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Objection Reviewing Officer
USDA-Forest Service Intermountain Region
324 25th Street
Ogden, UT 84401

Objection Submitted Electronically: objections-intermtn-regional-office@fs.fed.us

RE: Objection on Helicopter Landings in The Twin Peaks, Lone Peak, and Mount Timpanogos Wilderness Areas to Capture and Collar Mountain Goats and Bighorn Sheep Project

Dear Objection Reviewing Officer,

Please accept the below objection regarding the Forest Service's draft Decision Notice ("DN") and Environmental Assessment ("EA") for the "Helicopter landings in the Twin Peaks, Lone Peak, and Mount Timpanogos wilderness areas to capture and collar mountain goats and bighorn sheep project." The responsible official for this project is David Whittekiend, Forest Supervisor of the Uinta-Wasatch-Cache National Forest.

Wilderness Watch is a national wilderness advocacy organization, headquartered in Missoula, Montana, dedicated to the protection and proper administration of the National Wilderness Preservation System. Wilderness Watch members use and will continue to use the Twin Peaks, Lone Peak, and Mount Timpanogos Wildernesses for outdoor recreation and professional pursuits, including hiking, wildlife viewing, and wildlife study. As more fully described below, the Forest Service's proposed action would adversely affect Wilderness Watch's organizational interests, as well as its members' use and enjoyment of these wildernesses.

Western Wildlife Conservancy is a 501(c)3 organization founded in Salt Lake City, Utah in 1997. Our mission is to protect and conserve native wildlife and their habitats in the intermountain West through public outreach, education and advocacy. Many of our members routinely recreate in the Wasatch Mountain wilderness areas and enjoy the beauty and solitude found there, as well as observing our native wildlife.

Save Our Canyons is a public interest non-profit organization located in Salt Lake City, Utah that, for 45 years, has been dedicated to the protecting the wildness and beauty of the Wasatch mountains, canyons and foothills. Our members not only hike, bike, climb, hunt, fish and ski in these areas, but are also interested in seeing the Wasatch Mountains remain in their wild and natural state despite overwhelming pressures. The management of our Wilderness Areas in the Wasatch Mountains are at the core of our

mission, as we worked not only to establish these areas, but have sought to partner in the stewardship

of these areas for decades. We believe the study can be done in a way that is more compatible with Wilderness Management. The Forest Service's proposed action is an unnecessary intrusion into some of our most treasured lands that see far too many impacts already.

Yellowstone to Uintas Connection is a 501c3 non-profit entity working to restore fish and wildlife habitat including the Regionally Significant Wildlife Corridor connecting the Greater Yellowstone Ecosystem to the Uintas Mountains and Southern Rockies through the application of science, education and advocacy.

The Utah Chapter of the Sierra Club is a grassroots volunteer organization dedicated to the protection and promotion of Utah's outdoors and natural landscapes. We educate and advocate for the responsible preservation of clean air, water and habitats and the development of renewable energy for present and future generations. We believe that the Forest Service's proposed action would negatively impact the landscapes and recreational opportunities that are vital to our members.

Wilderness Watch submits this objection as the lead objector on behalf of the above groups. For ease of reading, objectors will collectively be referred to as "Wilderness Watch." Wilderness Watch previously submitted scoping comments on June 16, 2016 and March 11, 2017 and draft EA comments on August 17, 2017 for this project. These scoping and draft EA comments are specifically incorporated by reference in this objection letter, and the discussion below provides further detail on the issues raised in those comments.

PRELIMINARY CONCERN: DESTRUCTION OF RECORDS

To better understand the project proposal, Wilderness Watch submitted a Freedom of Information Act request and a State public records request for project related records. Electronic mail messages obtained through the State public records request indicate that the Forest Service may be withholding relevant information from the public, and worse, destroying electronic records and instructing Utah Division of Wildlife Resources ("UDWR") to do so as well. *See* Ex217-18; Ex222-25.¹ In one email containing an attachment on disease profiles, UDWR expresses a desire to keep the unpublished profiles for mountain goats and bighorn sheep in-house and out of the public domain. The lead project contact and wildlife biologist for the Forest Service responds to this email stating she will send a summary of the data that UDWR can re-send in a separate email, after which the Forest Service employee will delete the original email with the original reports. *See* Ex222-25. In another email, the same Forest Service employee instructs UDWR to "delete all your email that you do not want to keep before [sic] once we go public everything can be requested by the public. So clean everything up that you do not want to go out. I delete everything and clean out my trash daily." Ex217-218.

Review of responsive records indicates that other electronic records, including electronic correspondence and data relevant to the necessity inquiry, may have been withheld from the public or destroyed. In such a scenario, it is impossible to determine whether the Forest Service "failed to consider an important aspect of the problem" or failed to "explain the evidence which is available," which would render its decision on this project arbitrary and capricious. *See Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 43 (1983). Whether ultimately the case or not, such a scenario also gives the troubling impression that the Forest Service is coordinating with the State behind the scenes to "cook the books" on the project proposal, analysis, and ultimate determination, undermining meaningful public participation and the integrity of the administrative process. This fundamental concern underlies this objection.

¹ For convenience, both comment exhibits and additional exhibits submitted with this objection are attached with consecutive bates numbering ("Ex[#]") for citation.

PROJECT BACKGROUND
(*See also 8-17-17 Comment Letter at 2-4*)

In 2016, UDWR submitted a proposal to the Forest Service to capture, radio-collar, and take biological samples from mountain goats within the Twin Peaks, Lone Peak, and Mount Timpanogos Wildernesses utilizing helicopter net-gunning and darting methods. *See* U.S. Forest Service, Scoping Letter (May 25, 2016). The scoping letter indicated that UDWR was concerned about possible mountain goat population decline and sought to “monitor the animals in the wilderness in order to determine if there is an actual mountain goat decline in the population or if the animals are moving seasonally or changing home ranges.” *Id.* The Uinta National Forest Plan provides some support for the latter noting, “Mountain goats have dispersed south to Spanish Fork Peak along the lower northern boundary of the Diamond Fork Management Area.” Forest Plan at 5-54. They are also found “in the Cascade Mountain/Provo Peak area” and “are likely to disperse to Mount Nebo in the near future” *Id.* at 5-80; 5-91.

In 2017, after the public voiced concerns over the proposal’s goal to perpetuate an introduced species, UDWR modified its proposal to include capturing, collaring, and sampling of bighorn sheep. *See* U.S. Forest Service, Scoping Letter (February 13, 2017). The 2017 scoping letter indicated that, in addition to possible mountain goat declines, UDWR was now also concerned about “stagnant” bighorn sheep populations in the area and “needs to obtain disease profiles to determine if these populations have been exposed to various pathogens.” *Id.*

The Forest Service’s draft decision would authorize UDWR to pursue, capture, sample, and collar up to 20 mountain goats and 10 bighorn sheep utilizing helicopter net-gunning in the Twin Peaks, Lone Peak, and Mt. Timpanogos Wildernesses. DN at 2, EA at 15-16. The activities would require approximately 30 hours of low-level helicopter flights and an estimated 60 landings to chase and capture animals, drop personnel and supplies, take biological samples, and place GPS radio collars on the animals. DEA at 8, 15; EA at 15. The Forest Service states,

The purpose of this project is to determine if the Forest Service should authorize UDWR to land and to drop people and materials from helicopters in the Mount Timpanogos, Lone Peak, and Twin Peaks Wilderness areas for the purpose of capturing, taking biological samples and GPS radio collaring mountain goats and Rocky Mountain bighorn sheep. This would allow UDWR to try to understand the decline in the mountain goat population and the lack of growth in the Rocky Mountain bighorn sheep population. UDWR’s need is to understand the potential for disease spread between the two populations and to monitor and maintain meaningful data regarding current health status, survival, causes of mortality, year-round habitat use, migration/movements within and to and from the three wilderness areas. Based on the information gathered from this study, UDWR may be able to adjust management actions to conserve and protect these wildlife populations and maintain Wilderness Character.

DN at 2; EA at 9.

WILDERNESS ACT

(See also 8-17-17 Comment Letter at 3-6)

In the city, in the country, almost everywhere he goes, the American is confronted with an environment dominated by his own technology. This is new, no others before us have experienced it on the scale we experience today. The end result is not certain. For man, with all his ability to adapt, for all his domination of the "lesser" species, still is a child of the sea, the mountains, the very wilderness he is rapidly obliterating. We are a nation bedazzled by technology, and addicted to crash solutions. But there are no instant ecologies; no instant wilderness. And so, in the final analysis, we must devote much more of our attention in the future to assessing each new technological development for its ultimate impact on man's environment. I hope it is never said of this generation, as Stephen Vincent Benet once said of another: "They thought, because they had power, they had wisdom also." We now have the power, literally, to move mountains. The next few years will determine if we have the wisdom to refrain from doing so. ~ Orville Freeman, Secretary of Agriculture, 1967

Statutory Mandate: The Wilderness Act establishes a National Wilderness Preservation System to safeguard our wildest landscapes in their “natural,” “untrammeled” condition. 16 U.S.C. § 1131(a). Wilderness is statutorily defined as “an area where the earth and its community of life are untrammeled by man” and an area “retaining its primeval character and influence... which is protected and managed so as to preserve its natural conditions....” *Id.* § 1131(c). Thus, wilderness “shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment *as wilderness*, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment *as wilderness*....” *Id.* § 1131(a) (emphasis added). The Act’s opening section “sets forth the Act’s broad mandate to protect the forests, waters, and creatures of the wilderness in their natural, untrammeled state” and “show[s] a mandate of preservation for wilderness and the essential need to keep [nonconforming uses] out of it.” *Wilderness Soc’y v. U.S. Fish & Wildlife Serv.*, 353 F.3d 1051, 1061-62 (9th Cir. 2003) (en banc). UDWR’s proposal seeks Forest Service approval for the use of helicopters and radio telemetry collars to investigate possible population declines of an introduced species intensively and perpetually managed by the State primarily for recreational sport hunting opportunities. UDWR’s proposal does not serve the purpose of the Wilderness Act—it is fundamentally at odds with it.

Federal Administrative Duties and Management Direction: While UDWR has the responsibility to manage wildlife across Utah, wilderness designation places restrictions on that management authority and requires the Forest Service to ensure that any state wildlife management activities in wilderness, including research, are conducted in a manner that preserves wilderness character. Congress provided a clear mandate for administering agencies: “[E]ach agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character.” 16 U.S.C. § 1133(b). Certain uses and activities, including helicopter landings and the use of electronic tracking installations, undermine the preservation of wilderness and are thus prohibited with narrow exception. 16 U.S.C. § 1133(c); *see also* 36 C.F.R. § 261.18(c) (Forest Service regulations prohibiting “[l]anding of aircraft, or dropping or picking up of any material, supplies, or person by means of aircraft, including a helicopter” in National Forest Wilderness); 36 C.F.R. § 293.6 (prohibiting “mechanical transport,” “landing of aircraft,” and “dropping of materials, supplies, or persons from aircraft” in wilderness except as provided by Wilderness Act). These uses and activities may be authorized by the Forest Service only where “necessary to meet minimum requirements for the administration of the area for the purpose of [the Wilderness Act].” 16 U.S.C. § 1133(c).

Consistent with the Wilderness Act and its implementing regulations, the Forest Service’s management direction prohibits motorized equipment or mechanical transport to facilitate research in

wilderness “unless the research is *essential* to meet minimum requirements for administration of the area as wilderness and cannot be done another way.” FSM 2324.42(4) (emphasis added). Likewise, “[r]esearch methods that temporarily infringe on the wilderness character may be used, provided the information sought is *essential for wilderness management* and alternative methods or locations are not available.” FSM 2323.37 (emphasis added). “Wildlife and fish management programs shall be consistent with wilderness values,” FSM 2323.32(3), and the Forest Service is directed to “[d]iscourage measures for direct control (other than normal harvest) of wildlife and fish populations,” FSM 2323.32(4), and “[p]rovide an environment where the forces of natural selection and survival rather than human actions determine which and what numbers of wildlife species will exist,” FSM 2323.31(1).

Relevant Statutory Standard for Authorizing Otherwise Prohibited Activities: Accordingly, under the Wilderness Act, the Forest Service may only approve helicopter net-gunning and the installation of GPS tracking collars on mountain goats and bighorn sheep in the Wildernesses if the Forest Service rationally demonstrates that studying wildlife population dynamics to inform routine state wildlife management objectives is necessary to meet minimum requirements for administration of the area for the purpose of the Wilderness Act, and there is no alternative to otherwise-prohibited uses that would achieve that purpose. *See* 16 U.S.C. § 1133(c). The justifications for the project advanced in the Environmental Assessment and draft Decision Notice do not satisfy this stringent standard, and the Forest Service is abdicating its statutory duties by deferring to the State’s objectives.

UDWR’s proposal is not necessary to meet minimum requirements for administration of the Twin Peaks, Lone Peak, and Mount Timpanogos Wildernesses. (See also 8-17-17 Comment Letter at 6-17).

A. The Forest Service cannot rely on UDWR’s wildlife management objectives to justify a conclusion that studying population dynamics via helicopter-assisted radio-collaring is necessary to administer the areas as wilderness.

The Forest Service is considering authorizing intensive management actions normally prohibited in wilderness based solely on UDWR’s desire for data to inform its routine wildlife management objectives. “Congress made preservation of wilderness values ‘the primary duty of the Forest Service, and it must guide all decisions as the first and foremost standard of review for any proposed action.’” *Wilderness Watch v. Vilsack*, 229 F.Supp.3d 1170, 1182 (D. Id. 2017) (citing *Greater Yellowstone Coalition v. Timchak*, 2006 WL 3386731 at *6 (D. Id. Nov. 21, 2006)). To comply with the Wilderness Act, UDWR must seek approval for management actions involving prohibited uses in wilderness, and the Forest Service in-turn must make the requisite finding of “necessity” before it may authorize the action. *Id.* at 20. The Forest Service cannot rationally make this finding for the reasons stated below.

1. The Forest Service has failed to reconcile UDWR’s desire to perpetuate an introduced species with the mandates of the Wilderness Act. (See also 8-17-17 Comment Letter at 8-9).

Several commenters opposed the project proposal because it would authorize repeated aerial intrusions and GPS installations in wilderness for the primary purpose of maintaining an introduced mountain goat population for the benefit of sport hunting and recreational viewing, *see, e.g.*, DEA at 39-43, 47-48; 60; 64; 66; 82; 93; 95. The Forest Service initially responded to these concerns by stating that “UDWR’s position is that mountain goat habitat exists in Utah and they require proactive management,” that there was a sighting of mountain goats in Utah in 1918, and by simply reiterating

that the proposal now includes study of bighorn sheep. *See* DEA at 39-43, 47-48; 60; 64; 66; 82; 93; 95; 96-97. It also noted that “[t]here is professional disagreement on whether or not mountain goats are native to these wilderness areas, but they are native to the Northern Rocky Mountains. For the sake of this analysis they will be considered as part of the natural quality of wilderness character.” DEA at 22. To support its “professional disagreement” assertion, the Forest Service referenced only one, non-confirmed report from 1918 indicating the presence of mountain goats in Utah. *See* DEA at 7. However, the Forest Service’s own sources consider Utah to be outside of the native range of mountain goats and indicate that goats were introduced into Utah in the 1900s for trophy hunting:

The mountain goat is native to mountainous regions of northwestern North America from about 44 °N latitude to 63 °N latitude. Its native range occurs from southeastern Alaska south to the Columbia River in Washington; east into Idaho and western Montana; and north to southern Yukon....

Throughout the 1900s mountain goats were also introduced in some areas outside of their known historical range: [including] in several mountain ranges in northeastern Utah... Mountain goats were introduced to these areas for trophy hunting.

Ex002, 26 (Robin J. Innes, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, *Oreamnos americanus*, Fire Effects Information System (2011)); *see also* Ex058 (Elizabeth Flesh et al., *Range Expansion and Population Growth of Nonnative Mountain Goats in the Greater Yellowstone Area: Challenges for Management*, Wildlife Society Bulletin, July 10, 2016); Ex79 (Rolf Johnson, Washington Dept. of Game, *Mountain Goats and Mountain Sheep of Washington*, January 1983) (excerpt depicting range map). By all accounts, mountain goats have not had a well-documented presence in the project area since their introduction by UDWR in 1967. *See* Wildlife Report at 6; Ex228 (*Utah Mountain Goat Statewide Management Plan* (2013) (“Mtn. Goat Plan”)) (“[a]ll [mountain goat] populations [in Utah] are the result of introductions; the first of which occurred in 1967.”).

In recent project documents, the Forest Service modified its position indicating that,

Regardless of their native status to Utah, they are certainly native to the North American continent and the Northern Rocky Mountains. The DWR’s position is that mountain goat habitat exists in Utah, as indicated by the success of introduced populations. As such, the DWR believes mountain goats are a valuable addition to our wildlife resource diversity and are a legitimate part of our modern Utah faunal landscape. As with any other ungulate species in our now pervasively human altered ecosystem, they require pro-active management.

Wildlife Report at 10. It clarified that “mountain goats will be considered part of the natural conditions present at the time of wilderness designation, but it must be made clear that this does not imply that we believe mountain goats are native.” MRA at 6 (emphasis added); *see also* Wildlife Report at 6. The Forest Service does not point to any authority for its position that conditions existing at the time of wilderness designation set a natural, static baseline. Indeed, many unnatural conditions exist in wildernesses at the time of designation, such as evidence of development, invasive weed prevalence along user trails, and stocked fish in wilderness lakes, but that does not mean these conditions can be actively perpetuated by the agency after designation.

The Forest Service likewise provides no explanation for taking a contradictory position on mountain goats in other National Forests. For example, in another National Forest in Utah, the Forest Service has expressed concern over UDWR’s mountain goat program due in large part to the impacts from introduced species on native ecosystems. *See Utah Native Plant Society v. U.S. Forest Serv.*, No. 2:16-cv-56-PMW (D. Ut. March 2, 2017). In another example, the Forest Service, in

conjunction with the National Park Service, is preparing a plan to eradicate an “exotic mountain goat” population on the Olympic Peninsula due to “adverse impacts on the natural quality of designated wilderness.” Ex146 (National Park Service, Olympic Nat’l Park, *Draft Mountain Goat Management Plan / Environmental Impact Statement* (2017)); Ex167-192 (National Park Service, Olympic Nat’l Park, *Olympic National Park Minimum Requirements Analysis*, 2017); Ex193-216 (Forest Service, Olympic, Mt. Baker-Snoqualmie, and Okanogan-Wenatchee National Forests, *Minimum Requirements Analysis Mountain Goat Removal from Olympic National Forest Wilderness Areas*, 2016).² In the case of the Olympics, mountain goats were introduced in the 1920s—well before wilderness designations in the 1980s—but the Park Service and Forest Service do not consider them part of natural wilderness conditions. See Ex164; Ex198, 210, 213. Here, the Forest Service should not authorize the project because the intensive perpetuation of an introduced species for recreational opportunities does not serve the purpose of the Wilderness Act.

2. The Forest Service has failed to reconcile UDWR’s desire to intensively manipulate wildlife populations for recreational opportunities with the mandates of the Wilderness Act. (See also 8-17-17 Comment Letter at 3, 9-11).

UDWR intensively manages mountain goats and bighorn sheep through an active translocation program primarily for recreational sport hunting. This reality is important because the Forest Service is analyzing the focal question of what is “necessary” for the minimum administration of the Wildernesses through UDWR’s lens of what is “natural” for the areas. It is UDWR setting population targets based on hunter opportunity goals, and it is UDWR asserting that the current populations might be too low based on those targets. Indeed, bighorn sheep in the project area are not demonstrating a population decline at all. Instead, UDWR has defined this population as “stagnant,” which it defines as a population that exhibits no clear growth trend and shows poor population performance relative to a population objective. See EA at 5.

UDWR’s mountain goat population objectives and management strategies are set forth in its Utah Mountain Goat Statewide Management Plan. Ex226-49 (UDWR, *Utah Mountain Goat Statewide Management Plan* (2013)) (“Mtn. Goat Plan”). “Mountain goats are managed [by UDWR] as a once-in-a-lifetime species” for hunters. Ex228-29. UDWR also manages bighorn sheep as a “once-in-a-lifetime species” for hunters and sets forth population objectives and management strategies in its Utah Bighorn Sheep Statewide Management Plan. Ex250-78 (UDWR, *Utah Bighorn Sheep Statewide Management Plan* (2013)) (“Bighorn Sheep Plan” at Ex253). To meet its population objectives, UDWR implements an active translocation program to create and augment populations around the State. Ex232; Ex254. UDWR indicates that “[s]ince 1981, permits [for hunting mountain goats] have steadily increased,” and “[f]rom 1981 to 2012, a total of 1231 permits have been issued resulting in the harvest of 1176 mountain goats.” Ex229. “Demand for permits is extremely high,” *id.*, and “transplants continue to be the preferred method used to establish new mountain goat populations and supplement existing ones,” *id.* at 232.

UDWR’s plan calls for utilizing mountain goat populations in wilderness as source populations for “augmentation or to start new populations within Utah or for other states,” but notes that “wilderness designated lands are one of the largest barriers to catching animals.” Ex232. Similarly, “[f]rom 1967 to 2012, a total of 1378 people hunted bighorn sheep (324 Rocky Mountain, 1054 desert) resulting in the harvest of 1182 bighorn sheep (321 Rocky Mountain, 861 desert).” Ex253-254. “Demand for bighorn sheep permits is extremely high, [] demand is increasing faster than supply[,]” and “[t]ransplanting bighorn sheep is a primary tool for restoration and management of bighorn populations.” Ex254, 258.

² Wilderness Watch points to the Olympic Mountain Goat Management Plan EIS and associated documents not to demonstrate approval of the proposed action and attendant analyses but to demonstrate the stark inconsistencies in how the Forest Service addresses management of introduced species within wilderness.

UDWR's goals and methods are at odds with the administration of "area[s] where the earth and its community of life are untrammled by man," 16 U.S.C. § 1131(c), and Forest Service direction to "[m]aintain wilderness in such a manner that ecosystems are unaffected by human manipulation and influences so that plants and animals develop and respond to natural forces." FSM 2320.2. UDWR's generalized need for data to inform its wildlife management decisions cannot justify actions that are generally prohibited under the Wilderness Act. *See Wolf Recovery Foundation*, 692 F. Supp. 2d 1264, 1270 (D. Id. 2010). The proposal here would authorize helicopter intrusions and electronic installations in three Wildernesses on a basis—a state's asserted need to collect wildlife-population data to inform big game management decisions—that could not justify helicopter use in the wilderness as a matter of course. While UDWR may manage wildlife in wilderness, "Wildlife and fish management programs [must] be consistent with wilderness values," FSM 2323.32(3). The proposed action should not be authorized because its goals and methods are incompatible with wilderness preservation.

3. The Forest Service's conflicting reading of the Wilderness Act results from the incompatibility of the proposal with wilderness preservation. (See also 8-17-17 Comment Letter at 4-5 (fn. 1)).

Where the Forest Service's wilderness administration guidance directs the Forest Service to "[p]rovide an environment where the forces of natural selection and survival rather than human actions determine which and what numbers of wildlife species will exist," FSM 2323.31(1), a proposal to utilize prohibited activities in three designated wildernesses to investigate a population decline of an introduced species that is intensively managed by the State to meet population targets for big-game hunting presents quite a hurdle. This is because,

In contrast to other public land management statutes, which typically authorize agencies to consider and weigh diverse values through exercise of their scientific and policy expertise, the Wilderness Act required certain areas to be managed predominantly for one use: wilderness preservation....

Unlike all other land-management statutes, the Wilderness Act's basic purpose was not to delegate authority to expert agencies, but rather, to exclude certain lands from the application of the agencies' specialized expertise, to restrain agency flexibility, and to protect (with limited, narrow exceptions) certain lands from the impact of the sort of policy choices land managers typically make.

Sean Kammer, *Coming to Terms with Wilderness: The Wilderness Act and the Problem of Wildlife Restoration*, 43 ENVTL. L. 83, 100-101 (2013).

The agencies' desire to perpetuate big-game species at static population targets also explains the Forest Service's impermissible position here that the statutory terms "natural" and "untrammled" often conflict with one another. EA at 20; 23-24. The Forest Service states that "[t]he Wilderness Act identifies five qualities of wilderness" (untrammled, natural, undeveloped, outstanding opportunities, and other features of value), EA at 19, and that actions taken to protect one of these qualities may diminish another quality without any guidance within the Act on how to resolve the conflict, EA at 20. However, the Wilderness Act does not state that there are five qualities of wilderness nor does it provide conflicting definitions for wilderness qualities. Indeed, the Forest Service's Olympic Mountain Goat MRA acknowledges that these "qualities are not specifically mentioned in the law." Ex197. That MRA also notably provides complementary definitions of "untrammled" ("areas essentially unhindered and free from human manipulation") and "natural" ("areas with ecological systems largely separate from direct human influence"). *Id.* These complementary definitions provide a coherent reading of the Wilderness Act where natural

conditions generally flow from untrammelled conditions.³ To the extent that there is an administrative conflict between various uses of wilderness and preservation of wilderness, the statute and the agencies' regulations and management guidance provide direction for resolving those conflicts in favor of wilderness preservation. *See, e.g.*, 16 U.S.C. § 1133(b); 36 C.F.R. § 293.2(c); FSM 2320.6.

Ultimately, “whatever ‘wilderness character’ means, it cannot be something that depends upon the active manipulations of humans.” Sean Kammer, *Coming to Terms with Wilderness: The Wilderness Act and the Problem of Wildlife Restoration*, 43 ENVTL. L. 83, 86 (2013). Restraint and humility are important values underpinning the Wilderness Act, and “[l]and managers should exercise this same humility in dealing with wilderness areas, lest they lead us down a path to where there are no longer any places that are truly ‘wild,’ no places beyond the control of human institutions and cultural imperatives.” *Id.* The Forest Service should not authorize the project because it is incompatible with the purpose of the Wilderness Act.

B. Even if the Forest Service could rely on UDWR’s wildlife management objectives for administering wilderness, the EA and DN do not provide the specialized finding of necessity required by the Wilderness Act. (See also 8-17-17 Comment Letter at 6-7, 11-17).

The Forest Service has not demonstrated that the proposed activities are “*necessary* to meet *minimum requirements* for the administration of the area *for the purpose of the Wilderness Act*,” 16 U.S.C. § 1133(c) (emphasis added), and that “the information sought is *essential* for wilderness management and alternative methods or locations are not available,” FSM 2323.37 (emphasis added). Instead, the Forest Service states that taking no-action might negatively affect the natural character of the Wildernesses for the following reason:

There could be long term indirect effects from the no action alternative. If no action is taken, there is legitimate concern that these species populations will continue to decline and this important aspect of the natural quality of wilderness could be impacted. The population of the bighorn sheep within the three wilderness areas may continue to be stagnant over time or could go into a downward trend because of disease spread through interaction with domestic animals outside the three wilderness areas. The possible transmission of disease to bighorn sheep and mountain goats inside the wilderness areas from those bighorn sheep that have interacted with domestic animals is the primary concern and a likely cause of the underperformance of bighorn sheep and mountain goats in the Wasatch. Whether or not the underperformance of these herds is a natural process or if it is being caused by disease from domestic livestock or something else would not be understood if no action is taken. If no action is taken, the effect to the natural quality could range from minor to catastrophic (loss of one or both of the herds) with potential significant and long-duration effects.

EA at 24. The MRA adds a broad statement of necessity noting,

Understanding the potential for disease spread between bighorn sheep and mountain goat populations, monitoring and maintaining meaningful data regarding current health status, survival, causes of mortality, year-round habitat use, and migration /

³ It is a well-established rule of statutory construction that a statute should be construed “as a symmetrical and coherent regulatory scheme,” *Gustafson v. Alloyd Co.*, 513 U.S. 561, 569 (1995), and a “harmonious whole,” *Fed. Trade Comm’n v. Mandel Brothers, Inc.*, 359 U.S. 385, 389 (1959).

movements within and to / from the three wilderness areas is important for retaining these species as part of the wilderness environment.

MRA at 6. To the extent that disease is an issue, the MRA states, “Information from this study would provide essential data to help UDWR understand what is causing species-specific mortality and population decline. Most management options for infected bighorn sheep populations require identification of a strain type, and data regarding pathogen and strain type are crucial to finding a solution to the disease problem in general.” MRA at 2. However, these statements contain several speculative assumptions that are not fleshed out in the record, not supported by the scientific evidence before the agency, and that ignore reasonable alternatives that could investigate and address the many potential causes of population fluctuation without offending the Wilderness Act.

1. UDWR’s study will not provide meaningful data on the variety of factors it intends to investigate. (See also 8-17-17 Comment Letter at 18-19).

The Forest Service has not indicated how UDWR’s study will provide statistically meaningful data on health status, survival, migration trends, and causes of mortality. The project as proposed is a one-time sampling and collaring of 20 mountain goats and 10 bighorns. MRA at 7. The Forest Service does not provide any information or citation as to why this is an effective sample size and project duration other than simply stating that UDWR considers this an effective sample. Email correspondence from a records request sheds more light. When asked how UDWR came up with the 20 mountain goats and 10 bighorn sheep for a sample size, UDWR responded with a link to WAFWA Wild Sheep Working Group guidelines for pathogen surveillance. Ex 219-21 (E-mail from Rusty Robinson, Bighorn Sheep / Mountain Goat Biologist, UDWR, to Pamela Manders, Fish and Wildlife Manager, Uinta-Wasatch-Cache National Forest (June 1, 2017)). Those guidelines state that nasal and tonsil swabs, blood, and feces should be sampled every other year from 10% of the herd or 10-15 animals along with annual opportunistic sampling of mortalities and hunter harvest. Ex283 (Western Association of Fish and Wildlife Agencies, Wild Sheep Working Group, *Adaptive Wild Sheep Disease Management Venture (DMV) Strategy* (January 2017)). Ongoing sampling is necessary because of imperfect detection probabilities, variabilities due to infection stage and test timing, and environmental factors affecting herd health and mortality. See, e.g., Wildlife Report at 25 (demonstrating strain detection is dependent upon sampling during shedding). A small, one-time sample is not sufficient to address all of these variables.

A District Court in Idaho recently found another helicopter-assisted collaring and sampling project unlawful where the Forest Service analyzed and authorized only 1 year of what was likely to be a 10-year elk mortality study by Idaho Department of Fish and Game (“IDFG”). See *Wilderness Watch v. Vilsack*, 229 F.Supp.3d 1170, 1176, 1180 (D. Id. 2017). There, IDFG sought to collar and take samples from elk to investigate a population decline. *Id.* at 1176. IDFG acknowledged that it could not obtain valid elk mortality data with five years of project activity, even with intensive collaring and sampling operations targeting up to 124 adult females and over 30 calves, because mortality and survival rates (particularly with calves) are highly variable over time. Ex301-2, Ex311 (IDFG, *Middle Fork Zone Elk Monitoring MRA*, August 7, 2015); see also *Vilsack*, 229 F.Supp.3d at 1176. Representative variability in survival data required a longer study.

A one-time study of a minimum number of animals cannot sufficiently inform UDWR on the various possible causes of population decline where so many variables could impact mortality, including susceptibility to mortality from disease, from one year to the next. The project should not be authorized because it will degrade wilderness character without obtaining meaningful data. If UDWR intends additional similar projects in the future, those additional projects must be disclosed and their cumulative impacts on wilderness character analyzed before the project can be authorized.

2. Even if meaningful data could be obtained through a one-time study, the Forest Service offers no indication of how the information gleaned will be used to preserve wilderness. (See also 8-17-17 Comment Letter at 17).

Compounding the risks associated with the proposal and the clear impacts to wilderness, the Forest Service offers no indication in the draft EA, the EA, the DN, or any other project documents about possible management actions that might result from the information gleaned. The draft EA simply indicates that “[b]ased on the information gathered from this study, UDWR may be able to adjust management actions to conserve and protect these wildlife populations and maintain Wilderness Character.” The MRA indicates that understanding potential disease spread, current health status, survival, habitat-use, movement patterns, and causes of mortality “is important for retaining these species as part of the wilderness environment,” MRA at 6, and “[m]ost management options for infected bighorn sheep populations require identification of a strain type, and data regarding pathogen and strain type are crucial to finding a solution to the disease problem in general,” MRA at 2.

As an initial matter, the evidence before the Forest Service indicates that UDWR’s efforts may not result in detection of strain type in the animals tested. UDWR captured two ewes and one mountain goat kid outside of the project area in 2017, and though they all tested positive for *Mycoplasma Ovipneumoniae*, they were not shedding the pathogen at the time of capture so UDWR could not identify a strain type. Wildlife Report at 25. Additionally, even if a strain type could be identified from limited sampling, and assuming that all of the other animals in the Wildernesses are carrying the same strain type without other strains present, the range of possible management actions are invasive and largely ineffective at arresting pathogen progression.

While the project record is silent as to what these management options might be, various studies identify typical management responses to pathogen occurrence and note that these responses, including vaccination, antibiotic treatment, culling, and population eradication and repopulation, “have generally had mixed or negative results.” One recent review of literature and data found that “[n]o vaccine or antibiotic treatment has controlled infection in domestic or wild sheep to date, management actions have been unsuccessful at reducing morbidity, mortality, or disease spread once a bighorn sheep population has been exposed.” Ex328, 335-36 (E. Frances Cassirer, *Pneumonia in Bighorn Sheep: Risk and Resilience*, *The Journal of Wildlife Management* 82(1):32-45 (2018)). Additionally, intensive management options (such as selective culling, depopulation, and reintroduction) had mixed to poor results, and in any event, are “best applied to small, accessible populations, where extensive testing is feasible.” Ex336 (emphasis added). It is well-established that the underlying cause of disease transmission is contact with domestic sheep and goats, and the most effective—or the only effective—measure for addressing disease transmission is preventing this contact. As discussed below, the Forest Service could implement protective measures to better prevent contact between bighorn sheep and domestic animals. If other factors are contributing to population declines, various wilderness-compatible management responses are available to address those factors. The Forest Service should not authorize the project as proposed because it will not result in any effective, wilderness-compatible management actions, and there are alternatives available that could better address population concerns without offending the Wilderness Act.

3. The Forest Service has unlawfully dismissed consideration of factors that could be contributing to population declines and alternative actions that might address those factors without offending the Wilderness Act. (See also 8-17-17 Comment Letter at 11-13).

Bighorn sheep are far more sensitive to mortality from disease pathogens than mountain goats, and the bighorn sheep population in the project area is not in decline. Further, “[p]neumonia related pathogens have been documented in mountain goat populations located in other parts of Utah, but to date, no negative effects have been recorded.” EA at 6 citing unpublished UDWR data. Thus

existing data, combined with evidence indicating that mountain goat populations are dispersing to other areas, indicates that disease is not a primary factor in mountain goat declines, and alternative causes should be explored before authorizing intensive motorized and electronic intrusions in wilderness.

While other wilderness-compatible management actions could be more effective in addressing population decline without the need to authorize prohibited activities in wilderness, the Forest Service categorically rejected analysis of such alternatives noting that “[t]he evaluation of other potentially detrimental impacts to mountain goat populations is outside the scope of this analysis,” DEA at 47; *see also* DEA at 40; 63; 66; 79; 81; 95-96. In *Wilderness Watch v. U.S. Fish & Wildlife Service*, 629 F. 3d 1024 (9th Cir. 2010), the Ninth Circuit found that “many other strategies could have met the goal of conserving bighorn sheep without having to construct additional structures within the wilderness,” and “[i]mportantly, in contrast to the creation of new structures within the wilderness, the Wilderness Act does not prohibit any of those [alternative] actions.” *Id.* Specifically, the Circuit noted that translocations, hunting, human disturbance, and predation all may be contributing to bighorn sheep population declines, *id.* at 1029-1030, and that actions such as cessation of translocations, moratoriums on hunting, and temporary trail closures could lead to an increase in the population without violating the Wilderness Act, *id.* at 1038. Similar to the circumstance before the Ninth Circuit, there are many factors identified as possible contributors to population declines in mountain goats and bighorn sheep that could be addressed without offending the Wilderness Act.

a. Cessation of Transplants. UDWR’s Mountain Goat Plan calls for utilizing mountain goat populations in wilderness as source populations for “augmentation or to start new populations within Utah or for other states,” and notes that “wilderness designated lands are one of the largest barriers to catching animals.” Ex232; *see also* Ex344 (Katie England, *Flying sheep: DWR transports wildlife via helicopter to test for disease*, Daily Herald (January 11, 2017))⁴ (noting that UDWR is in the process of establishing disease profiles for all of the herds in Utah to support ongoing translocation efforts).

However, transplanting “present[s] a clear risk for anthropogenically assisted pathogen introductions and opportunities for exposure at release sites,” and testing success is limited. Ex335. In addition to pathogen transmission, translocation (particularly of non-native species) presents other harms to natural environments. Similar to the scenario in the Olympic Peninsula, UDWR’s extensive transplant program has been a source of controversy in Utah due to impacts on native vegetation. *See Utah Native Plant Society v. U.S. Forest Serv.*, No. 2:16-cv-56-PMW (D. Ut. March 2, 2017); Ex347-50 (Brian Maffly, *Judge rejects suit over La Sal goat introduction*, The Salt Lake Tribune (March 4, 2017)). Cessation of translocation efforts could be implemented without violating the Wilderness Act, but the EA and DN do not analyze this alternative nor do they discuss ongoing harm to native vegetation from the perpetuation of non-native mountain goats.

b. Forage Studies and Management. The adequacy of forage and seasonal range, including post-fire habitat, could be limiting factors that could be studied and managed without the use of helicopters and electronic tracking devices. *See, e.g.*, Ex19-30. The agencies could study habitat factors and implement restrictions to protect important habitat without violating the Wilderness Act, but the EA and DN do not consider these alternatives.

c. Cessation of Hunting. Notwithstanding UDWR’s stated focus on intensive management for hunting opportunities, the Forest Service indicated that “[h]unting issues are outside the scope of this analysis.” DEA at 40; 63; 66; 79; 81; 95-96; *see also* DEA at 47. “Mountain goat population declines have been related primarily to overharvest.” Ex15, 27; *see also* Ex83 (Clifford

⁴ Available at: http://www.heraldextra.com/news/local/flying-sheep-dwr-transport-wildlife-via-helicopter-to-testfor/article_94056e6f-ae82-510c-a00d-47ea4897a7f1.html

Rice & Don Gay, *Effects of Mountain Goat Harvest on Historic and Contemporary Populations*, 91 *Northwestern Naturalist* 40 (2010)) (noting that speculations regarding cause of mountain goat population declines included habitat change, predation, disease, parasites, recreation impacts, and excessive harvest and finding that declines can be attributed primarily to the effects of harvest). Cessation of mountain goat and bighorn hunting in and around the project area could be implemented without violating the Wilderness Act, but the EA and DN dismiss consideration of this alternative.

d. Prevention of Contact with Domestic Sheep and Goats. The Forest Service indicates that the “proximity of bighorn sheep to domestic sheep grazing areas and connectivity of habitats between other bighorn sheep herd’s seasonal ranges play a critical role in management of respiratory disease,” Wildlife Report at 5, EA at 7, and “[c]omingling with domestic sheep and bighorns has been observed in the past on Mt. Timpanogos,” EA at 7.⁵ While there are no domestic sheep allotments on National Forest land within the project area, “disease transmission from domestic sheep to bighorn sheep still exists due to the presence of domestic sheep on private land or outside of the project area.” EA at 24. Indeed, the real problem is, as the EA states, “outside of the project area.” To the extent that disease transmission from domestic livestock to bighorn sheep is a contributing factor in possible mountain goat population declines, the agencies could perform a risk assessment for the entire bighorn range and implement protective measures without authorizing and implementing the intensive proposal presented by UDWR.

“Habitat utilization distribution of bighorn sheep in the Mt. Timpanogos population stretches from the Wasatch front from Provo Canyon on the south to the Corner Canyon on the north and includes Mt. Timpanogos, Mahogany Mtn., the areas of Dry Canyon, Battle Creek, and Grove Creek, Box Elder Peak, White Baldy Peak, American Fork Canyon, and Box Elder, Smooth, Preston, Willow, and Wadsworth Canyons.” EA at 7.⁶ The Forest Service could implement temporary or permanent closure orders restricting domestic livestock use (including grazing and packstock use) in these areas or restricting the manner of movement between pastures (e.g. trucking rather than herding). It could focus on removing escaped domestic sheep and diverting bighorn sheep from areas occupied by domestic sheep (whether on private or public land). It could work with landowners and permittees to implement better preventative measures (e.g. double-fencing, penning domestic animals at night, testing domestic sheep, keeping better watch of domestic sheep in pasture, notifying agency officials if interactions with bighorns are observed, etc.). All of these measures are more effective than post-transmission responses and all could be implemented without violating the Wilderness Act. But, the EA and DN do not analyze these alternatives.

e. Collaring and Study of Populations Outside of Wilderness. The Forest Service indicates that bighorn move in and out of the Wildernesses, and prior collaring efforts outside of the Wildernesses indicate interactions between those bighorns and mountain goats within the Mount Timpanogos Wilderness. *See* MRA at 2; Wildlife Report at 4. Additionally, there is another bighorn population to the south that intermingles with domestic sheep, and these two bighorn populations likely intermingle with each other. *See* Ex263 (Bighorn Plan showing contiguous nature of these populations). Shannon 2014, referenced in the EA, also shows that the Rock Canyon and

⁵ The EA cites to Shannon 2014 to document domestic sheep and bighorn sheep interaction that occurred on Timpanogos. Since domestic sheep don’t graze in the project area, and since the Forest Service has not fully explored this issue in the project record, it is difficult to know exactly how and where the observations occurred or assess management actions that could prevent contact.

⁶ The geographic distribution of bighorn sheep and mountain goats, and how that distribution is translated into concerns over disease transmission, is not consistently articulated in the EA and supporting materials. *See, e.g.*, Wildlife Report at 4; EA at 7. The map provided in the Wildlife Report shows no data records for bighorn sheep in Corner Canyon, Box Elder Peak, White Baldy Peak, or Box Elder Canyon. There are no records of bighorn in Twin Peaks Wilderness and records in the Lone Peak Wilderness are limited to the southern fringe.

Timpanogos bighorn populations are contiguous, and both populations were the subject, along with a Mt. Nebo population, of the research paper. Shannon at 739 (Figure 1). “It is believed, that as bighorn sheep interact across the population’s range, exposure of bighorn sheep to other bighorn sheep carrying different strains of bacterium occurs. Therefore, proximity of bighorn sheep to domestic sheep grazing areas and the connectivity of habitats between other bighorn sheep herd’s seasonal ranges play a critical role in management of respiratory disease (Utah Division of Wildlife Resources, 2013 a).” Wildlife Report at 5.

The Forest Service and UDWR could capture and monitor bighorn sheep outside of the Wildernesses to determine movement patterns in and around the Wildernesses. The winter range for bighorns appears to be almost exclusively outside of wilderness, and bighorn sheep would likely be easier to study while on their winter range. This could be combined with aerial monitoring counts, opportunistic sampling of mountain goats and bighorn sheep, as well as collaring and sampling goats that venture outside of wilderness. See Wildlife Report at 25. Capturing mountain goats south of the project area is also an option. The Uinta National Forest Plan states, “Mountain goats have dispersed south to Spanish Fork Peak along the lower northern boundary of the Diamond Fork Management Area.” Forest Plan at 5-54. They are also found “in the Cascade Mountain/Provo Peak area” and “are likely to disperse to Mount Nebo in the near future.” *Id.* at 5-80 and 5-91; see also EX236; Wildlife Report at 25 (mountain goat kid captured in Provo Canyon). The agencies could implement these alternative actions without violating the Wilderness Act, but the EA and DN dismiss their consideration.

f. Reduction of Other Threats. Other threats to mountain goat populations include “increased human disturbance in formerly isolated habitats” and “reduction in forage quantity and quality because of successional changes in habitats from fire exclusion.” Ex027. “Human disturbance in bighorn sheep habitat is an increasing concern” causing bighorns to “change use areas and abandon certain habitats,” and “[h]uman disturbance is also thought to be a possible stress inducer, which may lead to disease problems in some populations.” Ex257. The project area generally receives heavy visitor use. See EA at 22-23. In addition to moratoriums on hunting and cessation of translocations, temporary trail closures and other restrictions on access to habitat could be implemented, but the EA and DN do not analyze these alternatives.

Aerial disturbance is another recognized threat. The Forest Service’s own report indicates that agencies should “reduc[e] human activities in mountain goat habitats, particularly where mountain goat populations are static or declining, specifically by regulating the frequency of low-flying aircraft over mountain goat herds.” Ex027. The agencies could work together to reduce low-level overflights and other aerial disturbance in the project area without violating the Wilderness Act, but the EA and DN do not analyze this alternative.

All of these measures could be taken, individually or in concert, without authorizing prohibited activities in wilderness, but the Forest Service has either rejected them as “outside the scope of this analysis” or failed to address them deferring largely to UDWR’s proposed action. This begs the question—where does this all lead? If UDWR is primarily concerned about population declines in an introduced mountain goat population and it believes a native bighorn population may be contracting disease from domestic sheep and carrying that disease into the Wildernesses where mountain goats may be contracting it, what will UDWR do? How does the Forest Service reconcile UDWR’s traditionally circumscribed and intensive management of introduced species with the Forest Service’s mandate to “[p]rovide an environment where the forces of natural selection and survival rather than human actions determine which and what numbers of wildlife species will exist,” FSM 2323.31, and to “[m]aintain wilderness in such a manner that ecosystems are unaffected by human manipulation and influences so that plants and animals develop and respond to natural forces,” FSM 2320.2? If there are no effective management responses that could be implemented outside of those listed above (which do not require helicopter intrusions and telemetry installations in wilderness), why is the proposal necessary to preserve wilderness? Assuming there are effective management responses to address pathogen progression within herds, which there do not appear to

be, but those management responses require additional prohibited activities and ongoing trammeling of wilderness, is the proposal necessary to preserve wilderness? It does not appear these questions can be answered in the affirmative, and the Forest Service should reject the project as proposed.

Plainly, the mere fact that a wildlife population is experiencing decline cannot justify the use of helicopters and GPS collaring for wildlife research in wilderness. The Wilderness Act contains a “narrow” exception authorizing helicopter use only where necessary to “further the wilderness character of the area.” *Wolf Recovery Found.*, 692 F. Supp. 2d 1264, 1267-68 (D. Id. 2010) (quotation omitted). This exception permits otherwise-prohibited activities only in the “most rare of circumstances” in which denying the activity would itself compromise the integrity of the wilderness. *Id.* at 1268. Invoking this provision based solely on wildlife-population shifts and speculative utility would contravene the statutory language and its interpretation by the federal courts, and would permit the exception to swallow the rule that helicopter use is prohibited in wilderness. *See id.* (“Helicopters carry ‘man and his works’ and so are antithetical to a wilderness experience. It would be a rare case where machinery as intrusive as a helicopter could pass the test of being ‘necessary to meet minimum requirements for the administration of the area.’”). If the Forest Service could approve helicopter-assisted research any time the data obtained *might* help a state agency better understand wildlife population dynamics, the statutory prohibition against helicopter use would be meaningless. Such a vague and speculative statement of possible utility to wildlife management objectives cannot suffice for the requisite “specialized” finding of necessity. *See Wilderness Watch v. U.S. Fish & Wildlife Serv.*, 629 F.3d at 1036-1039.

C. The Forest Service failed to address the risk of project activities actually exacerbating population declines in exchange for a limited prospect of gleaning new and useful information. (See also 8-17-17 Comment Letter at 13-16).

The Forest Service has not reconciled the proposal’s risks and speculative benefit with the Wilderness Act’s stringent necessity requirement. The proposed actions are forms of highly-invasive trammeling,⁷ and studies are clear that the impacts extend beyond the immediate act of pursuing, capturing, and handling the animals. For example, the Bureau of Land Management found significant disturbance potential to bighorn sheep from low-level helicopter flights:

Helicopter surveys may adversely affect populations of mountain sheep... by altering the movement, habitat use, and foraging efficiency of sheep so that survivorship or reproduction is reduced” (Stockwell 1991 in Bleich et al. 1994). Bighorn can respond so dramatically to helicopter use that it may override other factors affecting sheep movement (Bleich et al. 1990, Bleich et al. 1994). Sheep do not habituate or become sensitized to repeated helicopter flights (Bleich et al. 1994). MacArthur et al. (1982) reported no heart rate responses in bighorn sheep to helicopters above 400 meters in altitude. Helicopter flights at 90-250 meters above the ground increased the heart rate in ewes 2.5 - 3 times above normal. Bleich et al. (1994) found that radio collared bighorn moved significantly farther following a helicopter survey than on the day prior to a survey. Helicopter overflights may also reduce foraging efficiency during winter (Harris 1992). Miller and Smith (1985) recommended that helicopter flights be kept at over 100 meters above ground level to minimize impacts to bighorn sheep.

Ex106 (Bureau of Land Management, *Status of the Science on Questions that Relate to BLM Plan Amendment Decisions and Peninsular Ranges Bighorn Sheep* (2001)). Impacts to bighorn foraging

⁷ A UDWR video demonstrates the highly invasive nature of these activities: UDWR, *Big Game Transplants in Utah*, YouTube (April 27, 2009), <https://www.youtube.com/watch?v=th35x2sNyho>. Wilderness Watch submitted a copy of this video on a flash drive with its August 17, 2017 comment letter.

behaviors may be particularly pronounced during winter months. Ex113 (Craig A. Stockwell & Gary C. Bateman, *Conflicts in National Parks: A Case Study of Helicopters and Bighorn Sheep Time Budgets at the Grand Canyon*, 56 Biological Conservation 317 (1991)).

Similarly, a Forest Service publication indicates that mountain goats are particularly susceptible to disturbance impacts from helicopters:

[T]he use of helicopters, in particular, may pose a threat to mountain goat populations. Helicopter recreation, helicopter logging, or fire control operations by aircraft may alter mountain goat behavior and time budgets. Disturbance may be particularly detrimental in winter and during kidding. Many researchers recommended a 1 mile (2 km) disturbance-free buffer around mountain goat habitat.

Ex027. The same publication recommends “reducing human activities in mountain goat habitats, particularly where mountain goat populations are static or declining, specifically by regulating the frequency of low-flying aircraft over mountain goat herds.” *Id.* (emphasis added). Another article notes that “[c]lose range flights typically elicit strong negative responses in ungulates,” and “[b]ecause [mountain] goats tend[] to remain in nearby cliffs, instead of escaping some distance away, they were exposed to stress from helicopter disturbance for a prolonged period of time.” Ex128, (Steeve D. Cote, *Mountain Goat Responses to Helicopter Disturbance*, 24(4) Wildlife Society Bulletin 681 (1996)). “Helicopter flights caused the disintegration of social groups ... and resulted in 1 case of severe injury to an adult female.” Ex126. The author noted that “[g]oats appeared to be more sensitive to helicopter traffic than other open-terrain ungulates” and recommended that “[h]elicopters should remain [over] 2km away from goat herds.” Ex129.

These concerns were not addressed in the EA or the draft DN. UDWR’s proposal includes repeated low-level helicopter flights and landings during fall and winter months for bighorns and mountain goats, but the EA does not address well-documented disturbance issues to either bighorn sheep or mountain goats or reconcile the documented risks associated with low-level helicopter flights and landings with the goals of the project. The Wildlife Report provides a cursory discussion of impacts to wildlife but limits discussion to acute mortality rates associated with helicopter net-gun capture. Wildlife Report at 9, 12, 25-26. It does not discuss the issues described above. The proposed activities run the risk of exacerbating population declines with only limited prospect of adding to the existing knowledge base of possible reasons for the declines. Further, as discussed above, it is well established that management options for addressing pathogen-related declines are limited and tenuous. Such a scenario falls far short of the “rare case where machinery as intrusive as a helicopter could pass the test of being ‘necessary to meet minimum requirements for the administration of the area,’” *Wolf Recovery Found.*, 692 F. Supp. 2d at 1268, and the Forest Service should reject the proposal.

D. The draft EA does not address the Wilderness Act’s prohibition on installations and reconcile the proposal to place radio telemetry collars on wildlife with that prohibition. (See also 8-17-17 Comment Letter at 15-16).

The Forest Service admits that placing radio collars to “track [the animals] movement and interactions [] is also a clear trammeling action as it is an attempt to control nature and is human interference in the normal lifecycle of the animals.” DEA at 24. Collars are also “installations that represent visible evidence of human activity.” EA at 25. For the reasons stated above, the Forest Service has not demonstrated that placing electronic installations in wilderness is necessary, and it has failed to address concerns over misuse and misappropriation of telemetry data. “[D]emand for newer and better tools has led to added functions, such as global positioning system (GPS) engines, 2-way communication, geofencing and proximity sensors, longer battery life, or onboard cameras[.]” Ex132 (Alexandre L. Rasiulis et al., *The Effect of Radio-Collar Weight on Survival of Migratory Caribou*, 78(5) The Journal of Wildlife Management 953 (2014)). Of particular concern in the

wilderness context, one study noted:

Animal tracking can reveal animal locations (sometimes in nearly real-time), and these data can help people locate, disturb, capture, harm, or kill tagged animals. In Minnesota (U.S.A.), some anglers petitioned for access to movement data derived from electronic tagging of northern pike (*Esox Lucius*) to aid in fish capture (Grover 2001)... Similarly, tracking data were misused in a shark-culling program in western Australia (Meeuwig et al. 2015). Researchers tagged imperiled white sharks to study their spatial ecology and inform conservation planning. The tagged sharks were also used as warning systems at beaches. The agency that granted the research permits had access to the tagging data as part of the permitting requirements. However, these data were then used to locate and kill tagged animals to allegedly reduce human-wildlife conflict... Similar scenarios may occur in other areas where human-wildlife conflict is related to livelihoods.

Ex136 (Steven J. Cooke et al., *Troubling issues at the frontier of animal tracking for conservation and management*, 00 Conservation Biology 0, 1 (2017)). The article also discusses examples of members of the public acquiring tracking equipment or hacking into electronic tagging systems. *Id.* at 1-2. In its comments, Wilderness Watch asked: Does the Forest Service have mechanisms in place to safeguard against misappropriation of electronic data or against the electronic data ultimately being used to locate and destroy or harass the animals wearing them? How is the ongoing control and manipulation inherent in electronic monitoring compatible with wilderness values when wilderness is defined as areas where earth and its community of life are untrammelled by man (“Untrammelled – not untrampled – untrammelled, meaning free, unbound, unhampered, unchecked, having the freedom of the wilderness.”)? The Forest Service did not address these concerns. It simply noted in its Wildlife Report that the GPS tracking system is password protected, Wildlife Report at 26, which was certainly the case in the above scenarios as well.

Our comments also noted a recent study stating, “A crucial assumption often made [about telemetry devices], but rarely tested, is that the transmitter does not alter the behavior or vital rates of the subject.” Ex132. The weight of the collar, and possibly the size and shape of the collar, has been shown to impact survival rates in caribou. Ex134. “Ignoring [the] potential [impact of radio collars on survival] may bias [research] results and lead to inappropriate management decisions.” *Id.* The Forest Service did not address this concern.

Instead, the Forest Service cited Forest Service Manual guidance stating normally prohibited research methods can be utilized “provided the information sought is essential for wilderness management and alternative methods or locations are not available,” and provided radio telemetry marking is “inconspicuous.” MRA at 4 (citing FSM 2323.37). As stated above, the information sought is not essential for wilderness administration, and there are alternatives available. Further, this photo⁸ depicts UDW markings that are far from inconspicuous:

⁸ Cedar City News, Utah Wildlife Board approves changes to big game regulations, December 7, 2013 (available at <https://www.cedarcityutah.com/news/archive/2013/12/07/utah-wildlife-board-approves-changes-big-game-regulations/#.WlOrbUuIY8Z>).



Given the risks involved with electronic tracking, and given the incompatibilities with Wilderness Act mandates, the agencies must rigorously explore other less-intrusive, wilderness-compatible monitoring methods.

NEPA CONCERNS

(See also 8-17-17 Comment Letter at 17-21)

The proposed action is likely to cause significant direct, indirect, and cumulative impacts and is likely part of a larger project if UDWR wishes to achieve statistically valid sampling. The Forest Service must take a hard look at this project through an Environmental Impact Statement (“EIS”) and rigorously explore reasonable alternatives that would not offend the Wilderness Act.

The EIS is NEPA's core requirement. Environmental concerns must be “integrated into the very process of agency decisionmaking” and “interwoven into the fabric of agency planning.” *Andrus v. Sierra Club*, 442 U.S. 347, 350-351 (1979). NEPA directs federal agencies to prepare a detailed Environmental Impact Statement (“EIS”) for federal actions that may significantly affect the quality of the human environment. 42 U.S.C. § 4332(2)(C). The purpose of an EIS is two-fold: 1) to ensure that the agency will have available and will carefully consider detailed information on significant environmental impacts when it makes decisions, and 2) to “guarantee that the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision.” *Robertson v. Methow Valley Citizens*, 490 U.S. 332, 349 (1989); 40 C.F.R. § 1501.2(b).

Pursuant to NEPA’s implementing regulations, to determine whether an EIS is required, federal agencies may first prepare a less detailed environmental assessment (“EA”). See 40 C.F.R. § 1501.4. An EA should consider several factors to determine if an action will significantly affect the environment, a circumstance that would mandate the preparation of an EIS. If the agency concludes the action will not significantly affect the environment, it must issue a Finding of No Significant Impact (“FONSI”) to justify its decision not to prepare an EIS. 40 C.F.R. § 1508.13. The FONSI must provide a convincing statement of reasons why the action will not have a significant effect on

the environment. *Id.* It is *only* when the proposed action will not have a significant effect on the environment that an EIS is not required. 40 C.F.R. § 1508.13. A FONSI is not appropriate in this case for the reasons stated below.

The project's direct, indirect, and cumulative effects present significant impacts that must be addressed in an Environmental Impact Statement. (See also 8-17-17 comment letter at 18-20).

NEPA regulations list ten factors the Forest Service must consider in analyzing the “intensity” of the project and determining whether an action is “significant,” a circumstance that would trigger the need for an EIS. 40 C.F.R. § 1508.27. Several of these factors render a FONSI inappropriate, including the following:

A. The project would impact three designated wildernesses. 40 C.F.R. § 1508.27(b)(3).

Designated wilderness areas are the epitome of “area[s] demonstrat[ing] unique characteristics,” 40 C.F.R. § 1508.27(b)(3), and the actions contemplated by the Forest Service in this case are actions expressly prohibited by the Wilderness Act because they harm the unique character of wilderness. *See* 16 U.S.C. § 1133(c). UDWR’s proposal involves intensive helicopter intrusions, including 60 landings, and radio-collaring of mountain goats and bighorn sheep in three Congressionally designated wildernesses for the ultimate end of intensive wildlife manipulation. These authorizations result in precisely the type of harm that Congress sought to prevent by prohibiting such activities. This circumstance, particularly in combination with other factors, raises substantial questions over the significance of the proposed action’s direct, indirect, and cumulative impacts to wilderness. *See Wilderness Watch v. Vilsack*, 229 F.Supp.3d 1170, 1180-81 (D. Id. 2017) (finding 40 C.F.R. § 1508.27(b)(3) “is triggered because the project took place in the Wilderness Area.”). Indeed, the Forest Service admits that it is “keenly aware of the impacts to wilderness character,” but discounts this factor by noting that the “decision is the minimum necessary.” DN at 6. However, as already discussed, the Forest Service refused to consider reasonable alternatives to the proposed action noting that they were “outside the scope” of the proposal, and in any event, the Forest Service paradoxically contends that its “decision will not result in any significant beneficial or adverse effects.” DN at 6 (emphasis added). It is difficult to see how a proposal to utilize helicopters and installations without any significant beneficial effect to wilderness character meets the high standard of being necessary to meet minimum requirements for administration of the area for the purpose of the Wilderness Act. *See* 16 U.S.C. § 1133(c).

Additionally, that the location of the actual landings and collaring may be concentrated in specific locations does not render the impacts to wilderness negligible. *See* DN at 6. Even if this were a relevant consideration, the Forest Service does not know precisely where the landings will occur or how lengthy of a pursuit will ensue before the landings. Additionally, the use of electronic tracking installations will not be limited in geographic application as collared animals will disperse across the Wildernesses.

B. The proposal is highly controversial. 40 C.F.R § 1508.27(b)(4).

An action is highly controversial where public comments “cast substantial doubt on the adequacy of the [agency's] methodology and data.” *Hillsdale Environmental Loss Prevention, Inc. V. United States Army Corps Of Engineers*, 702 F.3d 1156 (10th Cir. 2012) (discussing *Nat’l Parks & Conservation Assoc. v. Babbitt*, 241 F.3d 722 (9th Cir. 2001)). As discussed above and in previous comments, the Forest Service has not demonstrated that a limited, one-time study will provide meaningful data; it has not demonstrated that any effective, wilderness-compatible management actions exist that might result from the information gleaned; it has not addressed the risk that the proposal may actually exacerbate the issue it seeks to address; and, the analysis was so

narrowly tailored to UDWR's proposal that it precluded exploration of other methodologies and data that might better address population fluctuations with the added benefit of being wilderness-compatible. These analytical flaws and omissions "cast[] serious doubt upon the reasonableness of [the Forest Service's] conclusions." *Nat'l Parks*, 241 F.3d at 736.

C. The project would establish precedent for future authorizations. 40 C.F.R. § 1508.27(b)(6).

Similar to the Forest Service's position in *Wilderness Watch v. Vilsack*, the Forest Service here dismisses this factor noting that any future proposals will be analyzed and authorized independently. *See* DN at 7. However, it is reasonable to assume that a research project seeking statistically valid sampling will require additional, similar activities in the future, and similar justifications for the action will be provided. This circumstance, in combination with other factors, poses direct, indirect, and cumulative impacts to wilderness. Aside from the similar authorizations made by the Forest Service in *Wilderness Watch v. Vilsack*, the Forest Service has never to our knowledge authorized such an intensive and extensive aerial intrusion into wilderness for the purpose of population studies by the State. By authorizing UDWR's proposal, the Forest Service would be setting a concerning precedent nation-wide for state fish and game agencies to research population trends of game animals utilizing methods that are prohibited by the Wilderness Act. Accordingly, "[t]he Forest Service approval of this one-year project certainly set[s] a precedent for approval of similar projects in the future[.]" *Vilsack*, 229 F.Supp.3d at 1180. And, as described in the next factor, the approval of this project gives "the [State] incentive to continue slicing its long-term projects into one-year slivers." *Id.*

D. It is reasonable to anticipate a cumulatively significant impact on the environment. 40 C.F.R. § 1508.27(b)(7).

The Forest Service dismisses this factor by pointing to Section 3 of the EA. DN at 7. However, the EA devotes one paragraph to cumulative impacts noting only that helicopters are dispatched into the wildernesses for search and rescue operations (26 instances in the last 10 years), fire suppression (unknown number of flights for 4 fires in the last 10 years), and dam stabilization, flood repairs, and fish stocking (undisclosed frequency).⁹ EA at 26-27. It then concludes that the 60 landings authorized here "would have a minimal cumulative effect" when combined with these other intrusions and that the "effect is not permanent." EA at 27. While the Forest Service easily dismisses the harm of these ongoing helicopter intrusions, courts have found similar cumulative intrusions significant. *See Wolf Recovery Foundation*, 692 F.Supp.2d 1264, 1270 (D. Id. 2010) ("[g]iven that [one helicopter] project is allowed to proceed, the next project will be extraordinarily difficult to justify" and "will face a daunting review because it will add to the disruption and intrusion" from prior projects); *see also Vilsack*, 229 F.Supp.3d 1170 (finding a subsequent helicopter project unlawful). The perfunctory cumulative impacts analysis does not provide "a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these project, and differences between the projects, are thought to have impacted the environment." *Te-moak Tribe of Western Shoshone of Nevada v. U.S.*, 608 F.3d 592, 602 (9th Cir. 2010).

Further, while the Forest Service does not discuss cumulative impacts from helicopter and fixed-wing wildlife surveys, other discussion sections in the EA indicate that these activities occur

⁹ It is concerning that the Forest Service is authorizing helicopter use to facilitate activities and conditions that are themselves wilderness-degrading. For example, it is difficult to imagine how utilizing helicopters to stock fish could be compatible with the mandates of the Wilderness Act. Authorizing the proposed action in this case would add to this disruption in an effort to reach a likely similar end—the manipulation of game species to meet recreational demand.

every 2 to 3 years. EA at 8. Additionally, as discussed above, the Forest Service does not discuss the likelihood of similar future actions by UDWR to obtain meaningful, statistically valid data. The EA and draft DN do not discuss the likelihood of future proposals for statistically valid sampling or disclose the limited utility of a one-season study. The Forest Service must disclose and analyze these reasonably foreseeable and significant impacts. 40 C.F.R. § 1508.7.

The extent of significant cumulative impacts to three designated Wildernesses from past, ongoing, and reasonably foreseeable activities alone warrants the preparation of an Environmental Impact Statement. Taken in conjunction with other factors, the project certainly presents significant direct, indirect, and cumulative impacts to wilderness. *See Vilsack*, 229 F.Supp.3d at 1181 (finding “three important factors—cumulative impacts, precedent, and an ecologically critical area—were present, any one of which would have triggered the preparation of an EIS rather than an EA.”).

E. The action threatens a violation of federal law imposed for the protection of the environment. 40 C.F.R. § 1508.27(b)(10).

As discussed throughout this objection notice, the Forest Service would authorize activities generally prohibited under the Wilderness Act, including multiple helicopter overflights and landings and the installation of GPS tracking collars, without “any significant beneficial ... effects.” The Forest Service is considering these authorizations without demonstrating that the proposed action is necessary to meet minimum requirements for administration of the area for the purpose of the Wilderness Act, without disclosing limitations about the validity of data from a one-time project, without disclosing why the data is necessary (e.g. disclosing what resulting management actions could be taken to preserve wilderness character, the efficacy of that range of actions, and the actions’ ultimate compatibility with wilderness administration), and without disclosing and taking a “hard look” at project impacts to wilderness character and disturbance impacts to wildlife as required by NEPA.

The Forest Service’s purpose and need is too narrowly drawn, the Forest Service failed to consider relevant factors and take a hard look at project impacts, and the Forest Service failed to explore a reasonable range of alternatives. (See also 8-17-17 Comment Letter at 20).

NEPA requires the Forest Service to “[r]igorously explore and objectively evaluate all reasonable alternatives” to a proposed action. 40 C.F.R. § 1502.14(a). The Forest Service “may not define the objectives of its action in terms so unreasonably narrow that only one alternative . . . would accomplish the goals of the agency’s action, and the EIS would become a foreordained formality.” *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991). As discussed above, the Forest Service has not demonstrated an independent need for the project aside from UDWR’s broad wildlife management goals; it has failed to take a hard look at project impacts to wilderness character and wildlife, and it has expressly refused to consider other relevant factors to population fluctuations; and it has failed to sufficiently explore and analyze alternatives to the proposed action that could address the Forest Service’s objectives without violating the Wilderness Act. The Forest Service has an obligation under both the Wilderness Act and NEPA to rigorously explore those alternatives. *See Wilderness Watch, Inc. v. U.S. Fish & Wildlife Serv.*, 629 F.3d at 1039; *High Sierra Hikers Ass’n*, 390 F.3d at 647.

CONCLUSION AND REQUESTED RELIEF

For the above reasons, Wilderness Watch requests that the Forest Service either deny authorization for the proposed action or prepare an Environmental Impact Statement that takes a hard look at the above described direct, indirect, and cumulative impacts and fully explores alternatives that would not offend the Wilderness Act.

Thank you for your consideration,



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