



January 26, 2023

Solid Waste Advisory Committee
County Road Department
61150 SE 27th Street
Bend, Oregon 97702

Dear Deschutes County Solid Waste Advisory Committee:

With the anticipated removal of Sites 151300, 181315, 181300, 211900 and 212000 from consideration for a future solid waste management facility, the Solid Waste Advisory Committee's (SWAC) current list of potential locations for a landfill would be reduced to seven, all in the eastern extent of Deschutes County. Development of any of them would have significant negative consequences for wildlife, wildlands and recreation, while subverting Congressional designations, undermining decades of conservation planning and management, and compromising future protections for wilderness and wildlife in the region.

Oregon Natural Desert Association (ONDA) represents more than 14,000 members and supporters, including 4,000 in Deschutes County, who are dedicated to the protection and restoration of Oregon's high desert. Our organization has invested over 35 years in conserving this vital landscape, including in Deschutes County—organizing Oregonians and collaborating with partners to promote wilderness designation, conserve greater sage-grouse and other wildlife, preserve landscape connectivity and strive toward a thriving ecological future for the region.

ONDA objects to development of the seven remaining sites in eastern Deschutes County and urges the SWAC to revise its process to include additional locations for a potential new landfill.

Site 191400-200 Would Permanently Degrade the Oregon Badlands Wilderness, Bend's Desert Wilderness

ONDA and the Deschutes County community campaigned for nearly a decade to designate the Oregon Badlands Wilderness (the Badlands) in 2009. The Badlands is beloved locally for hiking, horseback riding, wildlife watching and stargazing amidst unique lava formations and ancient juniper woodlands. The potential placement of a solid waste management facility at Site 191400-

200 immediately adjacent to the Badlands would permanently degrade an important natural asset that makes Central Oregon such a wonderful place to live and visit.

In accordance with Congressional direction and public preferences, the Bureau of Land Management (Bureau) manages the Badlands for “wilderness characteristics: untrammelled quality, outstanding opportunities for solitude or primitive, unconfined recreation, and undeveloped and primeval character and naturalness.”¹ The increased traffic, noise, odors, invasive species, wind-transported plastics and other trash, and light pollution inherent in developing Site 191400-200 would permanently impact the rare and irreplaceable public values associated with this wilderness, to the detriment of thousands of people who enjoy recreating in this remarkable place every year. We strongly urge the SWAC to eliminate this site from further consideration.

Remaining Potential Sites Would Impact Mule Deer, Elk and Pronghorn, Prized Game Species in Central Oregon

Development of any of the sites in the eastern part of the county would affect native ungulates. Sites 191400-200, 191400-2400 and 191400-3300 provide important winter range to mule deer and Rocky Mountain elk and support pronghorn habitat. In addition, Sites 201500-300 and 19100 support elk winter range and pronghorn habitat and Sites 222200-400 and 222200-200 provide elk winter range. Seasonal migration is critical to these species as they semi-annually traverse expansive landscapes to reduce exposure to harsh winter conditions and locate food sources.² Recent studies have found that a growing anthropogenic footprint is negatively impacting these animals’ ability to move seasonally, highlighting the need for management actions and planning that minimizes disturbance to migratory corridors and seasonal habitats.³ Habitat use by mule deer, pronghorn and elk is likely to be disturbed by the construction and use of a solid waste management facility and associated infrastructure, and as such, none of the seven remaining sites should be considered viable locations for this project.

¹ Bureau of Land Management. 2014. Oregon Badlands Wilderness Management Plan Environmental Assessment, Decision Record. Prineville, OR, https://eplanning.blm.gov/public_projects/nepa/95454/128327/156176/Badlands_Wilderness_Mgmt_Plan_DR.pdf

² Kauffman, M., Lowrey, B., Beck, J., Berg, J., Bergen, S., Berger, J., Cain, J., Dewey, S., Diamond, J., Duvuvuei, O., Fattebert, J., Gagnon, J., Garcia, J., Greenspan, E., Hall, E., Harper, G., Harter, S., Hersey, K., Hnilicka, P., Hurley, M., Knox, L., Lawson, A., Maichak, E., Meacham, J., Merkle, J., Middleton, A., Olson, D., Olson, L., Reddell, C., Robb, B., Rozman, G., Sawyer, H., Schroeder, C., Scurlock, B., Short, J., Sprague, S., Steingisser, A., and Tatman, N. 2022. Ungulate migrations of the western United States, volume 2. U.S. Geological Survey Scientific Investigations Report 2022–5008, <https://doi.org/10.3133/sir20225008>.

³ *Id.*

Sites 191400-3300 and 222200-400 Would Impact Golden Eagles, a Sensitive Desert Raptor

Golden eagles nest within two miles of Sites 191400-3300 and 222200-400 (and perhaps other sites as well). Golden eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The species endures mortality from a variety of anthropogenic threats and its population may be vulnerable to declines. Golden eagles use the same nest sites perennially and so protecting golden eagle nest locations and the species' ability to reproduce must be a priority in siting new development.

Research indicates that human activity is responsible for the majority of golden eagle nest failures, and the construction of a solid waste management facility is likely to cause both short- and long-term or chronic disturbances to eagle nesting.⁴ Given the potential of nest abandonment from disturbance associated with landfill operations, the Committee should no longer consider Sites 191400-3300 and 222200-400 as viable for a solid waste facility.

Remaining Potential Sites Would Devastate Greater Sage-Grouse Populations in Deschutes County, an Imperiled Icon of the Sagebrush Sea

Greater sage-grouse are imperiled in Oregon and Deschutes County. Despite moderate increases the last two years, the statewide population remains 40 percent below 2003 baseline estimates and continues to exhibit a long-term decline.⁵ Federal and state agencies, the Oregon governor's office, the Oregon Sage-Grouse Conservation Partnership, the scientific community, local jurisdictions and private landowners have worked together for decades to reverse these trends. Unfortunately, all of the remaining sites would impact sage-grouse, five are within sage-grouse habitat, and Sites 191400-2400, 191400-3300, 191600 and 222200-200 are less than four miles from active or pending sage-grouse leks. The impacts on sage-grouse from developing any of these locations would be irreversible and unmitigable.

Habitat loss and fragmentation, disturbance and disruption from operations and traffic associated with development are known factors in sage-grouse population declines. These impacts are especially acute in areas around sage-grouse leks (usually measured as a four-mile radius),⁶

⁴ Hansen, D.L., R.J. Spaul, B. Woodbridge, D. Leal, J.R. Dunk, J.W. Watson, and J. T. Driscoll. 2017. Human disturbance of breeding golden eagles (*Aquila chrysaetos*). Unpublished report prepared for the Western Golden Eagle Team. U.S. Fish and Wildlife Service, <https://ecos.fws.gov/ServCat/Reference/Profile/112570>

⁵ Vold, S. 2022. Oregon Sage-Grouse Population Monitoring: 2022 Annual Report. Oregon Department of Fish and Wildlife. Hines, OR.

⁶ Moynahan, B. J. 2004. Landscape-scale factors affecting population dynamics of Greater Sagegrouse (*Centrocercus urophasianus*) in northcentral Montana, 2001-2004. PhD Diss. Univ. of Montana. Missoula, MT; M. J. Holloran and S. H. Anderson. 2005. Spatial distribution of Greater Sage-grouse nests in relatively contiguous sagebrush habitats. *Condor* 107(4): 742-752.

which are essential for sage-grouse nesting and brood-rearing. The immense scientific record on sage-grouse is clear: anthropogenic development and activity should be avoided within four miles of sage-grouse leks.⁷

In addition to the landfill itself, road use and/or road development associated with the construction and maintenance of a facility would have multiple negative effects on the species, including mortality from vehicle collisions and behavioral disruption due to traffic, noise, and human presence.⁸ Anthropogenic noise associated with roads has been shown to decrease abundance of males at leks by 73 percent.⁹ These effects are not limited to the immediate vicinity around a road, as male attendance can decline at leks as far away as 7.5 km (4.66 miles) from a road.¹⁰

In addition to eliminating and fragmenting habitat, roads and site development would create a harmful and extensive “edge effect” in sage-grouse range, affecting habitat composition and aridity, producing dust and noise, generating garbage and roadkill, and facilitating the spread of invasive, non-native plant species.⁵ In addition to these impacts, fires are much more likely to ignite along roads and at developed sites, increasing fire risk to sage-grouse habitat.

The road development required for the construction and maintenance of a solid waste management facility for Sites 191400-2400, 191400-3300, 191600 and 222200-200 would violate prescriptions in Oregon’s Greater Sage-Grouse Conservation Assessment and Strategy, which states, “[d]isturbance from high volume roads can lead to avoidance of otherwise suitable habitat or direct mortality of birds. Minimize the construction of new roads through occupied sage-grouse habitat, especially lek, nesting and brood-rearing areas.”¹¹ The Bureau’s own conservation plan similarly proscribes upgrading or constructing roads “within 4.0 miles of occupied or pending leks,” except in the case of “public safety, administrative use, and valid existing rights.”¹²

⁷ Sage-Grouse National Technical Team. 2011. A Report on National Greater Sage-Grouse Conservation Measures. Bureau of Land Management. A 4-mile lek buffer may include an average of 80 percent of nesting females (SGNTT 2011: 21); larger buffers may be recommended to conserve the species (6.2 miles, Aldridge & Boyce 2007; 6.2 miles, Doherty et al. 2010; 5.3 miles, Holloran and Anderson 2005; 4.6 miles, Coates et al. 2013).

⁸ *Id.*

⁹ Blickley, J. L., D. Blackwood, G. L. Patricelli. 2012. Experimental evidence for the effects of chronic anthropogenic noise on abundance of greater sage-grouse at leks. *Cons. Biol.* 26:461-471.

¹⁰ Connelly, J. W., S. T. Knick, M. A. Schroeder, S. J. Stiver. 2004. Conservation assessment of Greater Sage-grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies. Cheyenne, WY. In Wyoming, the effects of fossil fuel drilling on sage-grouse were noticeable out to 12.4 miles from leks (Taylor et al. 2012; Taylor et al. 2013).

¹¹ Hagen, C. A., Anthony, R., Borine, R., Boyd, C., Buckner, G., Budeau, D., Dillon, J., Ellis, S., Gregg, M., Henderson, D., Miller, R., O’Keefe, J., Pustis, N., Youtie, B., and Zalunardo, D. 2011. Greater Sage-Grouse Conservation Assessment and Strategy for Oregon: A Plan to Maintain and Enhance Populations and Habitat.

¹² Bureau of Land Management. 2015. Oregon Greater Sage-Grouse Approved Resource Management Plan Amendment. Bureau of Land Management, Oregon State Office. Portland, OR. (September 2015).

Landfills and associated infrastructure would also subsidize predation on sage-grouse eggs, chicks and adults, especially by ravens. Ravens are renowned opportunists that take advantage of a variety of resource subsidies, and which can markedly expand their population size and range.¹³ A solid waste management facility would provide endless food subsidies in the form of organic garbage and increased prey (e.g., rodents), while associated power lines and other infrastructure for the facility would benefit ravens as nesting substrates and perches from which to hunt. Ravens negatively impact sage-grouse nest survival by predated upon chicks and sage-grouse hens tend to avoid areas with high raven density, adversely affecting sage-grouse populations directly from predation as well as reducing use of otherwise suitable habitat.⁸ Even developing Sites 191400-200, 201500-300, and 222200-400, which are just beyond the four-mile lek buffers would still endanger the species due to exponential increase of ravens that would be produced at any of those locations.

Site 222200-400 Would Degrade Cougar Wells Wilderness Study Area, Future Wilderness for Deschutes County

Site 222200-400 is a private inholding within the Cougar Wells Wilderness Study Area (WSA). Administered by the Bureau of Land Management, federal law requires the agency to manage public lands and resources “without permanent impairment of the productivity of the land and the quality of the environment.”¹⁴ Pursuant to its authorities, the Department of the Interior has also adopted a manual that guides the Bureau’s management of WSAs. The Bureau’s WSA Manual 6330 provides that no new discretionary uses shall be established in a WSA that “would impair the suitability of such areas for wilderness designation.” Impairment includes new surface disturbance such as disturbance of rock, soil, or vegetation that “would necessitate reclamation, rehabilitation, or restoration” to return the site to its original appearance.¹⁵ Notably, current motorized access to proposed Site 222200-400 within the WSA is via a motorized primitive trail—that is, a route that was not constructed by mechanical methods. Manual 6330 prohibits the Bureau from upgrading primitive routes, including access routes to non-federal lands surrounded by WSAs “to a level greater than existed on October 21, 1976.” Even in the case where upgrading a route may be necessary, the Manual provides that maintenance for the purpose “under which it was originally conveyed from Federal ownership... must be limited so as not to cause impairment of wilderness characteristics,” which may include limiting the “volume of vehicle traffic” on the route.

¹³ O’Neil, S. T., P. S. Coates, B. E. Brussee, P. J. Jackson, K. B. Howe, A. M Moser, L. J. Foster, D. J. Delehanty. 2018. Broad-scale occurrence of a subsidized avian predator: Reducing impacts of ravens on sage-grouse and other sensitive prey. *J. Appl. Ecol.* 55(6): 2641-2652.

¹⁴ 43 U.S.C. § 1702(c).

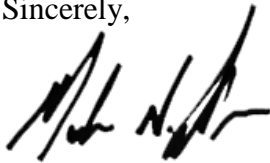
¹⁵ BLM. 2012. Manual 6330 – Management of Wilderness Study Areas (Public). Bureau of Land Management, Washington, D.C.

Furthermore, the public lands adjacent to the Cougar Wells WSA have been identified by the Bureau as Visual Resource Management (VRM) Class II.¹⁶ VRM Class II lands are to be managed in a way that retains the existing character of the landscape, and the allowed level of change is defined as such: “[t]he level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.”¹⁷ The construction of a solid waste management facility at Site 222200-400 would necessitate serious surface and visual resource disturbances both leading to and within the Cougar Wells WSA, violating the Bureau’s management guidelines for this area as a WSA and VRM Class II public lands, making this site unsuitable for further consideration.

Conclusion

Thank you for considering ONDA’s input to this critically important decision making process. ONDA is concerned that none of the sites in eastern Deschutes County are acceptable for development due to myriad conservation issues and resource conflicts. We recommend that SWAC broaden its search for additional potential sites, and we look forward to participating in that effort.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Salvo', written in a cursive style.

Mark Salvo
Program Director

¹⁶ BLM. 2022. BLM OR Visual Resource Management Polygon Hub. Bureau of Land Management, Oregon/Washington State Office, Portland, OR. <https://gbp-blm-egis.hub.arcgis.com/datasets/BLM-EGIS::blm-or-visual-resource-management-polygon-hub/about>

¹⁷ BLM. 2023. Bureau of Land Management Visual Resource Management Classes. Bureau of Land Management, Visual Resources, <https://blmwyomingvisual.anl.gov/vr-mgmt/blm/index.cfm>