

VIA CERTIFIED MAIL AND E-MAIL

July 9, 2021

Deb Haaland, Secretary of the Interior U.S. Dept. of the Interior 1849 C Street, N.W. Washington D.C. 20240 exsec@ios.doi.gov

Ray Suazo, State Director U.S. Bureau of Land Management One North Central Avenue, Ste. 800 Phoenix, AZ 85004-4427 rmsuazo@blm.gov Nada Wolf Culver, Deputy Director Exercising Authority of the Director U.S. Bureau of Land Management 760 Horizon Drive Grand Junction, CO 81506 nculver@blm.gov

Anthony Feldhausen, Gila District Manager U.S. Bureau of Land Management 3201 E. Universal Way Tucson, AZ 85756 afeldhausen@blm.gov

Dear Mses. Haaland and Culver, and Messers. Suazo and Feldhausen,

RE: Sixty-Day Notice of Endangered Species Act Violations regarding your failure to maintain protective fencing and to remove trespass cattle jeopardizing an Endangered Species and destroying San Pedro Riparian National Conservation Area Endangered Species' Critical Habitat.

The U.S. Secretary of the Interior ("Secretary"), U.S. Bureau of Land Management ("BLM") Director, State Director and Gila District Manager are hereby notified by the Center for Biological Diversity ("Center") and Maricopa Audubon Society ("Maricopa Audubon") of our intention to file suit 60 days after the filing of this Notice for unremedied violations of the Endangered Species Act, 16 U.S.C. §§ 1531-1544, and its implementing regulations, 50 C.F.R. §§ 402.01-402.17.

We file this Notice in connection with your failure to (1) maintain the required boundary fences protecting the San Pedro Riparian National Conservation Area ("SPRNCA") and (2) your failure to remove unauthorized trespass cattle in SPRNCA that are jeopardizing the continuing existence of an Endangered Species, Huachuca Water Umbel, destroying its designated SPRNCA Critical Habitat, and adversely modifying the SPRNCA Critical Habitat

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¹ Final Rule, Designation of Critical Habitat for Huachuca Water Umbel, Fish and Wildlife Service, Interior, Federal Register, Vol. 64, No. 132, page 37441, July 12, 1999.

of other endangered species, including Yellow-billed Cuckoo² and Northern Mexican Gartersnake.³ These species represent the health of the San Pedro River.

We have already filed complaints of trespass cattle within SPRNCA nine times in the last year or so alone⁴ with BLM Arizona State Director Raymond Suazo and BLM Gila District/SPRNCA Manager Scott Feldhausen to no avail. For almost a decade, we have filed countless complaints of trespass cattle within SPRNCA with State Director Suazo to no avail.

And now, as documented by the list of recent complaints and the images contained below in this Notice, owing to the lack of professional concern and action by State Director Suazo and by Gila District/SPRNCA Manager Feldhausen, the primary stronghold of the endangered Huachuca Water Umbel has now been severely damaged. The survival of this endangered plant is now jeopardized.

Completely frustrated by the fact that we have filed so many formal complaints with no results, with this Notice, the Center and Maricopa Audubon provide pertinent background information and identify the legal violations that we intend to challenge in federal court should BLM Acting Director Culver, State Director Suazo and Gila District/SPRNCA Manager Feldhausen fail to correct these violations within sixty (60) days.

² Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule, Federal Register, Vol. 79, Page 59962, October 3, 2014.

³ Endangered and Threatened Wildlife and Plants, Final Rule, Threatened Status for the Northern Mexican Gartersnake and Narrow-Headed Gartersnake, USFWS, Federal Register, Vol. 79, No. 130, Tuesday, July 8, 2014.

⁴ Email correspondence: to Ray Suazo (rmsuazo@blm.gov) and Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), from: Robin Silver; RE: Livestock at Hereford Bridge, throughout, May 10, 2020.; Email correspondence: to Ray Suazo (rmsuazo@blm.gov) and Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), from: Robin Silver; RE: SPRNCA COWS JUST UPSTREAM FROM FAIRBANK CROSSING, May 10, 2020.; Email correspondence to: Ray Suazo (rmsuazo@blm.gov) and Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), from: Robin Silver; RE: AZ BLM CONTINUES SERVICING CATTLE GROWERS AT ST. DAVID CIENEGA ON SPRNCA, June 16, 2020.; Email correspondence: to Ray Suazo (rmsuazo@blm.gov) and Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), from: Robin Silver; RE: SPRNCA TRESPASS GRAZING CONTINUES, report 20201006 Cattle trespass on San Pedro River CBD.pdf, October 6, 2020.; Email correspondence: to Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), Jayme Lopez (<u>jayme_lopez@blm.gov</u>) and Ray Suazo (<u>rmsuazo@blm.gov</u>), RE: TRESPASS CATTLE AT ST. DAVID CIENEGA AGAIN, March 21, 2021.; Email correspondence: to Jayme Lopez (jayme lopez@blm.gov), Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), Eric Baker (ebaker@blm.gov), and Ray Suazo (rmsuazo@blm.gov), from Lizann Michaud, RE: SPRNCA Trespassing Cattle Damage Intensifies at Hereford Bridge Area, March 22, 2021.; Email correspondence; to Scott Feldhausen (afeldhausen@blm.gov), Raymond M. Suazo (rmsuazo@blm.gov), Jayme M. Lopez (j06lopez@blm.gov), Eric M. Baker (ebaker@blm.gov), Margarita C. Guzman (mguzman@blm.gov), from: Robin Silver, RE: Why have you not removed the cows from St. David Cienega? You have the brands. You know that the owner is Carmen Miller. Some of these cows are the same ones that we have been photographing in St. David Cienega within the SPRNCA for years now. Your boundary fencing has needed repaired for years and you have failed to repair it., April 19, 2021.; Email correspondence: to Jayme Lopez (jayme lopez@blm.gov), Nada Culver (Director@blm.gov), Nada Culver (nculver@blm.gov), Ray Suazo (rmsuazo@blm.gov), and Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), from: Robin Silver; RE: ANOTHER REPORT OF TRESPASS COWS NORTH OF HEREFORD BRIDGE IN SPRNCA (2021 COMPLAINT #8), May 15, 2021.; and, Email correspondence to Scott Feldhausen (blm_az_gdo_mailbox@blm.gov), Jayme Lopez (jayme_lopez@blm.gov), Ray Suazo (rmsuazo@blm.gov), Nada Culver (Director@blm.gov), and Nada Culver (nculver@blm.gov), RE: TRESPASS CATTLE CONTINUE DESTROYING THE SAINT DAVID CIENEGA WITHIN THE SAN PEDRO RIPARIAN CONSERVATION AREA (2021 TRESPASS GRAZING COMPLAINT #9), June 6, 2021.

BACKGROUND

The San Pedro River is the last surviving, undammed desert river in the Southwest.⁵ In 1988, the U.S. Congress created the San Pedro Riparian National Conservation Area ("SPRNCA") within the Sierra Vista Sub-basin "[i]n order to protect the riparian area and the aquatic, wildlife, archeological, paleontological, scientific, cultural, educational, and recreational resources of the public lands surrounding the San Pedro River." The U.S. Congress created SPRNCA in recognition of the fact that the San Pedro River is one of Arizona's, the Nation's, and the World's environmental crown jewels.⁷

In August 1996, the North American Free Trade Association ("NAFTA") Commission for Environment Cooperation recognized the San Pedro River as one of the first North American Important Bird Areas." Also in August 1996, SPRNCA was recognized as the first "Globally Important Bird Area" in North America by the American Bird Conservancy.

SPRNCA is designated Critical Habitat for Huachuca Water Umbel¹⁰ and Yellow-billed Cuckoo.¹¹ It is proposed for Critical Habitat for Northern Mexican Gartersnake¹² and Arizona Eryngo.¹³

⁵ Arizona Riparian Inventory and Mapping Project, Arizona Game and Fish Department, Phoenix, December 1, 1993.; American Birding Association, Inc., "Winging It", Volume 7, Number 10, October 1995.; "Ribbon of Life, An Agenda for Preserving Transboundary Migratory Bird Habitat On the Upper San Pedro River, Commission For Environmental Cooperation, 1999.; Desertification of the United States, David Sheridan, Council on Environmental Quality 1981.; "In Arizona Desert, a Desert Oasis in Peril," Jon Christensen, New York Times, May 4, 1999.; "A Special Place, The Patience of a Saint San Pedro River," Barbara Kingsolver, National Geographic, April 2000.; "Alternative Futures for Landscapes in the Upper San Pedro River Basin of Arizona and Sonora, Carl Steinitz, Robert Anderson, Hector Arias, Scott Bassett, Michael Flaxman, Tomas Goode, Thomas Maddock III, David Mouat, Richard Peiser and Allan Shearer, USDA Forest Service Gen. Tech. Rep. PSW-GTR-191. 2005.; "We pump too much water out of the ground—and that's killing our rivers, Alejandra Borundo, National Geographic, October 2, 2019.

⁶ Arizona-Idaho Conservation Act, 16 U.S.C. § 460xx(a), November 18, 1988.

⁷ "Unique Wildlife Ecosystems, Arizona, Proposed Unique Ecosystem, Nationally Significant, San Pedro River," U.S. Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C., November 6, 1978.; Assessment of Water Conditions and Management Opportunities in Support of Riparian Values, BLM, 1987.; "U.S. Senate Committee on Energy and Natural Resources, San Pedro Riparian National Conservation Area Report, No. 100-525, 100th Cong., 2d sess., Sep. 7, 1988.; Arizona-Idaho Conservation Act, U.S. Congress 1988 (S. 2840), 16 U.S.C. § 460xx(a), U.S. Congress, November 18, 1988.; San Pedro Riparian Area," Sam Negri, Arizona Highways Magazine, April 1989.; Arizona Riparian Inventory and Mapping Project, Arizona Game and Fish Department, Phoenix, December 1, 1993.: This Land Is Our Land, America's Last Great Places – and How They Might Be Saved Forever," Life Magazine, October 1993.: "Arizona Riparian Protection Program Legislative Report." ADWR, July 1994.: American Birding Association, Inc., "Winging It", Volume 7, Number 10, October 1995.; "Rio San Pedro, One of the last great places," Robert C. Dyer, Arizona Highways Magazine, May 1996.; "The Ageless Waters of the San Pedro River," Roseann Beggy Hanson, Arizona Highways Magazine, November 1998.; Ribbon of Life, An Agenda for Preserving Transboundary Migratory Bird Habitat On the Upper San Pedro River, Commission For Environmental Cooperation, 1999.; "In Arizona Desert, a Desert Oasis in Peril," Jon Christensen, New York Times, May 4, 1999.; A Special Place, The Patience of a Saint San Pedro River, Barbara Kingsolver, National Geographic, April 2000.; "If National Geographic can see the San Pedro as a jewel, can't those of us living here?" Editorial, Sierra Vista Herald, April 25, 2000.; ; ; "A treasure at risk, Bill threatens San Pedro River," Editorial, Arizona Republic, May 23, 2002.; "Siphoning the San Pedro," Editorial, Arizona Daily Star, May 26, 2002.; "Last Great Places, San Pedro River, Miracle in the Desert, The Nature Conservancy Website, August 20, 2002.; "Riparian rip-off, A silly rider has popped up in Congress, again - and should die again," Editorial, Arizona Republic, May 21, 2003.; and "A river to save, the fate of the San Pedro will rest on McCain's shoulders," Editorial, Arizona Republic, September 2,

⁸ "Environment ministers identify first North American important bird areas," News Release, Toronto, August 2, 1996.

^{9 &}quot;San Pedro area earns key avian designation," Associated Press/East Valley Tribune, August 23, 1996.;

¹⁰ Final Rule, Designation of Critical Habitat for Huachuca Water Umbel, Fish and Wildlife Service, Interior, Federal Register, Vol. 64, No. 132, page 37441, July 12, 1999.

SPRNCA is also important recovery habitat for the recovery of Southwestern Willow Flycatcher, ¹⁴ Desert Pupfish, ¹⁵ Spikedace ¹⁶ and Loach Minnow. ¹⁷ The St. David Cienega, in particular, is already aiding recovery efforts for Umbel and Desert Pupfish. The St. David Cienega should be added to the designated Critical Habitat for the recently proposed endangered listing with Critical Habitat for Arizona Eryngo ¹⁸ because cienega habitat is so rare and consequently so valuable. ¹⁹

Permitted cattle grazing is not allowed within SPRNCA riparian or cienega areas except with two exceptions:

"... Approximately 2.5 miles of the Babocomari River occurs within the BLM administered portion of the Babocomari Allotment, some of which may be umbel habitat. The Brunchow Hill Allotment has had (last located in 2002), and may still have, umbel on BLM and non-Federal land. Approximately 0.3 mile of the San Pedro River is in the Brunchow Hill allotment, including approximately 500 feet on BLM administered lands. Grazing occurs in both allotments where umbel could occur on BLM lands and non-Federal lands, which is in the RNCA."²⁰

USFWS' has also raised concerns about SPRNCA trespass grazing in the past; however, BLM has managed to assuage these concerns:

"...authorized grazing adjacent or near the exclosures increases the likelihood of exclosure use. In an effort to remove unauthorized livestock as quickly as possible and limits impacts, the [BLM] Gila District informally contacts the owner of unauthorized livestock as soon as possible, and requests removal

¹¹ Final Rule, Designation of Critical Habitat for the Western Distinct Population Segment of Yellow-Billed Cuckoo, Fish and Wildlife Service, Interior, Federal Register Vol. 86, No. 75, page 20798, April 21, 2021.

¹² Revised proposed rule, Designation of Critical Habitat for the Northern Mexican Gartersnake and Narrow-Headed Gartersnake, Fish and Wildlife Service, Interior, Federal Register Vol. 85, No. 82, page 23608, April 28, 2020.

¹³ Proposed rule, Endangered Species Status for Arizona Eryngo and Designation of Critical Habitat, Fish and Wildlife Service, Interior, Federal Register, Vol. 86, No. 41, Page 12563, March 4, 2021.

¹⁴ Final Recovery Plan, Southwestern Willow Flycatcher (*Empidonax traillii extimus*); USFWS Southwestern Willow Flycatcher Recovery Team Technical Subgroup, August 2002.

¹⁵ Desert Pupfish (*Cyprinodon macularius*) Recovery Plan, Prepared by Paul C. Marsh, Arizona State University and Donald W. Sada Bishop, California for Region 2, U.S. Fish and Wildlife Service, Albuquerque, New Mexico, September 1993.

¹⁶ Spikedace (*Media fulgida*) Recovery Plan, USFWS, September 1991.

¹⁷ Loach Minnow (*Tiaroga cobitis*) Recovery Plan, USFWS, September 1991.

¹⁸ Proposed rule, Endangered Species Status for Arizona Eryngo and Designation of Critical Habitat, Fish and Wildlife Service, Interior, Federal Register, Vol. 86, No. 41, Page 12563, March 4, 2021.

¹⁹ Cienegas-Vanishing Climax Communities of the American Southwest, Dean A. Hendrickson and W.L Minckley, Arizona State University, 1985.; An Overview of Aridland Cienagas, with proposals for Their Classification, Restoration, and Preservation, A.T. Cole and Cinda Cole, The New Mexico Botanist, Special Issue No. 4, September 2015, in Proceedings of the Fourth Natural History of the Gila Symposium, October 25-27, 2012, Edited by Kathy Whiteman and William Norris, Western New Mexico University, 2015.; Plant Ecology of Arid-land Wetlands, a Watershed Moment for Cienega Conservation, Dustin Wolkis, Arizona State University, May 2016.; Final Rule, Designation of Critical Habitat for Huachuca Water Umbel, Fish and Wildlife Service, Interior, Federal Register, Vol. 64, No. 132, page 37441, July 12, 1999, page 37443.

²⁰ Memorandum to: Tom Dabbs, District Manager, Bureau of Land Management, Gila District, from USFWS Arizona Field Supervisor Steven L. Spangle, RE: Biological Opinion on the Gila District Livestock Grazing Program, May 21, 2012, page 68.

within a specific time frame ... [t]he exclusion is maintained by approximately 200 miles of SPRNCA boundary fence.²¹

But now, throughout large sections of SPRNCA, trespass grazing is devastating the San Pedro River without response from BLM SPRNCA administrators Director Suazo and Manager Feldhausen in spite of repeated notifications, pleas for action, and expressions of exasperation and anger at their complete lack of professional concern and responsiveness.

The listing Rule for the endangered Huachuca Water Umbel (*Lilaeopsis schaffneriana* ssp. *recurva*) states:

"The San Pedro River is an important recovery habitat for *Lilaeopsis*²² ... [t]he largest area currently available for recovery of *Lilaeopsis* is the San Pedro River along the perennial reach from Hereford to about 4 miles north of Charleston."²³

The November 2017, USFWS Huachuca Water Umbel Recovery Plan also notes "the greatest quantity of Umbel...[consistently] occurred south of Highway 90":

"They [Vernadero Group] also noted that the greatest quantity of *L.* schaffneriana ssp. recurva occurred south of Hwy 90 and that areas of higher concentrations remain higher from one monitoring period to the next (Vernadero Group 2011a, p. 21).²⁴

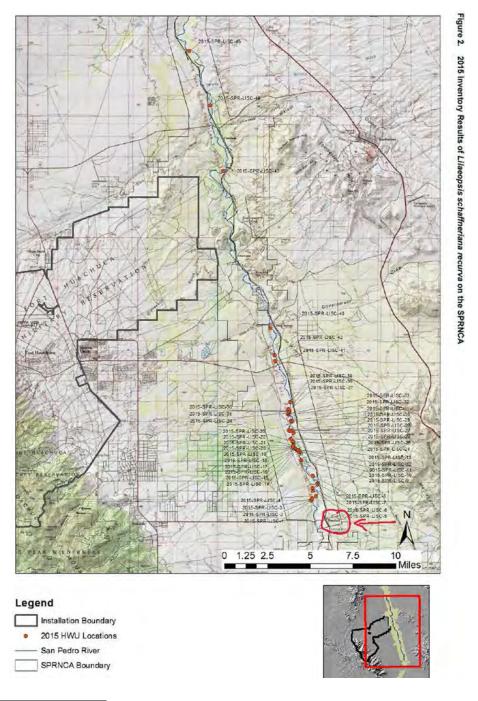
²¹ Id., pages 72, 220.

²² Final Rule, Determination of Endangered Status for Three Wetland Species in Southern Arizona and Northern Sonora, Mexico, Fish and Wildlife Service, Interior, Federal Register Vol. 62, No. 3, page 665, January 6, 1997, page 678.

²³ Id., page 682.

²⁴ Recovery Plan for *Lilaeopsis schaffneriana* ssp. *recurva* (Huachuca water umbel), Region 2 U.S. Fish and Wildlife Service Arizona Ecological Services Field Office Tucson, Arizona, November 2017, page 85.

The last comprehensive Umbel survey took place in 2015.²⁵ The survey results were reported in the 2016, "2015 Huachuca Water Umbel...Inventory Report" ("Fort Huachuca/XCEL (2016)"). The following map from Fort Huachuca/XCEL (2016)²⁶ clearly shows visually that the primary stronghold of the endangered Huachuca Water Umbel, marked by red dots, is located north of the Hereford Bridge (circled in red) and south of the Highway 90:



²⁵ 2015 HUACHUCA WATER UMBEL (*Lilaeopsis schaffneriana* ssp. *recurva*) SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA INVENTORY REPORT, COCHISE COUNTY, ARIZONA, Environmental and Natural Resources Division Directorate of Public Works, U.S. Army Garrison, Fort Huachuca, Arizona, Prepared by: XCEL Engineering, Inc, Oak Ridge, TN 37830, March 2016.

²⁶ Id., Figure 2, page 9.

Fort Huachuca/XCEL (2016) summarizes the situation illustrated by the above map with respect to the critical concentration of Huachuca Water Umbel populations north of the Hereford bridge:

"...in 2004, 30 populations were documented with the heaviest concentration of 22 water umbel populations north of Hereford bridge (EEC 2005). ... During the third survey, completed in 2007, 28 populations were documented, with the heaviest concentration of 23 water umbel populations occurring north of Hereford bridge (EEC 2008). ... [and, in] the fourth SPRNCA survey. ... [t]wenty-eight populations were documented, with the heaviest concentration of 22 water umbel populations occurring north of Hereford Bridge (Vernadero 2009).²⁷

Since Fort Huachuca/XCEL (2016), the northern approximately 3.5 miles of the area between the Hereford Bridge and Highway 90, has dried significantly with little remaining surface water and dramatically less Umbel. On June 17 and 28, we only found two Huachuca Water Umbel metapopulations between the Hereford Bridge and Highway 90. Cattle tracks were found within feet of one of the metapopulations. Cattle sign and damage extend from the Hereford Bridge to approximately 1.85 miles south of Highway 90.

²⁷ Id., page 1.



San Pedro River without cattle grazing, June 16, 2021, © Robin Silver.

The fact that miles of riparian habitat north of the Hereford bridge, the heart of occupied Umbel Critical Habitat, have now been heavily damaged by trespass cattle grazing and the fact that trespass cattle still occupy the northern part of SPRNCA are documented in the following images.



Cattle grazing, trailing, and trampling, $31^{\circ}26.5551'N$, $110^{\circ}65.186'W$, © Robin Silver.



Cattle grazing and trampling, 31°26.4998'N,110°65.068'W, © Robin Silver.



Cattle grazing, trailing, and trampling, 31°26.5452'N, 110°65.24'W, © Robin Silver.





Cattle grazing and trampling, 31°26.5602'N, 110°65.134'W, © Robin Silver.



Cattle feces, grazing and trampling, 31°26.5692'N, 110°65,16'W, © Robin Silver.



Cattle grazed bulrush and bank trampling, 31°26.576'N, 110°65.144'W, © Robin Silver.



Fresh cattle feces with flies, 31°26,5718'N, 110°65,177'W, © Robin Silver.



Cattle trailing, trampling, and grazing, 31°26,6057'N, 110°65,5207'W, © Robin Silver.



Cattle trailing, trampling, and grazing, 31°26,6052'N, 110°65,277'W, © Robin Silver.



Cattle trampling and grazing, 31°26,6092'N, 110°65,22'W, © Robin Silver.



Cattle trail and grazing, 31°26,6477'N, 110°65,18'W, © Robin Silver.



Cattle trampling and grazing, 31°26,6648'N, 110°65,185'W, © Robin Silver.



Cattle trail to San Pedro River, 31°26,6987'N, 110°65,002'W, © Robin Silver.



Grazed bulrush, 31°26,7138'N, 110°64,931'W, \copyright Robin Silver.



Cattle trampling and grazing, 31°26,7872'N, 10°64,458'W, © Robin Silver.



Cattle grazed bulrush, feces, and trampling, 31°26,7909'N, 110°64,405'W, © Robin Silver.



Cattle trail to streamside grazing, trampling, 31°26,8328'N, 110°63,509'W, © Robin Silver.



Cattle grazing and trampling, 31°26,8417'N, 110°63,418'W, © Robin Silver.



Cattle trail to trampling and grazed bulrush, $31^{\circ}26,8417'N$, $110^{\circ}63,418'W$, © Robin Silver.



Cattle trail, trampling and grazed bulrush, $31^{\circ}26,8437'N$, $110^{\circ}63,402'W$, © Robin Silver.



Cattle trail to grazed bulrush, trampling, 31°26,8454'N, 110°63,404'W, © Robin Silver.



Cattle grazing, feces, and trail to the River, 31°26,8503'N, 110°63,381'W, © Robin Silver.



Cattle feces, grazing and trampling, $31^{\circ}26,8546'N$, $110^{\circ}63,385'W$, © Robin Silver.





Cattle trail, feces, grazing and trampling, 31°26,8706'N, 110°63,336'W, © Robin Silver.



Trespass cattle north of the Hereford Bridge, 31°26.9114'N, 110°64.722'W, © Robin Silver.



Cattle trail across SPRNCA uplands to River, 31°26,9559'N, 110°63,426W, © Robin Silver.

Further, on July 3, 2021, one of our members submitted the following images:



Grazing on cottonwood seedling terminal buds by trespass cattle, July 3, 2021.



Fresh grazing on bulrush by trespass cattle, July 3, 2021.



Fresh grazing on seep willow terminal buds by trespass cattle, July 3, 2021.

On the northern SPRNCA, trespass cattle grazing is also rampant in the St. David Cienega. Trespass cattle grazing is rampant in the St. David Cienega similarly because SPRNCA administrators, BLM State Director Suazo and BLM Gila District/SPRNCA Manager Feldhausen, have failed to repair and maintain the boundary fencing.

Arizona is an "open range" or "fence out" state, where the responsibility for keeping cattle off of one's property is the responsibility of the landowner, not the responsibility of the neighboring rancher.²⁸ In other words, if a property owner does not want livestock to enter their property, the property owner is responsible to put up and to maintain their own fence.

"An owner ... of land is not entitled to recover for damage resulting from the trespass of animals unless the land is enclosed within a lawful fence..."²⁹

The St. David Cienega is Critical Habitat for Yellow-billed Cuckoo. Huachuca Water Umbel is found there. The St. David Cienega is important recovery habitat for the endangered Desert Pupfish.³⁰ Desert Pupfish are found there. Arizona Eryngo has been proposed as endangered with SPRNCA Critical Habitat.³¹ The St. David Cienega should be included as designated Arizona Eryngo Critical Habitat because cienega habitat is so rare and consequently so valuable.³²

The following images document the fact that SPRNCA administrators, BLM State Director Suazo and BLM Gila District/SPRNCA Manager Feldhausen have failed to repair and maintain the St. David Cienega boundary fencing, for years.

³⁰ Desert Pupfish (*Cyprinodon macularius*) Recovery Plan, Prepared by Paul C. Marsh, Arizona State University and Donald W. Sada Bishop, California for Region 2, U.S. Fish and Wildlife Service, Albuquerque, New Mexico, September 1993.

²⁸ Arizona Revised Statutes 3-1426, 3-1427.

²⁹ Arizona Revised Statutes 3-1427.

³¹ Proposed rule, Endangered Species Status for Arizona Eryngo and Designation of Critical Habitat, Fish and Wildlife Service, Interior, Federal Register, Vol. 86, No. 41, Page 12563, March 4, 2021.

³² Cienegas-Vanishing Climax Communities of the American Southwest, Dean A. Hendrickson and W.L Minckley, Arizona State University, 1985.; An Overview of Aridland Cienagas, with proposals for Their Classification, Restoration, and Preservation, A.T. Cole and Cinda Cole, The New Mexico Botanist, Special Issue No. 4, September 2015, in Proceedings of the Fourth Natural History of the Gila Symposium, October 25-27, 2012, Edited by Kathy Whiteman and William Norris, Western New Mexico University, 2015.; Plant Ecology of Arid-land Wetlands, a Watershed Moment for Cienega Conservation, Dustin Wolkis, Arizona State University, May 2016.; Final Rule, Designation of Critical Habitat for Huachuca Water Umbel, Fish and Wildlife Service, Interior, Federal Register, Vol. 64, No. 132, page 37441, July 12, 1999, page 37443.



Trespass cattle in St. David Cienega, June 5, 2016, © Robin Silver.



Trespass cattle in St. David Cienega, June 4, 2020, © Robin Silver.



Trespass cattle in St. David Cienega, June 4, 2020, © Robin Silver.



Trespass cattle in St. David Cienega, June 4, 2020, © Robin Silver.



Trespass cattle in St. David Cienega, June 4, 2020, © Robin Silver.



Trespass cattle in St. David Cienega, June 4, 2020, © Robin Silver.



Cattle trails after St. David Cienega prescribed burning, March 20, 2021, © Robin Silver.



Trespass cattle in St. David Cienega March 20, 2021, © Robin Silver.



Trespass cattle in St. David Cienega March 20, 2021, © Robin Silver.



Trespass cattle in St. David Cienega March 20, 2021, © Robin Silver.



Trespass cow in St. David Cienega May 30, 2021, © Robin Silver.



Trespass cattle in St. David Cienega May 30, 2021, © Robin Silver.



Trespass cattle in St. David Cienega May 30, 2021, © Robin Silver.

With respect to cattle grazing, the January 6, 1997, Umbel listing Rule states:

"Livestock grazing potentially affects *Lilaeopsis* at the ecosystem, community, population, and individual levels. Cattle generally do not eat *Lilaeopsis* because the leaves are too close to the ground, but they can trample plants. ... Poor livestock grazing management can destabilize stream channels and disturb cienega soils, creating conditions unfavorable to *Lilaeopsis*, which requires stable stream channels and cienegas. Such management can also change riparian structure and diversity, causing a decline in watershed condition."³³ ...

These areas being currently damaged are also designated Critical Habitat for Yellow-billed Cuckoo³⁴ and proposed Critical Habitat for the Northern Mexican Gartersnake.³⁵

"Perhaps 30 percent of the western U.S. population of Yellow-billed Cuckoos breed" in the San Pedro Riparian National Conservation Area."³⁶ At least 25% of Arizona's Yellow-billed Cuckoo population nests on the Upper San Pedro River.³⁷

The April 21, 2021, Yellow-billed Cuckoo Critical Habitat Designation Rule states:

"This area [the Upper San Pedro River] supports the largest population of breeding western yellow-billed cuckoos along and adjacent to a free-flowing river in Arizona and has a high conservation value." ³⁸

Ironically, the Yellow-billed Cuckoo Critical Habitat Designation Rule also states:

"The Designation of critical habitat may also help increase agency...stewardship...and curtail unauthorized activities that degrade habitat such as trespass grazing..."³⁹

And.

"The 40 mi (64 km) of the upper San Pedro River was designated by Congress as a Riparian National Conservation Area in 1988. The primary purpose for the special designation is to protect and enhance the desert riparian ecosystem, a rare remnant of what was once an extensive network of similar riparian systems throughout the American Southwest."⁴⁰

Director Suazo and Manager Feldhausen continue ignoring this fact.

³³ Final Rule, Determination of Endangered Status for Three Wetland Species in Southern Arizona and Northern Sonora, Mexico, Fish and Wildlife Service, Interior, Federal Register Vol. 62, No. 3, page 665, January 6, 1997, page 683.

³⁴ Final Rule, Designation of Critical Habitat for the Western Distinct Population Segment of Yellow-Billed Cuckoo, Fish and Wildlife Service, Interior, Federal Register Vol. 86, No. 75, page 20798, April 21, 2021.

³⁵ Revised proposed rule, Designation of Critical Habitat for the Northern Mexican Gartersnake and Narrow-Headed Gartersnake, Fish and Wildlife Service, Interior, Federal Register Vol. 85, No. 82, page 23608, April 28, 2020.

³⁶ National Audubon's Introduction to Important Bird Areas, Frank Graham, Jr., Audubon Magazine, Vol. 104, No. 5; December 2002.

³⁷ Western Yellow-billed Cuckoo in Arizona: 1998 and 1999 Survey Report, Arizona Game and Fish Department, March 10, 2000.; Survey and Life History Studies of the Yellow-billed Cuckoo: Summer 2001, Bureau of Reclamation, Prepared by Murrelet Halterman, August 13, 2002.

³⁸ Final Rule, Designation of Critical Habitat for the Western Distinct Population Segment of Yellow-Billed Cuckoo, Fish and Wildlife Service, Interior, Federal Register Vol. 86, No. 75, page 20798, April 21, 2021, page 20811.

³⁹ Ibid.

⁴⁰ Id., page 20857.

Former BLM Arizona State Director Dean Bibles was responsible for the acquisition of lands in the SPRNCA and for shepherding it through the legislative process that resulted in creation of SPRNCA.⁴¹ In Director Bibles' words,

"...the purpose for the acquisition was to save the riparian area for the migratory and nesting birds as well as other uses of the area that are incompatible with grazing."⁴²

Further, with respect to cattle grazing, the October 3, 2014, Yellow-billed Cuckoo listing Rule states:

"The Service (2002, Appendix G, pp. 5–7) and Krueper *et al.* (2003, p. 608) reviewed the effects of livestock grazing, primarily in southwestern riparian systems. ... these effects generally include the removal and trampling of vegetation and compaction of underlying soils, which can inhibit germination and change hydrology (Rea 1983, p. 40; Belsky *et al.* 1999, pp. 419–431) and promote the dispersal of nonnative plant species. Such effects are most significant when riparian areas have been subject to overuse by livestock (NAS 2002, pp. 24, 168–173). Overuse occurs when grazed vegetation does not recover sufficiently to maintain itself and soils are left bare and vulnerable to erosion. Over time, livestock grazing in riparian habitats, combined with other alterations in streamflow, typically results in reduction of plant species diversity and density and may increase the distribution and density of nonnative tamarisk by eliminating competition from native cottonwood and willow saplings, which are preferred forage for livestock (Krueper *et al.* 2003, p. 608).

Long-term cumulative effects of livestock grazing involve changes in the structure and composition of riparian vegetation (Service 2002, Appendix G, pp. 5–7), which may affect suitability of habitat for western yellow-billed cuckoo breeding and prey population abundance. The western yellow-billed cuckoo nesting habitat is structurally complex with tall trees, a multistoried vegetative understory, low woody vegetation (Halterman 1991, p. 35) and higher shrub area than sites without western yellow-billed cuckoos (Hammond 2011, p. 48). Livestock grazing alters understory vegetation, reducing height and density or eliminating new growth in riparian areas, and thereby hampering recruitment of woody species that, when mature, provide nest sites. Furthermore, the relatively cool, damp, and shady areas favored by western yellow-billed cuckoos are those favored by livestock over the surrounding drier uplands. This preference can concentrate the effects of habitat degradation from livestock in western yellow-billed cuckoo habitat (Ames 1977, p. 49; Valentine *et al.* 1988, p. 111; Johnson 1989, pp. 38–39; Clary and Kruse 2004, pp. 242–243).

Removal, reduction, or modification of cattle grazing has resulted in increases in abundance of some riparian bird species. For example, Krueper (1993, pp. 322–323) documented responses of 61 bird species, most of which increased significantly 4 years after removal of livestock grazing in Arizona's San Pedro River Riparian National Conservation Area. The bird species guilds that

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⁴¹ Arizona-Idaho Conservation Act, 16 U.S.C. § 460xx(a), November 18, 1988.

⁴² Correspondence, to: BLM Arizona State Director Ray Suazo, from: D Dean Bibles, BLM Arizona State Director 1982-1989; RE: Public Comment on RMP for SPRNCA, September 21, 2018.

increased most dramatically were riparian species, open-cup nesters, Neotropical migrants, and insectivores, all species that share characteristics with the western yellow-billed cuckoo. The western yellow-billed cuckoo numbers in the study increased, although not significantly (p=0.13) (Krueper *et al.* 2003, p. 612), but their survey methodology was not designed to detect western yellow-billed cuckoos. Recovery of vegetation in response to grazing removal in that study was quickest and most pronounced in the lower vegetation layers, the most accessible to grazing cattle. Thus, this situation would allow a greater number of seedlings and saplings of cottonwoods and other nest trees to attain maturity as suitable nesting sites.

In another example, livestock grazing was terminated along portions of the South Fork Kern River at the Kern River Preserve in the 1980s, and western yellow-billed cuckoos increased in number in the years following livestock removal. Smith (1996, p. 4) contended that termination of grazing at the Kern River Preserve was responsible for the dramatic increase in riparian vegetation, which was concurrent with the increase in western yellow-billed cuckoo numbers. These examples suggest that even severely degraded riparian systems can recover quickly, in at least some cases, after livestock removal (Krueper *et al.* 2003, p. 615), and that damage to riparian vegetation from grazing is at least partly reversible. They also illustrate the extent to which livestock grazing destroys and modifies nesting and foraging habitat of the western yellow-billed cuckoo.

In conclusion, most of the direct loss of habitat from agricultural conversion has occurred in the past, but ongoing agricultural activities, in whole or in combination with other impacts, especially those that result in changes in a watercourse's hydrology, have resulted in the curtailment of nesting and foraging habitat for the western yellow-billed cuckoo by restricting or preventing the growth of riparian plants, and such activities present an ongoing threat. Most of the current impacts from agricultural land uses arise from livestock overgrazing in riparian areas. Riparian vegetation can recover relatively quickly from these effects after livestock removal (Smith 1996, p. 4; Krueper *et al.* 2003, p. 615). However, without proper management to reduce overgrazing, ongoing overgrazing will continue to contribute to habitat modification in the range of the western yellow-billed cuckoo into the future.⁴³

SPRNCA, including the northern half of the section between the Hereford Bridge and Highway 90, is proposed Critical Habitat for the Northern Mexican Gartersnake.⁴⁴ The listing Rule for Northern Gartersnake states:

"Cienegas, a unique and important habitat for northern Mexican gartersnakes, have been adversely affected or eliminated by a variety of historical and current land uses in the United States and Mexico, including streambed modification, intensive livestock grazing, woodcutting, artificial drainage structures,

⁴⁴ Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Northern Mexican Gartersnake and Narrow-Headed Gartersnake, Revised proposed rule, Fish and Wildlife Service, Interior, Federal Register Vol. 85, No. 82, page 23608.

⁴³ Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule, Fish and Wildlife Service, Interior, Federal Register, Vol. 79, Page 59962, October 3, 2014, pages 60020-1.

stream flow stabilization by upstream dams, channelization, and stream flow reduction from groundwater pumping and water diversions. The historical loss of the cienega habitat of the northern Mexican gartersnake has resulted in local population declines or extirpations, negatively affecting its status and contributing to its decline rangewide. 45 ...

... Historical livestock grazing has damaged approximately 80 percent of stream, cienega, and riparian ecosystems in the western United States (Kauffman and Krueger 1984, pp. 433-435; Weltz and Wood 1986, pp. 367-368; Cheney et al. 1990, pp. 5, 10; Waters 1995, pp. 22–24; Pearce et al. 1998, p. 307; Belsky et al. 1999, p. 1). Fleischner (1994, p. 629) found that "Because livestock congregate in riparian ecosystems, which are among the most biologically rich habitats in arid and semiarid regions, the ecological costs of grazing are magnified at these sites." Stromberg and Chew (2002, p.198) and Trimble and Mendel (1995, p. 243) also discussed the propensity for cattle to remain within or adjacent to riparian communities. Expectedly, this behavior is more pronounced in more arid regions (Trimble and Mendel 1995, p. 243). Effects from historical or unmanaged grazing include: (1) Declines in the structural richness of the vegetative community; (2) losses or reductions of the prey base; (3) increased aridity of habitat; (4) loss of thermal cover and protection from predators; (5) a rise in water temperatures to levels lethal to larval stages of amphibian and fish development; and (6) desertification (Szaro et al. 1985, p. 362; Schulz and Leininger 1990, p. 295; Schlesinger et al. 1990, p. 1043; Belsky et al. 1999, pp. 8-11; Zwartjes et al. 2008, pp. 21–23). In one rangeland study, it was concluded that 81 percent of the vegetation that was consumed, trampled, or otherwise removed was from a riparian area, which amounted to only 2 percent of the total grazing space, and that these actions were 5 to 30 times higher in riparian areas than on the uplands (Trimble and Mendel 1995, pp. 243-244). ...

Szaro et al. (1985, p. 360) assessed the effects of historical livestock management on a related taxon and found that western (terrestrial) gartersnake (*Thamnophis elegans vagrans*) populations were significantly higher (versus controls) in terms of abundance and biomass in areas that were excluded from grazing, where the streamside vegetation remained lush, than where uncontrolled access to grazing was permitted. This effect was complemented by higher amounts of cover from organic debris from ungrazed shrubs that accumulate as the debris moves downstream during flood events. Specifically, results indicated that snake abundance and biomass were significantly higher in ungrazed habitat, with a five-fold difference in number of snakes captured, despite the difficulty of making observations in areas of increased habitat complexity (Szaro et al. 1985, p. 360). Szaro et al. (1985, p. 362) also noted the importance of riparian vegetation for the maintenance of an adequate prey base and as cover in thermoregulation and predation avoidance behaviors, as well as for foraging success. Direct fatalities of amphibian species, in all life stages, from being trampled by livestock

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⁴⁵ Final Rule, Threatened Status for the Northern Mexican Gartersnake and Narrow-Headed Gartersnake, Department of the Interior Fish and Wildlife Service, Federal Register Vol. 79, No. 130, page 38714.

has been documented (Bartelt 1998, p. 96; Ross *et al.* 1999, p. 163). Gartersnakes may, on occasion, be trampled by livestock.⁴⁶ ...

Subbasins where historical grazing has been documented as a suspected contributing factor for either northern Mexican or narrow-headed gartersnake declines include the Verde, Salt, Agua Fria, San Pedro, Gila, and Santa Cruz (Hendrickson and Minckley 1984, pp. 140, 152, 160–162; Rosen and Schwalbe 1988, pp. 32–33; Girmendonk and Young 1997, p. 47; Hale 2001, pp. 32–34, 50, 56; Voeltz 2002, pp. 45–81; Krueper *et al.* 2003, pp. 607, 613–614; Forest Guardians 2004, pp. 8–10; Holycross *et al.* 2006, pp. 52–61; Paradzick *et al.* 2006, pp. 90–92; USFS 2008).⁴⁷ ...

Summary

We found numerous effects of livestock grazing that have resulted in the historical degradation of riparian and aquatic communities that have likely affected northern Mexican and narrow-headed gartersnakes. Mismanaged or unmanaged grazing can have disproportionate effects to riparian communities in arid ecosystems due to the attraction of livestock to water, forage, and shade. ... Unmanaged or poorly managed livestock operations likely have more pronounced effects in areas impacted by harmful nonnative species through a reduction in cover. However, land managers in Arizona and New Mexico currently emphasize the protection of riparian and aquatic habitat in allotment management planning, usually through fencing, rotation, monitoring, and range improvements such as developing remote water sources."⁴⁸ ...

The Northern Mexican Gartersnake April 28, 2020, revised proposed designated Critical Habitat rule states:

"As a whole, this unit contains PBFs 1, 2, 5, 6, and 7, but PBFs 3 and 4 are in degraded condition. The physical or biological features in Upper San Pedro River Subbasin Unit may require special management consideration due to competition with, and predation by, predatory nonnative species that are present in this unit.⁴⁹ ...

Activities that the Services may, during a consultation under section 7(a)(2) of the Act, find are likely to destroy or adversely modify critical habitat include, but are not limited to: (2) Actions that would significantly increase sediment deposition or scouring within the stream channel or pond that is habitat for the northern Mexican or narrow-headed gartersnake,... or one or more of their prey species within the range of either gartersnake species. Such activities could include, but are not limited to: Poorly managed livestock grazing..."⁵⁰ ...

⁴⁶ Id., page 38715

⁴⁷ Ibid.

⁴⁸ Id., PAGE 38718.

⁴⁹ Revised proposed rule, Designation of Critical Habitat for the Northern Mexican Gartersnake and Narrow-Headed Gartersnake, Fish and Wildlife Service, Interior, Federal Register, Vol. 85, No. 82, page 23629, April 28, 2020. ⁵⁰ Id., 23633.

The November 2017, Huachuca Water Umbel Recovery Plan states:

"Habitat Requirements and Limiting Factors

Lilaeopsis schaffneriana ssp. recurva occurs in shallow and slow-flowing waters that are relatively stable, or in active stream channels containing refugial sites where the plants can escape the effect of scouring floods (62 FR 665, p. 667; 64 FR 37441, p. 37442). The taxon depends on the availability of permanently wet (or nearly so), muddy, or silty substrates with some organic content. At this time, the most significant long-term threats to the continued existence of the species are: 1) aquatic habitat degradation, including unsustainable groundwater withdrawal; 2) the effects of drought and climate change; 3) wildfire and resulting sedimentation and scouring; 4) invasive non-native plant competition; and 5) poorly managed livestock grazing.⁵¹ ...

Recovery Objectives

- 1) Protect and restore functional aquatic habitat and reduce dewatering threats to historical, existing, newly discovered, and newly established *L. schaffneriana* ssp. *recurva* occurrences and habitat. ...
- 3) Remove stressors related to invasive non-native plants and poorly managed livestock grazing to historical, existing, newly discovered, and newly established *L. schaffneriana* ssp. *recurva* occurrences and their habitats.⁵² ...

Of the three United States watersheds which support *L. schaffneriana* ssp. *recurva*, the San Pedro supports the greatest amount.⁵³ ...

The decision to list the taxon was based upon the limited number of wetland habitats in southern Arizona and northern Sonora, Mexico, suitable for this plant, and threats including the degradation and destruction of habitat resulting from poorly managed livestock grazing, non-native plant invasion, water diversions, dredging, and groundwater pumping.⁵⁴ ...

Background

1. Overview

The decision to list the taxon was based upon the limited number of wetland habitats in southern Arizona and northern Sonora, Mexico, suitable for this plant, and threats including the degradation and destruction of habitat resulting from poorly managed livestock grazing, non-native plant invasion, water diversions, dredging, and groundwater pumping. Other threats include catastrophic flooding, post-fire erosion and sedimentation, and drought exacerbated by climate change. 55 ...

Research and consultation under section 7 of the Act have identified threats that could potentially impact *L. schaffneriana* ssp. *recurva*, which include: aquatic

⁵¹ Recovery Plan for *Lilaeopsis schaffneriana* ssp. *recurva* (Huachuca water umbel), Region 2 U.S. Fish and Wildlife Service Arizona Ecological Services Field Office, Tucson, Arizona, November 2017, page v.

⁵² ld., page vi.

⁵³ Id., page ix.

⁵⁴ Id., page xviii.

⁵⁵ Id., page 1.

habitat degradation (Factor A [Present or threatened destruction, modification or curtailment of habitat or range]); wildfire and resulting sedimentation (Factor A); invasive non-native plant competition (Factor A); livestock grazing ...⁵⁶

Livestock Grazing

– Primary constituent elements 2 [a stream channel that is relatively stable, but subject to periodic flooding that provides for rejuvenation of the riparian plant community and produces open microsites for *L. schaffneriana* ssp. *recurva* expansion] and 3 [a riparian plant community that is relatively stable over time and in which non-native species do not exist or are at a density that has little or no adverse effect on resources available for *L. schaffneriana* ssp. *recurva* growth and reproduction] of critical habitat are impacted by this threat.

Lilaeopsis schaffneriana ssp. recurva is affected by livestock grazing in the following ways: 1) trampling, 2) direct impacts from construction of range improvement projects, 3) changes in stream geomorphology that lead to erosion, sedimentation, and downcutting, and 4) watershed degradation and resulting adverse effects to stream hydrology, (Service 1999, p. 237; Anderson 2006, p. 28). Observations of L. schaffneriana ssp. recurva's response to grazing indicate the taxon is capable of experiencing light to moderate grazing with negligible impact (Simms pers. comm. October 26, 2011; Anderson 2006, pp. 22, 31; Edwards pers. comm. February 21, 2001; Rorabaugh 2013, entire).

If not controlled, grazing during dry periods when cattle spend a disproportionate amount of their time, in riparian areas may result in harmful effects to *L. schaffneriana* ssp. *recurva* and other riparian obligates (Edwards pers. comm. February 21, 2001; Service 2002a, pp. 76-77; Krueper 1996, p. 287; Malcom and Radke 2008, p. 81; Service 2014a, pp. 3, 6-7). In such instances, severe and widespread trampling may occur; roots and soil structure can be damaged; vegetation, species composition, and structure can shift; soil can become compacted; stream banks can be degraded; runoff and soil erosion from storm events may increase with higher peak flows; and stream entrenchment may occur; all of which would have harmful effects on *L. schaffneriana* ssp. *recurva* habitat and existing occurrences (Service 2002a, p. 138; Krueper 1996, pp. 287-288; Simms pers. comm. October 26, 2011).

With the onset of earlier springtime temperatures (Cayan et al. 2005, entire) and continuing drought conditions (Weiss and Overpeck 2005, p. 2074; Archer and Predick 2008, p. 24), the period of winter vegetation dormancy and water availability has decreased in recent years. In Sunnyside Canyon, Lone Mountain Canyon and its tributaries, Bear Canyon, and Scotia Canyon, the current Coronado National Forest Grazing Management Plan recommends grazing in winter months only when adequate water is available to disperse cattle and reduce impact on riparian areas (Service 2002b, pp. 144-146). This stipulation should be amended to include more areas that support *L. schaffneriana* ssp. *recurva* and implementation enforced.

⁵⁶ Id., pages 15-16.

Higher intensity grazing of riparian areas has been shown to reduce the occurrence of L. schaffneriana ssp. recurva and damage its habitat (Falk 1998, p. 2; Dupée 1999, entire). Falk (1998, p. 2) noted that along the L. schaffneriana ssp. recurva monitoring transects, seven occurrences in Bear Canyon and four occurrences in Scotia Canyon showed evidence of bank instability or trampling from livestock use. Six of seven L. schaffneriana ssp. recurva occurrences in Bear Canvon, and one of four in Scotia Canvon, no longer contained plants in 1995. providing some evidence that habitat degradation did occur and possibly contributed to patch extinction in localized areas (Falk 1998, p. 2). In Leslie Creek, researchers quantified the impacts of a single cow on individual L. schaffneriana ssp. recurva and concluded that even a small number of livestock left in one place could eradicate the taxon in that area (Malcom and Radke 2008, p. 81). Researchers studying the effects of livestock removal at Cottonwood Spring concluded that two years following livestock removal, streamside and aquatic vegetation, and thus channel stability, were increased, all of which provided a benefit to L. schaffneriana ssp. recurva (Gori and Backer 1999b, p. 3). In the spring of 2014, L. schaffneriana ssp. recurva growing outside of cattle exclosures were diminished in size and quantity compared to those plants inside exclosures (Service 2014a, pp. 3-7).

In summary, the best available scientific and commercial information indicates that periodic disturbance removes competing vegetation and allows recolonization or expansion of *L. schaffneriana* ssp. *recurva* occurrences (Service 1999, p. 237). In instances where natural disturbance is low or infrequent, occasional trampling and grazing by domestic livestock could improve habitat for *L. schaffneriana* ssp. *recurva*; poorly managed livestock use, however, can be detrimental to the taxon and its habitat (Falk 1998, p. 2; Service 1999, p. 237; Service 2002a, p. 137; Malcom and Radke 2008, p. 81; Service 2014a, pp. 3, 6-7).⁵⁷ ...

Recovery Strategy

The recovery strategy for *L. schaffneriana* ssp. *recurva* is to provide conservation and restoration of the taxon and its habitat to the extent that will allow stable, self-sustaining occurrences to persist throughout its range within the United States with some level of connectivity and opportunities for expansion, dispersal, and genetic exchange. Our recovery strategy focuses on minimizing or ameliorating the most significant long-term threats to the continued existence of the taxon which are: 1) aquatic habitat degradation, including unsustainable groundwater withdrawal; 2) the effects of drought and climate change; 3) wildfire and resulting sedimentation and scouring; 4) invasive non-native plant competition; and 5) poorly managed livestock grazing.

Our strategy to recover *L. schaffneriana* ssp. *recurva* entails: 1) protecting and restoring upland and aquatic habitats that contribute to, support, or could support *L. schaffneriana* ssp. *recurva*; 2) conserving historical and current occurrences and their seedbanks, augmenting existing occurrences, establishing new occurrences in appropriate habitat, maintaining plants in botanical gardens

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⁵⁷ Id., pages 26-27.

and other Service approved facilities, and seed at proper storage facilities; 3) reducing stressors by managing invasive non-native plants that crowd out *L. schaffneriana* ssp. *recurva* and managing areas where livestock congregate that further stress *L. schaffneriana* ssp. *recurva*⁵⁸ ...

Recovery Objectives

To meet the recovery goal, the following objectives have been identified: ... Remove stressors related to invasive non-native plants and poorly managed livestock grazing to historical, existing, newly discovered, and newly established *L. schaffneriana* ssp. *recurva* occurrences and their habitats.⁵⁹ ...

Within this [Lone Mountain Canyon exclosure] and other exclosures (e.g. see the San Pedro River National Conservation Area above), it is important to monitor and remove trespass livestock.⁶⁰ ...

Lilaeopsis schaffneriana ssp. recurva occurring on Bureau of Land Management lands are monitored regularly by Bureau personnel.⁶¹ ...

They [Vernadero Group] also noted that the greatest quantity of *L.* schaffneriana ssp. recurva occurred south of Hwy 90 and that areas of higher concentrations remain higher from one monitoring period to the next (Vernadero Group 2011a, p. 21)."⁶² ...

USFWS' Huachuca Water Umbel 5-Year Review states:

"The vulnerability of its aquatic habitats to the impacts of drought, degradation, and climate change make this taxon equally vulnerable. Although new occurrences of *L. schaffneriana* ssp. *recurva* have been discovered in recent years and there have been some successes with introductions and augmentations, these are typically very small patches and do not outweigh the losses across the range. We are aware of eight occurrences that have been extirpated and six occurrences that have not been relocated in recent years. In addition, many of the occurrences in Mexico have not been revisited in recent years and their status is unknown. Maintaining self-sustaining, watershed-scale occurrences across the full suite of watersheds within the range of *L. schaffneriana* ssp. *recurva* is important to the survival of the taxon.

There are no *L. schaffneriana* ssp. *recurva* occurrences that appear to be increasing in size and many are reported as single patches among competing vegetation or in aquatic habitat that is in danger of being lost to groundwater pumping or drought. The loss of so many occurrences, uncertainty of so many others, and continued threats of drought, water withdrawal, and post-fire sedimentation, among others, demonstrate a continued danger of extinction

⁵⁸ Id., pages 35.

⁵⁹ Id., pages 35-36.

⁶⁰ ld., page 82.

⁶¹ Id., page 84.

⁶² ld., page 85.

throughout its range for the foreseeable future, and thus meets the definition of endangered at this time. 63 ...

RECOMMENDATIONS FOR FUTURE ACTIONS

The principle recovery strategy is to conserve the habitat of *L. schaffneriana* ssp. *recurva* by decreasing groundwater pumping, increasing water conservation and recharge, and protecting *L. schaffneriana* ssp. *recurva* occurrences and their seedbanks. Providing conservation and restoration of the taxon and its habitat will allow stable, self-sustaining occurrences to persist with some level of connectivity and opportunities for expansion and dispersal. Additional actions needed include monitoring, surveying, scientific study, outreach and partnership development, augmentation and introduction, and reduction or removal of stressors [such as destructive cattle grazing]."⁶⁴

LEGAL BACKGROUND

A. The Endangered Species Act

The ESA "represent[s] the most comprehensive legislation for the preservation of endangered species ever enacted by any nation." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). Section 9 of the ESA prohibits any "person" from "taking" any member of an endangered or threatened species without authorization from the FWS. 16 U.S.C. § 1538(a).⁶⁵

1. Section 7(a)(2)

Pursuant to Section 7 of the ESA, before undertaking any action that may have direct or indirect effects on any listed species, an action agency must engage in consultation with the FWS in order to evaluate the impact of the proposed action. See id. § 1536(a). The purpose of consultation is to ensure that the action at issue "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated critical] habitat of such species." 16 U.S.C. § 1536(a)(2). As defined by the ESA's implementing regulations, an action will cause jeopardy to a listed species if it "reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. §

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⁶³ 5-Year Review: Summary and Evaluation *Lilaeopsis schaffneriana* ssp. *recurva* (Huachuca water umbel), U.S. Fish and Wildlife Service Ecological Services Office, Tucson, AZ, July 18, 2018, pages 1-2.

⁶⁴ Id., page 2.

⁶⁵ The term "take" is defined broadly to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." *Id.* § 1532(19). The FWS has further defined "harass" to include "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3. In addition, "harm" is defined to "include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." *Id.*

402.02. Destruction or adverse modification of critical habitat is defined as "a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species." *Id.*; see also 16 U.S.C. § 1532(5)(A) (defining "critical habitat" as "the specific areas within the geographical area occupied by the species . . . on which are found those physical or biological features . . . essential to the conservation of the species and . . . which may require special management considerations or protection" and "species areas outside the geographical area occupied by the species . . . [that the Secretary determines "are essential for the conservation of the species").

The evaluation of the effects of the proposed action on listed species during consultation must use "the best scientific . . . data available." 16 U.S.C. § 1536(a)(2). Moreover, after the initiation of consultation, the action agency is prohibited from making "any irreversible or irretrievable commitment[s] of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures." *Id.* § 1536(d).

Consultation under Section 7 may be "formal" or "informal" in nature. Informal consultation is "an optional process" consisting of all correspondence between the action agency and the FWS, which is designed to assist the action agency, rather than the FWS, in determining whether formal consultation is required. See 50 C.F.R. § 402.02. During an informal consultation, the action agency requests information from the FWS as to whether any listed species may be present in the action area. If listed species may be present, the action agency is required by Section 7(c) of the ESA to prepare and submit to the FWS a "biological assessment" that evaluates the potential effects of the action on listed species and critical habitat. 16 U.S.C. § 1536(c)(1). As part of the biological assessment, the action agency must make a finding as to whether the proposed action may affect listed species and submit the biological assessment to the FWS for review and potential concurrence with its finding. Id. If the action agency finds that the proposed action "may affect, but is not likely to adversely affect" any listed species or critical habitat and the FWS concurs with this finding, then the informal consultation process is terminated. 50 C.F.R. § 402.14(b).

If, on the other hand, the action agency finds that the proposed action "may affect" listed species or critical habitat, then the action agency must undertake formal consultation. 50 C.F.R. § 402.14; see also FWS, Endangered Species Consultation Handbook ("Consultation Handbook") at 3-13 (1998). The result of formal consultation is the preparation of a biological opinion ("BiOp") by the FWS, which provides the FWS's analysis of the best available scientific data on the pre-existing status of the species and how it would be affected by the proposed action on top of the species' baseline condition. ⁶⁶

A BiOp must include a description of the proposed action, a review of the status of the species and critical habitat, a discussion of the environmental baseline, and an analysis of the direct and indirect effects of the proposed action and the cumulative effects of reasonably certain future state, tribal, local, and private actions. See Consultation Handbook at 4-14 to 4-31. At the end of the formal consultation process, the FWS determines whether the proposed action—in addition to the pre-existing environmental baseline of the species—

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⁶⁶ When preparing a BiOp, the FWS must (1) "review all relevant information," (2) "evaluate the current status of the listed species," and (3) "evaluate the effects of the action and cumulative effects on the listed species," 50 C.F.R. § 402.14, using "the best scientific and commercial data available," 16 U.S.C. § 1536(a)(2).

is likely to jeopardize the continued existence of a listed species or destroy or adversely modify any designated critical habitat. If the FWS determines that the proposed action is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat, but that the proposed action will nevertheless result in the incidental taking of listed species, then the FWS must provide the action agency with a written Incidental Take Statement ("ITS") specifying the "impact of such incidental taking on the species" and "any reasonable and prudent measures that the [FWS] considers necessary or appropriate to minimize such impact" and setting forth "the terms and conditions . . . that must be complied with by the [action] agency . . . to implement [those measures]." 16 U.S.C. § 1536(b)(4). If the FWS determines that the action will jeopardize a listed species or destroy or adversely modify designated critical habitat, then the FWS must offer the action agency reasonable and prudent alternatives to the proposed action that will avoid jeopardy to a listed species or adverse critical habitat modification, if such alternatives exist. *Id.* § 1536(b)(3)(A).

Without an adequate BiOp and ITS in place (or, in the context of informal consultation, absent a lawful concurrence in a "not likely to adversely affect" determination), any activities likely to result in incidental take of members of listed species are unlawful. *Id.* § 1538(a)(1)(B). Accordingly, anyone who undertakes such activities, or who authorizes such activities, *id.* § 1538(g), may be subject to criminal and civil federal enforcement actions, as well as civil actions by citizens for declaratory and injunctive relief, *see id.* § 1540. This includes action agencies, which must ensure their own compliance with the ESA; an action agency "cannot abrogate its responsibility to ensure that its actions will not jeopardize a listed species" merely by relying upon a BiOp, concurrence, or other consultation document issued by the FWS. *Pyramid Lake Paiute Tribe v. U.S. Dep't of Navy*, 898 F.2d 1410, 1415 (9th Cir. 1990).

2. Section 7(a)(1)

Section 7(a)(1) directs all federal agencies, in consultation with the Secretary of Interior, to "utilize their authorities . . . by carrying out programs for the conservation of endangered species." 16 U.S.C. § 1536(a)(1). "Conservation" is defined by the Act to mean *recovery*, i.e., "the use of all methods and procedures which are necessary to bring any endangered species . . . to the point at which the measures provided pursuant to this chapter are no longer necessary." *Id.* § 1532(3); *see also Gifford Pinchot Task Force v. FWS*, 387 F.3d 968, 1071 (9th Cir. 2004) (explaining that that "conservation' is a much broader concept than mere survival").

In interpreting Congress's intent behind Section 7(a)(1), the Supreme Court has explained that this provision requires agencies to engage in *affirmative* activities to protect endangered species. See Hill, 437 U.S. at 183-84 (The Department of "Agriculture . . . will have to take action to see that [the imperilment of species] is not permitted to worsen, and that these [species] are not driven to extinction. . . . [T]he agencies of Government can no longer plead they can do nothing about it. They can, and they must. The law is clear.") (citing 119 Cong. Rec. 42913 (1973)); see also Pyramid Lake Paiute Tribe v. U.S. Dept. of Navy, 898 F.2d 1410, 1417 (9th Cir. 1990) (finding that "agencies have affirmative obligations to conserve under section 7(a)(1)"); Sierra Club v. Glickman, 156 F.3d 606, 616 (5th Cir. 1998) ("Given the plain language of the statute and its legislative history, we

conclude that Congress intended to impose an affirmative duty on each federal agency to conserve each of the species.").

Further, courts have held that section 7(a)(1) imposes a specific—not generalized—duty to undertake affirmative programs to conserve listed species. *Glickman*, 156 F.3d at 615-16 (finding that "that the agencies' duties under § 7(a)(1) are much more specific and particular" because "[t]o read the command of § 7(a)(1) to mean that the agencies have only a generalized duty would ignore the plain language of the [Act]"); *Pyramid*, 898 F.2d at 1416 n.15 (noting that "section 7(a)(1) is a specific substantive provision outlining particular requirements"). While courts have recognized that each agency has some discretion in selecting a *particular* conservation program, *Pyramid*, 898 F.2d at 1418, each agency "must in fact carry out a program to conserve" listed species. *Fla. Key Deer v. Paulison*, 522 F.3d 1133, 1147 (11th Cir. 2008); see also Carson-Truckee Water Conservancy. v. Clark, 741 F.2d 257, 262 (9th Cir. 1984) (Section 7(a)(1) requires that agencies "actively pursue a species conservation policy.").

Thus, what distinguishes situations that are in compliance with this provision from situations that constitute violations of section 7(a)(1) is whether the agency's conservation programs (if any) are achieving a demonstrated conservation value for listed species, or, instead, are achieving only insignificant benefits for species. Paulison, 522 F.3d at 1146 (holding that "[t]otal inaction is not allowed" under Section 7(a)(1)); Pyramid, 898 F.2d at 1418 ("An 'insignificant' conservation measure in the context of ESA is oxymoronic; if the proposed measure will be insignificant in its impact, how can it serve the ends of conservation, and thus be a 'conservation measure'?"); Ctr. for Biological Diversity v. Vilsack, 276 F. Supp. 3d 1015, 1031 (D. Nev. 2017) (explaining that "taking insignificant measures cannot satisfy the requirements under Section 7(a)(1)," and finding a violation of that provision where the agency "was clearly aware of the accelerating deterioration of the flycatcher habitat and the increasing urgency of its obligations under Section 7(a)(1) to engage in conservation efforts"); Red Wolf Coal. v. U.S. Fish & Wildlife Serv., No. 2:20-cv-75-BO, 2021 WL 230202, at *4 (E.D.N.C. Jan. 22, 2021) (enjoining violation of Section 7(a)(1) where the court concluded that the agency's "current list of actions" pertaining to a species "fails to show how the[] [agency] is implementing a program for the conservation of the wild red wolf population").

3. Section 9

Section 9 of the ESA prohibits any "person" from "taking" any member of an endangered or threatened species without authorization from the U.S. Fish and Wildlife Service ("FWS"). 16 U.S.C. § 1538(a). The term "person" under the ESA specifically includes "any officer, employee, agent, department, or instrumentality . . . of any State, municipality, or political subdivision of a State." *Id.* § 1532(13). Accordingly, State agencies or officials are liable under the ESA when they conduct, license, or otherwise authorize activity in "specifically the manner that is likely to result in violation of federal law" such as the ESA's take prohibition. *See*, *e.g.*, *Strahan v. Coxe*, 127 F.3d 155, 163 (1st Cir. 1997), cert. denied, 525 U.S. 830 (1998); *see also Loggerhead Turtle v. County Council of Volusia County*, 148 F.3d 1231, 1251 (11th Cir. 1998), cert. denied, 526 U.S. 1081 (1999); *Defs. of Wildlife v. Adm'r.*, *EPA*, 882 F.2d 1294, 1300-1301 (8th Cir. 1989); *Animal Welfare Inst. v.*

Martin, 588 F. Supp. 2d 70 (D. Me. 2008); Animal Prot. Inst. v. Holsten, 541 F. Supp. 2d 1073 (D. Minn. 2008).

The ESA defines the term "take" broadly to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." *Id.* § 1532(19). FWS has further defined "harass" to include "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3. In addition, "harm" is defined to "include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." *Id.*

The ESA allows FWS, under specific, limited circumstances, to authorize take that the statute would otherwise prohibit. Section 10 of the ESA provides that for any take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity," FWS may authorize take by issuing an ITP when certain enumerated criteria are satisfied, including that the applicant prepares a "conservation plan"—referred to as a habitat conservation plan ("HCP")—specifying "what steps the applicant will take to minimize and mitigate" the activity's impacts. 16 U.S.C. § 1539(a)(1)(B), (a)(2)(A). To approve such an ITP/HCP, FWS must find, among other things, that the "applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking" and that the "taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild." *Id.* § 1539(a)(1)(B)(ii), (a)(1)(B)(iv).

LEGAL VIOLATIONS

A. BLM Has Violated, and Is in Ongoing Violation of, Section 7(a)(1) of the ESA

By chronically failing to take action in response to repeated complaints of trespass cattle in habitat—including occupied critical habitat—for the federally protected species identified herein, and especially BLM's failure to construct and/or maintain fencing to keep trespass cattle out of SPRNCA, BLM is in ongoing violation of Section 7(a)(1) of the ESA. The Center has submitted dozens of complaints notifying BLM that significant ongoing take is occurring as a result of BLM's failure to meaningfully address trespass cattle, but BLM has not taken any action—let alone developed a program to further the conservation of these species—while watching the habitat for these species (including critical habitat) deteriorate to the point where survival and recovery of these populations are in serious jeopardy. Section 7(a)(1) imposes an affirmative obligation on all federal agencies, in consultation with the FWS, to "carry[] out programs for the conservation"—i.e., recovery—of listed species. 16 U.S.C. § 1536(a)(I).

BLM's actions and omissions in SPRNCA—and in particular the refusal to take any action to meaningfully eliminate trespass cattle from habitat for listed species—constitute

the direct *opposite* of a program designed to avoid extirpation of these species from SPRNCA, let alone a program that is specifically aimed at *recovering* the species. Because trespass cattle are the primary contributing factor to the demise of these species and their habitat in SPRNCA, Section 7(a)(1) imposes on the BLM an affirmative duty to immediately develop, in consultation with the FWS, a comprehensive program that will timely implement all measures necessary to conserve—i.e., *recover*—these species before these populations are wiped out entirely.

Until and unless the BLM develops such a program, the agency is in flagrant violation of Section 7(a)(1). See, e.g., Ctr. for Biological Diversity, 276 F. Supp. 3d at 1030-32 (holding that an agency violated Section 7(a)(1) where its actions "did nothing to reverse or end the damage to the [species'] habitat inflicted by (and continuing to be inflicted by) [an invasive beetle species]" especially where the agency "was clearly aware of the accelerating deterioration of the [species'] habitat and the increasing urgency of its obligation under Section 7(a)(1) to engage in conservation efforts").

"Moreover, BLM cannot rely on the existence of any current program — including, for example, the Huachuca water umbel recovery plan, any multi-species conservation plan or habitat conservation plan — to meet its Section 7(a)(1) obligations because these plans do not address the issue of trespass grazing in and around the San Pedro Riparian National Conservation Area, and otherwise contain insignificant conservation measures which are not reasonably likely to conserve the species from the primary and direct threat of trespass livestock grazing in and around SPRNCA. See Pyramid Lake, 898 F.2d at 1415; Paulison, 522 F.3d at 1146-47."

B. BLM Has Violated, and Is in Ongoing Violation of, Section 9 of the ESA

It is indisputable that trespass cattle adversely affect the listed species identified herein and their habitat (including critical habitat) in SPRNCA in a manner that constitutes "take" in violation of Section 9 of the ESA by killing, injuring, harming, harassing, and otherwise taking members of these species. Because BLM could eliminate (or at least significantly reduce) the risk of take by constructing and maintaining appropriate fencing—yet BLM refuses to do so despite countless complaints submitted by the Center documenting that a substantial level of take is occurring on lands administered by BLM—BLM is "caus[ing] to be committed" unlawful take of listed species. 16 U.S.C. § 1538(a), (g); see also 50 C.F.R. § 17.3 (clarifying that take includes not only "an intentional or negligent act" but also any "omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, including breeding, feeding, or sheltering"). Thus, BLM must timely construct and/or maintain appropriate fencing in order to halt its ongoing violation of that provision.

Alternatively, to avoid liability under Section 9 of the ESA for the take of the species identified herein, BLM may seek to obtain an ITP related to its fencing (or lack thereof) in SPRNCA. See Animal Welfare Inst. v. Beech Ridge Energy LLC, 675 F. Supp. 2d 540, 580 (D. Md. 2009) ("The ITP process is available to . . . insulate [a project] from liability under

the ESA . . . and is the only way in which [a reviewing court] will allow the [project] to continue."). However, because it ordinarily takes at least several years to secure an ITP and to prepare an accompanying HCP—and thus there would not be any incidental take authorization for years, even if BLM ultimately obtains an ITP—this mechanism is not a legally sufficient option to avoid litigation in sixty days from the date of this letter to address ongoing take of listed species. Accordingly, while the Center and Maricopa Audubon would support BLM seeking an ITP related to its long-term management of trespass cattle in SPRNCA, the submission of an ITP application alone is not a sufficient substitute in the short term to eliminate the foreseeably substantial amount of take that will be inflicted upon these species in SPRNCA prior to the issuance of any ITP.

CONCLUSION

Our culture and our morality require that we protect and preserve all rare and imperiled species.

The contractual biblical teachings of Genesis are clear. God created the universe through His word and through manifestation of His will and His love.

God assessed his creation and "saw that it was good." 67

In verse, "God saw that it ["vegetation," "every living creature that moves," "wild animals ... of every kind,"] was good." 68

Man's role was established as governor over the world He created and loved, each part of which exists as the direct manifestation of His will.

In scripture, God said "let them ["humankind"] have dominion...over the birds of the air...and over all the wild animals of the earth...and over every living thing that moves upon the earth."⁶⁹

Consequently, it is not appropriate for man to destroy what God "saw...was good."⁷⁰ (1:12, 21-28)

Later in Genesis, God further reinforces the value of His beloved creations and Man's responsibility having been given dominion in His commands to Noah. The passage states:

"Then God said to Noah and to his sons with him: 'I now establish my covenant with you and your descendants after you and with every living creature that was with you - the birds, the livestock, and all the wild animals, all those that came out of the ark with you - every living creature on the earth."

Noah, of course, was considered a just man by God, and because of his piousness, received His mandate. In so doing, God further establishes that His followers, similarly

⁶⁷ Genesis, 1:12, 21-28.

⁶⁸ Ibid.

⁶⁹ Id., 1:28.

⁷⁰ Id., 1:12, 21-28.

⁷¹ Id., 9:8-9.

pious, will also carry out His desired conservation of His beloved, willfully wrought, creation. To do otherwise, is to be judged as unjust by God and suffer His wrath.

The Endangered Species Act similarly establishes as the policy and the law of our Nation, a contractual belief and covenant about the respect for, and the commitment to the value and preservation of all rare and imperiled plants and animals:

"It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act. ... The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered species and threatened species..."

Correspondingly and contemporaneously, our Public Lands have become our Nation's Ark with the Upper San Pedro River and SPRNCA as examples that BLM officials are morally and legally charged to protect.

As we have established in this Notice, BLM SPRNCA administrators Director Suazo and Manager Feldhausen, have failed to fulfill their professional and legal obligation to protect SPRNCA and the Endangered Species that represent and depend on the San Pedro River.

The Center and Maricopa Audubon look forward to hearing from you in response to this Notice. However, the Center will not delay the filing of a lawsuit if BLM SPRNCA administrators Director Suazo and Manager Feldhausen fail to take appropriate corrective actions within sixty days of receiving this letter.

The Center and Maricopa Audubon will be represented by Eubanks & Associates, PLLC, should litigation be necessary.

If you have further questions, please contact Robin Silver, M.D., Center for Biological Diversity, P.O. Box 1178, Flagstaff, AZ 86002, by mail; by phone: (602) 799-3275, or by Email: rsilver@biologicaldiversity.org.

Sincerely.

Robin Silver, M.D.

Co-Founder and Board Member Center for Biological Diversity

49

⁷² Endangered Species Act of 1973, *16 U.S.C.* 1531 et seq., Sections 2(b) and (c).