

# Aguila Wells Project

## ENVIRONMENTAL ASSESSMENT DOI-BLM-AZ-P010-2022-0020-EA

U.S. Department of the Interior  
Bureau of Land Management  
Hassayampa Field Office  
2020 E. 20<sup>th</sup> Street  
Phoenix, Arizona 85022  
623-580-5500

**January 11, 2023**



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ACHRONYMS:

|       |  |
|-------|--|
| ACEC  | Area of Critical Environmental Concern       |
| ADEQ  | Arizona Department of Environmental Quality. |
| ADWR  | Arizona Department of Water Resources        |
| BLM   | Bureau of Land Management                    |
| CFR   | Code of Federal Regulations                  |
| EA    | Environmental Assessment                     |
| FLPMA | Federal Land Policy and Management Act       |
| IDT   | Interdisciplinary team                       |
| NEPA  | National Environmental Policy Act            |
| RMP   | Resource Management Plan                     |

## **1.0 INTRODUCTION/PURPOSE AND NEED**

### **1.1 Introduction**

Deganahl Cattle Company submitted an application to the Bureau of Land Management (BLM) for the installation of three new supplemental livestock waters at existing livestock stock tanks located on the Aguila grazing allotment (Figure #1). Additional livestock handling facilities are also proposed at these supplemental waters.

Proposed well sites are located at:

Desert Tank: This is an existing dirt tank located in T4N R10W S28 NWSE (Figure #2). The dirt tank is fenced, with a set of corrals existing on site. The proposal includes drilling a new well adjacent to the existing corral and piping water to new troughs located in and adjacent to the existing corrals and inside the existing fence.

Sunset Tank: This is an existing dirt tank located in T6N R 10W S7 SWNW (Figure #2). The dirt tank is fenced, with a small corral existing on site. The proposal includes drilling a new well adjacent to the existing small corral, expanding the corral system to increase livestock holding and sorting capacity, and piping water to new troughs located in and adjacent to the proposed new corral setup.

A third location at Twin Tanks was determined to be located on AZ State Trust lands. The applicant has applied to place this facility on State Trust lands.

This Environmental Assessment (EA) has been prepared in response to this application. This EA serves to analyze the potential effects of installation of these facilities, as well as any proposed alternatives to this action.

Total area for the project is expected to be less than 10 acres in size, with 5 acres at each proposed well location. The proposed facilities are located in priorly disturbed areas, with the only new disturbance related to installation of wildlife watering facilities.

### **1.2 Purpose and Need**

The purpose of this action is to evaluate additional water sources for livestock and wildlife use on the Aguila allotment in response to the application to place new improvements. The additional infrastructure is needed because the existing improvements are inadequate especially during extended dry periods and drought.

The need for this action is to comply with requirements set forth in the Federal Land Policy and Management Act (FLPMA); The Taylor Grazing Act of 1934; and the grazing regulations found at 43 Code of Federal Regulations (CFR) Part 4120, Grazing Management.

### **1.3 Scoping and Issue Identification**

Internal scoping for this project was conducted with an interdisciplinary team (IDT) of resource specialists in February of 2021. Potential resources in the project area were identified using GIS data sets and local specialist knowledge. Based on this internal scoping, the following issues have been identified for analysis:

- How would installation of the facilities affect livestock management on the Aguila allotment?
- How would installation of the facilities affect Sonoran Desert tortoise habitat where those facilities lie within designated habitat?

### **1.4 Land Use Plan Conformance Statement**

The Proposed Action and alternatives would be conformance with the Bradshaw-Harquahala Resource Management Plan and Record of Decision (BLM, 2010). Specifically, the following RMP decisions apply:

GM-6: Build livestock control fences and alternative water sources where needed to meet natural resource objectives. Fence construction and maintenance will follow guidance provided in BLM Handbook on Fencing No. 1741-1.

GM-12: Range improvements needed for proper management of the grazing program will be determined and completed, including repair and/or installation of fences, cattle guards, water developments, and vehicle routes needed to access improvement areas.

TE-12: Evaluate on a case-by-case basis all proposed activities, including the following, for impact to desert tortoise population or habitats:

- Range improvements

WF-10: The density and distribution of wildlife waters will be maintained, improved, or increased throughout the planning areas to sustain and enhance wildlife populations across their range.

WF-12: New wildlife waters will be built when needed to maintain, restore, or enhance native wildlife populations or distributions.

WF-14: Water developments, including those for purposes other than wildlife, will include design features to ensure safe and continued access to water by wildlife.

### **1.5 Relationships to Statutes, Regulations, Manuals and Other Plans**

The following statutes, regulations and other authorities that apply to this Project include, but are not limited to:

- The Federal Land Policy and Management Act
- The Taylor Grazing Act of 1934
- Public Rangelands Improvement Act of 1978
- 43 CFR 4100, Grazing Administration- Exclusive of Alaska
- Candidate Conservation Agreement for the Sonoran Desert tortoise (*Gopherus morafkai*) in Arizona (2015)

### **1.6 Decision to be Made**

The authorized officer is the Field Manager for the Hassayampa Field Office, who will decide whether to approve or disapprove the installation of the new water sources and livestock facilities described in the Proposed Action. At the conclusion of the NEPA process, Grazing Decisions will be issued under 43 CFR 4160.

## **2.0 PROPOSED ACTION AND ALTERNATIVES**

This chapter describes the alternatives to be analyzed in detail in Chapter 3.0. The IDT developed two alternatives, the Proposed Action and the No Action. One additional alternative was dismissed from further analysis. The alternatives are designed to meet the purpose and need for action, conform to existing land use plans, and satisfy the legal and regulatory requirements for rangeland management.



## **2.1 Proposed Action**

The Proposed Action is to approve the construction of new water sources and livestock handling facilities at existing stock tanks located on the Aguila allotment. The locations for the new facilities are described below:

Desert Tank: This is an existing approximately 3-acre-foot dirt tank located in T4N R10W S28 NWSE (Map 3). The dirt tank is fenced, with a set of corrals existing on site. The proposal includes drilling a new well adjacent to the existing corral setup and piping water for approximately 240 feet to new troughs located in and adjacent to the existing corrals and inside the existing fence.

Sunset Tank: This is an existing approximately 2-acre-foot dirt tank located in T6N R 10W S7 SWNW (Map 2). The dirt tank is fenced, with a small corral existing on site. The proposal includes drilling a new well adjacent to the existing small corral, expanding the corral system to increase livestock holding and sorting capacity, and piping water approximately 140 feet to new troughs located in and adjacent to the proposed new corral setup.

The facilities will be constructed as funding is secured. Well depths are expected to be between 500-800 feet. Well depths are based on current well depths to the northeast and south at existing facilities. Due to the remote nature of both proposed wells, well draw-down rates are not expected to impact local agriculture, communities, or other livestock watering facilities.

Corral and fence construction will follow requirements as set forth in the BLM Fencing Handbook.

In addition to the above range improvements, there will be additional infrastructure for the benefit of wildlife. Wildlife water sources will consist of pipe fenced areas between one half and one acre in size, located a minimum of 330 feet from livestock handling facilities. Each wildlife water will consist of a 500-gallon storage tank feeding a wildlife-friendly drinker. Livestock will be excluded from these facilities at all times.

### **2.1.1 Management Actions**

The following management actions will be implemented in conjunction with approval of the application to place range improvements:

- Improvements will be held under Cooperative Agreements in accordance with 43 CFR 4120.2-3 and 4120.3-9
- All vehicles associated with construction of the new facilities will be pressure washed prior to arrival on site to prevent the spread of noxious, invasive weeds.
- Wildlife water sources will be available on a year-round basis for wildlife use.
- Wildlife facility maintenance will be conducted by BLM on a semi-annual basis, or as necessary.
- Livestock facility maintenance, including well maintenance, will be assigned to the permittee. All maintenance costs will be reported to the BLM for tracking purposes.
- All water troughs will contain wildlife escape ramps. All water storage shall be closed-top in order to minimize evaporation potential.
- All permitting requirements will be completed as required by the ADWR and ADEQ before any well construction is started. This includes ADWR water adequacy determination for the project area. If either ADWR or ADEQ determines that the wells are not permissible due to any water adequacy or other permitting issues, then the project wells will not be allowed to be constructed on BLM lands.
- Well construction will conform to ADWR and ADEQ requirements.
- Any cultural (historic/prehistoric site or object) or paleontological resource (fossil remains of plants or animals) discovered within the project area must immediately be reported to the HFO Field Manager or their designee. All operations in the immediate area of the discovery shall be suspended until written authorization to proceed is issued.

## **2.2 No Action Alternative**

Under the No Action Alternative, the application to place range improvements would be denied. No construction outside of maintenance of the existing facilities would be allowed. Current facility water availability would continue to be seasonally restricted.

## **2.3 Alternatives Considered but Eliminated From Detailed Analysis**

### *Alternative Wildlife Water Sources*

This alternative would have used the new troughs located within the existing facilities as the source for perennial wildlife water. This alternative would have reduced the need for trenching and

secondary wildlife facilities as shown on Maps 2 and 3. This alternative was dismissed from further analysis due to:

1. Potential wildlife conflicts while livestock are present at the facilities.
2. Potential conflicts with corral type fencing as opposed to wildlife drinker type fencing.
3. Height of drinkers in relation to target wildlife species.

### **3.0 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES**

This chapter identifies and describes the current condition and trend of elements or resources in the human environment which may be affected by the Proposed Action or No Action Alternative. The Affected Environment is the same for all alternatives.

#### **3.1 General Setting**

The general setting for the proposed action is the Aguila grazing allotment, located southwest of Aguila, Arizona. This grazing allotment encompasses approximately 208,000 acres of Public Land located south of US 60, north of Salome highway, with Eagle Eye Road roughly bisecting the allotment. The allotment includes the Harquahala wilderness, parts of the Bighorn and Hummingbird Springs wildernesses, as well as the Harquahala ACEC. Vegetation at the project areas is typical of low rainfall Sonoran Desert scrub, with a landscape dominated by creosotebush (*Larrea divaricata*) on upland areas, with trees limited to areas of increased moisture.

#### **Resources Considered for Analysis**

The following resources are or may be present in the Project Area, may be affected by the Proposed Action or No Action Alternative and warrant detailed analysis (see Appendix A for rationale for those resources present, but not analyzed in detail).

#### **3.2 Types of Effects**

In this document, the terms “effect” and “impact” are used synonymously.

40 Code of Federal Regulations, Part 1508.1 (g) (July 2020) provides the following definition: “Effects or impacts means changes to the human environment from the proposed action or

alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.”

For the purpose of this analysis, the duration of the impact is defined as follows:

- **Short-term:** impacts that would be during construction of the facilities.
- **Long-term:** impacts that would be during the expected lifetime of the improvements, or approximately 30 years.

For the purposes of this analysis, the Direct, Indirect and Cumulative effects are defined as follows:

- **Direct:** Effects which are caused by the action and occur at the same time and place.
- **Indirect:** Effects which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable.
- **Cumulative effects:** Effects which are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present and reasonably foreseeable action regardless of what agency or person undertakes such other actions.

For the purpose of this analysis, intensity or severity of the impact is defined as follows:

- **Negligible:** changes would not be detectable and/or measurable. The resource would be essentially unchanged or unaltered.
- **Minor:** changes would be detectable, localized, and/or measurable. The resource would be slightly changed or altered.
- **Moderate:** changes would be clearly detectable, measurable, and/or have an appreciable effect on the resource. The resource would be notably changed or altered.

For the purpose of this analysis, the type of impact is defined as follows:

- **Adverse:** impacts that would have a detrimental effect to a resource.
- **Beneficial:** impacts that would have a positive effect to a resource.

### **3.3.1 Wildlife Resources**

The project area lies within the Arizona Upland division of the Sonoran Desert. Vegetation includes velvet mesquite, foothills paloverde, ironwood, and catclaw, as well as ocotillo.

Common cactus species are saguaro, prickly pear, cholla, and barrel cactus. Shrubs are represented by creosote, triangle-leaf bursage, jojoba, and brittlebush. Native grasses occur sparsely, but the invasive red brome is present through the project area. Wildflowers are typically present in the spring and can be abundant after above average cool season precipitation. Wildlife species in the area include mule deer, javelina, coyote, bobcat, gray fox, jackrabbit, desert cottontail, Gambel's quail, mourning dove, various small mammals, migratory birds, and numerous species of reptiles.

### **Species Listed Under the Endangered Species Act**

There are no threatened or endangered species that occur in or within the vicinity of the project area.

### **BLM Sensitive Species**

The animal species identified by the Bureau of Land Management for the Hassayampa Field Office that could occur in or near the proposed project area are Sonoran Desert tortoise (*Gopherus agassizii*), desert purple martin (*Progne subis*), and gilded flicker (*Colaptes chrysoides*).

### **Sonoran Desert Tortoise**

The Sunset project area is within category 3 Sonoran Desert tortoise habitat. The Desert Tank project area is not within BLM designated tortoise habitat. The Sonoran Desert tortoise is a candidate for endangered species listing. Tortoises tend to occupy steep rocky hillsides and ridges with outcrops of large boulders as well as areas with incised washes and caliche caves but may be found in lower densities in areas with less topography. Tortoises generally use natural and excavated cover sites between or under boulders and in caliche caves along washes wherever

they occur. The majority of Sonoran Desert tortoise diet consists of annual forbs, perennial forbs, grasses, and woody plants.

There are no hibernacula or suitable shelter sites occur in the vicinity of the project area. There is potential however, that desert tortoise could use the project areas for foraging or dispersal.

### **Purple Martin**

Purple martins are found in a variety of habitats but seem to prefer densely vegetated Sonoran Desert scrub habitats where large saguaros with many cavities are in abundance. They are cavity nesting birds often using abandoned cavities in saguaros excavated by woodpeckers or flickers. Purple martins arrive in Arizona in mid-April, but do not become common in their breeding areas until mid-May (Corman and Wise-Gervais 2005). Nesting purple martins have not been documented in the vicinity of the project area (Corman and Wise-Gervais 2005). Although there is not an abundance of large saguaros with many cavities in the project area there is potential that purple martins occur in the vicinity of the project area.

### **Guillemot Flicker**

Guillemot flickers occur primarily in the Arizona Upland division of the Sonoran Desert. The majority of flickers nest in saguaros with a few nesting in Fremont cottonwood and Gooding willow (Corman and Wise-Gervais 2005). Breeding flickers have been documented in the vicinity of the project area.

### **Migratory Birds**

Migratory birds were evaluated for the upland division of the Sonoran Desert. Effects were also evaluated for bird species of conservation concern. Species of conservation concern were identified as Arizona Partners in Flight Priority Species (Latta et al. 1999) and U.S. Fish and Wildlife Service Birds of Conservation Concern (USFWS 2021) that potentially occur in the project area. There are no designated Important Bird Areas in the vicinity of the projects area.

## **3.3.2 Environmental Consequences Wildlife Resources**

### *Proposed Action*

#### **Sonoran Desert Tortoise**

Short term impacts to desert could occur during project implementation when increased human activity including increased presence of vehicles and machinery. Long term and cumulative

impacts to tortoise would be negligible as new fencing and other features associated with the project would not impede the movement of tortoise through the area. However, tortoise may avoid the project areas during times that livestock are present at the sites.

The Proposed Action may impact individuals but would not lead toward listing or loss of viability of Sonoran Desert tortoise

### **Purple Martin and Gilded Flicker**

Purple martins and gilded flickers are both dependent upon saguaro cactus for nesting. Because there will be mitigation measures in place to protect saguaro cactus the proposed action would have negligible impacts to the nesting of these species.

Foraging for these species could be affected in the immediate vicinity of the three project areas due to the limited amount vegetation that would be removed via livestock concentration. Loss of vegetation could affect insect abundance.

The proposed action may impact individuals but would not lead toward the listing or loss of viability of purple martin and gilded flicker. The cumulative impact would be negligible.

### **Migratory Birds**

Because some vegetation would be removed in the project area the proposed action could result in limited unintentional take of migratory bird species but would not result in a measurable negative effect to migratory bird populations.

### **Recommended Mitigation Measures for Wildlife and Habitat**

1. Look out for and avoid desert tortoises. If tortoises must be moved to avoid harming them, they should be moved according to Arizona Game and Fish Department guidelines (see appendix).
2. Avoid destroying or damaging vegetation to the greatest extent practicable during project implementation. Avoid saguaros entirely.

### ***No Action Alternative***

The no action alternative would have no impact to desert tortoise, desert tortoise habitat, BLM Sensitive species, or migratory birds.

### **3.4.1 Livestock Grazing**

The Aguila grazing allotment is a perennial grazing allotment encompassing approximately 207,000 acres of public lands with a year-long grazing season. The allotment is permitted for 427 head of livestock, however, numbers on the allotment are varied based on forage condition and water availability. There is no formal livestock rotation system in place on the allotment. Livestock are generally moved to higher elevation areas during the summer months, and to lower elevation areas in order to utilize the annual forage crop in the late winter and spring season.

Livestock have likely been present in the allotment since the late 1800s. Current BLM records show continuous grazing use since the 1960s. Range improvements from the 1940s through the 1960s focused on surface water diversions, with limited wells on the allotment. Well construction began to supplant surface water diversion after the 1960s, with the majority of the wells in the allotment being drilled in the 1980s.

### **3.4.2 Environmental Consequences for Livestock Grazing**

#### ***Proposed Action***

Under the Proposed Action, the direct effect, the water availability will increase at Sunset Tank and Desert Tank. These waters are in areas of lower annual vegetation production, and livestock predominantly use ephemeral forage in these areas during years with enough rainfall to support an ephemeral bloom.

Livestock distribution on the allotment is expected to have a cumulative effect to slightly improve with the additional water availability. With improved livestock distribution, grazing pressure on vegetation will be reduced in areas with existing perennial waters as livestock are rotated to the new perennial water sources. This will allow for greater flexibility in livestock management on the allotment. There are no reasonably foreseeable cumulative impacts to the ground water availability or impacts to other wells in the area. BLM will defer water availability determination to the ADWR during their well drilling permit review process.

#### ***No Action Alternative***

Under the No Action alternative, livestock grazing will continue at the levels and informal rotation system as described above. Use of Sunset Tank and Desert Tank will continue to be



limited to seasons with sufficient rainfall to maintain water in these tanks. Livestock distribution will continue to be focused around existing perennial water sources.

### **3.5.1 Soil Resources**

Soils in the project area are typical for Sonoran Desert low rainfall areas. Rainfall in the project areas is expected to be between 2-10", with areas of increased moisture along drainages and toeslopes along hills.

Sunset Tank lies within La Paz county, which does not have a current soil survey. Soils at the nearby Dushey tank, located 2 miles to the northeast in Maricopa County, are substantially similar. These soils include the Eba-Continental complex in the 8-10" precipitation zone, and the Anthony Sandy Loam in the same rainfall regime. All these soils are deep, well drained soils. Soil surface textures are gravelly loam to clay loam for the Eba and Continental soils, to sandy loam for the Anthony soil.

Soils around Desert tank include Chuckwall-Gunsight complex and the Brios-Carrizo complex, with both complexes in the 2-7" low rainfall regime. Soils are deep and well drained to excessively drained. Both the Chuckwalla and Gunsight soils have soil surface textures of gravelly loam, while the Brios and Carrizo soils loamy and gravelly sand, respectively.

### **3.5.2 Environmental Consequences for Soils**

#### *Proposed Action*

Under the Proposed Action, soils will be displaced due to trenching for wildlife water features, well drilling activities, placement of new water storage facilities, and fencing placement.

The majority of construction activities will be taking place within the footprint of existing range improvements. Soils located in these areas will be unaffected by expansion of the existing facilities. Wildlife water source installation will cause localized disturbance of soils due to trenching. This disturbance is expected to be less than one quarter of an acre across both sites. Soils displaced for trenching activities will be used to backfill the trench.

Maintenance of the new facilities aside from pipelines will not cause additional soil disturbance. Pipeline maintenance will be infrequent and will involve highly localized soil disturbances relating to exposure of the pipeline in areas of failure. This is expected to only occur in areas of compaction where pipelines cross existing roads.

*No Action Alternative*

Under the No Action alternative, soils will not be impacted by construction of new range improvements. Impacts associated with the existing facilities will continue to occur.

**3.7 Residual Effects**

*Proposed Action*

No residual effects are expected under the proposed action.

*No Action Alternative*

No residual effects are expected under the No Action alternative.

**4.0 PERSONS, GROUPS, AND AGENCIES CONSULTED**

**4.1 List of Preparers**

The following individuals were involved in the preparation of this EA:

**Bureau of Land Management**

| <b>Name</b>   | <b>Title</b>                           | <b>Project Expertise</b>             |
|---------------|--|--------------------------------------|
| James Holden  | Rangeland Management Specialist        | Livestock grazing, Soils, Vegetation |
| Roger Joos    | Wildlife Biologist                     | Wildlife, T&E                        |
| Dale Ohnmeiss | Planning and Environmental Coordinator | NEPA                                 |
|               |  |                                      |
|               |  |                                      |
|               |  |                                      |

**4.2 Public Review**

This EA has been made available to the public for review and comment for 15-days. The comment period was conducted between August 5 to August 20, 2022. The BLM sent notification of this document’s availability to individuals, organizations, or agencies by postcard or email. All comments would be reviewed and categorized by the BLM. Although not required for an EA by

regulation, an agency may respond to and summarize substantive and timely comments received as a part of the Final EA in an appendix (BLM 2008).

Substantive comments would:

- 1) Question, with reasonable basis, the accuracy of the information in the EA;
- 2) Question, with reasonable basis, the adequacy of, methodology for, or assumptions used for the environmental analysis;
- 3) Present new information relevant to the analysis;
- 4) Present reasonable alternatives other than those analyzed in the EA; and/or
- 5) Cause changes or revisions in one or more of the alternatives.”

#### **4.3 Tribes, Individuals, Organizations or Agencies Consulted**

The BLM Archeologist determined that the project area is not within or near any cultural or Tribal concerns and has determined that Tribal consultation was not necessary.

If at any time before or during the well construction any cultural or paleontological items are discovered, the construction is to be stopped and the BLM is to be notified for evaluation. No further construction will be allowed until cleared by the BLM archeologist.

## 5.0 REFERENCES

- Bureau of Land Management (BLM). 2008. *National Environmental Policy Act Handbook (H-1790-1)*. U.S. Department of the Interior. January.
- Corman, T. E. and C. Wise-Gervais. 2005. *The Arizona Breeding Bird Atlas*. University of New Mexico Press, Albuquerque, NM. 636 pp.
- Latta M.J., C.J. Beardmore, and T.E. Corman. 1999. *Arizona Partners in Flight Bird Conservation Plan. Version 1.0. Nongame and Endangered Wildlife Program Technical Report 142*. Arizona Game and Fish Department, Phoenix, Arizona.
- U.S. Fish and Wildlife Service. 2021. *Birds of Conservation Concern 2021*. United States Department of the Interior, U.S. Fish and Wildlife Service, Migratory Birds, Falls Church, Virginia. <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.ph>

# Appendix A. Resources and Issue Identification Checklist.

**Appendix A. Resources and Issue Identification Checklist.**

The following tables were developed based on the professional judgement of the BLM’s interdisciplinary team, and review of baseline studies.

**Supplemental Authorities**

Appendix 1 of BLM’s NEPA Handbook (H-1790-1) identifies supplemental authorities that are subject to requirements specified by statute or executive order and must be considered in all BLM environmental documents (BLM 2008). Table 1 lists the Supplemental Authorities and their status in the Analysis Area (Section 3.1). Supplemental authorities that *may be affected* by the Proposed Action or No Action Alternative and *warrant detailed analysis* are further described in this EA.

**Table 1. Supplemental Authorities\*.**

| Resource                                       | Present<br>Yes/No | May be<br>Affected<br>Yes/No | Rationale for Not Analyzing Resources in Detail   |
|--|-------------------|------------------------------|---|
| Air Quality                                    | Yes               | No                           | The BLM has reviewed the National Ambient Air Quality Standards for the Analysis Area.  |
| Areas of Critical Environmental Concern (ACEC) | Yes               | No                           | The Sunset Tank site lies within the boundary of the Harquahala ACEC. The RMP decisions specific to this ACEC relate to higher elevation areas within the ACEC and will not be affected by this project on the lower elevation boundary. Specifically complies with decision AC-17, “Achieve and maintain unfragmented wildlife habitat, which provides adequate forage, cover, and access to water for healthy wildlife populations.”      |
| Cultural Resources                             | No                | No                           | Cultural surveys show no resources in the proposed areas affected by construction of the facilities.  |
| Environmental Justice                          | No                | No                           | Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations), requires that federal agencies identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no disproportionately low income or minority populations in the Analysis Area. |

| Resource   | Present Yes/No | May be Affected Yes/No | Rationale for Not Analyzing Resources in Detail   |
|--|----------------|------------------------|---|
| Farmlands (prime or unique)                      | No             | No                     | There are no U.S. Department of Agriculture designated prime or unique farmlands in the Analysis Area.  |
| Floodplains                                      | No             | No                     | There are no Federal Emergency Management Agency designated flood-hazard areas within the Analysis Area.  |
| Noxious and Invasive Weeds                       | No             | No                     | No mapped populations of noxious or invasive weeds in the Analysis Area. Stipulations for cleaning of construction equipment to prevent the spread of noxious invasive species will be incorporated into the standard operating procedures.   |
| Migratory Birds, BLM Sensitive Species (Animals) | Yes            | Yes                    | Carried forward for detailed analysis in EA   |
| Native American Religious Concerns               | Yes            | ?                      | The American Indian Religious Freedom Act of 1978 (42 USC 1996) requires federal agencies to consider whether their proposals impeded access to sacred sites required in their religions, including cemeteries, by Native Americans. Executive Order 13007 (Indian Sacred Sites) requires federal agencies to: (1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners; and (2) avoid adversely affecting the physical integrity of such sacred sites.<br>Per RMP- Yavapai tribe. |
| Threatened or Endangered Species (T&E)           | No             | No                     | No mapped or known populations of T&E species are present in the Analysis Area. There is no proposed or designated critical habitat in the Analysis Area.   |
| Wastes, Hazardous or Solid                       | No             | No                     | No hazardous or solid waste sites are present in the Analysis Area.   |
| Water Quality (Surface/Ground)                   | No             | No                     | There are no Clean Water Act Section 303 (b) impaired waters in the Analysis Area.  |
| Wetlands/Riparian Zones                          | No             | No                     | There are no Clean Water Act Section 404 jurisdictional wetlands in the Analysis Area. No riparian areas are present in the Analysis Area.  |

| Resource               | Present<br>Yes/No | May be<br>Affected<br>Yes/No | Rationale for Not Analyzing Resources in Detail                                      |
|------------------------|-------------------|------------------------------|--|
| Wild and Scenic Rivers | No                | No                           | There are no Congressionally designated Wild and Scenic Rivers in the Analysis Area. |
| Wilderness             | No                | No                           | There are no Congressionally designated Wilderness areas in the Analysis Area.       |

\*See H-1790-1 (January 2008) Appendix I Supplemental Authorities to be Considered.

### Resources or Uses Other Than Supplemental Authorities

BLM specialists have evaluated the potential impact of the Proposed Action or No Action Alternative on these resources and documented their findings Table 2. Resources or uses that *may be affected* by the Proposed Action or No Action Alternative and *warrant detailed analysis* are further described in this EA (BLM 2008).

**Table 2. Resources or Uses Other Than Supplemental Authorities.**

| Resource or Issue                     | Present<br>Yes/No | May be<br>Affected<br>Yes/No | Rationale for Not Analyzing Resources in Detail   |
|---------------------------------------|-------------------|------------------------------|---|
| BLM Sensitive Species (plants)        | No                | No                           | There are no populations of BLM sensitive plant species mapped in the Analysis Area.  |
| General Wildlife                      | Yes               | Yes                          | Carried forward for analysis in EA  |
| Lands and Realty                      | Yes               | No                           | The proposed action will have no effect on and Land and Realty actions within the project area.   |
| Lands with Wilderness Characteristics | Yes               | No                           | Sunset Tank lies within Land with Wilderness Characteristics. All proposed livestock facilities would occur within existing disturbance areas. Wildlife facilities will be designed to minimize visibility.                               |
| Resource                              | Present<br>Yes/No | May be<br>Affected<br>Yes/No | Rationale for Not Analyzing Resources in Detail   |
| Livestock Grazing                     | Yes               | Yes                          | Carried forward for analysis in EA  |
| Minerals                              | Yes               | No                           | There are no Notice- or Plan-level mining operations within the Analysis Area.  |
| Paleontological                       | No                | No                           | The BLM has reviewed the Potential Fossil Yield Classification (PFYC) System for the Analysis Area. There is no or low potential for fossils based on these classifications within the Expansion Area. No detailed analysis is warranted. |
| Recreation                            | Yes               | No                           | There are no developed recreation facilities within the Analysis Area. Dispersed recreation will not be affected by the proposed facilities.  |



| Resource                   | Present<br>Yes/No | May be<br>Affected<br>Yes/No | Rationale for Not Analyzing Resources in Detail   |
|----------------------------|-------------------|------------------------------|---|
| Socioeconomics             | No                | No                           | Resource not present.   |
| Soils                      | Yes               | Yes                          | Carried forward for analysis  |
| Travel Management          | No                | No                           | No travel management plan has been implemented in the Analysis Area.                            |
| Vegetation                 | Yes               | Yes                          | Carried forward for analysis.   |
| Resource                   | Present<br>Yes/No | May be<br>Affected<br>Yes/No | Rationale for Not Analyzing Resources in Detail   |
| Visual Resource Management | Yes               | ?                            | Sunset- VRM 2, Desert- VRM 3, Twin Tanks VRM 4  |
| Wild Horses and Burros     | No                | No                           | There is no BLM-designated herd management area for wild burros or horses in the Analysis Area. |

## Appendix B. Arizona Game and Fish Desert Tortoise Mitigation Guidelines

# **RECOMMENDED STANDARD MITIGATION MEASURES FOR PROJECTS IN SONORAN DESERT TORTOISE HABITAT**

*Arizona Interagency Desert Tortoise Team June 2008*

The following mitigation process and measures are recommended by the Arizona Interagency Desert Tortoise Team (AIDTT) for proposed surface-disturbing projects located in the habitat of the Sonoran population of the desert tortoise, *Gopherus agassizii*. Mitigation for projects in the habitat of the Mojave population, located north and west of the Colorado River, will be addressed by project proponents, land management agencies, Arizona Game and Fish Department, and the Fish and Wildlife Service through consultations between the Service and Federal agencies in accordance with section 7 of the Endangered Species Act and in the habitat conservation planning process for private actions.

This document is a supplement to the AIDTT Management Plan (AIDTT 1996). Determining the Need for Mitigation Project proponents, in coordination with local land managers, Arizona Game and Fish Department, and Fish and Wildlife Service, must determine whether desert tortoises are present or may occur in areas that would be disturbed by proposed projects. Presence can often be confirmed by contacting biologists with the Bureau of Land Management, Arizona Game and Fish Department, or other local biologists that have knowledge of specific areas or access to the Arizona Game and Fish Department Heritage Data Management System or other data bases that list locality data for desert tortoises. Tortoises can be expected to occur in desert mountains, rocky areas, washes cut through caliche, and bajadas in desert scrub vegetation communities. Tortoises are typically absent above 4,500 feet elevation. Mitigation will generally not be needed above 4,500 feet.

If tortoises have been found in the project area or nearby areas of similar habitat, the species can be presumed present and appropriate mitigation must be included in the proposed project. If presence is questionable, surveys by qualified biologists should be conducted. Often, casual surveys by qualified biologists that focus on microsites with the greatest potential for supporting tortoises can confirm the presence of the species. More intensive work is needed to suggest absence of tortoises. We recommend that these intensive surveys generally follow Fish and Wildlife Service survey protocol for the Mojave population (Fish and Wildlife Service 1992),

except those areas with little or no potential for desert tortoises, such as dry lake beds and riparian areas need not be surveyed.

Tortoise biologists conducting surveys should be familiar with the habitats and survey methods for Sonoran tortoises, which are in many ways different from those of the Mojave population. If the species is present in the project area (including the zone of influence - Fish and Wildlife Service 1992), mitigation should be included as a component of the project design.

Mitigation Plan Mitigation should be tailored to the nature of the proposed action, its anticipated effects, and the density and expected response of desert tortoises to the action. The following mitigation actions are grouped to assist in selection of appropriate actions for specific projects. Nevertheless, each project is different, and development of an appropriate mitigation plan will require the input of a desert tortoise biologist and authorizing agencies, such as the Arizona Game and Fish Department and, for actions on Federal lands, the Bureau of Land Management, Forest Service, Bureau of Reclamation, and Department of Defense.

Approval of a mitigation plan will typically be by an authorizing or permitting/authorizing land management agency, but only Arizona Game and Fish Department can authorize handling or moving tortoises.

Mitigation measures suggested herein are recommendations to be used in developing mitigation plans for specific projects. Required mitigation will be developed by permitting agencies and project proponents in accordance with land management plans, the Desert Tortoise Rangewide Plan (Spang et al. 1988), the National Environmental Policy Act (NEPA), and other applicable guidance and regulations. In general, more rigorous mitigation should be sought in areas supporting moderate to high density tortoise populations (>20 tortoises/mi), in category 1 and 2 habitats (Spang et al. 1988), and in Sonoran Desert Management Areas (AIDTT 1996). The first set of mitigation measures are presented as a generic mitigation outline. Within the outline, measures are listed in the general order and priority in which they should be applied to project proposals. This step-down process is in accordance with NEPA regulations and Fish and Wildlife Service mitigation policy.

A second set of measures follow the outline and consist of project-specific mitigation recommendations. These and/or other measures developed during project planning should be added to the generic mitigation outline as appropriate.

A good source of ideas for mitigation measures is the biological analysis for the proposed Eagle Mountain Landfill (Circle Mountain Biological Consultants 1996), in which the author summarizes mitigation measures used as terms and conditions in biological opinions for the Mojave population of the desert tortoise. Some of the following recommended measures are defined fairly specifically; others provide more general guidance to be considered in the process of developing a project mitigation plan. As these measures are adapted for inclusion into a mitigation plan, replace "should" with "shall" to indicate that they are mandatory stipulations.

Generic Mitigation Plan for Projects in Desert Tortoise Habitat:

**Priority 1: Avoid the Impacts**

To the extent possible, project features should be located in previously disturbed areas or outside of desert tortoise habitat.

# MAPS

Map 1. Aguila Wells Project Map

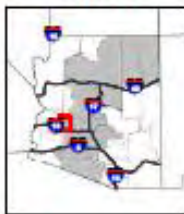
Map 2. Sunset Tank Well Proposed Facilities

Map 3. Desert Tank Well Proposed Facilities



Source: Esri, Mapbox, GeoEye, Earthstar Geographics, CNR/Airphoto, USDA, AeroGRID, IGN, and the GIS User Community

Arizona



Map Location

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.

### Aguila Allotment Proposed Well Locations

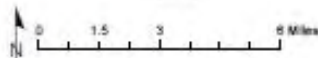
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BUREAU OF LAND MANAGEMENT




Date: 12/10/2020



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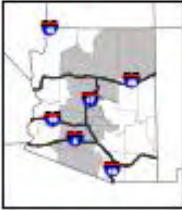
-  Proposed Well Locations
-  Aguila Allotment
-  Bureau of Land Management

MAP PREPARED BY  
James Holden  
ON 12/10/20



Report Book: Camp Verde, BLM/BIA/BLM, 02/20/2020, GTR/Report, 02/20/2020, 10/20/2020, 10/20/2020, 10/20/2020

Arizona



Map Location

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Sunset Tank Well Proposed Facilities

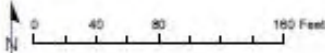
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT












Date: 12/10/2020



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Proposed Facilities

- |  |  |
|--|--|
|  New Fence    |  Trough             |
|  Pipeline     |  Well and Solar     |
|  Remove Fence |  Wildlife Drinker   |
|  Storage      |  Wildlife Exclosure |
|  |  Wildlife Pipeline  |

MAP PREPARED BY  
James Holden  
ON 12/10/20





Source: Esri, DeLorme, GeoEye, Earthstar Geographics, CNRS/Airbus DS, USDA/USGS, AeroGRID, IGN, and the GIS User Community

