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SOUTHWEST BORDER

Cultural and Natural Resource Impacts from Barrier Construction

Statement for the Record by Anna Maria Ortiz, Director,
Natural Resources and Environment

Accessible Version

Chairman Gosar, Ranking Member Stansbury, and Members of the Subcommittee:

Thank you for the opportunity to submit this statement regarding our work on cultural and natural resource impacts from border barrier construction along the U.S. southwest border. To help address illegal cross-border activity, the federal government has constructed hundreds of miles of physical barriers along the southwest border in recent decades, including on federal lands managed by the Department of the Interior where important cultural and natural resources are located. These resources include sacred sites for tribal communities, as well as the habitats of dozens of threatened and endangered species of animals and plants. Federal and tribal lands make up a total of 760 miles, or approximately 40 percent, of the nearly 2,000-mile border.

In January 2017, an executive order directed the Secretary of Homeland Security to immediately plan, design, and construct a contiguous wall or other impassable physical barrier at the southwest border.¹ In response, the Department of Homeland Security's (DHS) U.S. Customs and Border Protection (CBP) initiated the Border Wall System Program to replace and construct new barriers along the southwest border. In 2019, the President declared a national emergency that directed the Department of Defense (DOD) to provide additional support to CBP efforts.²

DHS and DOD used legal authorities to waive various cultural and natural resource-related laws in constructing border barriers from January 2017 through January 2021.³ Within DOD, the U.S. Army Corps of Engineers (USACE) was tasked to help expedite the construction of border barriers using billions of dollars in DOD funding made available following the

¹*Border Security and Immigration Enforcement Improvements*, Exec. Order No. 13767, § 4, 82 Fed. Reg. 8793, 8794 (Jan. 30, 2017) (issued Jan. 25).

²*Declaring a National Emergency Concerning the Southern Border of the United States*, Pres. Proclamation No. 9844, 84 Fed. Reg. 4949 (Feb. 20, 2019) (issued Feb. 15).

³The laws DHS waived included, but were not limited to, the National Environmental Policy Act of 1969 (NEPA), Endangered Species Act, Federal Water Pollution Control Act (Clean Water Act), Clean Air Act, National Historic Preservation Act, Migratory Bird Treaty Act, Archeological Resources Protection Act, Paleontological Resources Preservation Act, Safe Drinking Water Act, Solid Waste Disposal Act, and the Native American Graves Protection and Repatriation Act. See e.g., 84 Fed. Reg. 52118 (Oct. 1, 2019). The laws DOD waived included: NEPA, National Historic Preservation Act, Endangered Species Act, Migratory Bird Treaty Act, Migratory Bird Conservation Act, Eagle Protection Act, Clean Water Act, Fish and Wildlife Coordination Act, and the Clean Air Act.

National Emergency Declaration. A presidential proclamation paused construction in January 2021.⁴

My statement is based on our September 2023 report entitled [Southwest Border: Additional Actions Needed to Address Cultural and Natural Resource Impacts from Barrier Construction](#).⁵ It discusses border barrier installed from January 2017 through January 2021 and its impacts to natural and cultural resources, and CBP and DOD assessments of potential impacts of border barrier construction during that time.⁶

For that report, we reviewed laws, regulations, and guidance applicable to the construction of border barriers. We described border barrier installed by analyzing CBP's geospatial data and overlaying data from the U.S. Geological Survey. To identify impacts from the construction and to evaluate CBP's and DOD's pre-construction assessments, we reviewed agency documents, including assessments, and interviewed officials from CBP, USACE, Interior and its component agencies, and the U.S. Department of Agriculture's Forest Service. We also interviewed a nongeneralizable sample of two tribal governments and five nongovernmental stakeholders regarding their perspectives and visited project sites along the border in Arizona and Texas. The report contains a more detailed description of the scope and methodology of our review. Our work was performed in accordance with generally accepted government auditing standards.

Barrier Construction from January 2017 through January 2021 Had Various Impacts on Cultural and Natural Resources

In our September 2023 report, we found that CBP and DOD, via USACE, installed approximately 458 miles of border barrier panels across the

⁴*Termination of Emergency With Respect to the Southern Border of the United States and Redirection of Funds Diverted to Border Wall Construction*, Pres. Proclamation No. 10142, 86 Fed. Reg. 7225 (Jan. 27, 2021) (issued Jan. 20). This proclamation also revoked Executive Order 13767, which called for construction of a border wall.

⁵GAO, *Southwest Border: Additional Actions Needed to Address Cultural and Natural Resource Impacts from Barrier Construction*, [GAO-23-105443](#) (Washington, D.C.: Sept. 5, 2023).

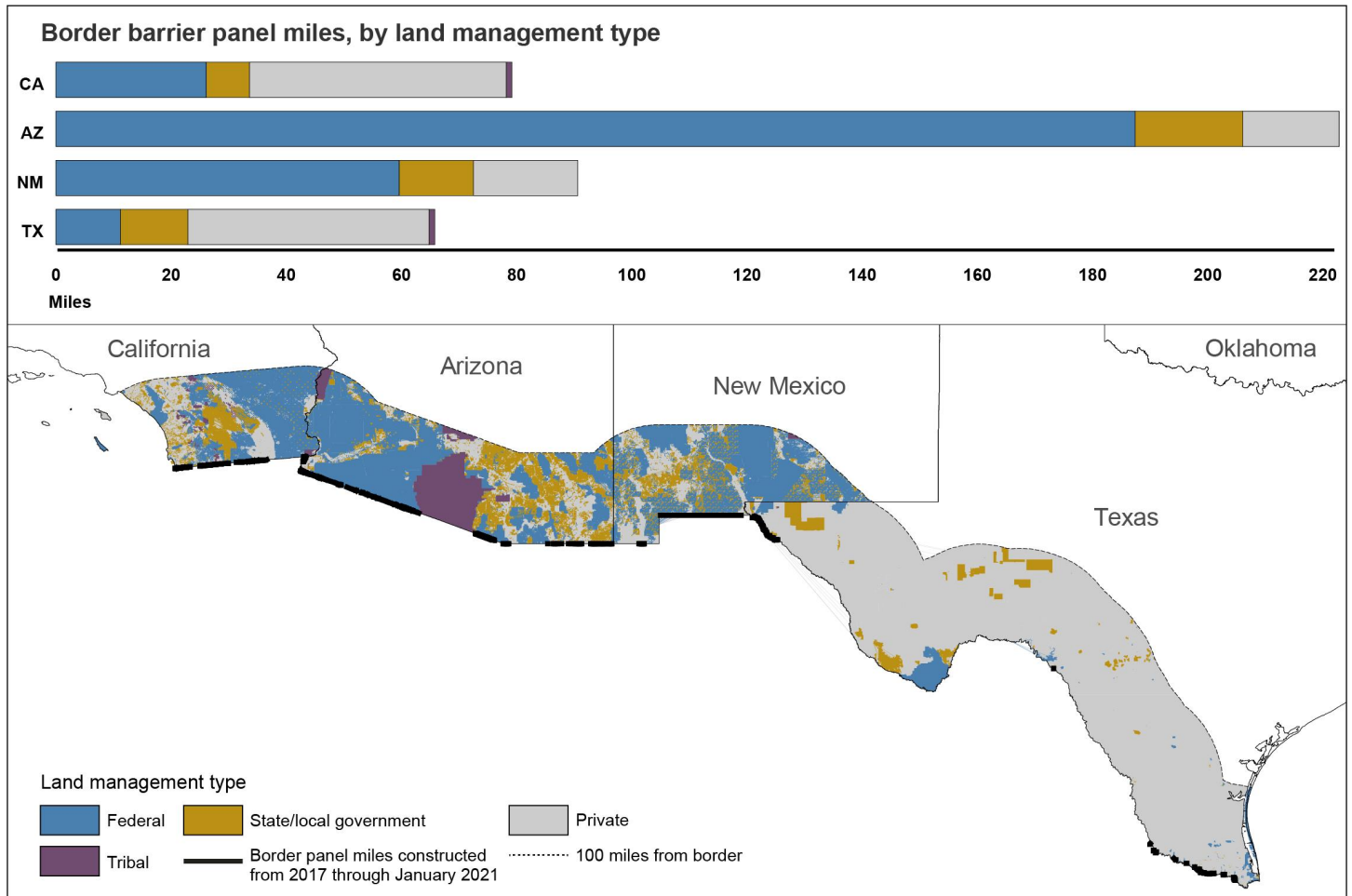
⁶In our report, we also assessed actions taken to address impacts to cultural and natural resources since January 2021.

southwest border between January 2017 and January 2021.⁷ About 284 of these miles (62 percent) were on federal lands, including those managed by the National Park Service, Fish and Wildlife Service (FWS), and the Forest Service, according to CBP data. For example, the agencies constructed 187 miles of barrier panels across federal lands in Arizona, more than in any other state, including through Organ Pipe Cactus National Monument, San Bernardino National Wildlife Refuge, Cabeza Prieta National Wildlife Refuge, and Coronado National Forest. Most of the barrier miles that the agencies planned to construct with DOD funding were on federal lands because selecting those locations expedited the contracting and construction process (see fig 1).⁸

⁷Border barrier panels refer to the vertical pedestrian barrier component of CBP's border barrier system. CBP's full barrier system included pedestrian barrier panels—consisting of 18- to 30-foot-tall concrete-filled steel bollards—and other attributes such as lights and sensors. In some cases, the barrier system also included features such as roads or levees. In the report, we referred to border barrier panels because most of these miles represented the installation of barrier panels rather than the completion of the entire CBP barrier system.

⁸See GAO, *Southwest Border: Schedule Considerations Drove Army Corps of Engineers' Approaches to Awarding Construction Contracts through 2020*, [GAO-21-372](#) (Washington, D.C.: June 17, 2021). We have previously reported that barrier construction on federal lands allowed CBP and DOD to proceed without the government first having to acquire real estate from private landowners—a process that could take years, according to CBP officials. GAO, *Southwest Border: Information on Federal Agencies' Process for Acquiring Private Land for Barriers*, [GAO-21-114](#) (Washington, D.C.: Nov. 17, 2020).

Figure 1: Miles of Border Barrier Panels Installed along the Southwest Border, by Land Management Type and State, January 2017 through January 2021



Source: GAO analysis of U.S. Customs and Border Protection and U.S. Geological Survey, Protected Areas Database of the United States data. | GAO-24-107127

Notes: This figure shows locations of miles of border barrier panels installed from 2017 through January 2021. It does not include locations of miles of barriers installed prior to 2017. Tribal lands are American Indian Reservations-Federal and American Indian Trust Land, as defined by the U.S. Census Bureau.

The agencies installed pedestrian barrier panels (rather than vehicle barriers) for any project initiated as part of the border barrier system after 2017.⁹ According to CBP data, more than 80 percent of the miles of pedestrian barrier panels installed replaced previously existing pedestrian

⁹Vehicle barriers are typically about 3 feet tall with wide enough openings to allow for wildlife passage.

or vehicle barriers. Our 2023 report includes additional details about the barrier panels installed.

We also found in our September 2023 report that a variety of impacts to cultural and natural resources occurred from border barrier construction, according to federal officials and representatives from Tribes and stakeholders we interviewed and our observations. Construction activities, the installed barrier system components, and incomplete project activities due to the cancellation of construction contracts after the January 2021 pause contributed to these impacts. For example, pausing construction and cancelling contracts exacerbated some of the negative impacts because contractors left project sites in an incomplete or unrestored state as of the January 2021 pause, according to agency officials. We identified impacts in five broad categories: cultural resources; water sources and flooding; wildlife migration and habitats; vegetation and invasive species; and erosion. Examples of these impacts include:

- **Cultural resources.** Some projects caused significant damage and destruction to cultural resources, including historic sites and sites sacred to Tribes, according to tribal and agency officials and four of the five stakeholders we interviewed. For example, according to Tohono O’odham Nation officials, a culturally important site in Arizona was irreparably damaged when contractors used explosives to clear the way for expanding an existing patrol road. The blasting damaged portions of Monument Hill, a site that the Hia-C’ed O’odham, ancestors of the Tohono O’odham, and other Tribes historically used for religious ceremonies and that remains important to several Indigenous communities. According to Tohono O’odham Nation officials, Monument Hill was the site of intertribal battles and contains the remains of Apache and O’odham ancestors who fought in those battles.
- **Water sources and flooding.** The barrier system itself can disrupt the natural flow of water in heavy rain events. These rain events can occur regularly along rivers and drainages near the border, and barrier-related obstructions can exacerbate flooding, according to National Park Service and Bureau of Land Management officials. For example, during construction, the contractor built the patrol road several feet above the desert floor in Organ Pipe Cactus National Monument, in some places by as much as 8 feet. As a result, the raised road acts as a natural dam by impeding water flow during rain events. During heavy rains, water typically flows south across the desert into Mexico but now hits the side of the raised road, according

to a National Park Service official. We observed that, as of May 2022, more than a year after the pause in construction, the contractor had not yet regraded the road to allow for proper drainage.

- **Wildlife migration and habitats.** Installation of pedestrian barrier has affected wildlife by impeding their movement across the landscape, including in habitat for threatened and endangered species, according to tribal and agency officials and all five stakeholders. For example, installing the full border barrier system in parts of the Rio Grande Valley in Texas has fragmented the endangered ocelot's habitat, according to a joint FWS and CBP documented agreement. The barrier system has also severed the animal's travel corridors across the border. These cumulative impacts have substantially elevated the risks of the ocelot's extinction in the U.S., according to the agreement.
- **Vegetation and invasive species.** Clearing lands for border barrier construction damaged native vegetation. FWS officials told us that invasive plant species took root at project sites in Texas, where contractors cleared native vegetation to create staging areas to store construction equipment and materials. Although construction contracts usually included reseeding native vegetation, in many cases the reseeding did not occur because of the January 2021 pause in construction, according to FWS officials.
- **Erosion.** Barrier construction on steep hillsides—and erosion control measures that were unfinished when construction was paused—have led to significant erosion in many locations, especially because the agencies were unable to address the erosion for more than a year in many cases, according to CBP officials. For some projects, contractors disturbed large tracts of mountainside to install barrier, build access roads, and clear construction staging areas, leaving steep slopes unstable. In addition, according to CBP officials, incomplete erosion control measures along the barrier and patrol roads threatened the integrity of the barrier system itself. For example, according to agency officials, contractors built a large construction staging area near the top of a mountain in the Pajarito Mountains on the Coronado National Forest in Arizona, clearing the mountainside of vegetation that kept the soil in place. According to a Forest Service official, the entire mountainside is in danger of collapse (see fig. 2).

Figure 2: Erosion on the Coronado National Forest in Arizona (May 2022)



Erosion below the site of a cleared staging area (left); erosion below an area where only several border barrier panels were installed as of January 2021 (right).

Source: GAO. | GAO-24-107127

Some officials also reported positive impacts of barrier construction on natural resources. For example, one Coronado National Forest official noted that there was less trash and trampling of native vegetation after the barrier was built. CBP officials also noted that the addition of barrier in some areas reduced the amount of drug trafficking across some federal lands, making it safer for patrol agents to travel along the border.

CBP and DOD Considered Potential Impacts, but Agencies, Tribes, and Stakeholders Identified Concerns

In our September 2023 report, we found that CBP and USACE, within DOD, each took steps to assess potential cultural and natural resource impacts of border barrier construction and actions to help minimize these impacts for the projects they managed. Because the agencies waived legal requirements, including cultural and natural resource-related laws, before constructing border barriers between 2017 and January 2021, they did not have to conduct any activities required by those laws, such as environmental assessments required by the National Environmental Policy Act of 1969 (NEPA), as amended.

Despite the waived legal requirements, CBP and USACE officials told us they reviewed studies, conducted some assessments and surveys, and solicited input from federal agencies and others. Officials from both agencies said that their approaches differed from what they would have done if they had been required to comply with NEPA. However, CBP officials said they tried to meet, as closely as possible, NEPA's substantive requirements, when time permitted. USACE officials also said that they took the steps they could, while operating in the best and fastest way possible.

Land management agency officials, tribal officials, and stakeholders told us they have concerns regarding how CBP and USACE assessed potential cultural and natural resource impacts. In some cases, they noted that they shared these concerns with CBP and USACE. CBP and USACE officials also noted some concerns regarding the assessments. These concerns included:

- **Soliciting and incorporating input.** Land management agency officials, a tribal official, and all five of the stakeholders we interviewed suggested that CBP and USACE could improve their approach to soliciting and incorporating input regarding their assessments, such as by consulting with Tribes and providing more detailed information when soliciting input. For example, officials from FWS and the National Park Service both described instances when CBP solicited input on maps or project descriptions but did not include important details that would allow them to offer anything but general feedback. According to USACE officials, the short time frames limited their ability to solicit and incorporate additional input. CBP officials said that they did not always respond to the input they received and noted that they could do a better job of that in the future.
- **Sufficiency of analysis.** One stakeholder and a tribal official emphasized the importance of studying related issues before taking action to construct barriers, such as studying the impact on wildlife from installing lights on border infrastructure. In addition, some of the CBP and USACE assessment reports we reviewed identified limitations of the agencies' own analyses. For example, CBP's assessment of potential impacts for a project in Arizona stated that the agency did not survey the project location at the right time of year to identify many of the potentially affected species or their potential habitats. CBP officials explained that they did not undertake some studies because they would not have completed them in time to meet construction deadlines.

- **Flexibility in barrier decision-making.** Land management agency officials and three of the five stakeholders we interviewed also noted concerns about the agencies' limited flexibility in decision-making about barrier system installation, including barrier type (pedestrian or vehicle) and location. One Interior official said that having such flexibility could provide more opportunities to satisfy both CBP's border security mission and the land management agencies' missions, especially on federal lands that have been specifically protected for their natural resource value. CBP officials told us that the 2017 executive order and appropriations acts limited their flexibility in varying the barrier system components, such as their ability to install vehicle barrier.¹⁰ According to USACE officials, they also did not have flexibility in choosing barrier system components to install, and the military construction projects were to comply with CBP's standard for the border barrier system.

We found that CBP, which has committed to implementing mitigation actions and maintains its authority to construct border barriers, has not fully evaluated these concerns to inform future actions or efforts.¹¹

According to key practices that we and others have identified for both program and project management, it is important to identify and apply lessons learned from programs, projects, and missions to limit the chance of recurrence of previous failures or difficulties.¹²

CBP officials said they have not evaluated lessons learned regarding their assessments because they have not completed the barrier construction projects. They said that they would typically wait to consider such lessons once that occurs. However, CBP conducted its efforts to assess the potential impacts of those projects prior to January 2021, which would allow it to consider any lessons from those efforts now, even if it is conducting additional work at the project sites. Moreover, CBP's statutory

¹⁰The 2017 executive order directed the planning, design, and construction of a contiguous and impassable physical barrier, and CBP's fiscal years 2018 through 2021 appropriations acts directed the agency to use operationally effective barrier designs that were already deployed as of May 2017. CBP's fiscal years 2020 and 2021 appropriations also permitted certain operationally effective adaptations of those earlier designs.

¹¹As of June 2021, DOD had cancelled all military construction- and counterdrug-funded border barrier projects.

¹²GAO, *Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects*, [GAO-19-25](#) (Washington, D.C.: Dec. 21, 2018). Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Sixth Edition (2017); and *Implementing Organizational Project Management: A Practice Guide*, First Edition (2014). PMBOK is a trademark of Project Management Institute, Inc.

authority to build border barrier, as well as to waive laws when doing so, remains in effect, so it is important to improve its process.¹³ By evaluating lessons learned, CBP could gain insights for imminent, ongoing, or future barrier construction efforts conducted using its waiver authority.

In our September 2023 report, we recommended that CBP, with input from Interior, DOD, Tribes, and stakeholders, evaluate lessons learned from its prior assessments of potential impacts. CBP agreed with this recommendation and stated it would collect information and compile a lessons learned report by June 2024.

Chairman Gosar, Ranking Member Stansbury, and Members of the Subcommittee, this concludes my statement for the record.

GAO Contacts and Staff Acknowledgments

If you or your staff have any questions about this statement for the record, please contact Anna Maria Ortiz, Director, Natural Resources and Environment, at (202) 512-3841 or OrtizA@gao.gov or Rebecca Gambler, Director, Homeland Security and Justice, at (202) 512-8777 or GamblerR@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement.

GAO staff who made key contributions to this statement are Leslie Kaas Pollock (Assistant Director), Jeanette Henriquez (Assistant Director), Ulana Bihun, Candace Carpenter, Serena Lo, Matthew McLaughlin, Sasan J. "Jon" Najmi, Cynthia Norris, and Jeanette Soares. Other staff who made key contributions to our September 2023 report are acknowledged there.

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