

# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
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February 3 2022

To: Colorado Ecological Services Supervisor, U.S. Fish and Wildlife Service,  
Lakewood, Colorado

From: Western Colorado Supervisor, U.S. Fish and Wildlife Service, Grand Junction,  
Colorado

Subject: Intra-Service Biological Opinion for Issuance of a Section 10(a)(1)(B) Permit for  
Incidental Take of Threatened and Endangered Species Associated with the Low  
Effect Gunnison Rising Annexation Habitat Conservation Plan

## **Introduction**

The Western Colorado Ecological Services Field office of the U.S. Fish and Wildlife Service (Service) transmits this biological opinion (Opinion) to serve as fulfillment of formal consultation under section 7 of the Endangered Species Act of 1973 (Act), as amended, (16 U.S.C. 1531 et seq.) and the Interagency Cooperation Regulations (50 CFR 402). This Opinion addresses impacts that may result from issuance of an incidental take permit (Permit) in accordance with section 10(a)(1)(B) of the Act for incidental take of threatened and endangered species associated with the Gunnison Rising Annexation Habitat Conservation Plan (HCP) in Gunnison County, Colorado. The Gunnison Rising Annexation (Gunnison Rising) is a residential and commercial development located in the City of Gunnison (City) in Gunnison County, Colorado. Because the Service has authority over issuing s.10 incidental take permits under the Act associated with habitat conservation plans, the Service is the lead Federal agency for this action, resulting in an intra-Service consultation.

Issuance of the Permit may affect, and is likely to adversely affect the threatened Gunnison sage-grouse (*Centrocercus minimus*) and four federally listed Colorado River fishes (bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus luscus*), humpback chub (*Gila cypha*), and razorback sucker (*Xyrauchen texanus*)) and their critical habitats.

Although the Permit is being issued for incidental take of Gunnison sage-grouse (GUSG), water depletions as a result of the development will also affect the Colorado River fishes. As such, this

INTERIOR REGION 5  
MISSOURI BASIN

KANSAS, MONTANA\*, NEBRASKA, NORTH DAKOTA,  
SOUTH DAKOTA

\*PARTIAL

INTERIOR REGION 7  
UPPER COLORADO RIVER BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

Opinion also addresses the fishes. This Opinion is the second of two parts addressing water depletion impacts to the Colorado River fishes from Gunnison Rising. A Recovery Agreement signed by the City constituted the first step of the water depletion aspect of this Opinion and is appended. The Recovery Agreement and this Opinion constitute the entire formal consultation. The first section of this Opinion finishes addressing impacts to the Colorado River fishes and the second section addresses impacts to the GUSG. The Colorado River fishes section is abbreviated and tiers to the 2009 Gunnison River Programmatic Biological Opinion, as stated in the *Threatened and Endangered Colorado River Fishes* section.

This Opinion was prepared using information from the Final HCP (Gunnison Valley Properties et al. 2021) and information in our files. The Service actively participated in the preparation of the HCP and wrote the Environmental Action and Screening Form (EAS), which serves as a NEPA categorical exclusion (Service 2021a). These documents provide additional detail and supporting information for this Opinion and are hereby incorporated by reference. A complete administrative record of this consultation is on file in our office and the final Opinion is available to the public at <https://ecos.fws.gov/ecp/report/biological-opinion> (search on “Western” for Western Colorado biological opinions).

## **Background**

The Gunnison Rising development area was initially approved to be annexed into the City through a 2009 Annexation Agreement after a 3-year local process involving the City, Gunnison County, Colorado Parks and Wildlife (CPW), and the Gunnison Basin Sage-grouse Strategic Committee. The Annexation Agreement was updated in 2020 (City 2020). The proposed development area is adjacent to existing City infrastructure and is within a three-mile planning area that both the City and County acknowledge as the highest priority to encourage development where it creates less of a fragmented landscape (City 1997, 2001, 2015).

Avoidance, minimization, and mitigation measures to benefit GUSG were being discussed as early as 2006 with the entities named above and including the Service primarily through the Gunnison Basin Sage-grouse Strategic Committee, even though the Gunnison sage-grouse was not federally listed until 2014 (79 FR 69192). The HCP process was started in 2016 but some areas initially slated for development were avoided and non-development buffers to the north and the south of the City boundary were established through the early discussions. Additionally, cattle grazing was voluntarily relinquished in 2009 as a mitigation measure to improve GUSG habitat (see Project Description below for more information).

As part of the HCP application, a Historical Properties Programmatic Agreement will be implemented by the Service and the City to avoid or mitigate impacts to historical and archaeological properties (Service et al. 2021b). Additional surveys are needed in the northern part of the proposed development area and development around historical and archaeological properties may be avoided once surveys and mitigation measures are determined. However, any areas not developed as a result of the historical and archaeological properties would not be excluded from the impacted habitat acreage stated in the HCP or this Opinion since the areas will be near development and will not be suitable for GUSG.

## BIOLOGICAL OPINION

### Description of Proposed Action

The proposed action is issuance of a Permit to the City by the Service, in accordance with section 10(a)(1)(B) of the Act. The Permit will authorize incidental take of GUSG from construction and development activities authorized by the City and carried out by the primary developer, Gunnison Valley Properties (GVP), as well as other potential commercial or individual developers. The Permit will be issued with mandatory conditions, which are part of the proposed action. Incidental take authorized by the permit may occur during residential and commercial development, and the associated capital improvements required for these types of development (see the HCP and below for further details).

Gunnison Rising is a 637-acre, master-planned community, within the easternmost boundary of the City (Figure 1). A master-planned community means there are residential homes as well as potentially commercial sites, institutional sites, and recreational sites. The master planning for Gunnison Rising was a cooperative venture between the City, Gunnison County, Western Colorado University (WCU), and GVP as well as between three planning consultants (Cascadia Partners, YBA Architects, ECONorthwest). Gunnison Rising is zoned by Gunnison County as a Planned Unit Development (PUD). A major change to the PUD was recently completed and several documents making up the PUD have been updated (City 2021). The current planned zones detailed in the Gunnison Rising PUD/Master Plan are as follows: a. Single-Family Residential (0.26 dwelling units per acre), b. Residential (1-5 dwelling units per acre), c. Multi-Family “Residential Village” (5-12 dwelling units per acre), d. Commercial/Mixed use, e. RV Park and Camping, f. Government Campus, g. Events Center and Rodeo, h. Open Space and Parks.

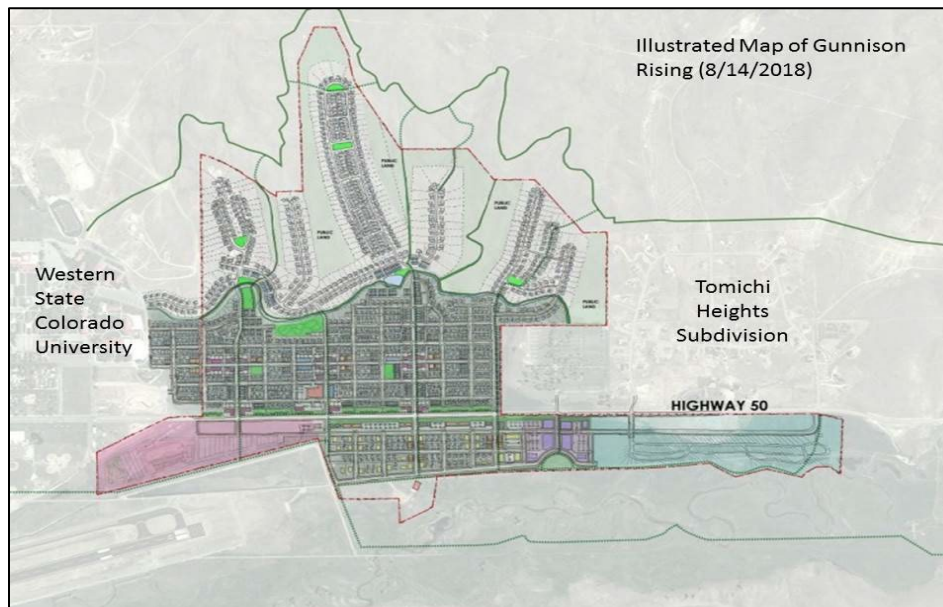


Figure 1. The August 2018 planning effort put forth by the City of Gunnison, Gunnison County, Western Colorado University, and Gunnison Valley Properties.

The Gunnison Rising Plan Area totals approximately 28,478 acres in two land areas. The first area of land (Western Plan Area) includes 1,522 acres and encompasses 637 acres of the proposed Gunnison Rising development north and south of U.S. Highway 50 (North Parcel and South Parcel, respectively), a 420-acre parcel donated by GVP to WCU (which contains a 160-acre Conservation Easement (CE) held by CPW), and a 465-acre parcel that is now Tomichi Creek State Wildlife Area (SWA) (Figure 2). The 420-acre parcel to the north of the development (North Parcel Mitigation Area) and the 465-acre parcel to the south of the development (Tomichi Creek SWA; aka South Parcel Open Space Buffer) provide open space buffers against disturbance from the development. Although the northern parcel is considered a mitigation area for this HCP the southern parcel is simply an open space buffer that minimizes impacts (see minimization and mitigation sections in the HCP). The second area of land (Eastern Plan Area) is a 26,956-acre grazing allotment managed by the U.S. Bureau of Land Management (BLM) where GVP cattle grazing was relinquished for mitigation (Figure 3). The cattle were voluntarily relinquished in 2009 (Scott, pers. comm., 2021) and the permit was officially withdrawn in 2011 (BLM 2011) from the 14,725-acre Cabin Creek Allotment east of the Gunnison Rising project area. The allotment was combined in 2011 with the 12,231-acre Alder Creek Allotment to form the 26,956-acre Cabin-Alder Allotment (Figure 3; BLM 2011). Relinquishment of GVP cattle amounted to 15 percent of the allotment total and allows the BLM to manage the remaining permittees' cattle to meet GUSG habitat objectives (see section 5.3 of the HCP and the Effects of the Action section below for further discussion).

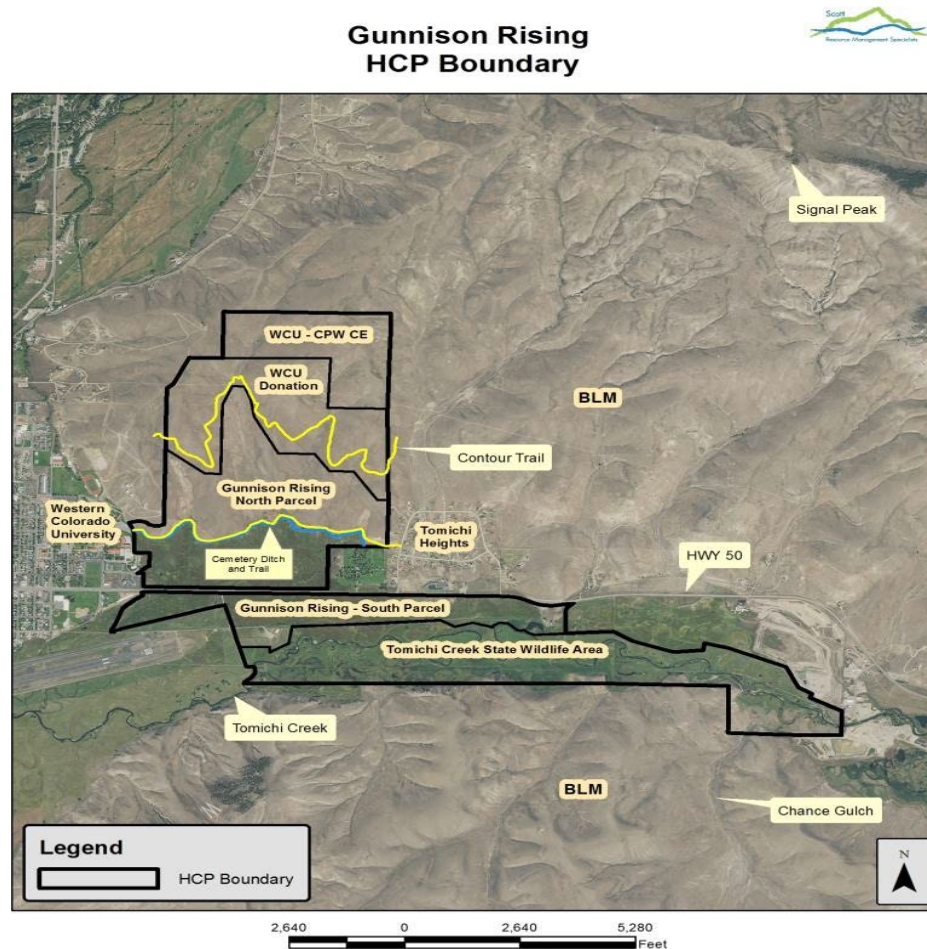


Figure 2. Western Plan Area showing the Contour and Cemetery Ditch Trails, the North Parcel Mitigation Area (labeled as the WCU Donation and WCU-CPW CE), and the Tomichi Creek SWA/South Parcel Open Space Buffer.



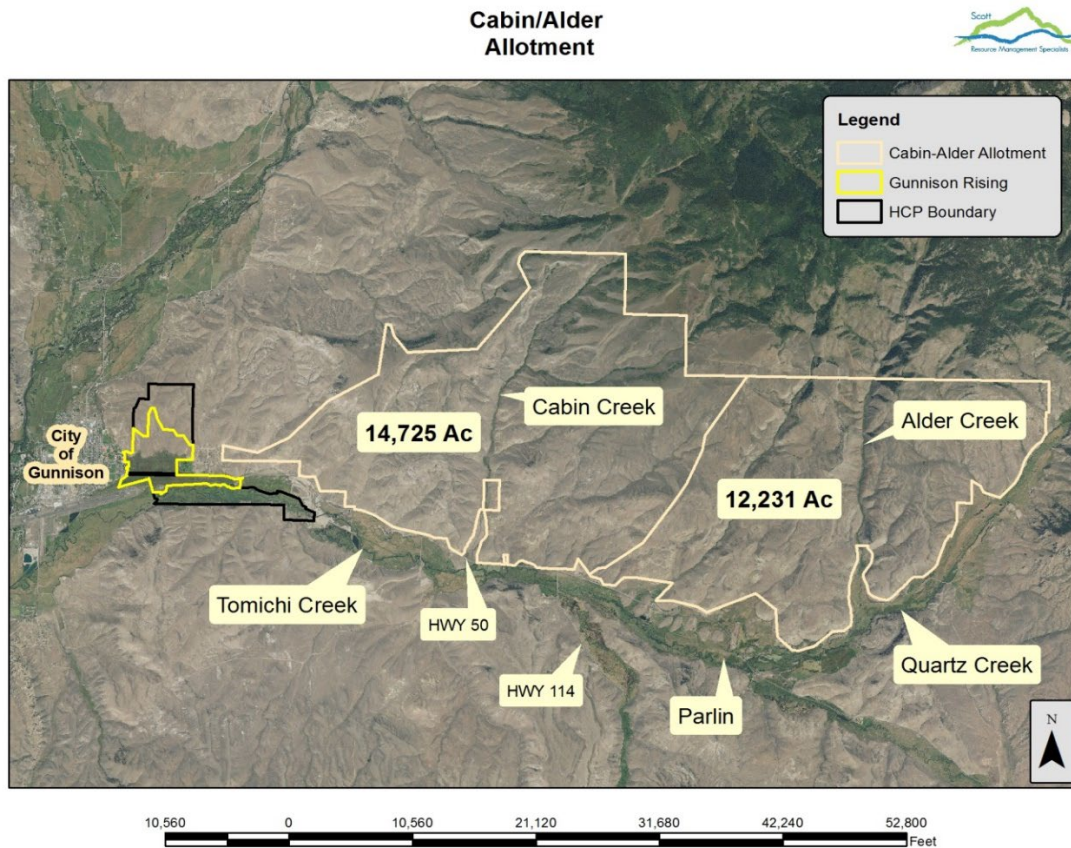


Figure 3. The Eastern Plan Area/mitigation area (BLM's Cabin-Alder Allotment).

The buildout and development for Gunnison Rising is proposed in a phased manner at a rate of 20 to 50 acres every 5 years, moving from the western to eastern boundary and from south to north. Development will first occur in the “No Take Area” on either side of Highway 50. The No Take Area is an area that is currently impacted by hay meadows and surrounding development such that GUSG do not use it, thus no take of GUSG will occur there (Ireland, pers. comm. 2019). The No Take Area includes the 347-acre Phase I development site and 94 acres between the development area and north side of Tomichi Creek where habitat has been altered such that it is not functional GUSG habitat (Seward, pers. comm. 2019; Figure 4 (acreage unlabeled)). After Phase I is completed, development will proceed to the north onto Phase II (Figure 4). The development could have proceeded only on Phase I without a Permit since no take to GUSG would occur, especially if initiated during an appropriate time of year such as the fall when GUSG disperse into higher and dryer sage-brush habitat. However, Phase II development plans may result in incidental take of Gunnison sage-grouse, resulting in the City's Permit application. The Permit will initially be issued for 20 years but could be renewed if development or actions associated with the HCP are still ongoing.

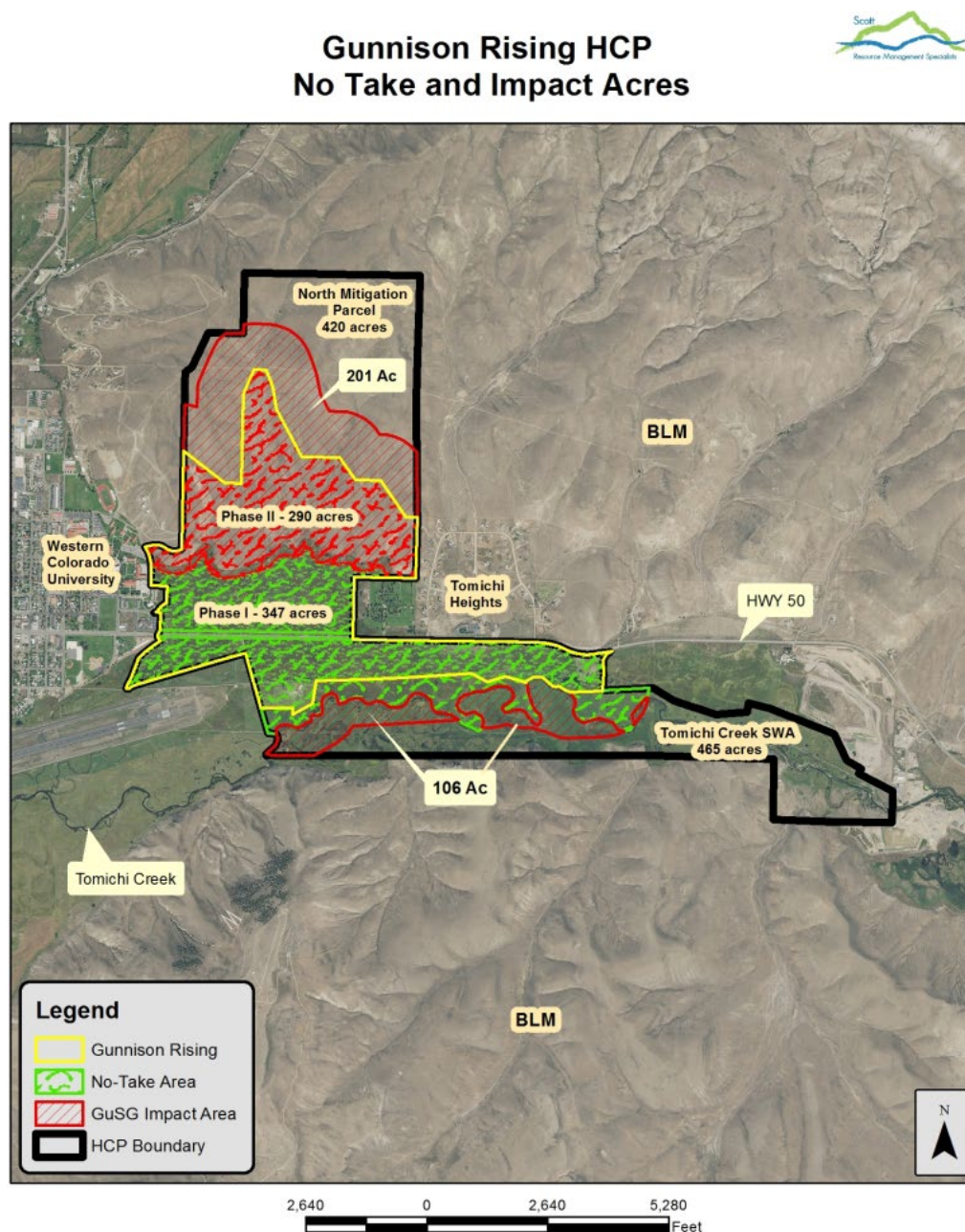


Figure 4. The Western Plan Area including the “No Take Area” and the impact acres.

Additional details for the Description of the Proposed Action can be found in sections of the HCP under the Introduction and Background (Plan/Permit Area), Project Description and Covered Activities, Conservation Program (Measures to Avoid and Minimize Take, Measures to Mitigate the Unavoidable Take, Monitoring, Reporting, and Adaptive Management Strategy), Changed and Unforeseen Circumstances, Funding, Permit/HCP Administration, and in the Appendices.

***THREATENED AND ENDANGERED COLORADO RIVER FISHES***

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was initiated on January 22, 1988. The Recovery Program was intended to be the reasonable and prudent alternative for individual projects to avoid the likelihood of jeopardy to the endangered fishes from impacts of depletions to the Upper Colorado River Basin. In order to further define and clarify the process in the Recovery Program, a section 7 agreement was implemented on October 15, 1993, by the Recovery Program participants. Incorporated into this agreement is a Recovery Implementation Program Recovery Action Plan (RIPRAP) which identifies actions currently believed to be required to recover the endangered fishes in the most expeditious manner. On October 18, 2021, the humpback chub was downlisted from endangered to threatened and a 4(d) rule was written to accompany the downlisting (86 FR 57588). The other three fishes (bonytail, Colorado Pikeminnow, and razorback sucker) remain as endangered.

On December 4, 2009, the Service issued a final Gunnison River Basin Programmatic Biological Opinion (PBO) (this document is available for viewing at the following internet address: <http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/GUPBO.pdf>). The Service has determined that projects that fit under the umbrella of the Gunnison River PBO would avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts. The Gunnison River PBO states that in order for actions to fall within the umbrella of the PBO and rely on the RIPRAP to offset its depletion, the following criteria must be met.

1. A Recovery Agreement must be offered and signed prior to conclusion of section 7 consultation.
2. A fee to fund recovery actions will be submitted as described in the proposed action for new depletion projects greater than 100 acre-feet/year (AF/yr). The Fiscal Year 2022 fee is \$22.84 per AF and is adjusted each year for inflation.
3. Reinitiation stipulations will be included in all individual consultations under the umbrella of this programmatic.
4. The Service and project proponents will request that discretionary Federal control be retained for all consultations under this programmatic.

The Recovery Agreement was signed by the Service and the Water User (City of Gunnison) (Appendix A). The depletions associated with this project are considered historic depletions which do not make contributions to fund recovery actions. Construction of the Gunnison Rising development is planned to result in 697 acre-feet per year (AF/year) of water depletion to the Gunnison River. This is not considered a new depletion due to the conversion of historic (pre-1988) agricultural water uses to municipal uses in the proposed developments. The Service has agreed to condition its approval documents to retain jurisdiction should section 7 consultation need to be reinitiated. Therefore, the Service concludes that the subject project meets the criteria to rely on the Gunnison PBO to offset depletion impacts and is not likely to jeopardize the continued existence of the species and is not likely to destroy or adversely modify designated critical habitat. The reinitiation criteria, outlined in the Gunnison PBO, apply to all projects

under the umbrella of the PBO. Therefore, if the PBO is reinitiated, reinitiation of this biological opinion would follow as well.

The Service and the Recovery Program track all water depletions that are covered under the Gunnison PBO and other water depletion PBOs within the Upper Colorado River Basin on a quarterly basis. A summary of those depletions are available at:

<http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/consultation-list.html>. Also, in accordance with the Section 7, Sufficient Progress, and Historic Projects Agreement, the Service reviews cumulative accomplishments and shortcomings of the Recovery Program in the upper Colorado River basin. Per that Agreement, the Service uses the following criteria to evaluate whether the Recovery Program is making “sufficient progress” toward recovery of the four listed fish species:

- actions which result in a measurable population response, a measurable improvement in habitat for the fishes, legal protection of flows needed for recovery, or a reduction in the threat of immediate extinction;
- status of the fish populations;
- adequacy of flows;
- and magnitude of the impact of projects.

Through these bi-annual Sufficient Progress reviews the Service evaluates the best available and current information to determine if the Recovery Program continues to offset depletion effects identified in existing Section 7 consultations including the depletions covered by these PBOs. In the most recent assessment (dated February 12, 2021), the Service determined that sufficient progress has been made towards recovery. Sufficient Progress reports can be found at: <http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/sufficient-progress-letters.html>.

This concludes our biological opinion section for the endangered Colorado River fishes.

## ***GUNNISON SAGE-GROUSE***

### **Status of the Species and Critical Habitat**

#### **Species**

The GUSG is the second largest grouse in North America. The species occurs in eight small, localized populations in central and western Colorado and eastern Utah. GUSG were formerly native to southwest Colorado, northern New Mexico, southeastern Utah, and possibly northeastern Arizona (Young *et al.* 2000, p. 446), but are now found exclusively in Colorado and Utah. They are closely associated with sagebrush (*Artemisia*) ecosystems in North America (Young *et al.* 2015, p. 1). The eight populations are the Gunnison Basin, San Miguel Basin, Pinyon Mesa, Crawford, Poncha Pass, Cerro Summit-Cimarron-Simms Mesa (CSCSM), Dove Creek, and Monticello populations.

A full description of the current and future condition of GUSG populations and conservation actions for each population can be found in the 2019 Species Status Assessment Report (SSA) (Service 2019, entire). Current conditions to evaluate population resilience were based on four



factors. Two demographic features; Growth Rate and achievement of High Male Count (HMC) targets established in the Gunnison Sage-grouse Rangewide Conservation Plan (RCP) (Gunnison Sage-grouse Rangewide Steering Committee 2005); Habitat Quantity needed to meet the HMC population target; and Habitat Quality based on a qualitative evaluation of whether the habitat in a population meets RCP habitat guidelines. For each metric a score of 0-3 was given and the overall population's resiliency score was derived from an average of the four metrics. A population's resilience was considered in critical condition if it had score of 0-0.75; low (poor health) of 0.76-1.5; moderate (moderately healthy) of 1.6-2.25; and high (healthy) of 2.26-3.0 (Service 2019, pp. 31-53). As of early 2019, the Dove Creek population was the only population in a critical condition. Three populations were in low condition (Crawford, Poncha Pass, and Monticello), two populations were in moderate condition (San Miguel Basin, and CSCSM), and two were in high condition (Gunnison Basin and Pinyon Mesa) (Service 2019, p. 53). Five of the populations have moderate habitat quality, two populations have low habitat quality, and Gunnison Basin and Pinyon Mesa populations have high quality habitat. Populations in higher resiliency categories are at less risk from stochastic events than populations with lower resiliency. In 2019, following completion of the SSA, high male counts in nearly all populations had declined and environmental variation, such as a harsh winter in 2018-2019, likely contributed to those decreased counts. Droughts can affect GUSG as well and declines have been noted following drought years (Seward, pers. comm., 2020).

Since the 2019 SSA was finalized, high male counts and total population estimates in the Gunnison Basin and Pinyon Mesa populations appear (non-statistically) to have remained stable or increased (Griffin, pers. comm. 2021a). The San Miguel Basin population also increased but the CSCSM population had no GUSG counted in 2019 and counts remained at 0 through 2021. The Crawford population increased in 2020 but the high male count and population estimate declined by more than half in 2021. In contrast, the Poncha Pass population remained relatively stable since 2019. The Monticello population continued its long-term decline with only half the total population in 2021 versus 2019, which was also down significantly from annual population estimates back to 1996 (Gibson, pers. comm. 2021). Lastly, the Dove Creek population did not have any GUSG counted in 2020 or 2021 for the fifth and sixth year in a row (Griffin, pers. comm. 2021a). Per the SSA criteria (Service 2019, Table 5, p. 34), CSCSM, Crawford, Poncha Pass, Monticello, and Dove Creek were all demographically in critical condition (functionally extirpated or close to) in 2021. Only the Gunnison Basin, Pinyon Mesa, and San Miguel Basin populations are not in critical condition demographically but Pinyon Mesa is considered in moderate condition and San Miguel Basin is considered in low condition demographically according to criteria established in the SSA (Service 2019, Table 6, p. 42).

The eight populations spread across southwestern Colorado and southeastern Utah provide redundancy that reduces risk from catastrophic events. However, risk of catastrophic events affecting the species is still high because the Gunnison Basin and Pinyon Mesa populations are the only highly resilient populations, and the Gunnison Basin provides the majority of the adaptive capacity and is the largest population. GUSG populations occupy a diversity of environmental conditions ranging from cold and dry (Gunnison Basin) to warmer and wetter (Pinyon Mesa) as well as hot and dry (Dry Creek Basin within the San Miguel Basin population) within six different ecoregions (Service 2019, p. 51). This may indicate GUSG has some adaptability to ecological variation, however the majority of the species occurs in the Gunnison Basin where temperatures are cooler, there is more winter snow runoff from higher elevations, more sagebrush, and better forb and grass cover (Service 2019, p. 51). Primary stressors

affecting the species both currently and historically that led to the decision to list the species are habitat loss and fragmentation due to human development, small population sizes, climate, invasive plants, pinyon-juniper encroachment, and improper livestock grazing (Service 2019, p. 36). For more thorough analyses of the species status, please see the GUSG SSA.

## **Climate Change**

Global climate forces potentially influence GUSG and their habitat; therefore current global climate observations are presented here in the Status of the Species section. Many global forces can influence climate patterns and result in temperature increase, temperature extremes, change in seasonal or yearly amount of precipitation, and chance of increase in drought frequency. These climate factors are the most relevant to western Colorado and to effects on GUSG and are focused on below. To provide the most recent global information, a brief synopsis of the Summary for Policy Makers (SPM) of the Sixth Assessment Report (AR6) on the Intergovernmental Panel on Climate Change (IPCC) is presented below. The IPCC AR6 SPM (IPCC SPM 2021) and the full report (IPCC 2021) has extensive additional information on factors that influence or result from global and regional climate changes that can be reviewed for additional information. Additional broad climate information is also presented at the State level in this section with more localized climate information in the Environmental Baseline below.

The planet has been warming at an increasing rate since 1850 especially in the last two decades since 2000 (IPCC SPM 2021, p.5). Global surface temperature over the land and oceans was up to 1.2°C (2.0°F) higher in 2011-2020 than from 1850-1900 and over the land only was up to 1.83°C (2.86°F) higher in 2011-2020 than 1850-1900. Hot extremes have become more frequent and more severe and cold extremes have become less frequent and less severe since the 1950's (IPCC SPM 2021, p. 10). Human influence has increased the chance of compound extreme events that include concurrent heatwaves and droughts on the global scale, fire, and flooding (IPCC SPM 2021, p.11). Climate change has contributed to increases in agricultural and ecological droughts in some regions due to increased land evapotranspiration (IPCC SPM 2021, p.10). The frequency and intensity of heavy precipitation has also increased since the 1950's.

Changes in climate have also been observed at the State level in Colorado. Temperature in Colorado increased in the 30 years prior to 2014 by 1.1°C (2.0°F) and by 1.4°C (2.5°F) in the last 50 years (Lukas et al. 2014, p.2). Snowpack, as measured by snow water equivalent, has mostly been below average in Colorado since 2000. The timing of snowmelt and peak runoff has also shifted 1-4 weeks earlier in the last 30 years in Colorado. Furthermore, the Palmer Drought Severity Index has shown an increasing trend in soil-moisture drought conditions due to below average precipitation since 2000 and the warming trend (Lukas et al. 2014, p. 2).

## **Critical Habitat**

There are 1,429,551 acres of occupied and unoccupied GUSG critical habitat designated in six units across Colorado and Utah (79 FR 69312). Table 1 below shows acreages and statistics of critical habitat in each of the six units.

TABLE 1. Size and current occupancy status of Gunnison sage-grouse in designated critical habitat units <sup>a, b</sup>. [Area estimates reflect all land within critical habitat unit boundaries.]

<b>Critical Habitat Unit</b>	<b>Acres</b>	<b>Hectares</b>	<b>Unit Percent of Total Acres</b>	<b>Occupied?</b>	<b>Acres</b>	<b>Hectares</b>	<b>Percent of Individual Unit</b>	<b>Percent of All Units</b>
Monticello-Dove Creek	343,000	138,807	24.0	Yes	107,061	43,326	31.2	7.5
				No	235,940	95,481	68.8	16.5
Piñon Mesa	207,792	84,087	14.5	Yes	28,820	11,663	13.9	2.0
				No	178,972	72,424	86.1	12.5
San Miguel Basin	121,929	49,343	8.5	Yes	81,514	32,988	66.9	5.7
				No	40,414	16,355	33.1	2.8
Cerro Summit-Cimarron-Sims Mesa	52,544	21,264	3.7	Yes	33,675	13,628	64.1	2.4
				No	18,869	7,636	35.9	1.3
Crawford	83,671	33,860	5.9	Yes	32,632	13,206	39.0	2.3
				No	51,039	20,655	61.0	3.6
Gunnison Basin	620,616	251,154	43.4	Yes	500,909	202,711	80.7	35.0
				No	119,707	48,444	19.3	8.4
All Units	1,429,551	578,515	100	Yes	784,611	317,521	54.9	54.9
				No	644,940	260,994	45.1	45.1

a Area sizes may not sum precisely due to rounding.

b Area sizes reflect lands excluded in this final critical habitat designation including private lands under CE, CCAA properties, and the Ute Mountain Ute Tribe's Pinecrest Ranch.

Figure 5 below shows the distribution of the critical habitat units. Other information such as the physical and biological features that comprise critical habitat, can be found in the final rule designating critical habitat (79 FR 69312).

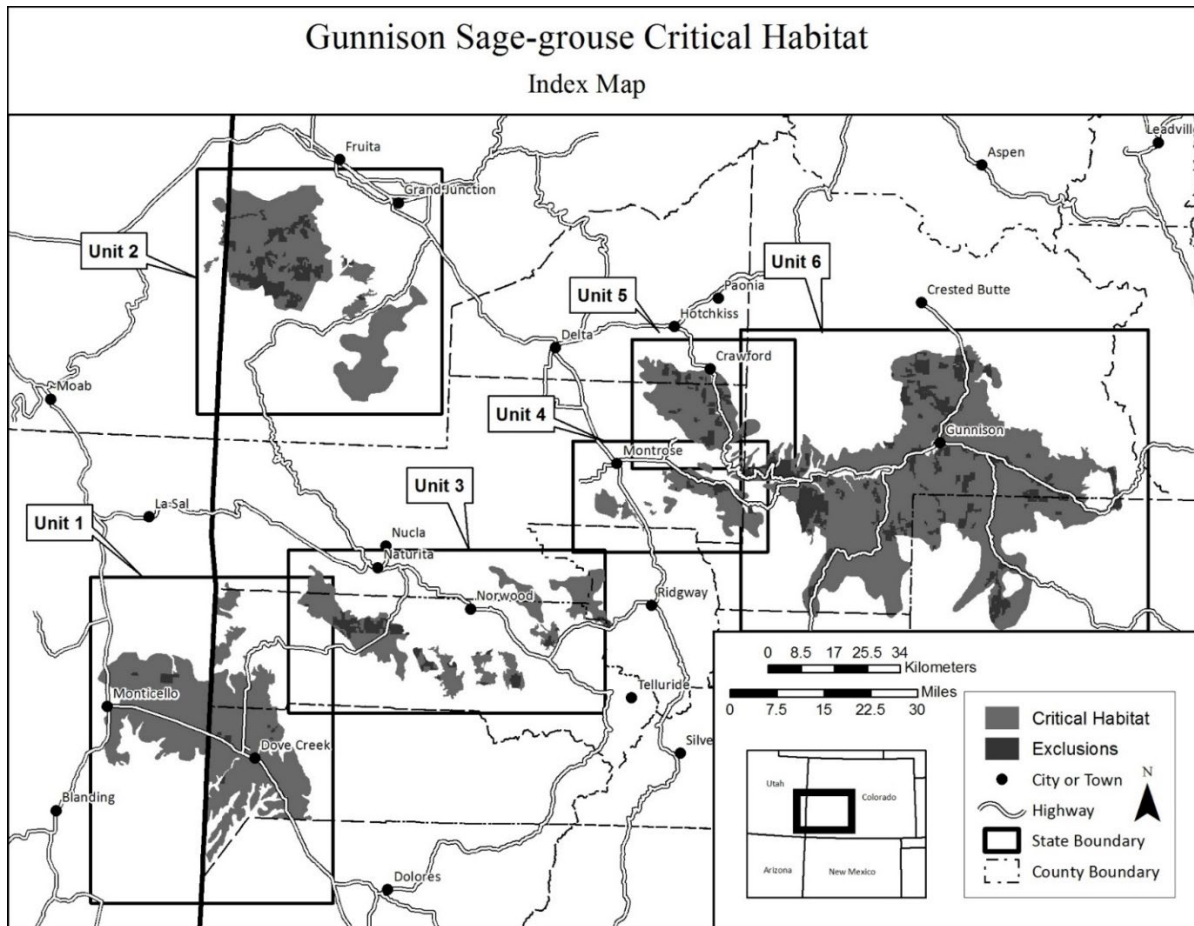


Figure 5. Distribution of GUSG critical habitat across its range in Colorado and Utah.

### **Environmental Baseline**

The environmental baseline refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (50 CFR 402.02).

The action area includes all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). For Gunnison Rising, we



consider the action area to be the same as the Plan Area and includes positive and negative effects of the action on the Western and Eastern Plan Areas (Figures 2 and 3). Gunnison Valley Properties' cattle used to graze the 14,725-acre Cabin Creek Allotment, which was combined with the Alder Creek Allotment in 2011 to form the 26,956-acre Cabin-Alder Allotment (BLM 2011). Through the reduction of cattle on the Cabin Creek Allotment, and by combining the allotments, management benefits to GUSG (as described in "Effects of the Action") extend to both allotments and thus we consider the entire 26,956-acre Cabin-Alder Allotment to be within the action area. Additionally, it should be noted that the development area is not entirely the same as the area where incidental take occurs due to 347 acres being considered an area where no take occurs (see Figure 4 above and section 1.2 in the HCP). However, the "No Take Area" is still within designated critical habitat and thus the effect to critical habitat necessitates the No Take Area to be included in the action area as discussed further in "Effects of the Action".

Included in the baseline is the Contour Trail that runs more or less east to west and is located at the southern end of the North Parcel Mitigation Area or just north of Phase II as well as the Cemetery Ditch and Trail that runs east to west at the southern end of Phase II (Figure 2). Both trails have been improved and are maintained as part of the BLM-approved Signal Peak Trail System that can be accessed from various points to the east and west, and through connecting trails on the BLM to the north (BLM 2018). There is one access point to the Signal Peak Trail System from the Contour Trail at the northern-most boundary of Gunnison Rising, which extends through the North Parcel Mitigation Area onto BLM land to the north and east including onto the Cabin-Alder Allotment (see Figure 8 in the HCP). Use of the trail system from existing residents is included in the baseline as is BLM's closure of the trail system from March 15<sup>th</sup> to May 15<sup>th</sup> before 10 AM (BLM 2018).

In addition to the trails, several dirt two-track roads exist on the Gunnison Rising property and are used for trail and ditch maintenance, agricultural use, and additional recreational uses. There is one overhead electrical line owned by Gunnison County Electric that transects the eastern edge of the parcel, and a transmission line, owned by Western Area Power Administration, that crosses to the north of Phase II development area but through the North Parcel Mitigation Area as well as through the Cabin-Alder Allotment. Both the distribution and transmission lines have access roads for maintenance and repair activities. U.S. Highway 50 splits the Gunnison Rising property into two sections (creating the North and South Parcels) as it travels east and west through Gunnison County. All of these existing features and their impacts are included in the baseline as are continued grazing-related activities on the Cabin-Alder Allotment by remaining permittees and occasional non-ground-disturbing use of the North Parcel Mitigation Area (WCU property) by WCU classes.

## **Climate Change**

Also included in the baseline is predicted and observed climate in the action area. Localized seasonal and annual temperature and precipitation changes for the Upper Gunnison Basin (above Blue Mesa Reservoir) were examined and used in assessing the future vulnerability of species and ecosystems in the Upper Gunnison Basin (Neely et al. 2011, entire). An excerpt from the vulnerability assessment follows:

"The average annual temperature of the Upper Gunnison Basin is projected to increase by approximately 3°C (5.4°F) from the late 20th century to the middle 21st century.

Average summer temperatures are projected to increase by approximately 4°C (7°F). Climate projections show no distinct trends in average annual or seasonal precipitation, but they reveal several ecologically important changes, including a 10-25% decrease in average annual runoff, more precipitation falling as rain rather than snow, earlier snowmelt and spring runoff peaks, and changes in the seasonality of flooding. Rising temperatures are projected to bring about these hydrologic changes no matter how precipitation patterns change in the basin (precipitation projections are considerably less certain than temperature projections)” (Neely et al. 2011, p.ii).

A more recent analysis by the Washington Post using National Oceanic and Atmospheric Administration (NOAA) temperature data shows that much of western Colorado has reached or is above 2.0°C (3.6°F) over the long-term average since 1895 and that average annual flows in the Colorado River Basin have declined by 20 percent over the past century (Eilperin 2020, entire). The Gunnison Rising action area is in a zone that has risen on average approximately 1.5°C (2.7°F) since 1895 (Eilperin 2020, first unnumbered figure).

## **Status of the Species and Critical Habitat within the Action Area**

### ***Species***

A GUSG Habitat Assessment was completed by Gunnison Valley Environmental Services for the Gunnison Rising North Parcel development area and mitigation area (Gunnison Valley Environmental Services 2007). Vegetation community types were assessed to determine the quality and quantity of potential GUSG seasonal habitats and were compared to minimum vegetation structural guidelines from the GUSG Rangewide Conservation Plan (RCP) (Gunnison Sage-grouse Range-wide Steering Committee 2005). In addition, riparian habitat and the north edge of the existing irrigated hayfield was assessed as potential habitat according to the local Gunnison-Sage Grouse Conservation Plan – Gunnison Basin (Gunnison Local Working Group 1997). The following is a summary of GUSG occurrence found during that assessment.

- Three piles of GUSG scat were observed in the extreme north portion of the Gunnison Rising assessment area (see Figure 6 in the HCP). The area where the scat was found is within a 160-acre conservation easement administered by CPW (and denoted as the WCU-CPW CE) and is located within the north and northeastern part of the 420-acre North Parcel Mitigation Area owned by WCU (Figures 2 and 4).
- A female GUSG with five chicks was observed on May 12, 2007, immediately south of the Cemetery Ditch in the irrigated hay meadow near the sagebrush and riparian interface (see Figure 6 in the HCP).

Since the 2007 Habitat Assessment there has not been any further documentation of GUSG in the proposed development area on the North Parcel. CPW has radio-telemetry and GPS locations within the North Parcel Mitigation Area (in the 160-acre WCU-CPW CE) as well as the South Parcel Open Space Buffer (see Figure 7 in the HCP) as late as 2017. However, not all GUSG in the Gunnison Rising vicinity were radio- or GPS-tagged. Consequently, based on both the location of the CPW monitored birds and the 2007 GUSG observation it is likely that GUSG occasionally use the suitable habitat within the Gunnison Rising Phase II development area. There are no leks in the Gunnison Rising development area, the North Parcel Mitigation Area, or the South Parcel Open Space Buffer. The closest lek is 0.7 miles to the north of Phase II (Signal Peak West lek) and the lek’s southern end is just north of the North Parcel Mitigation Area. The

Signal Peak West lek's status is currently classified as unknown (Seward, pers. comm. 2021). There are two other unknown status leks between 0.6 and 1 miles to the east (Tomichi Village and Signal Peak leks, respectively) (Griffin, pers. comm. 2021b). These leks are considered in unknown status due to irregular use, which does not meet the CPW definition of active, inactive, or historic (Seward, pers. comm. 2021). An active lek also occurs about a mile to the south of the South Parcel Open Space Buffer (Griffin, pers. comm. 2021b). The eastern part of the Cabin-Alder Allotment (Alder Creek) has 6 leks.

### ***Critical Habitat***

Most of the Western Plan Area (1,522 acres) was included in designated occupied critical habitat (79 FR 69312) (Figure 2). However, the 160-acre WCU-CPW CE and a 4-acre parcel owned by WCU (part of a larger WCU-enrolled parcel under the Candidate Conservation Agreement with Assurances (CCAA) for Gunnison sage-grouse (CPW 2006)) were excluded from critical habitat designation (79 FR 69312). The 4-acre WCU parcel is on the extreme western boundary of Gunnison Rising just north of the Cemetery Ditch and Trail and allows access from existing WCU infrastructure to Gunnison Rising (Figures 1 and 2). Consequently, the Western Plan Area contains 1,358 acres of critical habitat. The 26,956-acre Eastern Plan Area (Cabin-Alder Allotment) is entirely within occupied critical habitat (Figure 3). Effects to critical habitat are described in the Effects of the Action section below.

### **Effects of the Action**

Effects of the Action is defined as all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02).

### **Effects to GUSG**

Negative effects to the GUSG include direct and functional loss of habitat, displacement, and the potential for individual mortality or injury. Noise and sight disturbances from construction, lighting, and human activities will result in changes to habitat use by GUSG. Disturbance to GUSG may also occur during implementation of management strategies and monitoring contained within the HCP. Negative effects to GUSG are most likely to occur within the Phase II development area (290 acres) and disturbance zones to the north and south within 1,000 feet of the development (307 acres) for a total of 597 acres (Figure 4). The 1,000-foot disturbance zones were formulated in the Gunnison Basin Habitat Prioritization Tool (HPT) based on expected disturbance distance from development of three or more houses (see sections 6.1 and 6.5 in the HCP for further discussion or the HPT itself (Gunnison County 2018)). Some occasional disturbance to GUSG could also occur from additional Gunnison Rising residents on the Signal Peak trails on the North Parcel Mitigation Area and the Eastern Plan Area but we are not reasonably certain that take would occur from that use (50 § 402.17).

Positive effects to GUSG occur in the North Parcel Mitigation Area and the South Parcel Open Space Buffer in the Western Plan Area as well as the 26,956-acre Eastern Plan Area (Cabin-

Alder Allotment) (Figure 3). Out of the 290 acres of proposed development on Phase II, 23 percent of it is lower quality Tier II habitat and 77 percent is higher quality Tier I habitat versus the 420-acre North Parcel Mitigation Area that only has 12 percent Tier II habitat and 88 percent Tier I habitat. Consequently, there is a little better habitat on the North Parcel Mitigation Area than on Phase II of the development. Additionally, though negative effects from disturbance extend onto the North Parcel Mitigation Area and South Parcel Open Space Buffer, and the acres included within were used for calculation of take, the mitigation area and open space buffer still serve their other purpose in the disturbance zones by providing a development buffer between GUSG that occur further north and south both on and off the areas. Although the North Parcel Mitigation Area is owned by WCU they have stated that their plan for the North Parcel Mitigation Area is to leave it undeveloped (Ford, pers. comm. 2020). Closure of the North Parcel Mitigation Area (which overlaps the existing Signal Peak Trail System closure) from March 15<sup>th</sup> to May 15<sup>th</sup>, as well as daily construction timing restrictions from sunset to 9:00 AM during this time frame, will help reduce potential disturbance of the lek to the north of the North Parcel Mitigation Area (on BLM land) while potentially allowing nesting and brood rearing to continue on Phase II (until it is developed) and within the North Parcel disturbance zone. The closure of the South Parcel Open Space Buffer/Tomichi Creek SWA from the end of January to June 30<sup>th</sup> (CPW 2019a; 2019b) is expected to avoid take of GUSG broods and nests. Furthermore, through the reduction of 356 AUM's of cattle on the former Cabin Creek Allotment, and by combining it with the former Alder Creek Allotment, breeding, feeding, and sheltering benefits to GUSG extend to both allotments and thus we consider the beneficial effects of removing the cattle to extend to the entire combined 26,956-acre Cabin-Alder Allotment.

It is anticipated that GUSG feeding, sheltering, and possibly breeding (nesting but not lekking activity) will be eliminated on the Phase II development area and to some extent reduced within the disturbance zone on the North Parcel Mitigation Area. However, once construction occurs at the north end of Phase I it is likely that GUSG will start to gradually cease using the Phase II area and once construction on Phase II commences it is anticipated that GUSG will not nest on Phase II. Thus it is not expected that GUSG nests themselves will be taken.

Mortality or injury could occur to GUSG using or moving through Phase II, or Phase I, after construction commences. Mortality or injury could occur from collision with construction vehicles and large equipment during operation on the development site, during maintenance and repair activities, or during commercial or personal transportation. There is also potential for collision from human activities such as increased recreational bike use of new trails connecting the Gunnison Rising development to the Contour Trail (though disturbance is a more likely result) and there could be mortality or injury from domestic pet interactions. We expect, however, that collision with construction vehicles, personal cars, and bicycles would be extremely rare and take associated with the activity is not reasonably certain to occur. Domestic pet interactions should be limited by leash requirements from March 15-May 15 and through signage encouraging trail users to keep pets on leashes through June 30<sup>th</sup>, which will minimize disturbance or mortality to nesting hens and young. With the leash requirements in place we believe that disturbance from pet interaction would also be rare and take associated with the activity is not reasonably certain to occur.

The Gunnison Basin Population of GUSG retained a high resilience under all three plausible future climate scenarios analyzed in the SSA out to 2050. These included “Moderately Hot”, “Warm and Wet”, and “Hot and Dry” scenarios (Service 2019, pp. 55-84). Consequently, even



though droughts and harsh winters have been observed to sometimes reduce GUSG numbers, we do not expect that future climate conditions would significantly diminish the resiliency of the GUSG population in the Gunnison Basin, including the action area. Thus, we have no clear evidence that the effects of the action would be appreciably different to the Gunnison Basin population or the species as a whole under future climate scenarios as compared to the effects in today's observed climate.

The total permit area, which includes areas affected by the action, is 491 acres on the North Parcel and 106 acres on the South Parcel for a total of 597 acres (Figure 4). Occupied GUSG habitat in the Gunnison Basin at the time of listing and critical habitat designation was 592,168 acres (79 FR 69195) and was divided by the average number of grouse in the Basin, based on annual lek counts over 24 years (see Table 3 in the HCP), to come up with how many acres on average each grouse needs to survive. The average number of adult GUSG from 1995 to 2018 (see Table 3 in the HCP) was 3,650 resulting in each adult GUSG needing about 162 acres for feeding, breeding, and sheltering. Since there are 597 acres of habitat impact proposed to be covered by the Permit, dividing that acreage by 162 acres/GUSG results in 4 (3.7 precisely) adult GUSG anticipated to be taken as a result of Gunnison Rising. However, the loss of habitat and take of GUSG will be fully offset by the minimization and mitigation measures included in the HCP.

The four individual GUSG anticipated to be taken is only 0.11 percent of the long-term mean of GUSG in the Gunnison Basin (1995-2018). The percentage of the mean (4496) GUSG taken rangewide (1996-2018) is 0.09 percent (Ireland, pers. comm. 2021). We consider four GUSG taken to be a slightly high estimate as not all GUSG habitat within the 597-acre Permit area will be developed. Three hundred and seven acres (201 acres North Parcel Mitigation Area; 106 acres South Parcel Open Space Buffer) within the 1,000-foot disturbance zones, as established by the HPT (Gunnison County 2018), will continue to support GUSG habitat, and, especially as one gets further away from the development, will likely support GUSG use. Nonetheless, to be conservative, we have calculated the amount of take as if all the area with the disturbance zones will have no GUSG use in the future. The positive benefits to GUSG from the mitigation and the avoidance and minimization measures offset affects to GUSG and, along with the low number and percentage of GUSG anticipated to be taken, Gunnison Rising is unlikely to appreciably reduce the likelihood of survival and recovery of GUSG in the wild.

### **Effects to GUSG Critical Habitat**

Information on potential changes to GUSG habitat from climate change is discussed in the "Status of the Species, Baseline, and Effects to GUSG" sections above. However, we do not have any evidence that the effects of the action on critical habitat in the action area, or on the Gunnison Basin critical habitat unit as a whole, would be appreciably different under future climate scenarios as compared to the effects of the action on critical habitat in today's climate.

On the North Parcel, there are 141 acres of critical habitat in Phase I of the Gunnison Rising development and 286 acres within Phase II. Although, Phase II is 290 acres in total, 4 acres within Phase II is enrolled under the CCAA for GUSG (CPW 2006) and was, therefore, previously excluded from critical habitat designation (79 FR 69312), resulting in the 286 acres within critical habitat. Adjacent to Phase II there is a 1,000-foot disturbance zone, as established by the HPT (Gunnison County 2018), where consequences of the action reduce the

value of critical habitat, particularly in close proximity to the proposed development (see sections 6.1, 6.5, and Figure 11 in the HCP for additional HPT description or review the HPT itself (Gunnison County 2018)). The disturbance zone area equals 201 acres but approximately 4 acres of that overlap the excluded 160-acre WCU-CPW CE (79 FR 69312) resulting in 197 acres of critical habitat in the disturbance zone and resulting in a total of 624 acres ( $141 + 286 + 197$ ) of occupied critical habitat that will be wholly or partially impacted from Gunnison Rising on the North Parcel (Figure 2 and Figure 4). Out of the 420 acres of critical habitat in the North Parcel Mitigation Area, 197 acres is in the disturbance zone and 160 acres is excluded from critical habitat leaving 63 acres of critical habitat on the North Parcel Mitigation Area that will not be affected by consequences of the action. Additionally, the 26,956 acres in the Eastern Plan Area will not be affected by consequences of the action and will provide habitat benefits to GUSG by remaining open space and, in the Eastern Plan Area, by a 15 percent reduction of grazing (356 AUM's). The intent of the 15 percent AUM reduction was to ensure that the vegetation (upland and riparian grasses and forbs) would not be over utilized. The value of not over utilizing these communities is to: 1) retain sufficient "stubble" height on grasses and forbs in upland and riparian areas to hide GUSG nests and small chicks, 2) maintain the health and diversity of grasses and forbs so that they are not replaced with other species (sagebrush, other shrubs, or noxious weeds) that do not provide the cover/chick food/insect habitat GUSG need, and 3) maintain sufficient vegetation along riparian corridors to stabilize streambanks/catch sediment to prevent erosion and loss of wet meadow habitat (BLM 2011; De Valois, pers. comm. 2021).

For the South Parcel there are 206 acres of critical habitat that are within the development footprint, which is all considered as part of the "No Take Area" (Figure 4) but is still within critical habitat. In addition, there are 94 acres south of the planned development area but north of Tomichi Creek (on the South Parcel Open Space Buffer/Tomichi Creek SWA) that is non-functional GUSG habitat due to existing disturbances such as U.S. Highway 50 and other disturbances (Seward, pers. comm. 2019; Figure 4) causing the total critical habitat within the "No Take Area" to be 300 acres on the South Parcel (Figure 4). Furthermore, 106 acres is within the 1,000 foot HPT disturbance zone south of Tomichi Creek where critical habitat value may be reduced, particularly in closer proximity to the proposed development. Therefore, in total the South Parcel contains 406 acres of critical habitat ( $300 + 106$ ) wholly or partially impacted from Gunnison Rising. On the South Parcel Open Space Buffer there are 265 acres of critical habitat that is not negatively impacted by Gunnison Rising. This is calculated by subtracting the 94 non-functional acres and the 106 acres within the disturbance zone (totaling 200 acres) from the 465-acre total Open Space Buffer.

In summary, out of the 1,358 acres of critical habitat in the Western Plan Area, 1,024 acres of critical habitat will be wholly or partially negatively impacted from Gunnison Rising (624 acres North Parcel; 406 acres South Parcel). However, a total of 27,284 acres of critical habitat (63 North Parcel; 265 South Parcel; 26,956 Eastern Plan Area) is considered to be free from negative effects from the Gunnison Rising development. Additionally, critical habitat quality in the Eastern Plan Area is expected to increase due to the reduction in grazing pressure, which is considered part of the action.

There are 500,909 acres of occupied critical habitat (subtracting exclusions) in the Gunnison Basin (Table 1, 79 FR 69312); thus, within the Gunnison Basin, there is 0.21 percent of occupied critical habitat that will be affected. If the unoccupied habitat in the Gunnison Basin (119,707 acres) is included that totals 620,616 acres which equates to 0.17 percent. Occupied habitat

rangewide is 784,611 acres so critical habitat impacted by Gunnison Rising represents 0.13 percent of all occupied habitat. There is 1,429,551 acres of occupied and unoccupied critical habitat rangewide so there is only 0.07 percent of total designated critical habitat impacted by Gunnison Rising. We do not believe this low percentage of impact would appreciably diminish the value of critical habitat within the Gunnison Basin population or rangewide.

### **Cumulative Effects**

Cumulative effects are those effects of future State or private activities, not involving Federal activities that are reasonably certain to occur within the action area of the Federal action subject to consultation. There are no known future State or private activities that are planned or are reasonably certain to occur within the action area.

### **Conclusion**

After considering the current status of the GUSG, the environmental baseline for the action area, the effects of the action including avoidance, minimization, and mitigation measures described in the HCP and this biological opinion, and the cumulative effects, it is our biological opinion that development of Gunnison Rising and issuance of the Permit is not likely to jeopardize the continued existence of the GUSG and is not likely to reduce appreciably the likelihood of both the survival and recovery of GUSG in the wild by reducing its reproduction, numbers, or distribution. Additionally, it is our biological opinion that the development will not destroy or adversely modify GUSG critical habitat and will not appreciably diminish the value of critical habitat as a whole for the conservation of the species.

“Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

“Destruction or adverse modification” means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (50 CFR § 402.02).

We summarize our rationale below:

1. Based on observation and telemetry data there is known or likely GUSG use in the development area (especially Phase II) and adjacent disturbance zones. Therefore, it is reasonable to anticipate consequences to GUSG, including a limited amount of take, to occur. However, the four individual GUSG anticipated to be taken is only 0.11 percent of the long-term mean of GUSG in the Gunnison Basin and only 0.09 percent of the long-term mean rangewide.
2. The amount of occupied critical habitat affected by the proposed project is only 0.13 percent of the rangewide occupied critical habitat and only 0.07 percent of the rangewide total critical habitat (occupied and unoccupied).
3. Concentration of development near existing infrastructure (adjacent to the city) will limit fragmentation of habitat elsewhere (throughout Gunnison Basin). This will reduce impacts to the bird and its critical habitat over the long-term.
4. Conservation of land through donation to WCU (who stated they will not develop it) and through a conservation easement to CPW (who will manage it for GUSG) in the North

Parcel Mitigation Area will provide habitat for GUSG on at least 219 acres of land undisturbed by Gunnison Rising and a portion of land within the 201-acre 1,000 foot disturbance zone will likely still be usable by GUSG. Additionally, the 420-acre Mitigation Area provides an open space buffer minimizing disturbance to GUSG further north and east. The 465-acre South Parcel Open Space Buffer/Tomichi Creek SWA also currently provides a disturbance buffer from development to GUSG further south and will provide continued use of habitat on at least 265 acres within Tomichi Creek SWA for the foreseeable future.

5. The North Parcel Mitigation Area protects a higher percentage of Tier I habitat within the Mitigation Area than will be lost to development on Phase II. There will be 420 acres that contains 88 percent of Tier I habitat protected on the North Parcel Mitigation Area versus 290 acres containing 77 percent Tier I habitat lost within the Phase II development area.
6. Removal of 356 AUMs (15% of total use) on the Cabin-Alder Allotment/Eastern Plan Area will reduce impacts to GUSG habitat by allowing for the enhancement of grass and forb production, benefitting GUSG nesting and brood rearing habitat on 26,956 acres. This will enhance the productivity of the bird and the quality of its critical habitat.

## **INCIDENTAL TAKE STATEMENT**

### **Introduction**

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The proposed Gunnison Rising HCP and its associated documents clearly identify anticipated impacts to affected species likely to result from the proposed taking and the measures that are necessary and appropriate to minimize and offset those impacts. All conservation measures described in this biological opinion and in the proposed HCP, together with the terms and conditions described in the Permit, are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within this Incidental Take Statement pursuant to 50 CFR §402.14(i). Such terms and conditions are non-discretionary and must be undertaken for the exemptions under section 10(a)(1)(B) and section 7(o)(2) of the Act to apply. If the permittee fails to adhere to these terms and conditions, the protective coverage of the section 10(a)(1)(B) permit and section 7(o)(2) may lapse. The amount or extent of incidental take anticipated under the proposed Gunnison Rising Annexation HCP, associated reporting



requirements, and provisions for disposition of dead or injured animals are as described in the HCP and its accompanying Permit.

### **Amount or Extent of Incidental Take Anticipated**

The Service anticipates that up to four GUSG could be taken as a result of the proposed action as described in the Effects of the Action /Effects to GUSG section. The incidental take is expected to be in the form of harm resulting in death or injury to the species through habitat loss and significant disruption to feeding, sheltering, and perhaps breeding (specifically nesting and early brood rearing). Phase I will be built first, thus disturbance or displacement will disrupt, to some extent, feeding and sheltering within 1,000 feet to the south of the development and 1,000 feet to the north of the development on Phase II land (which may also affect nesting/early brood rearing). When Phase II is being developed consecutively less acreage will be available to GUSG as development proceeds and the 1,000 foot disturbance area will gradually be pushed to the north of Phase II.

### **Effect of the Take**

The effects of any incidental take of individual GUSG resulting from covered activities will be relatively small (0.11 percent) when compared to the long-term mean (1995-2018) Gunnison Basin population as well as the long-term mean (1996-2018) rangewide population (0.09 percent). The Service determines that this small level of anticipated take is not likely to result in jeopardy to the survival and recovery of the species and is not likely to reduce appreciably the likelihood of both the survival and recovery of GUSG in the wild by reducing its reproduction, numbers, or distribution.

### **Reasonable and Prudent Measures and Terms and Conditions**

The HCP contains all measures necessary to minimize and mitigate the impacts of the incidental take to the maximum extent practicable. Monitoring, reporting, and adaptive management will be conducted as stated in Section 5 of the HCP. Therefore, no additional reasonable and prudent measures or terms and conditions are necessary. Terms and conditions will be placed in the Applicant's Permit.

## **REINITIATION NOTICE**

This concludes formal consultation on the Gunnison Rising Annexation HCP. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

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### **Personal Communications**

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Ford, Sherry. 2020. Western Colorado University. Email titled "WCU contact" regarding no ground disturbing activities on the WCU mitigation property (1.14.2020; 11:53 AM).

Gibson, Scott. 2021. Email titled "Monticello GUSG HMC" (11.3.2021; 1:09 PM).

Griffin, Kathy. 2021a. Email titled "Rangewide GUSG Population Estimates" (10.8.2021; 8:19 AM).

Griffin, Kathy. 2021b. Email titled "Lek statement accuracy" (7.1.2021; 2:57 PM).

Ireland, Terry. 2019. Email titled "Gunnison Rising No Take Area" (3.28.2019; 10:27 AM).

Ireland, Terry. 2021. Email titled "Rangewide GUSG population estimates (1996-2018)" (10.08.2021; 1:21 PM).

Scott, John. 2021. Email titled "Grazing on Cabin Creek and Alder allotments" (7.7.2021; 6:53 PM).

Seward, Nathan. 2019. Email titled "Gunn Rising" (4.30.2019; 12:30 PM).

Seward, Nathan. 2020. Email titled "Past 3-year Gunnison sage-grouse lek count numbers" (7.7.2020; 6:12 PM) via Kathy Griffin (7.7.2020; 7:43 PM) via Creed Clayton (6.22.2021; 11:51 AM).

Seward, Nathan. 2021. Colorado Parks and Wildlife. Email titled "Signal Peak lek complex" regarding lek status and High Male Count data (9.14.2021; 10:53 AM).

cc: Anton Sinkewich, Community Development Director, City of Gunnison, Gunnison, Colorado 81230 ([ASinkewich@gunnisonco.gov](mailto:ASinkewich@gunnisonco.gov))

Dick Bratton, Gunnison Valley Properties, 864 W South Boulder Rd, Louisville, CO 80027-2410 ([rbratton@hfak.com](mailto:rbratton@hfak.com))

Byron Chrisman, Gunnison Valley Properties, 864 W South Boulder Rd, Louisville, CO 80027-2410 ([byron@chrismanc.com](mailto:byron@chrismanc.com))

Ron Welborn, Gunnison Valley Properties, 864 W South Boulder Rd, Louisville, CO 80027-2410 ([ronwelborn@gunnisonrising.com](mailto:ronwelborn@gunnisonrising.com))

John Scott, Scott Resource Management Specialist, ([scottrms@gunnison.com](mailto:scottrms@gunnison.com))

Kathy Griffin, Colorado Parks and Wildlife, 711 Independent Ave., Grand Junction, CO 81505 ([Kathy.griffin@state.co.us](mailto:Kathy.griffin@state.co.us)).

## **Appendix A.**

### **Recovery Agreement Regarding a Gunnison River Water Depletion as a Result of the Gunnison Rising Development**

#### **RECOVERY AGREEMENT**

This Recovery Agreement is between the United States Fish and Wildlife Service (Service) and the City of Gunnison (Water User) and is dated the last day of signature below.

WHEREAS, in 1988, the Secretary of Interior, the Governors of Wyoming, Colorado and Utah, and the Administrator of the Western Area Power Administration signed a Cooperative

Agreement to implement the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program); and

WHEREAS, the Recovery Program is intended to recover the endangered fish while providing for water development in the Upper Basin to proceed in compliance with state law, interstate compacts and the Endangered Species Act; and

WHEREAS, the Colorado Water Congress has passed a resolution supporting the Recovery Program; and

WHEREAS, on December 4, 2009, the Service issued a programmatic biological opinion (2009 Opinion) for the Gunnison River Basin and the operation of the Wayne N. Aspinall Unit concluding that implementation of specific operation of the Aspinall Unit, implementation of a Selenium Management Plan and specified elements of the Recovery Action Plan (Recovery Elements), along with existing and a specified amount of new depletions, are not likely to jeopardize the continued existence of the endangered fish or adversely modify their critical habitat in the Gunnison River subbasin and Colorado River subbasin downstream of the Gunnison River confluence; and

WHEREAS, Water User is the owner and operator of water that will be used in the Gunnison Rising residential and commercial development (Water Project), which causes or will cause depletions to the Gunnison River subbasin; and

WHEREAS, Water User desires certainty that its depletions can occur consistent with section 7 and section 9 of the Endangered Species Act (ESA); and

WHEREAS, the Service desires a commitment from Water User to the Recovery Program so that the Program can actually be implemented to recover the endangered fish and to carry out the Recovery Elements.



NOW THEREFORE, Water User and the Service agree as follows<sup>1</sup> :

1. The Service agrees that implementation of the Recovery Elements specified in the 2009 Opinion will avoid the likelihood of jeopardy and adverse modification under section 7 of the ESA, for depletion impacts caused by Water Users Water Project. Any consultations under section 7 regarding Water Projects depletions are to be governed by the provisions of the 2009 Opinion. The Service agrees that, except as provided in the 2009 Opinion, no other measure or action shall be required or imposed on Water Project to comply with section 7 or section 9 of the ESA with regard to Water Projects depletion impacts or other impacts covered by the 2009 Opinion. Water User is entitled to rely on this Agreement in making the commitment described in paragraph 2.
2. Water User agrees not to take any action which would probably prevent the implementation of the Recovery Elements. To the extent implementing the Recovery Elements requires active cooperation by Water User, Water User agrees to take reasonable actions required to implement those Recovery Elements. Water User will not be required to take any action that would violate its decrees or the statutory authorization for Water Project, or any applicable limits on Water Users legal authority. Water User will not be precluded from undertaking good faith negotiations over terms and conditions applicable to implementation of the Recovery Elements.
3. If the Service believes that Water User has violated paragraph 2 of this Recovery Agreement, the Service shall notify both Water User and the Management Committee of the Recovery Program. Water User and the Management Committee shall have a reasonable opportunity to comment to the Service regarding the existence of a violation and to recommend remedies, if appropriate. The Service will consider the comments of Water User and the comments and recommendations of the Management Committee, but retains the authority to determine the existence of a violation. If the Service reasonably determines that a violation has occurred and will not be remedied by Water User despite an opportunity to do so, the Service may request reinitiation of consultation on Water Project without reinitiating other consultations as would otherwise be required by the Reinitiation Notice section of the 2009 Opinion. In that event, the Water Projects depletions would be excluded from the depletions covered by 2009 Opinion and the protection provided by the Incidental Take Statement.
4. Nothing in this Recovery Agreement shall be deemed to affect the authorized purposes of Water Users Water Project or the Service statutory authority.
5. This Recovery Agreement shall be in effect until one of the following occurs:
  - a. The Service removes the listed species in the Upper Colorado River Basin from the endangered or threatened species list and determines that the

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<sup>1</sup> Individual recovery agreement may be changed to fit circumstances

Recovery Elements are no longer needed to prevent the species from being relisted under the ESA or

- b. The Service determines that the Recovery Elements are no longer needed to recover or offset the likelihood of jeopardy to the listed species in the Upper Colorado River Basin; or
- c. The Service declares that the endangered fish in the Upper Colorado River Basin are extinct; or
- d. Federal legislation is passed or federal regulatory action is taken that negates the need for [or eliminates] the Recovery Program.

6. Water User may withdraw from this Recovery Agreement upon written notice to the Service. If Water User withdraws, the Service may request reinitiation of consultation on Water Project without reinitiating other consultations as would otherwise be required by the Reinitiation Notice section of the 2009 Opinion.


**ANN TIMBERMAN**

Digitally signed by ANN  
TIMBERMAN  
Date: 2021.05.24 17:10:23 -06'00'

Western Colorado Field Supervisor  
U.S. Fish and Wildlife Service

Date \_\_\_\_\_

  
Water User Representative

  
Date \_\_\_\_\_