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To: Gunnison Basin Sage-grouse Strategic Committee Members

From: Shannon Frias, Administrative Assistant III

Date: June 7, 2022

Included in your packet for the Wildlife Conservation Strategic Committee Meeting:

June 15, 2022 Agenda
Draft of May 18, 2022 Minutes
Wanita Final Report
GUSG Action Plan

GUNNISON BASIN SAGE-GROUSE STRATEGIC COMMITTEE
REGULAR MEETING AGENDA

DATE: Wednesday, June 15, 2022

PLACE: Planning Commission Meeting Room, Blackstock Government Center OR via Zoom meeting, Meeting ID: 849 9779 9362 (see Teleconference Information below)

1. 10:00am
 - Call Regular Meeting to Order; Determination of Quorum; Verify Public Notice of Meeting
 - Agenda Approval
 - Approval of May 18, 2022 Meeting Minutes
2. 10:05
 - Committee Member Comments/Reports
3. 10:40
 - Gunnison County Sage-Grouse Conservation Action Plan Final Revisions
4. 10:55
 - Lek Count Update
5. 11:15
 - Waunita Watchable Wildlife Site Update
6. 11:35
 - Cheatgrass Treatment and Sagebrush Restoration Coordinator Position Update
7. 11:50
 - Public Comments
8. 11:55
 - Future Meeting
9. 12:00pm
 - Adjourn

NOTE: This agenda is subject to change, including the addition of items up to 24 hours in advance or the deletion of items at any time. All times are approximate. Regular Meetings, Public Hearings, and Special Meetings are recorded and **ACTION MAY BE TAKEN ON ANY ITEM**. Work Sessions are not recorded and formal action cannot be taken. Two or more Gunnison County Commissioners may attend this meeting. For further information, contact the County Administration at 641-0248. If special accommodations are necessary per ADA, contact 641-0248 or TTY 641-3061 prior to the meeting.

Teleconference Information:

Zoom meeting, Meeting ID: 849 9779 9362

Passcode: 267971

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fus06web.zoom.us%2Fj%2F84997799362%3Fpwd%3DTjdVRFJCL2d4QnNzR1lmLytWQU5CQT09&data=05%7C01%7C%7Cf684ece4f2374a26718508da3da39d8b%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637890070170613007%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=1BvsemXGcJFriLVUh0za08zGPuTc4D%2Fgj67RmSbANY%3D&reserved=0>

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**GUNNISON BASIN SAGE-GROUSE STRATEGIC COMMITTEE
REGULAR MEETING MINUTES
May 18, 2022**

The May 18, 2022 Gunnison Basin Sage-grouse Strategic Committee meeting was conducted in the Gunnison County Board of County Commissioners Boardroom, located at 200 East Virginia Avenue, Gunnison, CO, 81230. The meeting was also available on Zoom.

Committee Members Present:

Voting Members:

Nathan Seward, Chairperson, Colorado Parks and Wildlife (CPW)
Liz Smith, Vice-Chairperson, Gunnison County Board of County Commissioners (BOCC)
Amber Wilson, Saguache County
Tim Kugler, Recreation At-Large
Whit Blair, U.S. Fish and Wildlife Service (USFWS)
Peter Caloger, Public At-Large
Matt Vasquez, U.S. Forest Service (USFS)
Kathy Brodhead, Bureau of Land Management (BLM)
Sue Navy, High Country Conservation Advocates (HCCA)

Non-Voting Members

Virginia Adams, Saguache County

Others in the Audience:

Marcella Tarantino, Bird Conservancy of the Rockies
Clayton BonDurant, CPW
Pat Magee, Western Colorado University (WCU)
David Gardner, City of Gunnison Public Works
Jerry Wiggington, Native Landscapes Management and Consulting
Patty Wiggington, Native Landscapes Management and Consulting

Staff Members Present:

Aleshia Rummel, Gunnison Conservation District, Wildlife Biologist

Others present as listed in text.

CALL TO ORDER: Chairperson Seward called the May 18, 2022 meeting of the Gunnison Basin Sage-grouse Strategic Committee to order at 9:11 A.M.

DETERMINATION OF QUORUM: Seward confirmed that a quorum was present.

AGENDA APPROVAL: Agenda approved as presented.

APPROVAL OF APRIL 20, 2022 MEETING MINUTES: Moved: by Smith and seconded by Kugler to approve the April 20, 2022 meeting minutes as amended. Motion carried unanimously.

GUNNISON COUNTY SAGE-GROUSE CONSERVATION ACTION PLAN FINAL REVISIONS

Seward noted that there were still some formatting issues that will need to be cleaned up in the final version. He asked the Committee about including a map for the HCP for City of Gunnison as relevant to the Action Item, but the Committee decided to not include a map because it is available from the USFWS.

Seward noted that Action Item 8D should also list the accomplishment in 2022 of having the STOR crew. Additionally, the STOR crew is applying for grant money for the Gunnison Basin Regional Partnership Committee which would work together to create a decision tool looking at recreation on the landscape and how it impacts wildlife. This grant application is ongoing.

Magee asked where the Waunita Watchable Wildlife Site is recorded, as an accomplishment. The Committee recorded it as an accomplishment in Action Item 8D.

Navy noted that it is challenging for potential members of the public to understand the current status versus the ongoing work when the Action Plan was initially written and revised. For example, grazing research (Action Item 1) is NOT currently funded at \$300k a year, or in Action Item 7 lists the programmatic EA target date as 3 years but it is unclear if that is 3 years from 2012 or 2025. She suggested reformatting the tables to have a column for 2009 and a separate column for 2022. Smith proposed an alternative to create more of a narrative to clarify dates, or to continue as in the remainder of the draft to outline dates in parentheses as necessary to provide clarity. The Committee settled on clarifying “ongoing” activities and timelines as listed in the current version. Additionally, there should be more clarity on which action items are new in 2022 versus the original ones in 2009.

BLM is working on revising their Resource Management Plan (for three field offices throughout the Gunnison sage-grouse range) to update grazing in relation to sage-grouse, and Brodhead wondered if that should be included as an accomplishment somewhere. Seward thought perhaps not because it was BLM specific rather than related to the Strategic Committee. Smith suggested to reference it so the resources are available to anyone that may look them up. Brodhead said she will look into where to note it under current status and ongoing actions, potentially as related to Action Item 8 or 1 before the next meeting. Vasquez said the USFS is also working to complete their Forest Plan revision and would like that to be captured given the special considerations as related to sage-grouse, including a new Biological Opinion for grazing.

Rummel will make changes to the narrative for clarity and resend it out to Committee for the June meeting to approve then. The Committee will be provided a link to the original revisions, as well as a clean copy, and potentially a “revised from the May clean copy” version.

HUMAN-BEAR CONFLICT REDUCTION COMMUNITY GRANT PROGRAM UPDATE

Smith reported that Rummel drafted a grant proposal for the Human-Bear Conflict Reduction Community Grant Program through CPW. Smith thanked City for their work and participation. The grant application was amended from individual trash cans to include bearproof dumpsters. Smith also thanked Jess Young and WCU MEM program for collaboration and resources.

Gardner said the City thought it would be a good grant. Gardner thought dumpsters were more important than individual residential cans. The City recently revised their Title 12 municipal codes in several ways that may have addressed some of the bear conflict in residential areas. For example, these revisions required 68-gallon and 96-gallon cans rather than smaller ones that tip over more easily. The codes require residents to store trash cans in a secure location overnight. The City enacted overfill charges to limit people from having spillage problems, and to create accountability from homeowners for their trash. The City also now allows approved bear-proof trash cans. However, the City will soon work on revising codes for dumpsters, which currently have less accountability. The City is working to have someone hold an account (HOA, an individual, etc) for overfill fees.

Gardner reported that the grant request was for 30 bearproof dumpsters, and 30 individual cans. Western students will help determine where the residential cans are most needed to reduce conflicts. Smith thought this was a good initial request and was appropriately scaled, with the potential to request more funds next year. Dumpsters are likely about \$1200 each, whereas residential cans average about \$280 each for manual opening mechanisms. However they are investigating the use of automatically dumping cans, which would be beneficial to reduce the possibility of human error with not unlocking the can at the appropriate time. Grant recipients will be announced in June.

Seward echoed his gratitude for the work completed with a short turnaround time and thanked BonDurant who worked with Jason Kibbler and Gardner to make the grant feasible and useful to the City and their equipment and needs.

Caloger asked BonDurant about the carrying capacity of bears in Gunnison compared to the current bear population. BonDurant explained that conflict is not always related to carrying capacity, but is often more related to scarcity of food and conditions across the landscape. Seward said some bears are habituated

to food resources in town (e.g., crabapples, trash) and when there is more food outside town, some bears will move out and feed elsewhere and others will remain in town.

Magee asked about advertising for the trash cans if the grant application is funded, and if there will be a clear link to sage-grouse and trash subsidies for ravens. Smith thought it would be appropriate to reach out to local media to make sure that story was part of the reporting.

COMMITTEE MEMBER COMMENTS/REPORTS

Smith updated the Committee on the cheatgrass and treatment restoration coordinator position. They have received one application from Collin McCullough. It is now more than 30 days since the position was posted but it is still listed. Smith wanted to post it more widely. County HR reached out to everyone who attended the Summit, advertised in the newspaper and Shopper, and on their website, and is investigating advertising on some job posting sites. Smith was concerned the right applicants might not be seeing the outreach. HR has provided resources for hiring committees, which still need to be formed and start reviewing applications. Magee and Seward both volunteered to be on hiring committees if needed. Smith has heard back from a few people on how the IGAs are formatted and worded but Smith requested feedback from all agencies that are financially committed. Magee suggested advertising on the Texas A&M wildlife job board as the position is related to sage-grouse habitat conservation. Smith has reached out to State's Noxious Weed Advisory Commission on where to list it. Magee was wondering about the budget for advertising the position, and there is no budget for that. Magee was hoping to encourage people from diverse backgrounds to apply, but it usually costs more money to advertise in those locations. The Wildlife Society job board would be a good location but costs money to advertise. Seward may be able to cover costs. Magee asked about the budget and Smith responded that it was posted at \$85,000 to \$105,000 but the person would be responsible for their own taxes, and other fees associated with being a contractor. This amount was determined as comparable to someone working in the County Ecological Stewardship program. Current contributions include BLM (about \$25,000, UGRWCD for about \$5,000, Sisk-a-dee for about \$15,000 with another \$15,000 to the Red Creek project, and the County would fund the remainder from the Landfill Mitigation funds up to half for 2-3 years until the opposition was established. Jerry Wiggington asked about if the person would be able to work on other contracts at the same time, and Seward thought it would be a full-time job but the person might be able to work on smaller side projects. There would also be a negotiation on what a person could do for the salary range. The coordinator would work with contract sprayers in the Basin to align work.

Smith went to Boulder for the State's Noxious Weed Advisory Commission meeting. They had a site tour on the Front Range to demonstrate agricultural grazing practices and their use to control tall oat grass. There was a distinct line where areas that were grazed stopped the fire. There is an intersection between grazing, fire, and noxious weeds. Smith thought virtual fencing could be really important to using grazing as a tool for noxious weed control, although admittedly it would be more challenging with cheatgrass given the short timeframe at which it is palatable. Eric McPhail at CSU-Extension is realigning his budget to have funding for base stations for local ranchers to use in a virtual fencing system. Smith thought the ability to target grazing in particular areas and move cattle across the landscape could be very useful.

Smith also reported at the most recent BOCC regular meeting there were 2 applicants (Magee and Young) for the education and research position on the Strategic Committee, and Smith recommended to appoint them without interviews.

Brodhead reported for BLM that the gates were scheduled to be opened May 15 from sage-grouse road closures, but there were problems with shed antler collectors starting on May 1 trying to break open gates and/or blocking the gates with too many vehicles. There are 52 gates to open, and this year May 15 was a Sunday so gates were opened Monday morning. Some of the public was unhappy with that decision. The official language is that roads are closed "through May 15" but the public believes it is opened on the morning of May 15. The BLM is trying to improve road closure signage, clarity of the closures, and gates on the closed roads. Advertisements in the Shopper currently list what the closures are, but they are working towards maybe having an educational news article about why the closures are in place, and maybe incorporating the "why" into the signage at gates as well, at least at some of the most busy trails/ roads. This could potentially use a QR code on the sign where there is internet connectivity. Kugler recommended clarity about if the closure pertained to human, mechanized, or motorized use. This year the BLM is

focusing on their travel management Area 5 (south of the City of Gunnison, including Hartman's to Bull Creek/ Lake City highway area) to correct signage, decommission roads as appropriate, and more. The BLM is working together to make it more of an office-wide effort rather than just wildlife. The USFS has some signage for road closures that they will share with BLM for consistent messaging. The BLM is in the process of hiring a Lands and Realty position, and the next position to fill is the wildlife biologist position which will likely be advertised in a few months.

Kugler reported that he heard that compliance with road closures was good at least in Signal Peak when someone from Gunnison Trails went to open the gate there. There was no evidence of people biking past closures despite dry conditions. Kugler thought opening Hartman's was really important to have an outlet for people wanting to get outside this spring.

Vasquez reported that Darren Long is working on wet meadow restoration coordination. Vasquez is working on grazing management and Forest Plan Revisions, and specifically looking at opportunities for habitat connectivity for sage-grouse. The USFS has some critical habitat areas, which may include performing vegetation management in habitats adjacent to critical habitat. Other areas are truly forested and are unlikely to change to suitable critical habitat. Seward was interested in what kinds of silvicultural practices because he thought with aridification and climate change, sage-grouse may start using some higher elevation sites including potentially forest borders. Magee said CPW has records of radio-collared grouse at 12,000 ft elevation.

Navy thanked everyone for the Stewardship Award. Navy reported that last year Eli Smith was HCCA's Stewardship Fellow from the WCU MEM program. This year he was hired as a Stewardship Director staff member. HCCA got another WCU MEM Stewardship Fellow.

Blair reported that the USFWS is awaiting final signatures from the regional director next week on the application for the Bipartisan Infrastructure Law but they have been notified that they received \$800,000 for cheatgrass and wet meadow restoration (\$550,000 related to cheatgrass and about \$350,000 for wet meadows restoration). They received good feedback on the number of letters of support and the level of partnership in the Gunnison Basin. Blair had to cut some money from the original requests specifically for monitoring and outreach. He will be working on 2 other grants (specifically, the State of the Birds, and another about invasive species prevention) to cover those aspects.

Caloger talked to Pete Coates at the SG Summit. Predation has become recognized in the last 10 years or so as a bigger threat (top 2-3 threats) especially in terms of recruitment. Coates agreed to correspond with him, and Caloger wanted to know if the correspondence should be through Caloger or through Strategic Committee. Seward requested Caloger work with Coates individually at this time. Seward was curious about the response of corvid populations to the work cleaning up subsidies. Do the corvids move on to a different location? Or scavenge more efficiently? The Crawford Local Work Group (LWG) is looking into predator control targeting ravens given their low sage-grouse population sizes. Seward wants to see what happens in Crawford first in terms of take permits and other procedures. Brodhead said the Crawford LWG wants to do raven surveys. Seward recommended building on 2013 and 2015 surveys from Magee to replicate sites and methods to assess change. Brandon Diamond, Young, and Magee met with Cinnamon Levi-Flinn (Colorado Department of Transportation; CDOT) who is very interested in predator and raven subsidy issues. She is considering enrolling in a WCU program for a MEM/MS combo as an agency employee, with a raven subsidy project. Smith reported that the BOCC supported the reduction in rates for agricultural producers for carcass removal at least as a test. There were questions about volume, how it will impact the landfill in the long term, so Jonathan Houck thought it would be great to see CDOT or other entities pitch in financially to help offset that cost that the County would then be subsidizing.

PUBLIC COMMENTS

Magee suggested a summer field trip. Seward said that we should discuss it at the next meeting, and Kugler suggested helping in a wet meadow workday later in the season (August or September).

FUTURE MEETINGS: Future meetings will occur in the Gunnison County Blackstock Government Center, 2nd floor meeting room and by Zoom online meetings, unless changed for a specific reason.

06-15-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
07-20-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
08-17-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
09-21-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
10-19-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
11-16-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room
12-21-22	10-12	Regular Meeting	Blackstock; 221 N. Wisconsin 2 nd floor meeting room

ADJOURN: The May 18, 2022 meeting of the Gunnison Basin Sage-grouse Strategic Committee adjourned at 11:36 PM.

Minutes Prepared By: Aleshia Rummel, Gunnison Conservation District

DRAFT

Gunnison Sage-grouse Watchable Wildlife Program

Waunita Watchable Wildlife Site
2022
Final Report



Gunnison Sage-grouse lekking on top of East Ridge on 4 April 2022. Photo by Amanda Aulenbach.

Lindsay Abernathy and Dr. Patrick Magee!
Sisk-a-dee and Department of Natural and Environmental Sciences
Western Colorado University
Gunnison, CO 81231

1 June 2022

Gunnison Sage-grouse Watchable Wildlife Program 2022 Annual Report

Site Statistics at a Glance

Volunteer Effort

1 supervisor, 1 coordinator and 8 volunteers
 42 hours of volunteer training
 177 volunteer hours at the site
 70 hours of coordination, supervision, and program implementation
 40 hours of supervision, educational programming, website management
Total volunteer commitment 329 hours (equivalent to an employee working 8.2 40-hr weeks)

Human visitation

Season Dates	1 - 30 April (30 days)
Closed Dates	Before 1 April, 10 - 16 April, After 30 April
Volunteer Monitoring Dates	1 April – 5 May (35 days)
Total Open Days	23
Total Visitors	331
Total True Visitors (total minus volunteers)	269
Average True Visitors per Open Days Only	11.7
Total Open Days with at Least One Visitor	21
Total Number of Vehicles on Open Days	129
Total True Visitor Vehicles	82
Average Number of True Visitor Vehicles per Open Days	3.6
Total Number of Vehicles that Violated Protocol	11 (13.4%)

Estimated dollars spent in Gunnison by visitors

Of the 12 surveys that were received, 10 were used to estimate the total amount of money spent by visitors in Gunnison. It was estimated that \$226.83 was spent per person, and when multiplied by the 269 true visitors, that totals to be **\$61,017.27**. However, due to the low survey number, this amount is likely not accurate and we have low confidence in this estimate of the impact of Gunnison Sage-grouse viewing on the local economy.

Gunnison Sage-grouse lek counts

High Male Count: 80 (28 April)
 High Female Count: 23 (17 April)
 High Unknown Count: 74 (25 April)
High Total Count: 108 (5 May)
 Days grouse present at any of three lek locations (including closed days 1 April - 5 May): 34 of 35 (97%)
 Days grouse present at any of three lek locations (not including closed days): 23 of 23 (100%)

Gunnison Sage-grouse distribution and use of three sub-leks

Main Lek: 0 grouse days were recorded
 North Meadow: 1,715 grouse days were recorded on 34 of 35 days, average of 50.4/day
 East Ridge: 192 grouse days recorded on 34 out of 35 days, average of 5.6/day

Watchable Wildlife Site Management

The Waunita Watchable Wildlife regulations passed by the Colorado Wildlife Commission went into effect in 2021. Per these new regulations, the site was closed prior to April 1 and after April 30. During April 2022, a mid-season closure occurred from 10-16 April. Volunteers monitored the site on all open dates and during the closed dates in April and until 5 May 2022. The site was open for grouse viewing on a total of 23 days. The new regulations were advertised on www.siskadee.org. This was the first year we had the viewing trailer operational under the new regulations – the last two years we did not provide the viewing trailer due to COVID 19. In 2020, the site was completely closed all season; in 2021, the parking area was open, but not the viewing trailer.

Volunteers monitored the site every day from 1 April to 5 May, arriving 1.5 hours before sunrise and staying until most grouse had dispersed for the day. On closed dates from 10-16 April and 1-5 May, volunteers monitored the site but parked approximately 100 m below the parking area on the side of County Road 887. During all closed dates, volunteers set a sign outside their car that indicated the site was closed.

From 10-16 April, CPW installed a camera at the watchable wildlife site parking area to assess compliance with site closure during that week. One violation was recorded on 11 April.

Gunnison County continued to manage County Road 887 by installing “No Parking” signs along the county road north of the viewing site. The intent was to discourage visitors from observing grouse at locations other than the established parking lot.

In 2022, CPW required all visitors at State Wildlife Areas to have a valid Colorado hunting or fishing license or a new State Wildlife Areas Pass. Sisk-a-dee advertised this on the siskadee.org webpage and held numerous conversations and emails with people who had questions about how to obtain the pass. The CPW webpage was confusing and we recommend it is revised for easier access to the pass. All commercial or private groups that booked the trailer continued to pay the \$100 use fee to Sisk-a-dee.



No Viewing Days

Of the 7 closure days during the season (10-16 April), when volunteers were parked on the county road, there were a total of 4 cars that came to the site to view the grouse. After volunteer interaction, 3 of these cars (on 11, 14 and 16 April) left the site shortly after. On 11 April, 6 visitors claiming to be a tour group arrived at the site at 5:28 am. The volunteer mistakenly offered to let them return to the site at 7:00-7:30 am, and they agreed and turned around. When

the volunteer left at 7:17 am, the group had not returned. On 14 April, the 2 visitors in a car with a Colorado license plate arrived at 6:35 am looking for dusky grouse and were given the wrong site from ebird. They left the site at 6:42 am. On 16 April, the 2 visitors in a car with a Colorado license plate arrived to the site at 5:21 am. It was suggested that they come back the following day when the site would be open again, and they departed at 5:23 am. For most of the statistics above, these three vehicles were not included as they did not stay the entire viewing time. However, there was one vehicle that, when informed of the site closure, decided to view the grouse from the parking lot anyways. These visitors, with a license plate from Ohio, arrived at 4:56 am. Here is the account from the volunteer that day:

“They were very upset claimed to have emailed “the head lady” about viewing and was told that this was the time they could come view these birds. I offered another day they said they were only here today. I offered returning at 7:00 -7:30 am and they were very upset and refused. I explained we did not want them further up the road due to wanting to restore the historical lek and beginning to see an increase in numbers as well as giving the birds a week off from viewing pressures known or unknown. They continued being upset claimed to have bird watched for 50+ years, told me they knew what they were doing, asked me multiple times if I realized how far away the lek is, and even asked what I would be able to do about them parking on the side of the road. I explained I was not able to tell them they could not park on the road if they stayed in their car however the DWM could and would not be happy if they were seen at the closed lek site parked on the closed road. They then drove away from me after almost 15 minutes of conversation back and forth towards the lek viewing area at 5:04 am. I was unable to message anyone regarding this incident at the time due to not having service and not wanting to leave my position with a car parked in the area and not wanting people to think it is open.”

These incidences were reported to local District Wildlife Manager Nick Gallowich, although no citations have been given and the incidents are still under investigation. There was no observed impact on the grouse on these mornings.



Gunnison Sage-grouse Watchable Wildlife Program 2022 Annual Report

Executive Summary

Western Colorado University (Western) and Sisk-a-dee worked with Colorado Parks and Wildlife (CPW) to deliver the Gunnison Sage-grouse Watchable Wildlife Program in spring 2022. Other partners included Gunnison County and the Gunnison Basin Sage-grouse Strategic Committee. The program includes four major goals. First, we provided opportunities for individuals and groups to view the Gunnison Sage-grouse, including commercial grouse viewing. Secondly, we promoted education regarding the conservation of the Gunnison Sage-grouse through two free evening slide programs and lek tours open to the public. A third program was given to the Colorado Field Ornithologists. Third, the Waunita Watchable Wildlife Site was monitored by volunteers to encourage visitors to adhere to the viewing protocol and to provide guidance to visitors. Fourth, data were collected concerning human visitation to the Watchable Wildlife Site, as well as grouse abundance and behavior, to determine the impacts of viewing on grouse. The count data were used by CPW for their annual Gunnison Sage-grouse population monitoring effort. Lindsay Abernathy served as the 2022 coordinator from Western for the monitoring effort, managing the reservations and logistics for commercial groups, recruiting and managing volunteers, and prepared the draft final report.

Volunteer Effort

Eight volunteers (not counting Lindsay Abernathy and Pat Magee!) monitored the Waunita Watchable Wildlife Site from 1 April to 5 May, and conducted a count on March 27 as a part of their training. Volunteers spent 35 volunteer days including conservatively **177 hours** monitoring Gunnison Sage-grouse, plus 2 days of **42 person-hours in training**. The classroom portion of training was facilitated by Pat Magee and Lindsay Abernathy and was held at Western Colorado University on 29 March 2022. Volunteers learned about Gunnison Sage-grouse ecology, the history of the watchable wildlife program at Waunita, and their role as volunteers. Each volunteer received a packet of information that included data sheets and we reviewed the data collection protocols. The field portion of training was held on March 27, 2022. Volunteers met at 4:30 am and carpooled to the Waunita Watchable Wildlife Site. Volunteers learned to locate and identify Gunnison Sage-grouse and learned to determine gender. They also learned how to conduct lek counts at the three sub-lek locations. They also were trained on methods to conduct human visitation monitoring. In addition to the volunteer hours associated with lek activities, Lindsay Abernathy invested approximately **70 hours** updating documents and coordinating commercial and private group visits through email and phone correspondence, scheduling, education on protocol, coordinating and training volunteers, supervising volunteers, managing and analyzing data, and preparing the final report for the Watchable Wildlife Program. Pat Magee expended approximately **40 hours** on supervision and training, communicating with the public (Sisk-a-dee inquiries), maintaining the Siskadee.org webpage, conducting educational programs, and reviewing and revising the final report. A total of **329 volunteer hours** were contributed to the Gunnison Sage-grouse Watchable Wildlife Program in 2022.

Visitation

True visitors (not volunteers affiliated with Sisk-a-dee, CPW and Western) were present on 21 of the 23 days the site was open to the public for viewing (91.3% of viewing days). Including the volunteers, 331 people visited the lek in 2022. Of the 331 total visitors, 62 were volunteers and **269 were true visitors**. On average, 11.7 true visitors were present at the site per day that the site was open (23 days). Visitors came from **13 U.S. states and 3 foreign countries**.

A total of 129 vehicles were present at the Waunita Watchable Wildlife Site in 2022. Volunteers accounted for 47 of the vehicles, leaving **82 true visitor vehicles**. The highest total vehicle count was 11

on 2 April and the highest number of true visitor vehicles was 8 on 2 April. The average true visitor vehicles present per day at the Watchable Wildlife Site was 3.6 (23 open days).

A total of 11 commercial groups reserved the viewing trailer. Three of these commercial groups reserved two mornings. One commercial group that reserved a morning in the trailer did not follow protocols, see protocol violations. There were four private groups that reserved the trailer, and were booked on the same day. Of these four groups, one group did not follow the protocols (see protocol violations). The commercial and private groups that acquired reservations under Sisk-a-dee's commercial use permit were not required to have fishing or hunting licenses or State Wildlife Area passes, all other visitors were required to purchase valid licenses. No law enforcement was conducted to check compliance with the SWA pass requirement.

Gunnison Sage-grouse Activity

Gunnison Sage-grouse were present at the Waunita lek on 34 out of 35 mornings (97% of monitored dates), however, for the date (April 11) that grouse were not observed, the volunteer was not able to see the grouse due to vehicle positioning and chose not to reposition due to concern for disturbing the grouse. We did not observe any grouse using the Main Lek during the viewing season. The **high count for males was 80** on 28 April and the high count for females was 23 on 4 May. The high count of males and females was 74 on 25 April; and the high count, including individuals of unknown sex, was 108 on 5 May.

Visitor Compliance with Site Protocols

Of the 129 total vehicles, 118 (91.5%) followed the protocol listed on the Sisk-a-dee website. The remaining 11 vehicles, or **8.5% of visitors violated the protocol in some way** (however, all volunteers followed protocols). Of the true visitors (82 vehicles), 13.4% did not follow protocols. Of the 49 private vehicles, 9 (18.4%) committed protocol violations. Of the 33 tour vehicles, 2 (6.1%) committed protocol violations. Protocol violations included making noises from vehicles, talking above a whisper, slamming car doors, using the bathroom and/or exiting vehicles prior to viewing end time, arriving late or leaving early. Only one protocol violation (visitors leaving the trailer early on 19 April) coincided with a flushing event. Most of the protocol violations at the viewing area apparently did not result in a known sage-grouse disturbance, and this is potentially because the grouse display and congregate approximately 1 km from the viewing area.

Flush Events

Causes of flush events were typically unknown and it is unclear if they were associated with disturbance or a part of inter-lek area movement. Of the 57 grouse flush events recorded from grouse on the 35 monitored days, they flushed before sunrise 42.9% of the time and after sunrise 57.1% of the time. Visitor disturbances to the lek were recorded for two (3.5%) of these flush events and passing traffic from non-visitors for four (7.0%) of these flush events. Ten (17.5%) of these flush events were observed to have been potentially caused by coyotes. On one day (16 April), a coyote was observed chasing after a low-flying grouse. Birds of prey (hawks, eagles, harriers) were suspected to have caused six (10.5%) of the observed flushes. One (1.8%) flush event is thought to have been caused by a raven. Two flush events were thought to have been caused by wind (3.5%) on a particularly windy day, 5 April. For the rest of the 32 (56.1%) observed flush events, no disturbances correlated with the flush. Elk were observed on many days, but were never suspected to have caused a flush event.

Communications

Visitor primarily referenced the www.siskadee.org website to learn about Gunnison Sage-grouse viewing, and also communicated with Lindsay Abernathy via phone and email for purposes of reserving the viewing trailer as well as email and phone for groups and volunteers, Pat Magee via phone, text and e-mail for visitors planning their trips and inquiring about site protocols, grouse numbers and behaviors,

directions, lodging, other birding opportunities and more. The Sisk-a-dee blog (<http://gunnitagegrouse.blogspot.com/>) was not updated this year. Communications via phone, text and e-mail with commercial groups and private birders occurred on a daily basis. The webpage provides background information on watchable wildlife opportunities, viewing protocols, sunrise times, closure dates, and contact for further information (Patrick Magee's contact). This year, the webpage underwent a major revision, causing a delay in the updated 2022 information. This likely increased the amount of inquiries from the website.



Waunita Watchable Wildlife Site on an early April morning 2022. Grouse lek about 1 km away from the viewing site where this photo was taken by Patrick Magee!

Gunnison Sage-grouse Watchable Wildlife Program 2022 Annual Report

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Gunnison Sage-grouse in the North Meadow on 1 May 2022. Photo by Amanda Aulenbach.



Volunteers at the field training on 27 March 2022. Photo by Amanda Aulenbach.

Gunnison Sage-grouse Watchable Wildlife Program 2022 Annual Report

Orientation to the Waunita Site

Located 19 miles east of Gunnison along County Road 887, the viewing area is owned by Colorado Parks and Wildlife and includes a viewing trailer, a parking area, and a portable outhouse. The site is open seasonally from 1-30 April and monitored annually from 1 April to 5 May. Gunnison Sage-grouse conduct their mating ritual to the east on private land owned by the Double Heart Ranch. The land has a conservation easement in place to protect the Gunnison Sage-grouse. The site has been operated by CPW since 1999 and is the only public viewing site for Gunnison Sage-grouse in the Gunnison Basin which holds approximately 87% of the global population of the bird. The grouse historically displayed at the Main Lek but most activity now is in the North Meadow or on the East Ridge.



Program Effort

Ten volunteers representing CPW, Sisk-a-dee, and Western Colorado University (Western), monitored the Waunita Watchable Wildlife Site during the 2021 Season. Nine were Western students and 1 was a Western faculty member.

Volunteers monitored grouse numbers and human visitation every day during a 35-day period in the 2022 Gunnison Sage-grouse viewing season. Two training days occurred on 3/27/2022 and 3/29/2022. The first official day of monitoring was 4/1/2022 and the last day of monitoring was 5/05/2022. The site was open for 23 days during this period.

Volunteers monitored the Watchable Wildlife site from the parking lot for all 23 days that the site was open and were present on the County Road for the 7 mid-season closed dates and at the site for the 5 post-season closed dates. Volunteers monitored the lek from their vehicles during open and closed dates.

Volunteers were acknowledged on 1 May 2022 at Gunnison Pizza Company Restaurant and treated to dinner and were given thank you gifts. CPW funded the dinner, Sisk-a-dee funded the drinks and gifts.

2022 Volunteers		
Name	Email	Phone #
Lindsay Abernathy	lindsay.abernathy@western.edu	336-709-9787
Pat Magee!	Pmagee@western.edu	970-641-3959
Jett Moore	lexxie.moore@western.edu	615-295-5010
Lauren Hirsch	laurenhirsch0@gmail.com	510-331-6780
Liam Duggan	liam.duggan@western.edu	806-787-8732
Amanda Aulenbach	amanda.aulenbach@western.edu	610-301-8435
Matthew Wells	matthew.wells@western.edu	719-492-6795
Anton Burt	anton.burt@western.edu	785-213-3899
Garrett Konet	garrett.konet@western.edu	440-668-2452
Kjerstine Jones	kjerstine.jones@western.edu	970-779-1297

Visitation

Rate of visitation

The site was monitored by volunteers from 1 April through 5 May. The site was closed on 12 of those days, 10-16 April and 1-5 May. Of the 23 days the site was open, visitors used the site via the trailer and/or parking lot on 21 days, or 91.3%. Of the 12 closed days, the site was visited on 3 days (25%) but on only one day did the visitors disobey the volunteer and stay to view the grouse..

Total number of visitors and vehicles

Visitors

Total visitors: 331
 Total true visitors (total minus volunteers): 269
 Total number of true visitors viewing from trailer: approx. 135
 Total number of true visitors viewing from parking lot: approx. 104
 Total number of volunteers on site: 62
 Average true visitors per open days only: 11.7

Vehicles

Total number of vehicles: 129
 Total number of private vehicles in parking lot: 49
 Total number of tour vehicles (in trailer): 33
 Total number of volunteer vehicles: 47
Total number of vehicles belonging to true visitors: 82
 High vehicle count: 11 (April 2)
High true visitor vehicle count: 9 (April 2)
 Average number of all vehicles per day (35 days): 3.7
 Average number of true visitor vehicles per day (35 days): 2.3
Average number of true visitor vehicles per day open days only (23 days): 3.6
 Average number of volunteer vehicles per day: 1.34

Visitor Geography

Total number of U.S. states represented: 13

Total number of countries represented outside the U.S.: 3

U.S. States	Countries and Provinces
Arkansas Arizona California Colorado Delaware Indiana New York Ohio Oregon Texas Virginia Washington Wisconsin	Germany Hungary United Kingdom United States



Vehicles parked at the viewing site on 4 April 2022, a typical morning for Gunnison Sage-grouse viewing. The vans carry commercial birding groups who park and are escorted by Sisk-a-dee volunteer into the viewing trailer seen at the back of the photo. Photo by Amanda Aulenbach.

2022 Waunita Watchable Wildlife Site Gunnison Sage-grouse Viewers
(Shaded cells represent days when lek viewing was closed to the public)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
03/27 Volunteer Field Training Day Part 1 7 volunteers	03/28	03/29 Key: _ total _ trailer _ parking lot where from _ volunteers	03/30	03/31	04/01 17 total 8 commercial 4 parking lot DE/NY/OH Volunteer Field Training Day Part 2 5 volunteers	04/02 16 total 9 Sisk-a-dee 5 parking lot OH/AZ/CO 2 volunteers
04/03 21 total 16 commercial 3 parking lot AK 2 volunteers	04/04 21 total 14 commercial 5 parking lot Germany/OK/ United Kingdom/WI 2 volunteers	04/05 20 total 16 commercial 2 parking lot unknown 2 volunteers	04/06 23 total 17 commercial 4 parking lot United Kingdom/ unknown 2 volunteers	04/07 17 total 8 commercial 7 parking lot CO/CA 2 volunteers	04/08 20 total 6 Sisk-a-dee 12 parking lot United Kingdom/ Hungary/IN/CA/ OR 2 volunteers	04/09 35 total 24 commercial* 9 parking lot CO/NY 2 volunteers
04/10 1 volunteer	04/11 8 parking lot* 1 volunteer	04/12 1 volunteer	04/13 1 volunteer	04/14 2 parking lot* 1 volunteer	04/15 1 volunteer	04/16 2 parking lot* 1 volunteer
04/17 19 total 8 commercial 9 parking lot CO/CA/United Kingdom 2 volunteers	04/18 10 total 7 commercial 1 parking lot United Kingdom 2 volunteers	04/19 8 total 6 private* 0 parking lot 2 volunteers	04/20 2 total 0 trailer 1 parking lot United Kingdom 1 volunteer	04/21 5 total 2 private 1 parking lot CO 2 volunteers	04/22 17 total 15 commercial 0 parking lot 2 volunteers	04/23 6 total 0 trailer 5 parking lot CO 1 volunteer
04/24 13 total 8 commercial 3 parking lot CO 2 volunteers	04/25 6 total 0 trailer 4 parking lot TX/NY 2 volunteers	04/26 4 total 0 trailer 3 parking lot CA/VA 1 volunteer	04/27 1 total 0 trailer 0 parking lot 1 volunteer	04/28 1 total 0 trailer 0 parking lot 1 volunteer	04/29 2 total 0 trailer 1 parking lot WA 1 volunteer	04/30 16 total 11 commercial 3 parking lot CO/NY 2 volunteers
05/01 1 volunteer	05/02 1 volunteer	05/03 1 volunteer	05/04 1 volunteer	05/05 1 volunteer		

* See Protocol Violations
Group Visits

The trailer was occupied 16 of the 23 open days of the viewing season, or 70% of the time.

Total number of groups:

2 non-profit educational and/or environmental (Sisk-a-dee and CFO)

11 commercial birding groups

4 private groups

Commercial groups used the trailer 12 days

Non-profit groups used the trailer 3 days

Private groups used the trailer 1 day

Type of Group	Group Name	Number of Uses	Dates Used
Non-Profit	Sisk-a-dee	2	2 and 8 April
	Colorado Field Ornithologists	1	22 April
Commercial	Quetzal Tours	1	30 April
	Wildside Nature Tours	1	17 April
	Wild Wings	1	21 April
	VENT Birding Tours	1	3 April
	WINGS Birding Tours	1	6 April
	She Flew	2	7 and 24 April
	North Am. Partnership for International Birding	1	18 April
	High Lonesome Bird Tours	2	4 and 5 April
	Colorado Birding Adventures	1	9 April
	BirdQuest	1	1 April
	Tropical Birding	1*	9 April*
Private*	Stephen Price	1	19 April
	John Parker	1	19 April
	Paul Stewart	1	19 April
	Mark Robbins	1	19 April
Total Group User days		16	

* See Protocol Violations – this group arrived the day after their reservation and viewed from the parking area because the trailer was previously booked.

Number of Open Days and Visitor/ Vehicle Counts

Year	Number of Open Days	Number of True Visitors	Number of True Vehicles
2004	30		
2005	37	318	102
2006	41	290	85
2007	40	301	97
2008	39	282	80
2009	39	333	109
2010	39	374	115
2011	40	470	140
2012	40	274	98
2013	40	233	118
2014	40	297	75
2015	39	299	91
2016	40	310	93
2017	40	333	93
2018	28	290	98
2019	26	214	70
2020	NA – COVID closure	NA	NA
2021	23	203	90
2022	23	269	82

Protocol Violations

A total of 15 violations were made by visitors during the 2022 viewing season.

Vehicles (numbers and percentages) following proposed grouse viewing etiquette

Vehicles following protocol: 105 (90%)

Vehicles not following protocol: 11 (10%)

Of the 82 vehicles belonging to true visitors, 11 violated viewing protocol (13%)

Of the 33 tour vehicles, 2 violated viewing protocol (6%)

Of the 49 private vehicles, 9 violated viewing protocol (18%)

Of the 47 volunteer vehicles, 0 violated viewing protocol (0%)

On two days protocol violations were especially notable. The first was on 9 April by commercial birding group Tropical Birding. Originally, all communications and the calendar had this group in the trailer on 8 April – shared with our Sisk-a-dee group. However, the night before their viewing, we were informed that they would instead be arriving for the morning of 9 April. In an effort to accommodate this group, we allowed them to follow the 2021 protocol and view from their vans in the parking lot. This group also repositioned one of their vans after arriving (turning on the engine), slammed doors, and talked loudly.

The other notable group that violated protocol was on 19 April. On this day, four separate, small, private groups reserved the trailer. One of these groups decided to exit the trailer at 0616 to “get a better view” and set up their scope just outside the trailer in the parking lot. This exit flushed 12 grouse. The rest of the groups in the trailer also exited at 0625 and set their scopes up in the same location. Then at 0643, the first group to exit the trailer decided to leave the site early against volunteer instruction. In total, around 22 grouse flushed due to these violations. This was the only confirmed human caused disturbance from the site that flushed grouse.



Photos taken by the parking lot volunteer on 4/19/22 of the groups viewing outside of the trailer. Photos by Matthew Wells.

Sisk-a-dee Educational Efforts

Sisk-a-dee offered two free Gunnison Sage-grouse programs and lek tours on 1-2 April and 7-8 April 2022. The programs consisted of an evening slide show at Western Colorado University focused on the ecology and conservation of the Gunnison Sage-grouse and tips on identification distinctions between Greater and Gunnison Sage-grouse. This was followed by a morning tour to the Waunita lek with sage-grouse viewing from the trailer. There were 9 individuals that attended the program and lek tour on 1-2 April, and 6 individuals that attended the program and lek tour on 7-8 April. Both programs were fully booked this year and we had a waiting list. We allowed half occupancy on the second tour for the Tropical Birding group and they didn't show. Several people from the first tour did not show. For the 2023 season, Sisk-a-dee has initiated a \$25 deposit for these programs to encourage visitors who make a reservation for the free program to actually attend and not take up space for others on the waiting list. A third program was added on 21-22 April for the Colorado Field Ornithologists.

Gunnison Sage-grouse Lek Counts

High Counts through the Years

2022 High Grouse Counts

High Male Count **80 males on 28 April** (highest number in our 18-year record)
High Female Count 23 females on 17 April (highest number since 2010)
Total High Count (known sex) 99 total male and females on 28 April (highest)
Total High count (including unknown sex) **108 total** males, females, and unknown on 5 May (highest)

2021 High Grouse Counts

High Male Count 38 males on 10 April
High Female Count 8 females on 4 May
Total High Count (known sex) 45 total male and females on 10 April
Total High count (including unknown sex) 56 total males, females, and unknown on 19 April

2020 High Grouse Counts

High Male Count 21 males on 25 April 2020
High Female Count 2 females on 11 April 2020
Total High Count (known sex) 21 total males and females on 15 April 2020
Total High Count (including unknown sex) 34 total males, females and unknown on 2 May

*Lek was only counted on 4 days in 2020.

* Jim Mendonca reported 57 grouse counted in the North Meadow on 11 April 2020

2019 High Grouse Counts

High Male Count 16 males on 15 April 2019
High Female Count 9 females on 5 April 2019
Total High Count 23 total grouse on 15 April 2019 (of known-sex grouse)
Total High Count 42 males, females, unknown sex on 15 April 2019

2018 High Grouse Counts

High Male Count 17 males on 19 April 2018
High Female Count 5 females on 1 April 2018
Total High Count 20 total grouse on 19 April 2018

2017 High Grouse Counts

High Male Count: 23 males on 12 April 2017
High Female Count: 6 females on 12 April 2017
Total High Count: 29 total grouse on 12 April 2017

2016 High Grouse Counts

High Male Count: 27 males on 10 and 14 April 2016
High Female Count: 9 females on 20 April 2016
Total High Count: 34 total grouse on 10 April 2016

2015 High Grouse Counts

High Male Count: 28 males on 21 April 2015
High Female Count: 4 females on 3 May 2015
Total High Count: 29 total grouse on 21 April 2015
Total High Count w/ unknowns: 41 total grouse on 8 May 2015

2014 High Grouse Counts

High Male Count: 19 males on 5 April 2014
High Female Count: 14 females on 1 April 2014
Total High Count: 44 total grouse on 8 April 2014

2013 High Grouse Counts

High Male Count: 31 males on 2 April 2013
High Female Count: 20 females on 7 April 2013
Total High Count: 37 total grouse on 7 April 2013

2012 High Grouse Counts

High Male Count: 22 males on 6 April 2012
High Female Count: 12 females on 1 April 2012
Total High Count: 25 total grouse on 1 April 2012

2011 High Grouse Counts

High Male Count: 27 males on 2 April 2011
High Female Count: 30 females on 5 April 2011
Total High Count: 51 total grouse on 5 April 2011

2010 High Grouse Counts

High Male Count: 32 males on 3 May 2010
High Female Count: 42 females on 10 April 2010
Total High Count: 74 total grouse on 10 April 2010

2009 High Grouse Counts

High Male Count: 29 males on 19 April 2009
High Female Count: 25 females on 8 April 2009
Total High Count: 53 total grouse on 6 April 2009

2008 High Grouse Counts

High Male Count: 37 males on 5 April 2008
High Female Count: 33 females on 18 April 2008
Total High Count: 63 total grouse on 16 April 2008

2007 High Grouse Counts

High Male Count: 34 males on 8 May 2007
High Female Count: 12 females on 30 March and 14 April 2007
Total High Count: 40 total grouse on 8 May 2007

2006 High Grouse Counts

High Male Count: 38 males on 2 May 2006
High Female Count: 26 females on 9 April 2006
Total High Count: 52 total grouse on 5 April 2006

2005 High Grouse Counts

High Male Count: 30 males on 30 May 2005
High Female Count: 27 females on 7 April 2005
Total High Count: 37 total grouse on 7 April 2005

Gunnison Sage-grouse count data at the three sub-leks of Waunita in Spring 2022

2022	Main Lek			North Meadow			East Ridge			
Date	High Male	High Female	High Unknown	High Male	High Female	High Unknown	High Male	High Female	High Unknown	Total*
27-Mar	0	0	0	50	0	5	25	0	0	55
1-Apr	0	0	0	0	0	33	0	0	20	53
2-Apr	0	0	0	45	5	38	5	1	0	94
3-Apr	0	0	0	31	4	0	17	4	0	56
4-Apr	0	0	0	25	1	3	4	0	0	33
5-Apr	0	0	0	75	8	11	1	0	0	95
6-Apr	0	0	0	14	0	17	5	0	0	36
7-Apr	0	0	0	61	3	0	20	0	3	88
8-Apr	0	0	0	28	5	69	13	0	0	102
9-Apr	0	0	0	40	1	0	6	0	0	47
10-Apr	0	0	0	14	1	23	2	0	0	40
11-Apr	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12-Apr	0	0	0	64	3	0	0	0	0	67
13-Apr	0	0	0	23	0	18	0	0	0	41
14-Apr	0	0	0	17	0	34	0	0	0	51
15-Apr	0	0	0	0	0	0	1	0	0	1
16-Apr	0	0	0	15	0	2	1	0	0	18
17-Apr	0	0	0	11	23	0	2	0	0	36
18-Apr	0	0	0	14	0	7	1	0	0	22
19-Apr	0	0	0	11	0	26	9	0	0	46
20-Apr	0	0	0	0	0	17	0	0	0	17
21-Apr	0	0	0	21	1	0	3	0	0	25
22-Apr	0	0	0	18	0	20	0	0	0	38
23-Apr	0	0	0	9	4	40	0	0	0	53
24-Apr	0	0	0	15	2	23	0	2	0	42
25-Apr	0	0	0	10	0	74	2	0	0	86
26-Apr	0	0	0	30	3	24	10	0	0	67
27-Apr	0	0	0	30	2	23	1	0	0	56
28-Apr	0	0	0	80	7	0	12	0	1	100
29-Apr	0	0	0	31	2	0	0	0	0	33
30-Apr	0	0	0	27	4	8	9	0	4	52
1-May	0	0	0	34	1	25	2	0	0	62
2-May	0	0	0	27	3	0	0	0	0	30
3-May	0	0	0	30	5	23	0	0	0	58
4-May	0	0	0	22	0	40	0	0	0	62
5-May	0	0	0	58	5	39	6	0	0	108
Average Birds per day	0/35 = 0			1660/35 = 47.4			167/35 = 4.8			1815/35 = 51.9

Notes: **Blue** indicates season high counts. These are not necessarily the total high counts for males, females or unknown, because they are only for the individual lek. The high male, female, unknown, and totals came from leks combined. * Total grouse count is not always the sum of the individual counts because grouse may have moved among locations and would have been counted twice. The total count does not double count individuals seen at multiple lek locations on a day. On April 11, volunteer was parked on the road for the closure day, and due to low light, was parked at an angle where they could not get the lek site in view, and chose to not turn their car on to reposition due to concern of disturbing potential grouse. Average birds per day does not include 27 March or 11 April. Data from the training day March 27 is shown here but not included in the statistics.



Tour group in the trailer on 9 April 2022. Photo by Amanda Aulenbach.

Statistic	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
High count males	17	30	38	34	37	29	32	27	22	31
High count females	19	27	26	12	33	25	42*	30	12	20
High count males + females	30	37	52	40	63	53	72	51	25	37
Days grouse present at lek	30/30	39/40	37/37	40/41	38/40	40/40	40/40	41/41	34/40	39/40
Days grouse flushed before sunrise	X/30; 0%	5/40; 12.5%	2/38; 5.3%	9/40; 22.5%	3/40; 7.5%	10/40; 25%	15/40; 37.5%	21/40; 52.5%	38/40; 95%*	35/40; 87.5%
Days flushed by human activity	1/30; 3.3%	1/40; 2.5%	2/38; 5.3%	2/37; 5.4%	2/37; 5.4%	2/40; 5.0%	1/40; 2.5%	2/40; 5.0%	3/40; 7.5%	2/40; 5%
Visitor numbers (including volunteers)	286	374	355	354	351	435	445	536*	327	311
Visitor numbers (not including volunteers)	ND	318	290	301	282	333	374	470*	274	233
Vehicle numbers (including groups and monitors)	110	156	134	140	133	184	174	199*	141	173
Vehicle numbers (no volunteers); % of total vehicles that are volunteers	ND	102; 34.6%	85; 36.6%	97; 30.7%	80; 39.8%	109; 40.7%	115; 33.9%	140; 29.6%	98; 30.5%	118; 31.7%
Days at least one visitor at site (out of total monitored days)	29/30; 97%*	33/37; 89%	38/41; 93%	37/40; 92.5%	31/39; 79.5%	34/39; 87.2%	37/39; 92.5%	34/40; 85.0%	34/40; 85%	35/40; 87.5%
Percent of vehicles that violated protocol	29%*	19%	12%	8.9%	8.3%	20.7%	13.2%	5.7%	17.6%	10.2%
Number of U.S states represented	23	31*	24	25	30	28	26	27	24	27
Number of countries	2	4	3	5	5	5	6	9*	4	9*

Statistic	2014	2015	2016	2017	2018	2019	2020 Pandemic	2021	2022
High count males	19	28	27	23	17	16	21	38	80*
High count females	14	4	9	6	5	9	2	8	23
High count males + females	44	29	34	29	20	23	21	45	99*
Days grouse present at lek	20/40**	39/40 [#]	38/40 [#]	37/40 [#]	26/28 ^{#+}	35/40 [#]	4/4	31/35 [#]	34/35 [#]
Days grouse flushed before sunrise	6/20; 30%	5/39; 12.8%	5/40 12.5%	4/40; 10%	4/20 20%	9/26 35%	No data	21/39 54%	15/35 43%
Days flushed by human activity	3/20; 15%	2/39; 5.1%	0/40; 0%	0/40; 0%	0/28 0%	0/26 0%	No data	1/23 4%	6/35 17%*
Visitor numbers (including volunteers)	357	370	371	396	358	270	NA	246	331
Visitor numbers (not including volunteers)	297	299	310	333	290	214	NA	203	269
Vehicle numbers (including groups and volunteers)	133	133	136	135	143	122	NA	113	129
Vehicle numbers (no volunteers); % of total vehicles that are volunteers	75; 43.6%	91; 46.2%*	93; 31.6%	93; 31%	98; 32%	70; 43%	NA	90; 20%	82; 36%
Days at least one visitor at site (out of total monitored days)	28/40; 70%	30/39; 77%	27/40; 67.5%	27/40; 67.5%	25/28 (89%) ^{^+}	23/26 (88%)	NA	22/23 (96%) [^]	21/23 91%
			26/31 (84%) [^]	25/30 (83%) [^]					
Percent of vehicles that violated protocol	3%	8.3%	9%	19%	11%	11%	NA	33%	8.5%
Number of U.S states represented	23	22	24	21	31*	25	NA	22	13
Number of countries	5	4	4	4	8	5	NA	2	4

*Represents highest values recorded since 2004

** In 2014, the grouse started moving to new locations (grouse may have been at other locations besides Main Lek).

[#]This value represents grouse present at all three lek locations: North Meadow, East Ridge, Main lek

⁺In 2019, volunteers were not present at the parking area on closed dates, volunteers were present on 26 days

[^]Represents the number of days visitors were present when the lek was open for viewing.

Disturbances and Flushing

Grouse Flushes and Disturbances

Earliest flush time: 0601

Longest duration of time grouse flushed before sunrise: 27 minutes on 17 April (flush event at 0601)

Latest flush time: 0830

Longest duration of time grouse flushed after sunrise: 183 minutes (3 hours and 3 minutes) on 4 April (flush event at 0830)

Frequency of days grouse flushed before sunrise: 15 (42.9%)

Frequency of days grouse flushed after sunrise: 20 (57.1%)

Cause of Single, Multiple, or Entire Lek Flush

Unknown/no disturbance: 32 (56.1%)

Weather: 2 (3.5%)

Coyotes: 10 (17.5%)

Golden eagle (and other birds of prey): 6 (10.5%)

Ravens: 1 (1.8%)

Other (horses, cattle, elk): 0 (0%)

Human related disturbances not at parking area (passing vehicles): 4 (7.0%)

Human related disturbances at parking area: 2 (3.5%)

Total disturbances correlating with a single, multiple or entire lek flush: 57[#]

([#]This number is also the total number of observed flushes that occurred this season)

All potential disturbances to the grouse*

Coyotes: 22 (18.2%)

Golden eagle (and other birds of prey): 9 (7.4%)

Raven: 2 (1.7%)

Human related disturbances not at parking area (passing vehicles): 46 (38.0%)

Human related disturbances at parking area: 32 (26.4%)

Weather (snow, rain, wind): 3 (2.5%)

Other (elk, mountain lion): 7 (5.8%)

Total potential disturbances: 121

All human related potential disturbances*

Human activities associated with parking area

Car doors slamming (includes getting out of car**): 10 (13.5%)

Car idling: 1 (1.3%)

Left site early: 3 (4.1%)

Arrive at site late: 4 (5.4%)

Talking in car, beeping, coughing, moving, using bathroom: 6 (8.1%)

Started engine early/during morning: 4 (5.4%)

Car horn in parking lot: 0 (0%)

Vehicle high beams: 0 (0%)

Total: 28

Human activities not associated with parking area

Vehicle drove by on County Road: 46 (62.2%)

Passing vehicle honked: 0 (0%)

Total: 46

Total human related disturbances: 74

*Potential disturbances did not necessarily lead to a response by sage-grouse. Included above are those that correlated with a grouse response and those that did not. Included disturbances that volunteers recorded no response observed, because we might not necessarily see the response.

**Slamming doors and leaving vehicles were counted as separate individual incidences.



Left: Swainson’s Hawk on a fence post near the North Meadow lek on 25 April 2022. Photo by Amanda Aulenbach.
 Right: Elk near the North Meadow lek, male Gunnison Sage-grouse displaying on the lek on 25 April 2022. Photo by Amanda Aulenbach.

Summary of Lek Disturbances (Waunita Watchable Wildlife Site 2022)

Date	Disturbances	Flush to Sunrise	Weather
3/27*	0655 – fast truck 0713 – fast truck 0735 – coyote near N Meadow	0655 – around 20 flushed to E Ridge 0713 – around 20 flushed to E Ridge	26° F 0% cloud cover No precipitation Calm wind
4/1	0641 – coyote observed 0725 – car went down road	0651 – all flush (possibly due to coyotes) from N Meadow 0707 – around 20 flushed from E Ridge to behind ridge	31° F 100% cloud cover Snow night before
4/2	0644 – fast truck sped by 0650 – truck passed Golden Eagle seen on fence post W of N Meadow	0644 – around 70 flushed from N Meadow to the west (likely due to truck) 0650 – 4 flushed from N Meadow (likely due to truck) 0755 – around 50 flushed W from N Meadow	21° F 0% cloud cover No precipitation Calm wind
4/3	0640 – coyote High number of birds of prey in area	0640 – 4 flush from N Meadow to E Ridge (likely due to coyote)	36° F Slight clouds No precipitation No wind

Date	Disturbances	Flush to Sunrise	Weather
4/4	0500 – doors slam on vans (2) for tour group 0629, 0713, 0736, 0749, 0757, 0758, 0815, 0826 – vehicles driving down road past site 0630 – car arrived in parking lot late (sunrise @ 0646) 0634 – coyote 0744 – 2 coyotes observed 0800 – car from parking lot left site before volunteer gave the okay (no response from grouse) and slammed doors	0635 – one grouse on E Ridge flushed to unknown reason 0830 – almost all grouse flush from N Meadow, unknown reason	27° F 100% cloud cover No precipitation (foggy) Calm wind
4/5	0530, 0608, 0617 – cars drove by 0637 – coyote 0714 - coyote 0722 – wind started to pick up 0758 – began to snow Large elk herd on E Ridge	0634 – around half of the grouse in N Meadow flushed (unknown reason) 0725 – unknown number flushed from N Meadow due to wind gust 0744 – large gust of wind flushed most remaining grouse in N Meadow	48° F 90% cloud cover Light snow Calm – moderate wind
4/6	0500 – doors slam on vans (3) for tour group 0641 – elk on base of E Ridge and on top of E Ridge walked past grouse on E Ridge, no response from grouse 0644 – car from parking lot left at sunrise (no response from grouse) 0705 – Swainson’s hawk observed over E Ridge	0645 – around 10 flushed from N Meadow to unknown reason 0704 – around 10 flushed N from N Meadow (possibly due to hawk)	22° F 70% cloud cover No precipitation No wind
4/7	0455 – doors slam on van for tour group 0553, 0603, 0612 – car drove by 0645 – Northern harrier seen near N Meadow	0642 – 12 flushed from N Meadow to E Ridge (possibly due to Harrier) 0705 – flush 0735 – flush 0808 – unknown number flushed N from N Meadow, unknown cause	20° F 0% cloud cover No precipitation Calm wind
4/8	0502 – car locking horn (unknown response) 0634 – loud truck sped by 0653 – visitor used the bathroom (no response from grouse) 0656 – large bird of prey observed	0620 – around 20 flushed from N Meadow to W (unknown reason) 0635 – 32 flushed from N Meadow to E Ridge (possibly due to truck) 0645 – 8 flushed from N Meadow to W 0706 – 34 flush out of N Meadow to the E	19° F 0% cloud cover No precipitation Calm wind

Date	Disturbances	Flush to Sunrise	Weather
4/9	0514 – Tropical Birding van repositioned, doors slammed by both vans 0620 – sheriff truck drove loud/fast by site 0653 – coyote 0715 – loud talking in parking lot by Tropical Birding	0640 – unknown number of grouse flushed from N Meadow (possibly due to coyote)	24° F 0% cloud cover No precipitation Calm wind
4/10	0702 – coyote 2 vehicles drove past site, unknown times	0655 – around 17 flushed from N Meadow 0702 – few grouse flushed likely due to coyote, most stayed	38° F Cloudy No precipitation windy
4/11	0456 – loud interaction with visitor, visitor used parking lot despite being closed (see protocol violations) 0528 – volunteer spoke briefly with car that stopped in the parking lot, car departed at 0530 4 other vehicles were seen driving past the site, unknown times	NA	28° F 0% cloud cover No precipitation Calm wind
4/12	0718 – coyote in N Meadow 0727 – truck drove past 3 total vehicles drove past	No flushes observed	40° F 90% cloud cover Snow – light but picked up once grouse left for the morning Moderate wind
4/13	No vehicles seen	0715 – all birds flushed, didn't see them fly	15° F 30% cloud cover No precipitation Windy
4/14	0631 – truck drove past 0635 - volunteer spoke briefly with car that stopped in the parking lot, car departed at 0642 (car also arrived late, sunrise @ 0632) 0700 – Bald Eagle seen	0631 – 34 birds flushed from N Meadow to the W (likely due to truck)	13° F 40% cloud cover No precipitation Light wind
4/15	0644 – car drove past	Grouse only observed on E Ridge, no grouse seen in N Meadow	34° F 100% cloud cover No precipitation No wind
4/16	0521 - volunteer spoke briefly with car that stopped in the parking lot, car departed at 0523 0614 – car drove past going N	0616 – coyote walked directly through N Meadow and flushed all grouse except for 2 males, then spotted a flying grouse and	26° F 25% cloud cover No precipitation Light wind

Date	Disturbances	Flush to Sunrise	Weather
4/17	0622 – car drove past going S 0637 – same car as 0622 drove past going N 0641 – car drove past going S 0545 – coyotes howling	ran/chased it the length of the willows until view was blocked by other willows 0601 – 3 flushed from N Meadow to the N, unknown cause 0609 – 23 flushed from N Meadow to the N, unknown cause 0620 – around 15 flushed from N Meadow, unknown cause	35° F 0% cloud cover No precipitation No wind
4/18	None observed	0630 – all flushed (around 15) from N Meadow to the N, unknown cause	30° F 0% cloud cover No precipitation No wind
4/19	0616 – one visitor exits trailer 0625 – rest of group exits trailer 0643 – group from trailer departs site in vehicle against volunteer instruction (see protocol violations)	0612 – 20 flushed from N Meadow (likely due to trailer noise) 0616 – 12 flushed from N Meadow (likely due to trailer noise)	30° F 0% cloud cover No precipitation Calm wind
4/20	Bad car accident on US50 right before the turn off to the site Possible mountain lion screams Coyote seen on E Ridge, no grouse present Elk seen on E Ridge, no grouse present	0621 – unknown number flushed to the west, most grouse	47° F 20% cloud cover No precipitation No wind
4/21	0629 – coyote in N Meadow	0629 – 18 flushed from N Meadow due to coyote 0634 – 4 flushed from N Meadow, unknown cause	30° F 0% cloud cover No precipitation Calm wind
4/22	0527 – coyotes howling from behind E Ridge 0603 – coyote headed towards the N Meadow 0610 – coyote still in area, elk on mountain, golden eagle flying	0621 – 8 flushed from N Meadow towards E Ridge 0627 – around 30 flushed from N Meadow to the N	30° F 0% cloud cover No precipitation No wind
4/23	0538 – car drove past 0600 – car arrived in parking lot late (sunrise @ 0620) 0620 - coyote	0620 – all (around 40 grouse) flushed from N Meadow due to coyote	32° F 80% cloud cover Snow No wind
4/24	None observed	0651 – around 20 flushed from N Meadow, some to E Ridge	23° F 100% cloud cover No precipitation No wind

Date	Disturbances	Flush to Sunrise	Weather
4/25	0620 – coyote in area 12 elk seen	0628 – around 70 flushed from N Meadow to the W (possibly due to coyote)	28° F 50-100% cloud cover Snow/rain Calm wind
4/26	None observed	0700 – 8 flushed from N Meadow 0708 – 49 flushed from N Meadow	22° F 0% cloud cover No precipitation Calm wind
4/27	0432 – many coyotes howling 0636 – car drove past 0637 – Golden Eagle flew away from lek 0643 – car drove past	0627 – around 55 flushed from N Meadow to the N (possibly due to Golden Eagle) 0648 – 1 flushed from N Meadow to the N, unknown reason	32° F 50% cloud cover No precipitation Calm wind
4/28	0636-0650 – coyote in area, never interacted with grouse 0724 - raven	0719 – 12 flushed from N Meadow to the W 0724 – final 15 flush from N Meadow to the W (possibly due to a raven) 0730 – 2 flushed from E Ridge	29° F 0% cloud cover No precipitation Light wind
4/29	None observed	0713 – around 25 flushed from N Meadow, unknown reason 0715 – around 6 (rest of grouse) flushed from N Meadow, unknown reason	33° F 5% cloud cover No precipitation No wind
4/30	0540 – car arrived in parking lot late (sunrise @ 0611) and slammed car door 0548 – car going N fast and loud 0600 – same car that arrived late started engine, when asked to turn it off by volunteer they left the site early 0601 – 7 elk crossed dirt road, no response from grouse 0604 – fast car, no response from grouse 6011 - sirens heard from US50, no response from grouse 0653 – Raptor seen on fence post in N Meadow 0739 – coyote to the right of group of grouse on E Ridge	0639 – 15 flushed from N Meadow to the N (unknown reason) 0653 – 17 flushed from N Meadow to the N (likely due to raptor) 0741 – most grouse on E Ridge flushed due to coyote	25° F 0% cloud cover No precipitation No wind
5/1	None observed Total of 3 vehicles seen, unknown times	0721 – 60 flushed from N Meadow, unknown reason	30° F 0% cloud cover No precipitation Calm wind

Date	Disturbances	Flush to Sunrise	Weather
5/2	0635 – began to snow, no response from grouse 2 vehicles seen, unknown times	0655 – 30 flushed from N Meadow, flush not seen, unknown reason	34° F 50% cloud cover Some precipitation the night before, light snow No wind
5/3	None observed	0709 – all (58) flushed from N Meadow, unknown reason	26° F 0% cloud cover No precipitation Calm wind
5/4	0641 - coyote 2 total vehicles seen, unknown times	0641 – around 40 flushed from N Meadow due to a coyote	30° F 80% cloud cover Rain No wind
5/5	0602-0630 – ravens near lek, no response from grouse	0709 – all (around 50) flushed from N Meadow, unknown reason	28° F 80% cloud cover No precipitation Calm wind

*Data from 3/27 is not included in the statistics, but is summarised in this table.



Gunnison Sage-grouse in the North Meadow on 1 May 2022. Photo by Amanda Aulenbach.

Waunita Watchable Wildlife Site Daily Lek Statistics (2022)						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27 March 0700 No viewing Volunteer Training Male High Count: 50 Female High Count: 0 Unknown High Count: 5 Total Count: 55 Flushed: 0655, 0713 Reason: fast trucks passing site (both times) People: 7 Vehicles: 2	28 March 0658 No viewing	29 March 0657 No viewing	30 March 0655 No viewing	31 March 0653 No viewing	1 April 0652 Male High Count: 0 Female High Count: 0 Unknown High Count: 33 Total Count: 53 Flushed: 0651, 0707 Reason: coyote, unknown People: 17 Vehicles: 5	2 April 0650 Male High Count: 45 Female High Count: 5 Unknown High Count: 38 Total Count: 94 Flushed: 0644, 0650, 0755 Reason: truck, truck, unknown People: 16 Vehicles: 11
3 April 0649 Male High Count: 31 Female High Count: 4 Unknown High Count: 0 Total Count: 56 Flushed: 0640 Reason: coyote People: 21 Vehicles: 4	4 April 0647 Male High Count: 25 Female High Count: 1 Unknown High Count: 3 Total Count: 33 Flush: 0635, 0830 Reason: both unknown People: 21 Vehicles: 7	5 April 0646 Male High Count: 75 Female High Count: 8 Unknown High Count: 11 Total Count: 95 Flushed: 0634, 0725, 0744 Reason: unknown, wind, wind People: 20 Vehicles: 5	6 April 0644 Male High Count: 14 Female High Count: 0 Unknown High Count: 17 Total Count: 36 Flushed: 0645, 0704 Reason: unknown, hawk People: 23 Vehicles: 8	7 April 0643 Male High Count: 61 Female High Count: 3 Unknown High Count: 3 Total Count: 88 Flushed: 0642, 0705, 0735, 0808 Reason: harrier, unknown, unknown, unknown People: 17 Vehicles: 6	8 April 0641 Male High Count: 28 Female High Count: 5 Unknown High Count: 69 Total Count: 102 Flushed: 0620, 0635, 0645, 0706 Reason: unknown, truck, unknown, unknown People: 20 Vehicles: 7	9 April 0640 Male High Count: 40 Female High Count: 1 Unknown High Count: 0 Total Count: 47 Flushed: 0640 Reason: coyote People: 35 Vehicles: 7
10 April 0638 No viewing Male High Count: 14 Female High Count: 1	11 April 0637 No viewing Male High Count: NA Female High Count: NA	12 April 0635 No viewing Male High Count: 64 Female High Count: 3	13 April 0634 No viewing Male High Count: 23 Female High Count: 0	14 April 0632 No viewing Male High Count: 17 Female High Count: 0	15 April 0631 No viewing Male High Count: 1 Female High Count: 0	16 April 0630 No viewing Male High Count: 15 Female High Count: 0

Waunita Watchable Wildlife Site Daily Lek Statistics (2022)

Unknown High Count: 23 Total Count: 40 Flushed: 0655, 0702 Reason: unknown, coyote People: 1 Vehicles: 1	Unknown High Count: NA Total Count: NA Flushed: NA Reason: NA People: 3 Vehicles: 3	Unknown High Count: 0 Total Count: 67 Flushed: none Reason: NA People: 1 Vehicles: 1	Unknown High Count: 18 Total Count: 41 Flushed: 0715 Reason: unknown People: 1 Vehicles: 1	Unknown High Count: 34 Total Count: 51 Flushed: 0631 Reason: truck People: 1 Vehicles: 1	Unknown High Count: 0 Total Count: 1 Flushed: none Reason: NA People: 1 Vehicles: 1	Unknown High Count: 2 Total count: 18 Flushed: 0616 Reason: coyote People: 1 Vehicles: 1
17 April 0628 Male High Count: 11 Female High Count: 23 Unknown High Count: 0 Total Count: 36 Flushed: 0601, 0609, 0620 Reason: all unknown People: 19 Vehicles: 7	18 April 0627 Male High Count: 14 Female High Count: 0 Unknown High Count: 7 Total Count: 22 Flushed: 0630 Reason: unknown People: 10 Vehicles: 3	19 April 0625 Male High Count: 11 Female High Count: 0 Unknown High Count: 26 Total Count: 46 Flushed: 0612, 0616 Reason: both trailer noise People: 8 Vehicles: 6	20 April 0624 Male High Count: 0 Female High Count: 0 Unknown High Count: 17 Total Count: 17 Flushed: 0621 Reason: unknown People: 2 Vehicles: 2	21 April 0623 Male High Count: 21 Female High Count: 1 Unknown High Count: 0 Total Count: 25 Flushed: 0629, 0634 Reason: coyote, unknown People: 5 Vehicles: 4	22 April 0621 Male High Count: 18 Female High Count: 1 Unknown High Count: 20 Total Count: 38 Flushed: 0621, 0627 Reason: both unknown People: 17 Vehicles: 4	23 April 0620 Male High Count: 9 Female High Count: 4 Unknown High Count: 40 Total Count: 53 Flushed: 0620 Reason: coyote People: 6 Vehicles: 4
24 April 0619 Male High Count: 15 Female High Count: 2 Unknown High Count: 23 Total Count: 42 Flushed: 0651 Reason: unknown, no disturbance observed People: 13 Vehicles: 4	25 April 0617 Male High Count: 10 Female High Count: 0 Unknown High Count: 74 Total: 86 Flushed: 0628 Reason: coyote People: 6 Vehicles: 3	26 April 0616 Male High Count: 30 Female High Count: 3 Unknown High Count: 24 Total Count: 67 Flushed: 0700, 0708 Reason: unknown, no disturbance observed People: 4 Vehicles: 3	27 April 0615 Male High Count: 30 Female High Count: 2 Unknown High Count: 23 Total Count: 56 Flushed: 0627, 0648 Reason: golden eagle, unknown People: 1 Vehicles: 1	28 April 0614 Male High Count: 80 Female High Count: 7 Unknown High Count: 1 Total Count: 100 Flushed: 0719, 0724, 0730 Reason: unknown, raven, unknown People: 1 Vehicles: 1	29 April 0612 Male High Count: 31 Female High Count: 2 Unknown High Count: 0 Total count: 33 Flushed: 0713, 0715 Reason: both unknown People: 2 Vehicles: 2	30 April 0611 Male High Count: 27 Female High Count: 4 Unknown High Count: 8 Total count: 52 Flushed: 0639, 0653, 0741 Reason: unknown, raptor, coyote People: 16 Vehicles: 7

Waunita Watchable Wildlife Site Daily Lek Statistics (2022)						
1 May 0610	2 May 0609	3 May 0608	4 May 0606	5 May 0605	6 May 0604	7 May 0603
No viewing	No viewing	No viewing	No viewing	No viewing	No viewing	No viewing
Male High Count: 34	Male High Count: 27	Male High Count: 30	Male High Count: 22	Male High Count: 58		
Female High Count: 1	Female High Count: 3	Female High Count: 5	Female High Count: 0	Female High Count: 5		
Unknown High Count: 25	Unknown High Count: 0	Unknown High Count: 23	Unknown High Count: 40	Unknown High Count: 39		
Total Count: 62	Total Count: 30	Total Count: 58	Total Count: 62	Total Count: 108		
Flushed: 0721	Flushed: 0655	Flushed: 0709	Flushed: 0641	Flushed: 0709		
Reason: unknown	Reason: unknown	Reason: unknown	Reason: coyote People: 1	Reason: unknown		
People: 1	People: 1	People: 1	Vehicles: 1	People: 1		
Vehicles: 1	Vehicles: 1	Vehicles: 1		Vehicles: 1		

* People and vehicles include volunteers.

Gunnison Sage-grouse Watchable Wildlife Program Annual Report 2022

Discussion and Recommendations

In 2022, Gunnison Sage-grouse continued to use the Waunita lek site, with most of the use occurring in the North Meadow and less on the East Ridge (change in distribution and movement away from the Main Lek began in 2014). No grouse were observed in the Main lek during the 2022 viewing season. Intra-lek area movement was common between the North Meadow and the East Ridge, but less so from the East Ridge down to North Meadow. In 2018 and confirmed in 2021, grouse were using the east facing side of the East Ridge and moving from the ridge top (observable from the Waunita Watchable Wildlife Site) to the east facing slope and the habitat on that side of the ridge that is not visible from the Waunita Watchable Wildlife Site. In 2022, this was also observed but seemed to be less so than the last couple of years.

The highest high male count was 80 on 28 April, the highest high female count was 23 on 17 April, and the highest combined high male and female count was 99 on 28 April. The highest combined count including males, females and individuals of unknown sex was 108 grouse on 5 May. Overall grouse numbers were very high in 2022, relative to the last 18+ years of counts. The high male count and the high combined male and female count were the highest recorded in the 18-year record. The high female count was the highest recorded since 2010. It should be noted that the low light conditions, the long distance from the viewing site to the lek, the dense ground vegetation, the complex topography on the lek, and the large landscape where the birds have multiple lekking locations and move between these pose challenges to count accurately and to differentiate males and females. Males are readily seen due to their relatively large size, dark coloration from behind, white coloration from the front, movements and display behaviors. However, when males are not displaying they can be challenging to differentiate from females. In 2022, we had numerous high counts of grouse flushing off the North Meadow and during these flush counts gender identification is particularly difficult. However, most of the counts in 2022 are likely conservative counts of grouse numbers due to the challenges mentioned above.



Photo taken of the view from the parking lot on 4 April 2022 by Amanda Aulenbach.

In 2022, we observed a total of six human related disturbances that may have been the cause of grouse flushing events. We detected one incidence of visitor behavior (leaving the trailer early and leaving the site early) coinciding with a grouse flushing event and possibly being the cause of disturbance. No other visitor disturbances were observed to lead to a flushing event. This is likely related to the increased distance of the birds from the viewing area which is typically about 1 km away from the parking lot. The other four grouse flush events coincided with passing traffic along County Road 887. In addition to these human related disturbances, ten additional flush events coincided with coyote activity. This number is increased from seven in the 2021 viewing season. Coyotes were frequently observed at the lek this year (a total of 33 times), although most often (69.7% of the time) no response from grouse was observed. This statistic is lower than in 2021, where 88% of the time no response from grouse was observed. This could mean that coyotes are causing grouse to flush more often, as no coyotes were reported for causing grouse to flush in 2018, and only eleven were seen all season.

Main Lek

No grouse were observed at the Main Lek in 2022. We continue to manage the viewing site and parking lot to minimize disturbances to the Main Lek and potentially allow grouse to move back to this location.

North Meadow

The North Meadow was used consistently, more frequently and in greater abundance than the East Ridge. Grouse occupied the North Meadow 23 of the 23 viewing days (100%) compared to 19 of the 23 viewing days (83%) in 2021 and 20 of 26 viewing days (77%) in 2019. Grouse activity in the North Meadow seemed to stay consistent throughout the viewing season, and grouse frequently flushed from here to either the west (perhaps toward the Waunita Northwest lek), or to the East Ridge later in the morning. Clear observations in the North Meadow were obstructed by dense willows between the viewing area and the lekking areas and this made it more challenging for visitors, especially those in the parking lot, depending on the angle they were parked. Grouse seemed to disappear easily and quickly in the willows and small topographical complexities in the North Meadow, and it was difficult to get the full count. Typically when grouse flushed from the North Meadow it was apparent that many other grouse were also at the lek but not visible prior to flight. Counts, especially known sex counts, may be underestimated because of this. The site continues to benefit from Gunnison County's "No Parking" restrictions along County Road 887 north of the lek viewing area that deter visitors from trying to obtain closer views and create potential disturbances of the grouse in the North Meadow.

East Ridge

The East Ridge was used consistently throughout the season, but less grouse were seen there than in the North Meadow. In addition, less grouse were seen on East Ridge this season than in 2021 and 2019. Grouse were observed on the East Ridge 16 of the 23 (70%) viewing days, compared to 17 of the 23 viewing days (74%) in 2021 and 24 of 26 (92%) days in 2019. On the East Ridge, grouse occurred more frequently in smaller groups. They could be found in various areas along the Ridge but were mostly observed on the ridge spine and northern end of the Ridge. Grouse were observed flying and walking from the North Meadow to the East Ridge. Grouse present at the top of the East Ridge provided reasonable viewing with a spotting scope, especially when grouse were silhouetted on the ridge and when the sun broke the horizon. Distinctive identifying features of males could be readily observed.

Sunrise Time

An interesting metric that may provide insight into the well-being of the lek is residence time each day on the lek. This can be quantified with the time of flushing relative to sunrise time. In 2012-2013 grouse departed the Main Lek very early (87-95% of flushes occurred before sunrise). This early flushing made viewing challenging in low light conditions, but also indicated grouse were likely responding to consistent high visitation by predators, relatively close proximity of continuous activity at the viewing location for 40 consecutive days each season, and possibly other increases in human activity (more traffic

on County Road 887 and U.S. Highway 50). In 2022, grouse flushed before sunrise 42% of time. Since 2014, the average percentage of flushes before sunrise was 27% compared to 91% in 2012-2013. From 2005-2011, the average percentage of flushes before sunrise was 22%. In 2006 they flushed before sunrise only 5% of the time. From 2010-2013 this percentage raised to 68% and by 2014, the grouse started to relocate and relatively few used the Main Lek. In the last two years, the average percentage of flushes before sunrise was 48% (54% in 2021 and 42% in 2022). This increase over the recent later flushing behavior could be associated with grouse using the North Meadow more, which is closer to County Road 887. Local traffic on County Road 887 does appear to cause flushing by the grouse, particularly when fast moving vehicles speed by the lek. This also points to the importance of managing the Waunita viewing site and County Road 887 to restrict visitor access north of the viewing site. Since Gunnison County began placing No Parking signs along the county road, we have had very few observations of visitors attempting to move beyond the watchable wildlife site to gain closer viewing access.

Visitation and Site Management

In 2022, the Waunita Watchable Wildlife Site received 269 true visitors, compared to 203 in 2021 and 214 in 2019. There were 82 true visitor vehicles in 2022, compared to 90 in 2021 and 70 in 2019. In 2022, the site was closed from 10 - 16 April, to create a period protecting the grouse from disturbance by human visitors. Over time, the number of available viewing days has declined from 40 days in 2004-2015 (1 April to 10 May). In 2018 and 2019, the site was closed 2 days per week allowing for 28 (2018) and 26 (2019) days open to visitors. In 2020, the site was closed for the season due to COVID-19. In 2021, the site was open from 1-10 April, closed from 11-17 April, open from 18-30 April and closed after 30 April, providing 23 days open to visitors. This management strategy of holding a closure week mid-season was continued in 2022. When comparing the days where at least one visitor came to the site since 2014, while the available viewing days has decreased, the number of days used has increased. It should also be noted that this year was the first year that a wait list was needed for booking reservations for both of the free Sisk-a-dee programs, showing a sustained 20+ year interest in the viewing the Gunnison Sage-grouse.

The number of visitor protocol violations in 2022 were much lower than in 2021. This year had only 9% of cars violate protocol compared to the 33% from 2021, which was the highest rate of protocol violations since data began being collected in 2004. However, for both years, only one occasion was a reaction observed from the grouse, and likely that is because many of the recorded disturbances were too subtle to affect the grouse at the distance they are (1 km) from the Watchable Wildlife parking area. However, our protocols intend to manage human behavior as if the grouse were still using the Main Lek and therefore provide the possibility for the birds to return to this location. Activity at the viewing area creates noise and movement that potentially have negatively impacted the birds over the years. It is important to continue to monitor human use and have volunteers on site to remind visitors of the viewing protocols. The more we can provide viewing from the viewing trailer, the more likely we reduce protocol violations and grouse disturbances.

The purpose of the no viewing days is to reduce human caused disturbance at the site. The 7 closed days in the 30-day viewing season reduced the total number of days that human activity was present by 42% over historic season of 40 consecutive open days. Volunteers were also not present at the parking lot in 2022 on closed dates. They parked on County Road 887 about 100 m below the Waunita Watchable Wildlife Site parking area and propped up a CPW sign that said the site was closed. This was the location also used in 2021. In previous years, volunteers parked closer to U.S. Highway 50 and had a poorer view of the lek. This new location allowed for better sage-grouse counts on closed dates and easy surveillance of the watchable wildlife site. Interestingly, during the closed period lower sage-grouse use was documented by volunteers. The only date where grouse were not observed on the North Meadow (where the volunteer was able to see the area) was during the closure week.

At least four visitors apparently did not know that the site was closed on a date they arrived for viewing. One was upset and drove past the volunteer and claimed they spoke with Lindsay Abernathy about when to come, and that closure dates were not discussed in those communications (which was not true). This scenario creates negative feelings about the program and species. Closure dates are heavily advertised on the Sisk-a-dee website, which was newly revamped this season. We will continue to work to proactively publicize site policies, management changes, and viewing protocols.

Viewing sage-grouse at the Waunita site poses many challenges in addition to the long-distance views (facing east into the sun, birds readily move to out of view locations on east side of East Ridge, in North Meadow numerous vegetative obstructions limit viewing potential). Nevertheless, visitors are able to observe the Gunnison Sage-grouse in the wild during the frigid spring dawn with a spotting scope and are able to observe distinctive features necessary for proper species identification. Seeing the Gunnison Sage-grouse provides a fulfilling thrill to most visitors.

During the season, there were some vehicles in the parking lot that required assistance from the volunteer to find and view the grouse. This is largely due to the challenging conditions for viewing, including if visitors did not have their own scope. With the help of a volunteer who knows where to look for the grouse and has developed a search image, the probability of a visitor successfully viewing the grouse increases substantially. This management strategy, providing more assisted viewing and less self-service viewing (which generally is associated with less success and higher potential disturbance) helps create a positive viewing experience, especially for visitors who travel long distances to Gunnison for this “bird”.

Visitors and communications

Sisk-a-dee continued to communicate with the public regarding the Watchable Wildlife Site. Many visitors who contact Sisk-a-dee are interested in viewing grouse outside of the 1-30 April viewing season. Many other calls and e-mails are related to specific questions about the viewing experience and timing of viewing. The public can contact Sisk-a-dee by phone (970-641-3959), by visiting the Sisk-a-dee webpage (Siskadee.org), or by Dr. Patrick Magee’s cell phone (970-641-3959) or e-mail address (pmagee@western.edu). They also contacted Lindsay Abernathy (lindsay.abernathy@western.edu or 336-709-9787) to make trailer reservations for 2022 and 2023.

Reservations and Fees

As of 2021, CPW required the possession of a State Wildlife Area pass, or a hunting or fishing license from private visitors. Commercial users are not required to obtain a hunting or fishing license or SWA Pass because they are under Sisk-a-dee’s commercial use permit. Instead of CPW issuing commercial use permits to each commercial birding group, they issue an umbrella permit to Sisk-a-dee and Sisk-a-dee then handles all the reservations and charges a fee to commercial users (and other groups that use the viewing trailer). Reservation fees for the viewing trailer remained at \$100 for the 2022 viewing season. This has been the same fee for 20+ years. The reservation policy is that groups can begin to reserve the trailer on 1 January for the following year to accommodate commercial bird viewing companies, who are scheduling their trips more than a year in advance. For example, several groups began reserving the trailer for the 2023 season on 1 January 2022. All groups must make a reservation under Sisk-a-dee’s special use permit with CPW and all groups are required to be in the trailer, not in the parking lot.

Visitor Economic Impact

Of the 12 surveys that were received, 10 were used (due to completeness of answers) to estimate the total amount of money spent by visitors in Gunnison. It was estimated that \$226.83 was spent per person, and when multiplied by the 269 true visitors, that totals to be **\$61,017.27**. However, due to the low survey number, this amount is likely not accurate to the true economic impact made by visitors who come to view the Gunnison Sage-grouse. A greater effort should be made next year to hand out and collect viewing surveys.

Volunteers

Volunteers represent the core of the Waunita Watchable Wildlife Program. These individuals woke up early, collected data, and interacted with the public on chilly mornings. Again in 2022, they were dependable and hard-working. Due to the difficulty of counting grouse at Waunita, on site volunteer training is critical. Ten volunteers in 2022 provided the work force to monitor human behaviors, interface with the public, and gather data. To recognize these individuals, CPW and Sisk-a-dee hosted a volunteer appreciation pizza dinner at the Gunnison Pizza Company in Gunnison on 1 May 2022. CPW generously supplied the food and each volunteer received a gift card to Mocha's coffee shop from Sisk-a-dee.

Waunita Watchable Wildlife Site Management Strategies

1. Established visitor conduct standards (viewing protocols)
2. Reservation system and commercial permitting for commercial birding groups
3. Communication strategy (website, email and phone contacts, blogposts)
4. Program coordination
5. Volunteer monitoring
6. Education effort (conservation programs and viewing tours)
7. Site establishment (conservation easement, CPW owned viewing location)
8. Site management (parking area and wall, viewing trailer, outhouse)
9. Enforcement via wildlife harassment statute
10. Closure dates (7 consecutive closed dates in middle of season equates to 42% fewer days with human activity at the site)
11. Monitor effectiveness of closure dates (a. volunteers monitor site on closed dates, b. volunteers park 100 m from site and intercept visitors before they get to site, and c. remote surveillance with cameras)
12. Prohibition of parking along county road
13. Encourage Gunnison County, CPW and USFWS law enforcement presence at site to enforce parking, site closure and wildlife harassment regulations
14. Funnel more individuals and small private groups into the viewing trailer

Appendices

Example documents that were used/given to volunteers in the 2022 viewing season.

Volunteer Duties

Viewing Day - Parking lot volunteer duties:

1. Pick up scope, clip board, and data sheets by 3:00 pm the day before.
2. Dress warmly and bring headlamp.
3. Allow 40 minutes to drive to the site and arrive at lek at least one hour and thirty minutes prior to sunrise (see schedule).
4. Set up spotting scope with window mount.
5. Greet visitors as they arrive and explain protocol.
 - a. Have them fill out economic impact survey completely.
 - b. Make sure they know to stay in their car with lights and motor off until you signal them.
6. Fill out visitor form, where they are from and number in car, and **all** other data.
7. If visitors arrive late exit your car and politely remind them of the viewing protocol and give them a copy.
8. If anyone violates the viewing policy (leave car, runs engine, uses restroom, etc.) be proactive and courteously remind them of the protocol. If they continue record their information and report to coordinator. Record if the grouse flush as a result of their carelessness.
9. Count grouse per protocol and completely fill out sheet, **record all disturbances**.
10. After your first accurate count, record license plate numbers and talk with visitors to point out grouse locations and answer questions.
11. After all grouse have flushed, tell visitors they can use the restroom and or leave.
12. Collect all visitor surveys, or let them know they can mail their responses (address is on sheet).
13. Return scope and data sheets **immediately** and sign volunteer sheet.

Non Viewing Day – Road Monitoring volunteer duties:

1. Pick up ‘site closed’ sign, data sheet and spotting scope by 3:00 pm the day before.
2. Dress warmly and bring head lamp.
3. Arrive at site at least 1 hour and 30 minutes prior to sunrise.
4. Park 100 m down road from the Watchable Wildlife Site parking area on side of the road, park at angle so you can set up spotting scope on window and view the lek..
5. Place sign outside of car, so that it is visible to oncoming vehicles.
6. As car approaches get out of your vehicle and greet the visitor, explain what you are doing if they ask.
 - a. This is a residential area, so it may be someone who lives nearby
 - b. If it is a visitor for the Waunita site, explain why we have closures
 - c. Suggest other days they may visit
7. Fill out data sheet, briefly explain conversation, record license plate, and all other data.
8. Using spotting scope conduct lek count.
9. Be aware of surroundings, note any predators, disturbances, or birds (if seen).
10. Stay at site until approximately 7:15 am, or until you feel birds would not be disturbed by possible late-viewers.
11. Return sign, turn in data sheet, and sign volunteer sheet.

**Waunita Watchable Wildlife Site Gunnison Sage-grouse Viewing
Scheduling Calendar
2022**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
March 27	March 28	March 29	March 30	March 31	April 1	April 2
NO VIEWING	NO VIEWING	NO VIEWING	NO VIEWING	NO VIEWING	Viewing Season Opens	Sisk-a-dee
Field Training Lindsay Amanda Liam Garrett Matthew Jett		Classroom Training			BirdQuest Nigel Sadler +44 7913 105119 birders@birdquest-tours.com N = 8 Comfort Inn	N=2 Lorna Thomas Angella Trnka 720-254-7968 Lornat303@gmail.com
					Sisk-a-dee Program 6:30pm H130	N=2 William (Bill) and Jane Perry Jperry59@frontiert.net
					Fri: Lindsay training Lauren, Kjerstine, and Anton in trailer	N=2 Peter and Donna Stumpp Donna.stumpp@gmail.com 303-588-4818 Holiday Inn
					Liam Parking lot	N=2 Ged and Teresa Caddick Ged@ecotours.com 813 476-2810
					Sat> Trailer: Pat Parking Lot: Kjerstine	N=1 Shelly Kirn 59 Herlax Circle Chico, CA 95926 530-518-5531
						N=1 Jacob Hall jacob.s.hall@gmail.com 3019960027 Gunnison Inn

						<p>N=2 Brigitte Cohn & David Cohn 818-644-1052 (David) 818-651-1152 (Britgitte) dvdcohn@gmail.com Holiday Inn</p> <p>N=1 Martin Klein l.martin.klein@gmail.com</p>
<p>April 3 VENT Brian Gibbons thehornedgaun@gmail.com</p> <p>Trailer: Jett Parking Lot: Liam</p>	<p>April 4 High Lonesome Bird Tours Forrest Davis forrest@highlone.com sometours.com N=14 12 participants and 2 leaders, Kip Miller (269) 876-7754) Comfort Inn Trailer: Anton Parking Lot: Amanda</p>	<p>April 5 High Lonesome Bird Tours Forrest Davis forrest@highlone.com sometours.com N=16 (14 participants, 2 leaders) Stephan Lorenz (607) 252-6770 birdingtravel@gmail.com Comfort Inn Trailer: Matthew Parking Lot: Jett</p>	<p>April 6 WINGS Birding Tours Stephanie Schaefer 866-547-9868 stephanie@wingsbirds.com N=17 (3 leaders, main is Skye Haas 906-869-6165 theowlranch@gmail.com) Holiday Inn Express Trailer: Lindsay Parking Lot: Kjerstine</p>	<p>April 7 Tom Painting tpainting51@gmail.com N=1 She Flew Sue Riff 9702324539 (Sue's cell) sheflew@gmail.com N=8 Quality Inn *Dick Filby would like this date if it becomes available, N=10* Sisk-a-dee Program 6:30pm H130 Trailer: Garrett Parking Lot: Matthew</p>	<p>April 8 Sisk-a-dee Jay Robertson (Hilo, HI) and Steve Nord 808-895-6201 Jrobinson18@hawaii.rr.com N=2 Gunnison Inn David Connell and wife wdavideconnell@gmail.com N=2 Gary Ender and Jerry Lerman 301-908-2039 (Gary) 978-973-4201 (Jerry) Gary_ender@cast.net N = 2 Quality Inn Betsy Moore bmoore5552@gmail.com N=2</p>	<p>April 9 Seven Ponds Nature Center & Colorado Birding Adventures Carl Bendorf 319-333-9667 carlbendorf@gmail.com N=8+2 guides Comfort Inn Trailer: Kjerstine Amanda Parking Lot: Lindsay</p>

					Tropical Birding AF CT Desiree Desilva 409-515-9110 Phil Chaon (Guide) 409-515-9110 info@tropicalbirding.com N = 14 Quality Inn Trailer: Pat Parking Lot: Anton	
April 10	April 11	April 12	April 13	April 14	April 15	April 16
NO VIEWING	NO VIEWING	NO VIEWING	NO VIEWING	NO VIEWING	NO VIEWING	NO VIEWING
Parking Lot: Jett	Parking Lot: Anton	Parking Lot: Matthew	Parking Lot: Kjerstine	Parking Lot: Garrett	Parking Lot: Lauren	Parking Lot: Lindsay
April 17	April 18	April 19	April 20	April 21	April 22	April 23
Wildside Nature Tours binns@wildsidetoursinc.com N=8 Leader: Chris Brown chris@wildsidetoursinc.com 609.575.1048 Inn at Tomichi Village Trailer: Jett Parking Lot: Anton	North Am. Partnership for International Birding David Trently david@pibird.com N=7 (guide is Andy Bankert 321-258-2353) Gunnison Inn Trailer: Liam Parking Lot: Amanda	Stephen Price Sprice81@gmail.com N=2 Days Inn John Parker Parkerj15@comcast.net (248)891-5559 N=1 Rodeway Inn Paul Stewart Paulstewart9762@gmail.com +44 7746837301 N=1 Holiday Inn Mark Robbins Van Remsen Gary Graves mrobbins@ku.edu <u>u</u> N=3 Quality Inn	Jeff Kaboly jeffk@jkaboly.com N=3 Trailer: Lindsay Parking Lot: Kjerstine	Wildwings Dick Filby dickfilby@hotmail.com N=2 Duncan McNiven & Debbie Pain +44 7455 830396 Alpine Inn & Suites Trailer: Garrett-Lindsay Parking Lot: Matthew	Earth Day Quetzal Tours Nick gave date to Colorado Field Ornithologists Nick Komar quetzal65@comcast.net N=15 Trailer: Lauren Parking Lot: Anton	Tropical Birding AF CT Desiree D'Sylva Phil Chaon (Guide) 409-515-9110 info@tropicalbirding.com N=8 Quality Inn Trailer: Lindsay Parking Lot: Kjerstine

		Trailer: Matthew Parking Lot: Jett				
April 24 She Flew Sue Riff sheflew@gmail.com 9702324539 N=8 Quality Inn Trailer: Jett Parking Lot: Liam	April 25 Trailer: TBA Parking Lot: Amanda	April 26 Trailer: TBA Parking Lot: Matthew	April 27 Trailer: TBA Parking Lot: Lindsay	April 28 Trailer: TBA Parking Lot: Garrett	April 29 Trailer: TBA Parking Lot: Lauren	April 30 Quetzal Tours Nick Komar quetzal65@comcast.net N=11 Trailer: Lindsay Parking Lot: Kjerstine
May 1 NO VIEWING Parking Lot: Liam	May 2 NO VIEWING Parking Lot: Amanda	May 3 NO VIEWING Parking Lot: Matthew	May 4 NO VIEWING Parking Lot: Kjerstine	May 5 NO VIEWING Parking Lot: Garrett	May 6 NO VIEWING	May 7 NO VIEWING

2022 Gunnison Sage-Grouse Lek Survey Form

DATE: _____ OBSERVER/VOLUNTEER: _____

TEMP: _____ % CLOUD COVER: _____ PRECIP: _____ WIND SPEED: _____

LEK NAME: WAUNITA

USGS QUAD: _DOYLEVILLE COUNTY _GUNNSION LAND STATUS: _____ PUBLIC _X
PRIVATE

TIME	LOCATION MAIN LEK	MALES	FEMALES	UNKNOWN*	PREDATORS OBSERVED/ INTERACTIONS	DISTURBANCE

HIGH COUNTS: Males _____ Females _____ Unknown _____

TIME	LOCATION NORTH MEADOW	MALES	FEMALES	UNKNOWN*	PREDATORS OBSERVED/ INTERACTIONS	DISTURBANCE

HIGH COUNTS: Males _____ Females _____ Unknown _____

TIME	LOCATION EAST RIDGE	MALES	FEMALES	UNKNOWN*	PREDATORS OBSERVED/ INTERACTIONS	DISTURBANCE

HIGH COUNTS: Males _____ Females _____ Unknown _____

COMMENTS: Behaviors observed and movement direction and time off/on the lek*:

* All flushed birds should be documented as Unknown

Totals for Main Lek, North Meadow, And East Ridge: Males _____ Females _____ Unknown _____ Total # of All Birds Seen _____

2022 Waunita Lek Site Visitation Study

Date: _____ Time Arrived: _____ Time Departed: _____

Sunrise: _____

Observer: _____ Trailer _____ Parking Lot _____

Weather (precipitation, wind, sky, temperature): _____

Grouse Count: _____ Male Peak, _____ Female Peak, _____ Total

Human Visitation

Group Type	Vehicle license plate and state	Where they are from	Number per car	Time arrived	Visitor arrive < sunrise?	Engine off throughout	Car noises	Time departed	After grouse left?	Human Activity	Time	Grouse Response	Time
Private													
Private													
Private													
Private													
Private													
Private													
Private													
Private													
Private													
Tour													
Tour													
Tour													
Volunteer													
Volunteer													
Volunteer													
CPW													

Comments (include visitor comments, incidents, notable bird observations):

2022 Waunita Lek Site Closed Dates Observations

Date: _____ Time Arrived: _____ Time Departed: _____

Sunrise: _____

Observer: _____

Weather (precipitation, wind, sky, temperature): _____

Total Number of Vehicles Seen: _____

Total Number of Vehicles Stopped: _____

Vehicle license plate and state	Where they are from	Number per car	Time arrived	Time departed	Drove past site?	Visited Site?	Turned Around?	Was another date suggested?	Briefly Describe Conversation

Sisk-a-dee
Gunnison Sage-grouse Viewing Survey

It is the intent of Sisk-a-dee to gauge the impact on the local economy of Gunnison County to best demonstrate to local businesses the importance of the Gunnison Sage-grouse to the area. In doing so we hope to be able to develop ways we can improve bird numbers through community involvement and offer a more pleasurable viewing experience for visitors while improving habitat for the Gunnison Sage-grouse population. Please take a few minutes to fill out this survey. If you like, take it with you and mail it back at your leisure to:

Sisk-a-dee * 323 N Wisconsin Street * Gunnison, Colorado * 81230

Thank you for helping the **GUNNISON SAGE-GROUSE**

Name: _____ Number in vehicle: _____ Date of Viewing: _____

Where you are traveling
from: _____

Rental Vehicle: _____ Yes _____ No

Where did you hear about Gunnison Sage Grouse?

Did you come to Gunnison primarily to see our Sage-grouse?

Indicate whether expenses are associated with individual or
group: _____

How did you find out about the Waunita Watchable Wildlife
Program? _____

How did you get to Gunnison?

Transportation cost? _____ Mode of transportation

Where did you stay while in Gunnison? _____ Cost of lodging? _____

Where did you eat? _____ Cost of meals? _____

Were you able to buy memorabilia? _____

How much did you spend other than on food, lodging, and transportation during your visit? _____

What could we do to help enhance Gunnison's birding experience?

WHERE TO FIND BIRDS

Brown-capped Rosy-Finch (as well as Gray-crowned Rosy-Finch and Black Rosy-Finch):

- Drive around Crested Butte and Mount Crested Butte, look at feeders.
 - Follow Highway 135 (Main Street) north to Crested Butte
 - Many people look at websites and birding “chat rooms” ☺ to learn about sightings of rare birds in the area. They may have specific home addresses in Crested Butte to find the brown-capped rosy-finch at feeders. Most productive in Mount Crested Butte residential areas.

Waterfowl and shorebirds: (Barrow’s golden eye, American white pelican, loons, diving ducks, and cormorants):

- Blue Mesa reservoir, especially the narrows on the east end by the Highway 149 bridge
 - From Gunnison travel west on Highway 50 approximately 9 miles, need a spotting scope
- Gunnison Wastewater treatment plant
 - From Gunnison, head west on Highway 50 to mile post 153 (4.5 miles). Turn left (south) and cross the bridge. Park under the trees by the McCabe Wetlands sign. Walk the north side of the ponds, the road into the plant, and the south side of the property. Or drive along the road to the treatment plant and view from your vehicle.

Great blue herons, short-eared owls, rose-breasted grosbeaks and other migrants

- From Gunnison, take highway 135 14 miles northwest to the Roaring Judy Fish Hatchery. There is parking at several locations and the entire 783 acre site is open to the public. There are many acres of wetlands as well as two miles of frontage on the East River and upland meadows.

Eurasian collared dove:

- Drive around Gunnison! They are common all over town on power lines, in cottonwoods, and foraging on the ground or at feeders.

Dusky grouse:

- Black Canyon North and South Rim
- Crested Butte and Gothic areas

Turkeys

- Black Canyon, both the North and South Rim

Williamson’s sapsucker and golden eagles:

- Taylor Canyon
 - From Gunnison, take highway 135 north 10 miles to Almont.
 - In Almont, take CR 742 for 30 miles northeast to Taylor Park Reservoir.

Sage Birds (sage thrasher, sage sparrow, vesper sparrow, Brewer’s sparrow, green-tailed towhee, mountain bluebirds, etc.)

- From Waunita lek, keep driving up Waunita Hot Springs Road. There is public land where you can get out and walk around.
- Hartman’s Rocks (and up the road past Hartman’s...)
 - Follow Highway 50 west through town to the turn-off for Hartman’s (Gold Basin Road). Turn left and follow the road to the recreational pull off (on the right) or farther.
- The county road south of Parlin,
- 6 Mile Lane which is 6 miles east of Gunnison,
- Gold Basin Road which is past Hartman Rocks
- Basically anywhere on BLM land!

Bald Eagles

- Drive north of Gunnison, following the East River up to Crested Butte. In area around Roaring Judy Fish Hatchery is especially productive.

American Dipper

- Going north of Gunnison, follow the river to Almont and up the Taylor Canyon.

Waunita Watchable Wildlife Site Gunnison Sage-grouse Viewing Scheduling Calendar 2023

Updated 15 April 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
March 26 NO VIEWING	March 27 NO VIEWING	March 28 NO VIEWING	March 29 NO VIEWING	March 30 NO VIEWING	March 31 NO VIEWING	April 1 Viewing Season Opens WINGS Birding Tours Stephanie Schaefer 866-547-9868 greg@wingsbirds.com Sisk-a-dee Program 6:30pm Hurst Hall Rm 130
April 2 Sisk-a-dee	April 3 Victor Emanuel Nature Tours (VENT) Brian Gibbons Eric Bruhnke 512-328-5221 margaret@ventbird.com N = 16	April 4 Ornithology	April 5 Tropical Birding Desiree D'Sylva Phil Chaon (Guide) info@tropicalbirding.com 409-515-9110 N = 8	April 6 Highlonesome Bird Tours Kip Miller, guide (269) 876-7754 kipgmiller@gmail.com om Sisk-a-dee Program 6:30pm Hurst Hall Rm130	April 7 Sisk-a-dee Brigitte Cohn & David Cohn N=2 818-644-1052 (David) 818-651-1152 (Brigitte) dvdcohn@gmail.com om Pam Spaulding & Carol Besse N=2 spauldingpk@gmail.com	April 8 Highlonesome Bird Tours Kip Miller, guide (269) 876-7754 kipgmiller@gmail.com om
April 9 NO VIEWING	April 10 NO VIEWING	April 11 NO VIEWING	April 12 NO VIEWING	April 13 NO VIEWING	April 14 NO VIEWING	April 15 NO VIEWING

<p>April 16</p> <p>Wildside Tours Adrian Binns 267-968-9500 binns@wildsidetoursinc.com</p>	<p>April 17</p> <p>She Flew Bird Tours Sue Riffe sheflew@gmail.com</p>	<p>April 18</p>	<p>April 19</p> <p>North Am. Partnership for International Birding David Trently david@pibird.com</p>	<p>April 20</p> <p>Wildwings Dick Filby dickfilby@hotmail.com N=10</p>	<p>April 21</p>	<p>April 22</p> <p>Earth Day</p>
<p>April 23</p>	<p>April 24</p>	<p>April 25</p> <p>She Flew Bird Tours Sue Riffe sheflew@gmail.com</p>	<p>April 26</p> <p>Vicki Ramsey Eve43@sbcglobal.net C: 916-652-0489 N=2</p>	<p>April 27</p>	<p>April 28</p>	<p>April 29</p> <p>North Am. Partnership for International Birding David Trently david@pibird.com</p>
<p>April 30</p>	<p>May 1</p> <p>NO VIEWING</p>	<p>May 2</p> <p>NO VIEWING</p>	<p>May 3</p> <p>NO VIEWING</p>	<p>May 4</p> <p>NO VIEWING</p>	<p>May 5</p> <p>NO VIEWING</p>	<p>May 6</p> <p>NO VIEWING</p>

GUNNISON COUNTY SAGE-GROUSE CONSERVATION ACTION PLAN



Prepared by the Gunnison Basin Sage-Grouse Strategic Committee

Adopted by the Board of County Commissioners of Gunnison County October 20, 2009

Revised by the Gunnison Basin Sage-Grouse Strategic Committee in June 2022

Gunnison County Sage-Grouse Conservation Action Plan

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Introduction

This Conservation Action Plan is the result of the efforts of the Gunnison Basin Sage-grouse Strategic Committee to ensure that adequate work is being conducted to conserve the Gunnison Sage-grouse. By creating a Conservation Action Plan, the scope of the work can be narrowed to specific needs identified in the plan, helping to guide the group in its efforts. The actions in this plan are based on two different criteria.

1. The first is that every action addresses one or more of the ten objectives listed in the Strategic Plan. If it doesn't meet one of the objectives, it is unlikely that it fits into the role of the Strategic Committee.
2. The second criteria for actions included in this plan relate to the five listing factors of the U.S. Fish and Wildlife Service. Since ultimately, most of the decisions related to listing are based on these five factors, emphasis should be placed on the actions that can help answer and address these questions. This will demonstrate this Committee's efforts for the conservation of the sage-grouse in the Gunnison Basin. This Conservation Action Plan will help to continue to conserve the Gunnison Sage-grouse and demonstrate the willingness of the Gunnison County community to preserve and protect Gunnison Sage-grouse habitat.

It is the Committee's duty to rank and prioritize the actions based on available time and resources. Doing this will give the Committee focus and a goal to work towards. Some of these action items may take longer than others and it should be understood that the suggested timelines listed are provided only as estimates from which to set initial goals for completion of actions. The ultimate success of this Conservation Action Plan depends on the availability of resources to enable timely completion of tasks. We recognize that delays and/or bottlenecks may be inevitable. Regular evaluation of Action Item progress and results is important to properly manage these efforts and focus the project implementation team on key issues.

It is the intent that the Conservation Action Plan work in conjunction with the USFWS Recovery Implementation Strategy as numerous needed actions overlap.

Responsibility

Gunnison County is responsible for facilitating the implementation of this Conservation Action Plan with assistance from the appropriate stakeholders in the form of financial and physical resources, program oversight, guidance and direction. Successful implementation is limited to the degree that it complies with existing regulations (i.e. federal/state/local laws, etc...).

Including Stakeholders

One of the key elements of having a successful Action Plan is to include all stakeholders involved. The Strategic Plan identifies and defines stakeholder groups. Identifying stakeholders is the first step for working on this Conservation Action Plan. By including all interested parties, well thought out decisions will be made and all interests will have the opportunity to be heard. The involvement of stakeholders cannot be a passive invitation to participate, but a responsibility of the County to provide assurance that stakeholder participation is comprehensive and dedicated. Prior to implementing this Conservation Action Plan, the Gunnison County Wildlife Conservation Coordinator must create a database of stakeholders' contact information. The database will ensure a complete list of stakeholders for participation in meetings related to action items of interest to them.

Gunnison County Sage-Grouse Conservation Action Plan

Conservation Action Plan Prioritization Process

Prioritization of Action Items can assume a variety of criteria and assumptions. In the initial year of the Action Plan, the goal of the Committee was to make progress toward achieving the Strategic Plan mission.

Consequently, prioritization ranking was more a function of feasibility and likelihood of success rather than the overall impact of the results. In the beginning it is more important to raise awareness, assemble an organizational structure and experience success. We anticipate that future prioritization efforts will concentrate more on the consequence of the actions.

In order to prioritize action items, the Gunnison Basin Sage-Grouse Strategic Committee completed an exercise where each action item was evaluated on three criteria:

1. **Feasibility:** Whether or not the completion of the Action Item could be done in the 12- to 36- month time period for the plan.
2. **Resources:** Whether or not the resources needed to complete the Action Item are available or realistically obtainable.
3. **Sponsorship:** Those who would be responsible for completing the action item have the time and resources available to be successful.

Each of these criteria were ranked on a scale of three levels;

High: Highly likely that the action item would succeed.

Medium: May succeed but would depend on the scope and/or resources.

Low: Not likely to succeed or not likely to obtain necessary resources.

The members of the Gunnison Basin Sage-Grouse Strategic Committee each ranked every Action Item in 2009. High, medium, and low scores were tallied and priorities were determined based on these tallies. Action Items in this Plan are listed in order of the priority rankings completed by the Strategic Committee in 2009. It is important to point out that even though an Action Item may have received a lower ranking through this prioritization exercise, it does not mean the Action Item is not important. Some of the items that are needed the most to work toward conserving the grouse are also the least feasible, need the most resources, and will need the most sponsorship to complete. If a person, team, or agency takes sponsorship and works hard to complete a lower ranked item, it may move to the top of the priority list to complete. In 2022, the Action Items were prioritized again based on the assessment of the Strategic Committee, and several new Action Items were added, so the order of the Action Items no longer reflects priorities.

Implementation Schedule & Ongoing Planning Process

To achieve manageable results, Action Items are defined with the intent of being completed within 12-36 months. Should the scope of a particular Action Item grow beyond this timeframe, that Action Item should be re-evaluated. The items have been prioritized and timelines will be placed on the items to ensure the work continues to completion. Availability of necessary resources will influence scheduling of Action Items. Other scheduling considerations include the seasonality of the work, the life cycle of the sage-grouse and relationships among the individual Action Items.

Action Item Project Teams, when applicable, will provide the County with regular updates of their progress. Every 10 years the Strategic Committee should review Action Items, update the schedule, and address issues with the progress of Action Items. The Ongoing Planning Process (see page 25) is needed to ensure that current and future Action Items are relevant

and reflect the priorities of ongoing conservation efforts. On an annual basis, the County will review and approve the results of the annual planning process.

Summary

The Gunnison County Sage-Grouse Conservation Action Plan is considered a living document and must undergo continual review and revision to be effective. While the plan is the responsibility of Gunnison County, the success of the plan depends on the mobilization and commitment of the community at large. Involvement and compromise across stakeholders is necessary to achieve balanced results in light of the broader needs and interests of our community. In the end, we will meet the objectives set forth in the Strategic Plan.

Action Item Format

In defining Action Items, the Gunnison Basin Sage-Grouse Strategic Committee utilized the following consistent format to ensure that clearly defined goals, objectives, and strategies for success would ultimately result from the process of drafting a Conservation Action Plan. Action Items included in the remainder of this document follow the same format and include the same categories defined in the table below. The level of detail contained in the Action Item categories varies based on availability of information. Representations within the Action Items (scope of work, responsibility, results, schedule, etc.) are not a commitment or obligation and must be further defined.

Action Item Number & Title

Objective: (What objective the Action Item supports)

Action Description:	Provides an overview of the action item including the scope of the work required, the context of its origination and the significance that its completion will have on the preservation efforts.
Action Activity: (Clear Direction)	An overview of the steps required to successfully implement the Action Item.
Responsibility: (Passion)	Identifies the one or two entities (people, organizations, etc.) who the Strategic Committee believes should lead the effort to complete the Action Items. This person(s) represents the driving force behind the Action Item.
Measurable Results: (Intended Consequence)	On what standard will this Action Item be evaluated? There should be very clear, measurable results identified prior to starting any Action Item.
Stakeholders: (Ownership/Buy-in)	Stakeholder groups have been defined in the Strategic Plan and every Action Item should establish which of those stakeholders have an interest in this Action Item.
Schedule / Target End Date: (Schedule)	What is the intended start and end date for the Action Item? Identify any known interdependencies among Action Items or involving other community activity that may influence scheduling.
Resource Requirements / Source:	Identify how long it will take to implement the Action Item, how much money will be required (whether

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	direct expenditures or a value for internal resources) and estimated man-hours to complete the work.
Obstacles / Threats: (Managed Success)	In any project, there are forces that support the successful completion of the work and there are opposing forces. The idea is to anticipate the reasons why this project will not be successful so that these issues can be managed prior to or during the project.
Ranking / Priority	How important is this Action Item on its own merits and how does it compare across the other Action Items? Often times it is necessary for one task to be completed before something else can be started. These interdependencies are important to identify. Rankings were determined by the Strategic Committee and are shown for both 2009 and 2022.
Corresponding USFWS RIS Priority Actions and Activities	What are the corresponding Priority Actions and associated Activity from the USFWS Recovery Implementation Strategy (version 1, 2020) for the Gunnison Basin population?
Current Status and Ongoing Actions	What work remains to be done, as of 2022, related to this conservation activity?
Accomplishments by 2022	What work has been completed by 2022? This section lists available resources related to this conservation activity.

Action Item #1: Grazing Research

Objective: Research

Action Description:	Help with the coordination of the Grazing Research Project
Action Activity:	Have the Strategic Committee participate and offer facilitation of the development and implementation of the recent state species conservation trust fund project
Responsibility:	Strategic Committee, Stockgrowers
Measurable Results:	Grazing management practices that benefit sage-grouse needs and reduce controversy of grazing issues
Stakeholders:	Private landowners, public land management agencies, wildlife management agencies, technical/financial assistance agencies (NRCS)
Schedule / Target End Date:	5 – 6 years (2009) Completed assessments by 2012 (see accomplishments)
Resource Requirements / Source:	Funded at \$300,000 per year in 2009. No funding allocated or needed in 2022.
Obstacles / Threats:	2009: Continued funding Cooperation of landowners / managers Adequate resources to scope a project that will yield actionable results Impacts of research and technical needs of a study of this scope
Ranking / Priority	High (2009) Low (2022)
Corresponding USFWS RIS Priority Actions and Activities	1.06, 1.08, 5.04, 6.02, 6.03, 6.07, 6.09
Current Status and Ongoing Actions	Completed initial baseline monitoring, possibility of reoccurrence every 5 years
Accomplishments by 2022	Mary I. Williams and Ann L. Hild. 2012. Characteristics of Gunnison Sage-grouse Habitat in Dry Mountain Loam and Mountain Loam Ecological Sites in the Gunnison Basin. Final Report to Colorado Parks and Wildlife.

Action Item #2: Create Organization Structure for Action Plan Implementation

Objective: Communication & Coordination

Action Description:	There has been much discussion about who to go to for information on issues dealing with Gunnison Sage-grouse. Efforts to successfully complete many Action Items within the Gunnison County Sage-Grouse Conservation Action Plan will depend heavily on coordination of the expertise of the Working Group and Strategic Committee. The purpose of this Action Item is to facilitate cooperation and coordination of the Gunnison Basin Sage-Grouse Strategic Committee with the Local Working Group's Habitat, Information and Education, and Technical sub-committees. This will streamline efforts that are ongoing in the Gunnison Basin regarding Gunnison Sage-grouse conservation.
Action Activity:	<p>The Strategic Committee will work with the standing sub-committees of the Local Working Group that are in place to streamline basin-wide efforts to conserve Gunnison sage-grouse. Specifically, the working relationship between the LWG sub-committees and the Strategic Committee should be clearly defined and communicated by:</p> <ol style="list-style-type: none"> 1. Opening direct lines of communication between the Strategic Committee and the LWG subcommittees 2. Establishing common goals and objectives for completing Action Items 3. Appointing representative(s) from the Strategic Committee who will provide a direct line of support for completion of appropriate Action Items and who will communicate with the Strategic Committee on a regular basis about progress being made on Action Items undertaken by members of the LWG sub-committees.
Responsibility:	Strategic Committee
Measurable Results:	Policy and procedure that will allow for cooperation and coordination with Local Working Group standing sub-committees
Stakeholders:	All
Schedule / Target End Date:	Put together a sub-committee within Q1 2010 Implement process Q2 2010
Resource Requirements / Source:	Time: 160 hours in 2010 Money: in-kind time commitment

	People power: 20 people, 2-4 hour meetings in 2010
Obstacles / Threats:	2009: Overcoming the initial resistance of people to get on board, finding compromise to enable all interests to be involved and rewarded
Ranking / Priority	High (2009) Not applicable (2022)
Corresponding USFWS RIS Priority Actions and Activities	N/A
Current Status and Ongoing Actions	Completed
Accomplishments by 2022	Ongoing organizational structures as evident with formation of Strategic Committee's Technical and various subcommittees

Action Item #3: Use of the Gunnison County Sage-Grouse Conservation Trust

Objective: Habitat Conservation

Action Description:	The Gunnison Sage-Grouse Conservation Trust was created in 1999 to mitigate impacts to the Gunnison Sage-grouse caused by the Gunnison County Landfill. Beginning in 2005 the Gunnison County Sage-grouse Conservation Trust has been used to fund a part of the sage-grouse component of the County Wildlife Conservation Program, including spring (lekking) road closure expenditures, some BLM road closure expenditures and program operating expenses. Funding partnerships have declined from eleven organizations contributing \$44,000 in 2006 to two organizations contributing \$20,000 in 2009. Gunnison County, Gunnison County Electric Association and Tri-State Generation and Transmission Association, Inc. are the only entities currently contributing cash funding to the County sage-grouse conservation effort. This necessitates an increased level of contribution from the Conservation Trust to continue the sage-grouse component of the County's Wildlife Conservation Program.
Action Activity:	Continue the Gunnison County Sage-grouse Conservation Program to preserve habitat. Evaluate the level of sage-grouse habitat related work conducted by the Wildlife Conservation Program on an annual basis and adjust the level of funding from the Conservation Trust appropriately.
Responsibility:	Gunnison County
Measurable Results:	<p>Review, analysis, and appropriate mitigation of all Gunnison County Land Use Change (Building, OWTS, Access, Reclamation, Minor and Major Impact) permit applications within Gunnison Sage-grouse Occupied Habitat.</p> <p>Staff support to Gunnison Basin Sage-grouse Strategic Committee.</p> <p>Administration of County sage-grouse conservation activities (road closures, permit conditions, mapping, County property CI's, LUR, County sage-grouse website)</p> <p>Other habitat conservation efforts such as participation in developing the Ranchland Initiative Land Use Process; pursuing a Candidate Conservation Agreement option on Federal lands.</p>
Stakeholders:	Private landowners, public land management agencies, wildlife management agencies, local governments, and the business community

Schedule / Target End Date:	1 year (2010) and annually thereafter
Resource Requirements / Source:	Gunnison County Wildlife Conservation and other County staff
Obstacles / Threats:	Fund limitations
Ranking / Priority	High (2009) Low (2022)
Corresponding USFWS RIS Priority Actions and Activities	8.01 and 3.05
Current Status and Ongoing Actions	Ongoing. The Strategic Committee is exploring the use of the fund for a cheatgrass treatment and sagebrush restoration coordinator (see Action Item #10).
Accomplishments by 2022	Hiring of GUSG County Coordinator Sage-grouse reviews for >1,050 land use change, OWTS, and building permit applications Funding of GUSG festivals and research summits Funded several small-scale habitat improvement projects

Action Item #4: Community Awareness

Objective: Information & Education

<p>Action Description:</p>	<p>Many people who live in and visit Gunnison County are not yet “on board” with or are unaware of the movement to protect the Gunnison Sage-grouse. The community has some members who really don’t care whether the species survives, others who wish to ensure the proliferation of the species, and those who are unaware of the species and the issues surrounding it. The purpose of this Action Item is to raise the awareness level of all people in the County and to encourage their active participation in the efforts to protect the species. In doing so, activities and channels of communication will need to address a wide variety of interests and people in the county.</p>
<p>Action Activity:</p>	<p>There may be some benefit to a sequential order of these Action Activities. However, they can be implemented on a stand-alone basis. Activities include:</p> <ul style="list-style-type: none"> • Organize a Sage-grouse Awareness week to facilitate public education, awareness and fundraising in support of ongoing local efforts to preserve the Gunnison Sage-grouse. • Create and maintain an up-to-date database of stakeholders in sage-grouse related issues (i.e. antler hunters, recreation groups, contractors, realtors, etc.) and personally notify them of meetings where topics of interest to them are in the agenda to be discussed. This will foster increased public and stakeholder involvement in and awareness of GUSG issues and conservation efforts. • Create and publish links on Gunnison County’s website that will facilitate new residents’ understanding of wildlife issues in Gunnison County. For example, create a link to directing applicants for building permits, OWTS permits, etc. to information about the process and objective behind the CPW & Gunnison County’s Wildlife Conservation Coordinator’s goals with respect to protecting the Gunnison Sage-grouse. Links could consist of information about wildlife friendly fences, noxious weeds management, proper grazing practices, pet control, bear-proof garbage containers, etc. Expand the availability of these materials beyond the GUSG local working group, CPW, and CSU Extension to include motels, title companies, realtors, attorneys, etc. • Develop and implement age-appropriate sage-grouse, Endangered Species Act (ESA), and

	<p>conservation education programs in elementary, middle, and high school science programs.</p> <ul style="list-style-type: none"> • In conjunction with the road and recreation closures, identify areas of lesser concern to the seasonal activity of sage-grouse (Centennial State Wildlife Area, Cimarron, etc.) and create areas of opportunity (road “openings”). The objective is to encourage and direct outdoor recreation activity during sensitive times (i.e. lek season) so as to minimize the impact on sage grouse, while creating a positive, pro-recreation message to those who may not be focused on the Gunnison Sage-grouse concerns. • Create and publicize a website that gives research-based information about the identification, biology and control of plants listed on the Gunnison County Noxious Weed List and other commonly occurring and problematic weeds in Gunnison County. This will allow improved public access to information about weeds, their effects on habitat and science-based approaches to their control on private lands. In addition to general information about invasive plants and their control, the website will also include information specific to sage-grouse habitat: weeds most problematic in GUSG habitat, when to implement control measures in GUSG habitat, etc. Identify what businesses (or other points of contact) can be solicited for information dissemination and establish those relationships. • “Sage Chicken” menu items at local restaurants that result in a monetary donation to “Save the Grouse” foundation. The existence of the menu items will promote discussion about the sensitivity. • Establish sponsors (local businesses, organizations, schools, etc.) of geographic subsets of GUSG habitat areas. Sponsor activity will include: highway signage, distribution of information, trail signage, habitat restoration, GUSG population challenges, neighborhood mailings, road closure monitoring, volunteer work, fund raising for projects in their area, billboard space, etc. • Design Gunnison Sage-grouse bumper stickers and other related items. • Organize a mural painting contest. Have artists submit drawings for potential murals and award winners by painting their mural on prominent buildings in Gunnison and/or rural Gunnison (such as barns).
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	<ul style="list-style-type: none"> Integrate messaging into existing Celebrations. Incorporate GUSG messages into existing celebrations such as Cattlemen’s Days, July 4th, High School and WCU functions, Night of Lights, etc.
Responsibility:	Community leaders
Measurable Results:	<p>Event and meeting attendance</p> <p>Website hits</p> <p>Implement fundraising through restaurants</p> <p>Sponsorship of all areas of geographic concern</p> <p>Local, regional, and national exposure to the issues with a consistent message of support rather than controversy</p>
Stakeholders:	All
Schedule / Target End Date:	<p>Establish Activity Champions within 2010 Q1</p> <p>Champions will establish clear goals and timeline for implementation and completion of each activity during 2010 Q2</p> <p>2010 Q3 begin implementation of activities</p>
Resource Requirements / Source:	<p>Time: Ongoing</p> <p>Money: Year 1 (2010) - \$50,000, future years will generate money</p> <p>People power: Significant volunteer hours</p>
Obstacles / Threats:	Overcoming the initial resistance of people to get on board, finding compromise to enable all interest to be involved and rewarded
Ranking / Priority	<p>High to Medium (2009)</p> <p>High to Medium (2022)</p>
Corresponding USFWS RIS Priority Actions and Activities	2.02, 2.08, 3.11, and 3.14
Current Status and Ongoing Actions	Ongoing. Development of a conservation poster is currently in progress (December 2021). Gunnison Trails collaborates with other stakeholders to distribute information about season sage-grouse related road and trail closures.
Accomplishments by 2022	GUSG festivals and summits, bumper stickers and t-shirts, creation of the STOR crew, flowchart detailing sage-grouse building permit review process available on the Gunnison County Community and Economic Development Department website

Action Item #5: Campaign for the Continuation of the Land Preservation Fund

Objective: Grants & Fundraising

Action Description:	Ensure the continuation of the Gunnison Valley Land Preservation Fund, which was authorized by voters in 1997 for 15 years, and in 2012, for a period of 20 years, ending Dec. 31, 2033. A portion of sales tax from towns and the county goes to the Land Preservation Fund. Landowners and/or their representatives can ask for funding through this for matching funds to carry out land preservation projects, such as conservation easements.
Action Activity:	Promote and educate the public about the need to renew the Land Preservation Fund in 2032.
Responsibility:	Gunnison Valley Land Preservation Board
Measurable Results:	Majority vote in Nov. 2032 election
Stakeholders:	Conservation groups, landowners, public of Gunnison County
Schedule / Target End Date:	November election 2032
Resource Requirements / Source:	Money: for press releases, advertisements Time: for contacting stakeholders, creating advertisements, social media presence
Obstacles / Threats:	Poor economy, lack of interest, unaware public of incentives of program, competing community needs.
Ranking / Priority	High to Medium (2009) High (in 2032)
Corresponding USFWS RIS Priority Actions and Activities	3.11
Current Status and Ongoing Actions	Continuing to fund conservation projects benefitting the GUSG. Funding is in place currently.
Accomplishments by 2022	Successful re-authorization of GVLPB in 2012 with 81% of vote. Approx. 44,000 acres GUSG habitat conserved by YE 2021

Action Item #6: Mapping of Invasive Plant Control Efforts

Objective: Habitat Monitoring & Reporting

Action Description:	Increased coordination of invasive plant control efforts on public and private land
Action Activity:	The creation of a centralized weed database (or expanded use of an existing database) that documents occurrence and scheduled/completed treatments of target weed species will allow federal, state, and local land management agencies/ departments to coordinate effectively to control invasive plant species that negatively impact wildlife habitat. This process has already been started by the County GIS department but this Committee would help facilitate the entry and coordination across the different responsible parties. This GIS-based database should be accessible to weed managers from multiple agencies to allow frequent updates. Help with the facilitation of additional weed surveys may also be needed to ensure the final product will help determine the priorities for treatment. Coordination of treatment for noxious weeds, and especially cheatgrass, has become a significant concern in 2021. See Action Item #10 for related efforts.
Responsibility:	Lead role is divided between the technical (County GIS) and the field work as completed by the cheatgrass treatment and sagebrush restoration coordinator as outlined in Action Item #10 (in 2009 the fieldwork was the responsibility of the Gunnison County Wildlife Conservation Coordinator - GCWCC).
Measurable Results:	Completion of GIS-based database, establishment of protocol and training of personnel for reporting/submission of invasive plant occurrences and control measures. Published literature to educate public land users about species of concern. Annual compilation of multi-agency, basin-wide accomplishments, and efforts to control invasive plants in GUSG habitat. Raised awareness of public land users measured by follow-up to handouts that identify local species of concern.
Stakeholders:	The Gunnison County GIS department would be responsible for the creation and maintenance of this database, and all other land management agency and private land agency personnel involved in invasive plant species control would be contributors of data and information. Public land management agencies, wildlife management agencies, local government, public land users, willing private landowners

Schedule / Target End Date:	1 year (2010) to plan and implement the database and define the on- going input and reporting process. System refinement, data entry and reporting will be an ongoing task.
Resource Requirements / Source:	Time: one year Money: \$ 100,000 People power: 1 FTE
Obstacles / Threats:	Resource availability, effective coordination across Stakeholders.
Ranking / Priority	Medium (2009) High (2022)
Corresponding USFWS RIS Priority Actions and Activities	2.01 – 2.10
Current Status and Ongoing Actions	Ongoing – currently exploring creation of cheatgrass treatment and sagebrush restoration coordinator funded partially by Gunnison County Sage-grouse Conservation Trust funds (Landfill Mitigation funds), as outlined in Action Item #10. This position may help with mapping efforts for cheatgrass and potentially for other noxious weeds.
Accomplishments by 2022	Support of Gunnison Basin Sagebrush Ecosystem Alliance efforts (cheatgrass pull days, landowner education, research). Use of EDDMapS – West app and Conservation Efforts Database to record noxious weed occurrence.

Action Item #7: Programmatic Environmental Assessments for Habitat Projects

Objective: Habitat Monitoring & Reporting

Action Description:	Programmatic Environmental Assessment (EA) for sage-grouse habitat improvement projects
Action Activity:	BLM, National Park Service, and U.S. Forest Service working together to develop a programmatic EA for habitat improvement projects across the Gunnison Basin on public lands. The EA will cover a broad array of treatment types to allow for maximum flexibility in project planning. Would provide basin wide strategies for improvement and tie the actions to the range wide and local conservation plans and address cumulative impacts over the life of the EA.
Responsibility:	Gunnison County coordination of BLM, National Park Service, and the U.S. Forest Service
Measurable Results:	Completed EA
Stakeholders:	Public land management agencies, Strategic Committee
Schedule / Target End Date:	3 years
Resource Requirements / Source:	Employee time
Obstacles / Threats:	Making the EA a priority for agencies when there are already several other priorities in the next several years
Ranking / Priority	Medium (2009) High (2022)
Corresponding USFWS RIS Priority Actions and Activities	3.01
Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	Development of Candidate Conservation Agreement (CCA). [Restoration and Recovery Plan] Zeedyk Structure and Weed Control Programmatic BA (BLM, USFS, NPS)

Action Item #8: Manage Priority Areas

Objective: Habitat, Regulation & Incentives, Information & Education

<p>Action Description:</p>	<p>Assess the basin-wide landscape from key perspectives to enable effective management of Gunnison sage-grouse habitat and its influencing factors. The impact of a changing population of people and their use of the landscape can be significant relative to a healthy grouse population and a healthy and productive community.</p> <p>Finding a balance that enables both a healthy community and bird population depends on a comprehensive understanding of the following factors: sage-grouse activity, habitat health and the influence of other listing factors, landowner priorities, public use and recreation and the economic drivers of the area. Assessment of these factors and the creation of management tools will result in a policy backed plan that identifies management areas and priority for Gunnison sage-grouse.</p>
<p>Action Activity:</p>	<p>A series of “sub-projects” will be implemented in parallel to assess the landscape. Based on a compilation of the results, the final project will develop a detailed strategy for the conservation of the Gunnison sage-grouse. This action item will result in the coordination and completion of the various “sub-projects”. The “sub-projects” include the creation and analysis of data about the landscape:</p> <p>AI-8A: Assess Sage-grouse Population Dynamics AI-8B: Assess Habitat and Listing Factors AI-8C: Assess Landowner Values and Priority AI-8D: Assess Public Use and Recreation AI-8E: Assess New and Existing Economic Drivers AI-8F: Overlay Layers 1-5 and define management tools and priority areas AI-8G: Management Tools & Priority Areas (Habitat Conservation Plan)</p> <p>This Action Item and the corresponding layers of assessment should be considered an ongoing process of data collection and analysis and policy review.</p>
<p>Responsibility:</p>	<p>Gunnison County (facilitating the coordination of efforts, the availability of resources, and the overall guidance and scope management to ensure timely and compatible results from each sub-project)</p>
<p>Measurable Results:</p>	<p>Designated standards for landscape definition (i.e., geo- graphic boundaries, parcel owner, section/range, etc.)</p>

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	<p>Integrated database with mapping</p> <p>Communication mechanism across sub-projects</p> <p>Resource commitment</p> <p>Stakeholder buy-in and participation</p>
Stakeholders:	Local Government and those stakeholders who are responsible for the respective sub-projects
Schedule / Target End Date:	<p>6 months in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe)</p> <p>Reassessment of progress should be made annually (starting in 2022)</p>
Resource Requirements / Source:	<p>Meeting space</p> <p>Administrative resources</p> <p>Technical resources</p>
Obstacles / Threats:	Scope management is critical as there will be a tendency to try to accomplish too much. This should be viewed as a process of refinement.
Ranking / Priority	<p>Medium (2009)</p> <p>Medium (2022)</p>
Corresponding USFWS RIS Priority Actions and Activities	1.02, 1.05, 2.01, 3.09, 3.15, 10.06, and 11.02
Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	Completed Habitat Prioritization Tool for County land use decision support (Tier 1 and Tier 2 criteria)

Action Item #8A: Assess Sage-Grouse Activity

Objective: Research / Monitoring & Reporting

Action Description:	Determine the population dynamics of Gunnison sage-grouse and assess the health of the population in the area. Considering the five listing factors, determine what can be done to improve the conditions for Gunnison Sage-grouse and the likelihood that the improvements will have a material impact on the bird population.
Action Activity:	Obtain standards and overall project direction from Action Item #8. Gather data to represent the sage-grouse population dynamics during the various life stages (breeding/ lek activity, nesting, brood rearing, winter survival). Submit results to the central data collection and reporting resources. This Action Item will require some level of assumption about winter range activity given the schedule of the initial effort.
Responsibility:	Colorado Parks and Wildlife
Measurable Results:	<p>Within a standard geographic area, provide:</p> <ul style="list-style-type: none"> • Bird counts (male, female, youth, adult) both current and historical • Primary lek site(s) as well as other life stages • Predator activity • Range of mobility • Mortality rate and source of mortality • Analyze Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)
Stakeholders:	Colorado Parks and Wildlife
Schedule / Target End Date:	<p>6 months in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe)</p> <p>Annual reassessment of progress starting in 2022</p>
Resource Requirements / Source:	<p>Monitoring equipment</p> <p>Trapping and monitoring personnel</p> <p>Volunteer observation and data collection</p>
Obstacles / Threats:	Accuracy of data and ability to monitor activity with limited resources
Ranking / Priority	<p>Medium (2009)</p> <p>Medium (2022)</p>
Corresponding USFWS RIS Priority Actions and Activities	4.01 – 4.06, 9.01, 12.01, and 12.03

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Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	<p>Annual CPW Lek Count Reports</p> <p>Efficacy of Translocation (In review)</p> <p>A.D. Apa et al. 2021. Seasonal habitat suitability models for a threatened species: The Gunnison sage-grouse. <i>Wildlife Research</i></p> <p>Davis AJ, Phillips ML, Doherty PF Jr. 2015. Nest Success of Gunnison Sage-Grouse in Colorado, USA. <i>Plos one</i>. 10(8):e0136310</p> <p>Aldridge, C.L., D.J. Saher, T.M. Childers, K.E. Stahlnecker, and Z.H. Bowen. 2012. Crucial nesting habitat for Gunnison sage-grouse: a spatially explicit hierarchical approach. <i>Journal of Wildlife Management</i> 76:391-406</p> <p>Thomas R. Stanley, Cameron L. Aldridge, D. Joanne Saher, Theresa M. Childers. 2015. "Daily nest survival rates of Gunnison Sage-Grouse (<i>Centrocercus minimus</i>): assessing local- and landscape-scale drivers," <i>The Wilson Journal of Ornithology</i>, 127(1), 59-71</p>

Action Item #8B: Assess Habitat & Listing Factors

Objective: Habitat, Monitoring & Reporting

Action Description:	Assess the type and health of the habitat in the area, including what is natural and what is directly influenced by human activity. Considering the five listing factors, define what can be done to improve the conditions for Gunnison sage-grouse and the likelihood that the improvements will have a material impact on the bird population. In conjunction with the habitat assessment for Gunnison sage-grouse, we want to determine the habitat quality for their predators and the degree to which it affects the GUSG proliferation?
Action Activity:	Obtain standards and overall project direction from Action Item #8. Gather data to represent the quality and condition of the habitat as it pertains to the life cycle of the Gunnison Sage-grouse. Submit results to the central data collection and reporting resources.
Responsibility:	Colorado Parks and Wildlife
Measurable Results:	<p>Within a standard geographic area, provide:</p> <ul style="list-style-type: none"> • Sagebrush cover (height, maturity, status) • Desired food sources • Competing vegetation (noxious weeds, hay meadow, trees, willows, etc.) • Quality and quantity of riparian areas • Predator cover and/or perches • Annual variability, seasonal variability • Analyze Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)
Stakeholders:	NRCS, BLM, USFS, NPS, private landowners
Schedule / Target End Date:	<p>6 months in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe)</p> <p>Annual reassessment of progress starting in 2022</p>
Resource Requirements / Source:	<p>Expertise in habitat identification and health</p> <p>Landowner participation in data collection</p>
Obstacles / Threats:	Accuracy of data and ability to monitor activity with limited resources
Ranking / Priority	<p>Medium (2009)</p> <p>Medium (2022)</p>

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Corresponding USFWS RIS Priority Actions and Activities	1.02, 1.04, 1.05, 2.02, 3.05, 5.02 - 5.04, 5.06, 6.02, 6.03, 6.05, 6.06, 7.01, 7.02, 7.03, and 9.02
Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	<p>Habitat Prioritization Tool.</p> <p>P. Magee. 2014. Common Raven Use of Human Subsidized Resources in the Gunnison Basin. Final Report to Colorado Parks and Wildlife.</p> <p>Conservation Efforts Database is being developed to capture Gunnison sage-grouse habitat improvement work.</p> <p>Wet meadow restoration resiliency building partnership.</p> <p>USFS prescribed fire monitoring (2010, 2013).</p>

Action Item #8C: Assess Landowner Values & Priorities

Objective: Regulation & Incentives

<p>Action Description:</p>	<p>Decisions made by local, state, and national governing entities have an impact on landowners, both public and private. These decisions impose limitations on the landowners with the intent of creating a better overall environment for the Gunnison sage-grouse. It is critical to understand the real and perceived value considerations from the landowner’s perspective to ensure a cooperative and productive relationship with the landowners. This assessment will result in protection of the rights of the landowner as well as identify ideas and opportunities for “win-win” solutions (land exchanges, easements, habitat mitigation/ improvement, etc.) that benefit the Gunnison sage-grouse.</p>
<p>Action Activity:</p>	<p>Create a set of assumptions about private landowner concerns relative to sage-grouse. Form a task force consisting of individuals who represent private landowners. Validate assumptions about what a landowner values in terms of the use of their property versus the relative impact on the Gunnison sage-grouse. Define parameters that allow private landowners to protect their rights to use their land and, at the same time, optimize the overall impact on Gunnison sage-grouse habitat (minimize negative impacts and maximize positive impacts).</p>
<p>Responsibility:</p>	<p>Colorado Parks and Wildlife, public and private landowners</p>
<p>Measurable Results:</p>	<p>Parameters (Value Measures) to use during any decision-making process to enable “win-win” solutions among the sage-grouse and landowner interest. In other words, enable the landowner to maximize the value of their land (i.e., achieve their desired results with property improvements such as house, road, or driveway, septic, etc. and/or large-scale development efforts) with the least possible impact (and perhaps a net improvement) on the Gunnison sage-grouse and its habitat.</p> <p>Document current use and potential use (based on adjoining or area density/use)</p> <p>Increased number of CCAA applications</p> <p>Land management plan by property owner</p>
<p>Stakeholders:</p>	<p>Public and private landowners, business community (contractors, realtors, lawyers, etc. who deal with private landowner interests), City and County government, wildlife management agencies</p>

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Schedule / Target End Date:	6 months in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe) Annual reassessment of progress starting in 2022
Resource Requirements / Source:	Funding for initial landowner contract, work sessions and information gathering County leadership and stakeholder participation
Obstacles / Threats:	Not obtaining a comprehensive understanding of landowner priorities. It will require a dedicated effort to educate the individual landowners and assess their feedback.
Ranking / Priority	Medium (2009) Medium (2022)
Corresponding USFWS RIS Priority Actions and Activities	2.02, 3.05, 3.07 – 3.09, 3.11, 3.14, 6.02, 6.03, 6.07, 6.09, and 10.03
Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	CCAA participation Wet Meadow Restoration and Resiliency Building Project Conservation Easement funding/support County Planning Department Q/A and permit review

Action Item #8D: Assess Public Use & Recreation

Objective: Habitat, Regulation & Incentives

Action Description:	Public use on private and public lands has a direct impact on the Gunnison Sage-grouse, especially during certain stages in the grouse life cycle. This action will result in clarification of the form and impact of public use/recreation that influences the landscape. There are opportunities to encourage or direct activities to alternative areas during certain times of the year. There may also be the need to restrict certain types of activity within a given area.
Action Activity:	Obtain standards and overall project direction from Action Item #8. Assemble subject matter experts representing public use/recreation interests and identify when, how often and the scope of impact to Gunnison Sage-grouse. Generate ideas for managing the use of public lands. These efforts may coincide with other sub-projects.
Responsibility:	Colorado Parks and Wildlife
Measurable Results:	Within a standard geographic area, provide: <ul style="list-style-type: none"> • Type of use / recreation activity • Form of use (motorized / non-motorized) • Season of use • Coverage (general use or route specific) • Habitat and/or sage-grouse impact • Annual variability, seasonal variability • Analyze Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)
Stakeholders:	NRCS, BLM, USFS, NPS, private landowners, business community, recreation groups
Schedule / Target End Date:	6 months in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe) Annual reassessment of progress starting in 2022
Resource Requirements / Source:	Public participation Work session and facilitation resources Mailings and phone interviews
Obstacles / Threats:	Ability to assemble representatives of the many different uses of the landscape. It will be more difficult to establish meaningful alternatives that are acceptable to the users of the land.
Ranking / Priority	Medium (2009)

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	Medium (2022)
Corresponding USFWS RIS Priority Actions and Activities	2.09, 8.02 - 8.06, 11.01 - 11.03, 12.06
Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	<p>New shed antler regulations specific to Gunnison Basin. Trail closures for both Hartman Rocks and Signal Peak from March 15 – May 15.</p> <p>Motorized vehicle road closures throughout the Gunnison Basin from March 15 – May 15.</p> <p>Guidance in the CCA related to trail and road construction, rerouting, and decommissioning in Tier 1 and Tier 2 habitat.</p> <p>The STOR Committee, Gunnison County’s Community and Economic Development Department, the National Forest Foundation, Lake County, and Chaffee County are seeking funding through CPW and Great Outdoors Colorado (GOCO) to have a Regional Partnership Initiative to better manage natural resources and recreation resources.</p> <p>The Waunita Watchable Wildlife Site allows for commercial and public viewing for Gunnison sage-grouse, in partnership with Colorado Parks and Wildlife, Sisk-a-dee, and Western Colorado University.</p>

Action Item #8E: Assess Economic Drivers

Objective: Regulation & Incentives

Action Description:	<p>What is the highest and best use for the property? Given today's economic drivers and the potential for economic growth in the basin, characterize the potential for future economic application in the respective landscape.</p> <p>Presently, most of the landscape is influenced by ranching and/or development. The purpose of this action is to address new and expanded uses, such as solar or wind energy creation, geothermal research and production, forestry, oil, gas, mining, extensions of tourism or WCU, etc.</p>
Action Activity:	<p>Obtain standards and overall project direction from Action Item #8. Gather data to represent the condition of the economic drivers during the various seasons.</p> <p>Submit results to the central data collection and reporting resources.</p>
Responsibility:	Community leaders
Measurable Results:	<p>Within a standard geographic area, provide:</p> <ul style="list-style-type: none"> • Current economic use • Potential (and likely) economic use • Secondary impacts of economic change • Annual variability, seasonal variability • Analyze Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)
Stakeholders:	All
Schedule / Target End Date:	<p>6 months in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe)</p> <p>Annual reassessment of progress starting in 2022</p>
Resource Requirements / Source:	<p>Public participation</p> <p>Work session and facilitation resources</p> <p>Mailings and phone interviews</p>
Obstacles / Threats:	Lack of vision and anticipation of the expansion of the economic base in the area
Ranking / Priority	<p>Medium (2009)</p> <p>Medium (2022)</p>
Corresponding USFWS RIS Priority Actions and Activities	3.08, 3.09, 3.11, 11.01, 11.03

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Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	Gunnison County's Land Use Resolution Flow chart of land use permitting process available on Gunnison County's Community and Economic Development Department website Cell phone tower review

Action Item #8F: Management Tools & Priority Areas

Objective: Habitat, Regulation & Incentives

<p>Action Description:</p>	<p>Given the various components of analysis, compile results and formulate management tools. Based on the group’s ability to manage and identify top priorities, define the best methods that create a win-win scenario for the sage-grouse, the respective landowner and the community at large.</p> <p>Develop a detailed habitat conservation strategy that identifies key sage-grouse habitats within areas that are at high risk of being impacted. Develop and implement tools that allow for the protection of these high-quality habitats. This action item requires synthesis of available habitat data, habitat use data, threats potential, etc.</p> <p>Landscape Strategy: Develop and implement tools that allow for the protection of high-quality habitats within areas that are at high risk of being impacted. For example, the prioritization of land for development and wildlife values is needed. Facilitate/coordinate the effort to prioritize the key Gunnison sage-grouse leks and seasonal habitats on public and private lands in each of the Conservation Priority Regions in the Gunnison Basin. In doing so, the community will have the needed assurances that decisions made regarding private lands will be consistent and equitable.</p>
<p>Action Activity:</p>	<p>Obtain standards and overall project direction from Action Item #8. Provide findings to central data collection and reporting resources. This Action Item will require some level of assumption about winter range activity given the schedule of the initial effort.</p>
<p>Responsibility:</p>	<p>Gunnison County</p>
<p>Measurable Results:</p>	<p>By geographic area, define the landscape in terms of:</p> <ul style="list-style-type: none"> • Regulatory or Governmental processes that facilitate the painless protection of these habitats. • Revise City of Gunnison 3-mile Development Plan • Funding opportunities • Authorities and incentives that allow for and encourage protection of key habitats (e.g. land exchanges, mitigation formulas, etc.) • Sage-grouse population objectives • Priority within each area • Development / Preservation efforts • Habitat improvement initiatives

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	<ul style="list-style-type: none"> • Targeted activity (trade, sale, CCAAs, etc.). • Public information that describes the benefits of participating in habitat protection actions. • Community involvement / sponsorship
Stakeholders:	Must consider all stakeholders in this strategy development
Schedule / Target End Date:	6-12 months starting in 2009 (recognizing that this is an ongoing process, some level of assessment should be completed within this timeframe). This Action Item is more dependent on the completion of "Sub-projects" 8A through 8E. Once data has been combined from "Sub-projects" 8A through 8E, annual reassessments of progress should begin.
Resource Requirements / Source:	Report writing and administrative resources Work sessions to gather information and formulate plans
Obstacles / Threats:	Overcoming the initial resistance of people to get on board, finding compromise to enable all interests to be involved and rewarded. While this is an ongoing process, the initial synchronization of effort may result in incomplete data which in turn limits the ability to create a good strategy. Allowing more time to complete this sub-project may be necessary.
Ranking / Priority	Medium (2009) Medium (2022)
Corresponding USFWS RIS Priority Actions and Activities	3.08, 3.09, 3.11, 11.01, 11.03
Current Status and Ongoing Actions	Ongoing
Accomplishments by 2022	Draft report of priority private parcels within 0.6 mile buffer of GUSG leks, N. Seward CPW Gunnison Sage-grouse Conservation Priority Regions within the Gunnison Basin. 2005. GBLWG

Action Item #8G: Management Tools & Priority Areas (Habitat Conservation Plan)

Objective: Habitat, Regulation & Incentives, Monitoring & Reporting

<p>Action Description:</p>	<p>Given the growth and expansion of the City of Gunnison, develop a Habitat Conservation Plan (HCP) for the 3-Mile Radius/Development Plan Area.</p> <p>Congress intended the HCP program to function not only to authorize incidental take, but also as a process to integrate non-Federal development and land-use activities with conservation goals, resolve conflicts between protection of listed species and economic activities on non-Federal lands, and create a climate of partnership and cooperation.</p> <p>Facilitate/coordinate the effort to prioritize the key Gunnison Sage-grouse leks and seasonal habitats on public and private lands in the 3-Mile Area and develop a detailed HCP that identifies key sage-grouse habitats within areas that are at high risk of being impacted.</p> <p>Provide the opportunity to obtain an Incidental Take Permit (ITP) for proposed development that is consistent with the overall future plans for the development and expansion of Gunnison. In doing so, the community will have the needed assurances that decisions made regarding private lands will be consistent and equitable.</p> <p>This action item requires synthesis of available habitat data, habitat use data, threats potential, etc.</p>
<p>Action Activity:</p>	<p>Obtain standards and overall project direction from Action Item #8. Provide findings to central data collection and reporting resources.</p>
<p>Responsibility:</p>	<p>Gunnison County, City of Gunnison, BLM, CPW</p>
<p>Measurable Results:</p>	<p>Within the 3-Mile Radius/Development Plan Area:</p> <ul style="list-style-type: none"> • Regulatory or Governmental processes that facilitate for planned development • Revise City of Gunnison 3-mile Development Plan • Funding opportunities • Authorities and incentives that allow for and encourage protection of key habitats (e.g., land exchanges, mitigation potentials, etc.) • Development assurances for private landowners • Targeted activity (trade, sale, etc.) • Public information that describes the benefits of participating in the Incidental Take Permit (ITP)

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	<ul style="list-style-type: none"> • Community involvement/sponsorship
Stakeholders:	Must consider all stakeholders in this strategy development
Schedule / Target End Date:	This Action Item is new in 2022. Allow 12 – 24 months for completion of the HCP.
Resource Requirements / Source:	<p>Report writing and administrative resources</p> <p>Work sessions to gather information and formulate plans</p> <p>GIS resources (Habitat Prioritization Tool)</p>
Obstacles / Threats:	Overcoming the initial resistance of people to get on board, finding compromise to enable all interests to be involved and rewarded. Funding for this effort could cost a considerable amount. Allowing more time to complete this sub-project may be necessary.
Ranking / Priority	High (2022)
Corresponding USFWS RIS Priority Actions and Activities	3.09
Current Status and Ongoing Actions	Proposed as an Action Item in 2022
Accomplishments by 2022	No progress

Action Item #9: Wet Meadow Restoration

Objective: Habitat, Monitoring & Reporting

Action Description:	Wet Meadow Restoration and Resiliency Building Project in the Gunnison Basin
Action Activity:	Wet meadow restoration includes the use of Zeedyk rock work, low-tech process-based restoration techniques, and other related methods. These tools are used to slow the flow of water in perennial and ephemeral systems, retain moisture into the soil, and increase wetland vegetation cover in wet meadow areas. Stream reaches have been prioritized by The Nature Conservancy based on their proximity to sage-grouse habitat, and other factors.
Responsibility:	Lead role is hosted as a staff position with the Upper Gunnison River Water Conservancy District (UGRWCD). Funding and projects will be coordinated with natural resource managers in various public land management agencies, private landowner assistance agencies, and willing private landowners
Measurable Results:	Number of grants applied for and received, money spent on restoration, wet meadow restoration structures, acres of wetland restored, acres of sage-grouse brood-rearing habitat restored, change in wetland vegetation cover and species composition, soil moisture, and amount of sediment or soil retained
Stakeholders:	UGRWCD, public land management agencies, wildlife management agencies, volunteer organizations (e.g. HCCA), willing private landowners
Schedule / Target End Date:	New Action Item in 2022. Ongoing.
Resource Requirements / Source:	Money: \$100,000 annually for projects throughout the Gunnison Basin People power: 1 FTE plus seasonal employees
Obstacles / Threats:	Resource availability, including time for coordinator. Effective coordination across Stakeholders. Long term funding.
Ranking / Priority	High (2022)
Corresponding USFWS RIS Priority Actions and Activities	1.01 - 1.08
Current Status and Ongoing Actions	Ongoing. UGRWCD has a 1 FTE employee hired to coordinate wet meadow restoration actions across Gunnison sage-grouse range in the Gunnison Basin.
Accomplishments by 2022	9 years of wet meadow restoration work in the Gunnison Basin, including >5,150 acres of sage-

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	grouse brood rearing habitat restored, and >2,100 structures installed.
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Action Item #10: Coordination of Cheatgrass Mitigation and Habitat Restoration

Objective: Habitat, Monitoring & Reporting

<p>Action Description:</p>	<p>Increased coordination of invasive plant control efforts and restoration of sagebrush ecosystems on public and private land. Treatments will specifically target cheatgrass. Treatments may include chemical herbicide applications, mechanical hand-pulling, outcompeting with native species seeding efforts, or other similar treatments.</p>
<p>Action Activity:</p>	<p>Given the increasing prevalence of cheatgrass and other noxious weeds throughout the GUSG range, hiring a cheatgrass treatment and sagebrush restoration coordinator to facilitate grant writing, on the ground treatments, and coordination across land ownership is critical. The coordinator will work to map cheatgrass infestations to prioritize treatment areas more effectively, and therefore this Action Item #10 is closely tied with Action Item #6. The coordinator may assist with mapping efforts or securing funding for mapping efforts. In addition, the coordinator will be responsible for creating monitoring methods, and carrying out monitoring protocols to determine how effective treatments were. The coordinator would be responsible for understanding federal regulations for pesticide use and methods of application, and for planning appropriate treatments for each land ownership. Additionally, the coordinator will reach out to private landowners and work with willing private landowners. The coordinator will work with landowners (private and public) on preventing the further spread of cheatgrass. The coordinator will be involved with seed collections, reseeding, and related efforts for an integrated pest management approach. The coordinator will also be involved with public education and outreach events related to cheatgrass and sagebrush restoration.</p>
<p>Responsibility:</p>	<p>Multiple stakeholders and land management agencies</p>
<p>Measurable Results:</p>	<p>Hiring a cheatgrass and habitat restoration coordinator is a measurable result. Once hired, the success of the coordinator could be measured via grant applications submitted and received, money spent on treatments, and acres treated and monitored. A coordinator may also be involved in more integrated pest management approaches, and could also track acres restored via reseeding and other efforts. Treatments and habitat restoration projects must be recorded in the USFWS's Conservation Efforts Database.</p>

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Stakeholders:	Land management agencies and private land agency personnel involved in invasive plant species control would contribute data, priorities, and some resources for a coordinated effort. Funding for hiring a cheatgrass and habitat restoration coordinator could initially come from all land management agencies, and could be supplemented later by additional grant applications. Specific stakeholders include public land management agencies, wildlife management agencies, local government, public land users, willing private landowners.
Schedule / Target End Date:	This is a new Action Item in 2022. Hire a treatment coordinator by mid-2022 or earlier. That position should be funded for a minimum of 2 years until further grants can be secured for the position.
Resource Requirements / Source:	Time: two years minimum Money: \$ 100,000/12 months People power: 1 FTE annually
Obstacles / Threats:	Resource availability, effective coordination across Stakeholders. Long term funding for the coordinator capacity, and locating an organization/ agency willing to host the coordinator as an employee or handle the grants.
Ranking / Priority	High (2022)
Corresponding USFWS RIS Priority Actions and Activities	2.01 - 2.10
Current Status and Ongoing Actions	Ongoing – currently exploring possibility of Cheatgrass Coordinator position funded partially by Gunnison County Sage-grouse Conservation Trust funds (landfill mitigation; see Action Item #3). Gathering agency support and reaching out to other potential funding entities (power companies, CDOT, etc.)
Accomplishments by 2022	Support of Gunnison Basin Sagebrush Ecosystem Alliance efforts. Letters of support for funding the position. Technical Subcommittee drafted and announced a Scope of Work for the position as a contract through Gunnison County.

Acronyms

BLM – Bureau of Land Management
CCA – Candidate Conservation Agreements
CCAA – Candidate Conservation Agreements with Assurances
CDOT – Colorado Department of Transportation
CI – Certificate of Inclusion
CPW – Colorado Parks and Wildlife
CSU – Colorado State University
EA – Environmental Assessment
ESA – Endangered Species Act
FTE – Full Time Equivalent
GIS – Geographic Information Systems
GUSG – Gunnison sage-grouse
GVLPB – Gunnison Valley Land Preservation Board
HCCA – High County Conservation Advocates
HCP – Habitat Conservation Plan
HPT – Habitat Prioritization Tool
ITP – Incidental Take Permit
LUR – Land Use Resolution
LWG – Local Work Group
NPS – National Park Service
NRCS – Natural Resources Conservation Service
OWTS – On-site wastewater treatment system
RRP – Restoration and Recovery Project
STOR – Sustainable Tourism and Outdoor Recreation
SWOT - Strengths, Weaknesses, Opportunities and Threats
UGRWCD – Upper Gunnison River Water Conservancy District
USFS – United States Forest Service
USFWS – United States Fish and Wildlife Service
WCU – Western Colorado University

Appendix B.

2009 Action Item Workplan Template

Every project should have a workplan and schedule. The tasks will vary as will the level of detail. However, the project manager must define the project in sufficient detail to effectively manage the resources and keep the project on schedule. Workplans will change during the course of the project and enable the project manager to adjust resources accordingly. These versions, as they change, should be noted at the top of the workplan to ensure that everyone on the project team is working from the same set of tasks and schedule.

Action Item Work Plan Template S Denotes Strategic Committee Meeting Schedule

* Every project should have a workplan and schedule. The tasks will vary as will the level of detail. However, the project manager must define the project in sufficient detail to effectively manage the resources and keep the project on schedule. Workplans will change during the course of the project and enable the project manager to adjust resources accordingly. These versions, as they change, should be noted at the top of the workplan to ensure that everyone on the project team is working from the same set of tasks and schedule.

Task Description	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22	W23	W24	W25	W26	
I. Organization & Administration	S					S					S				S				S				S				
Define Project Team Structure & Workplan	x	x	x																								
Identify & Obtain Resources		x	x																								
Conduct Stakeholder Orientation			x	x																							
Define Project Objectives and Scope																											
Outline Final Deliverable																											
Conduct Strategic Committee Review																											
Create and Maintain Schedule	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
II. Define Information Requirements																											
Identify Intended, Measurable Results																											
Determine Sources of Information																											
Document Information Objectives		x	x	x	x	x	x	x	x																		
III. Identify and Collect Data																											
Establish Data Collection Methods				x	x	x																					
Organize and Educate Resources							x	x	x	x																	
Gather Data							x	x	x	x																	
Validate Data							x	x	x	x																	
IV. Assemble Necessary Information																											
Analyze Data																											
Assess Ability to Formulate Conclusions																											
Identify Additional Information																											
V. Formulate Conclusions and Assumptions																											
Review Findings and Conclusions																											
Document Assumptions																											
Define Recommendations																											
VI. Publish Results																											
Publish Final Deliverable																											
Educate Community																											
VII. Monitor Progress																											

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Appendix C.

2009 Ongoing Planning Process

Ongoing Planning Process Gunnison Sage Grouse Action Plan													
Task Description	Quarter 4			Quarter 1			Quarter 2			Quarter 3			
	October	November	December	January	February	March	April	May	June	July	August	September	
I. Organize Planning Team													
II. Evaluate Prior Year Implementation													
III. Assess Grouse Population & Habitat by Landscape Region													
IV. Summarize Federal, State and Local Ongoing Concerns													
• Division of Wildlife													
• USFWS													
• Gunnison County													
V. Analyze Local Strengths/Weakness/Opportunity/Threat													
VI. Define and Prioritize Action Items													
VII. Determine Resource Availability													
VIII. Update Action Item Schedule (April)													
IX. Report and Obtain Approval from Gunnison County (June)													
X. Monitor Ongoing Needs and Adjust Plan													