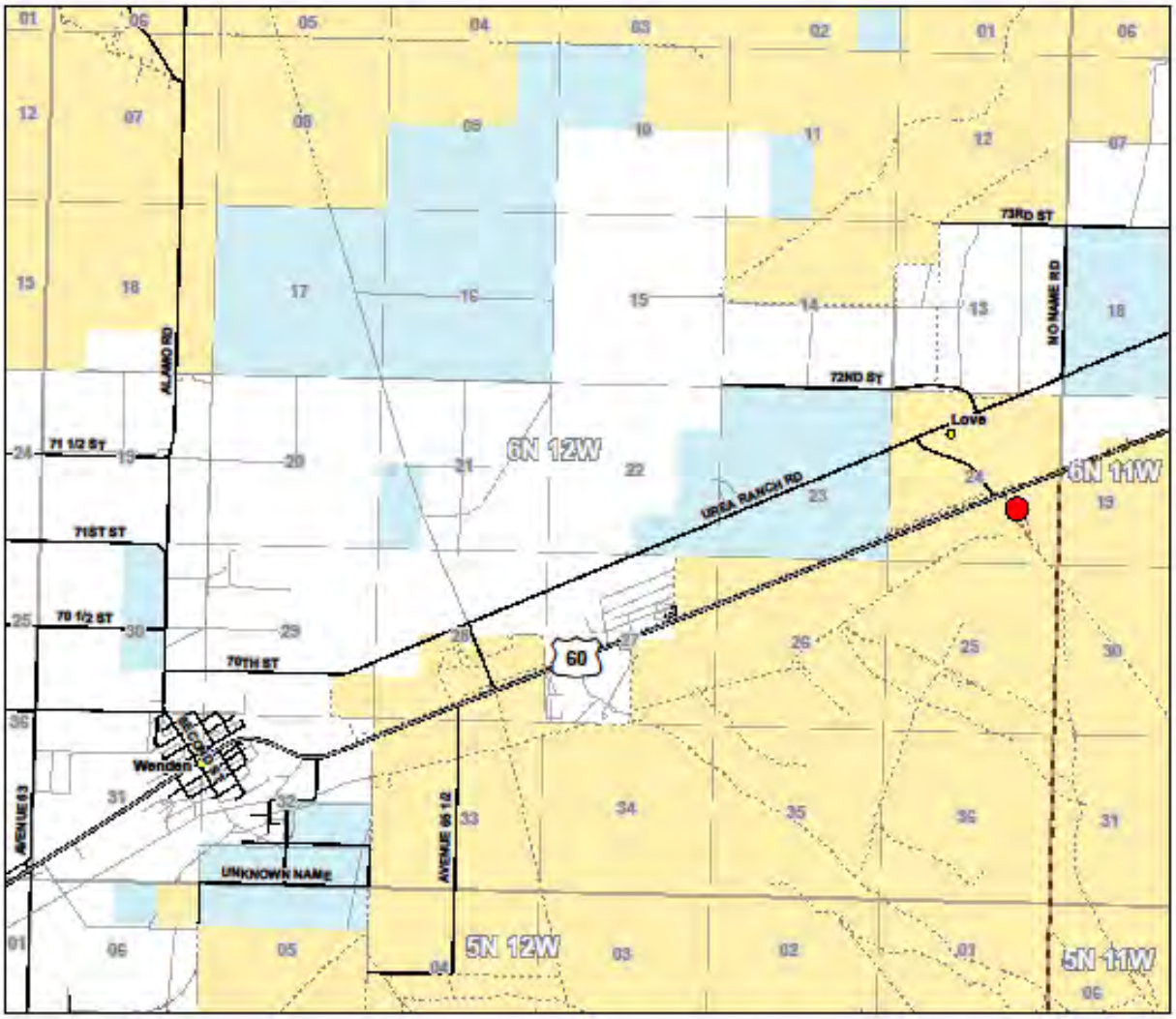

Madico Well and Facility

Colorado River District - Lake Havasu Field Office

Project Location
Town or Place of Interest
Field Office Boundary
U.S. Highway
County or Major Routes
Minor Routes
Route Not Assessed
Township / Range
Section
Bureau of Land Management
Private
State

0 0.55 1.1 Miles
0 0.55 1.1 Kilometers

N

Map Location within the Lake Havasu Field Office

Field Office Boundary

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Map Produced by BLM Lake Havasu Field Office Staff
File: Madico Facility Map - zoomed out
Date: 2/5/2021
Map Scale: 1:57,909
Coordinate System: NAD 1983 UTM Zone 12N
AZ Reference System: U.S. PLSS GSR
CA Reference System: U.S. PLSS SBM

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