



Considerations for Federal and State Landback
by
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Executive Summary

- This policy brief showcases how geographic information system (GIS) techniques can be used to identify public and/or protected land in relation to current and historic reservation boundaries, and presents maps showcasing the scope of landback opportunities.
- These lands include federal- or state-owned or managed land within current external reservation boundaries; within former reservation boundaries; near or abutting current reservation land; and protected areas designated for conservation management (which can include land held in fee).
- The sentiment to give all U.S. national park landback to the stewardship of Indigenous Peoples is gaining momentum. These areas indeed may provide a cohesive set of initial opportunities towards that aim, and can lean on management or co-management agreements in strategic areas that present win-win solutions for both public agencies and American Indian nations in expanding their footprint.
- While historically the laws that diminished reservations were intended to create opportunities for private ownership and settlement by non-Indigenous people, it is in fact the case that, 140 years later, six federal agencies currently manage approximately one-third the land that had been within former reservation boundaries.
- A quarter of land just outside of present-day reservation boundaries (within a 10-mile buffer) is managed by one of six federal agencies, largely made up of the Bureau of Land Management (11%) and the Forest Service (11%).
- Identifying where these parcels are, especially in relation to current or former reservation land, is a powerful first step for tribes and government agencies to begin to develop strategies for landback. Making this information more accessible will help streamline the process.

I. Identifying Landback Opportunities

A key component of landback—whether by land-use agreements; co-management or management agreements; or transfer of title—is physical land. While landback is not solely a movement for reservation- or land-based tribes, it has been a traditional avenue within the western-colonial legal system for tribes to reclaim landback into Indigenous use, stewardship, or ownership in efforts to repair and restore Indigenous relationships with land. Identifying land parcels that may be “good” contenders for landback can be a difficult process due to lack of transparency in land records and transactions; hostility in local real estate markets towards Indigenous ownership of land; inaccessibility of geo-spatial technology, data, or mapping information; and/or legal or administrative roadblocks in the process of transferring title or setting up use or management agreements. Therefore, identifying those relatively more-accessible parcels for landback on a broad spatial scale may be a helpful undertaking for tribes, philanthropies, and other persons or administrative departments seeking to support land return.

What makes a parcel of land a “good” candidate for landback? Key questions to ask when identifying potential parcels of land for return to Indigenous peoples include the following:

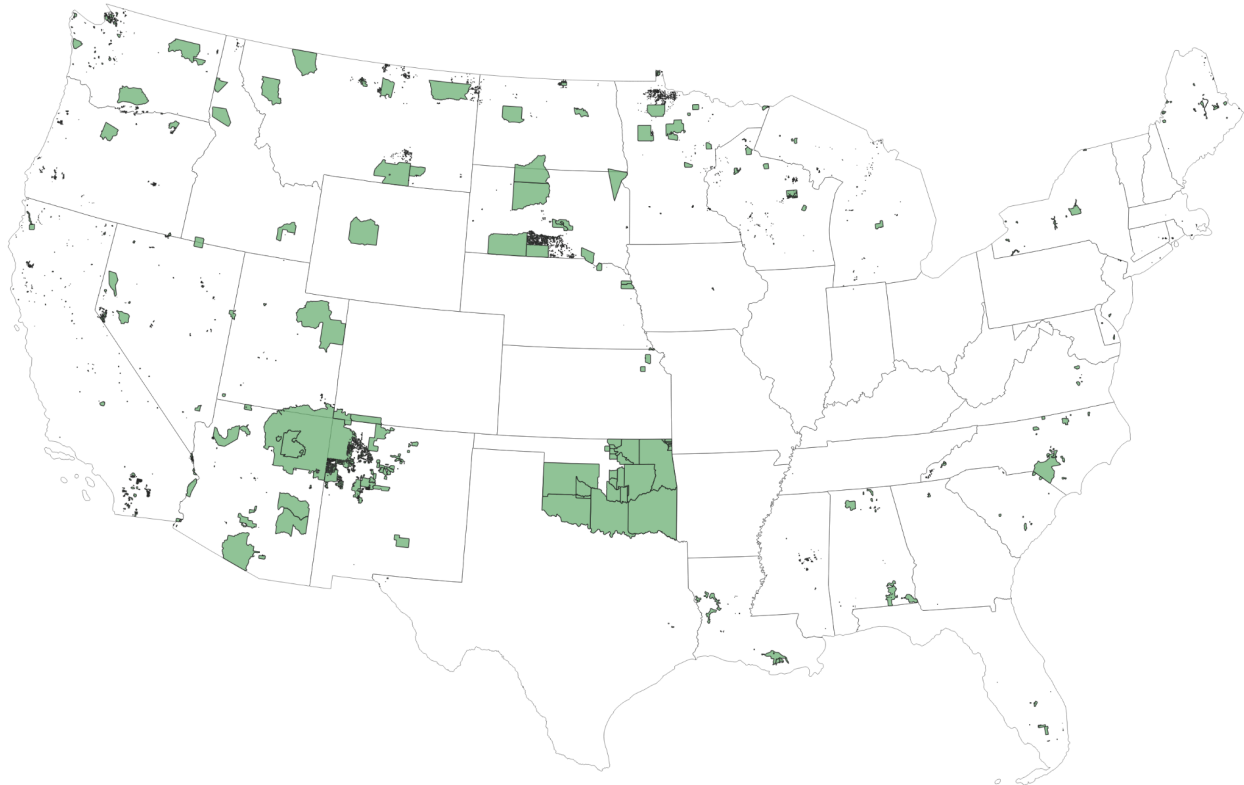
- Is there a historical or cultural tie between the physical land and a specific Indigenous nation or set of nations?
- Does the land in question lie within the external boundaries of an existing reservation, or within the external boundaries of historic reservation land?
- Is the land in question owned privately, in fee-simple title, or is it publicly owned?
- Is the land in question managed by a federal or state entity for environmental stewardship purposes?
- Does the land in question have conservation or other easements that limit trade in the general open property market?
- Does the Department of Interior, or other administrative departments, already own or manage the land?
- Does the land in question abut current reservation or trust land?
- Was land that was historically part of a federally recognized reservation, and lost due to encroachment or policy change, still within the public domain, or otherwise managed by a federal or state agency?



II. Mapping Federal and State Lands Near or Within Reservations

Some of these questions can be answered on a broad scale using geographic information system (GIS) techniques. As a starting point, Figure 1 displays the external boundaries of federally recognized American Indian reservations within the continental U.S. (as of 2020)¹:

Figure 1: Federally Recognized American Indian Reservation Land, External Boundaries (2020)



Approximately 4% of the land within the external boundaries of these reservations (not including Alaska and Hawaii) contains land that is federally managed by one of six main federal agencies (Bureau of Land Management, Bureau of Reclamation, U.S. Department of Defense, U.S. Fish and Wildlife Service, the Forest Service, and the National Park Service).²

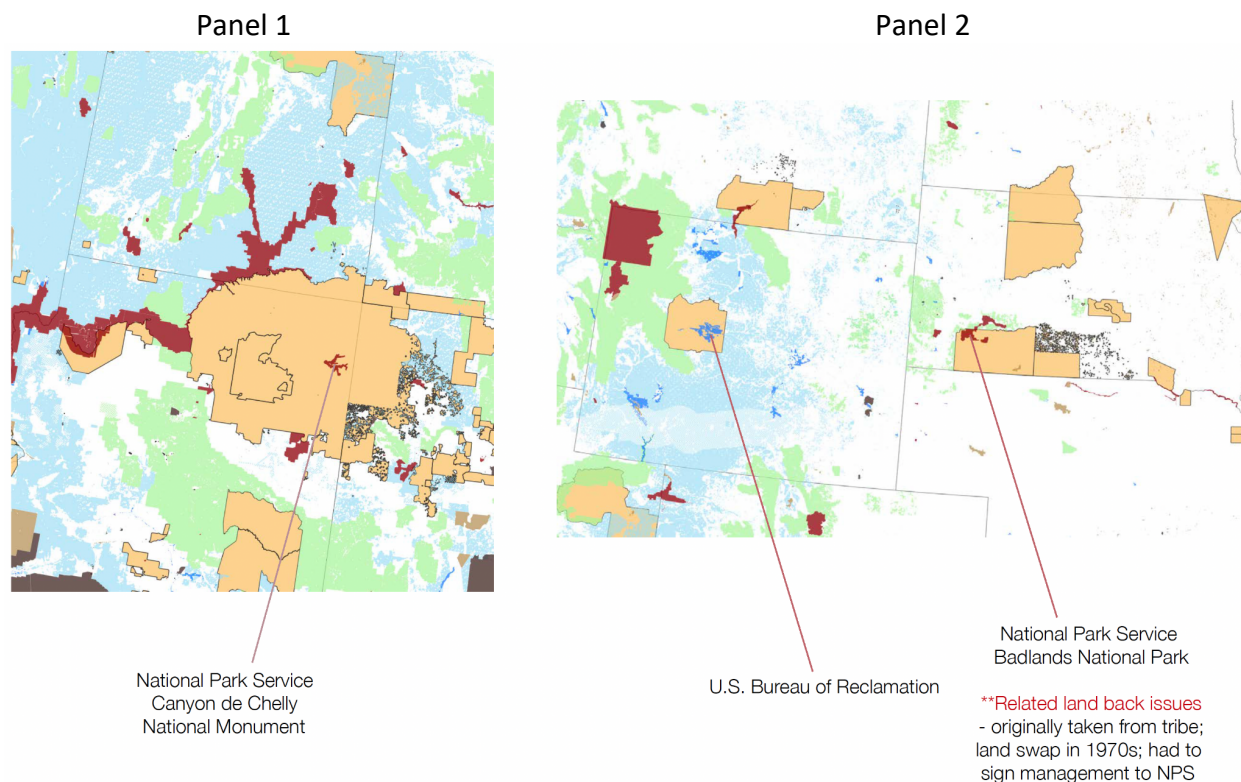
¹ Boundary files reflect those from the U.S. 2020 Decennial Census and American Community Survey, at the geographic summary level of American Indian Area/Alaska Native Area/Hawaiian Home Land. Downloaded from IPUMS National Historical Geographic Information System: Version 17.0 [dataset]. Minneapolis, MN: IPUMS. 2022. <http://doi.org/10.18128/D050.V17.0>

² USA Federal Lands. Appended from individual agency source data from BLM, DoD, USFS, USFWS, NPS, PADUS 2.1, and compiled by Esri as part of the ArcGIS Living Atlas of the World. Last updated May 2022, and accessed in September 2022 at <https://www.arcgis.com/home/item.html?id=5e92f2e0930848faa40480bcb4fdc44e#overview>



Figure 2 shows zoomed-in examples of how and where these overlaps occur, displaying American Indian reservations (orange-shaded areas) and U.S. federal lands in Arizona (Panel 1), and Wyoming and South Dakota (Panel 2).

Figure 2: U.S. Federal Lands and American Indian Reservations (2020), AZ, WY, and SD



The blue-shaded areas in Figure 2 depict Bureau of Land Management (BLM) land; the maroon areas depict National Park Service (NPS) land; the light-green areas depict Forest Service (FS) land; and the darker-blue areas represent Bureau of Reclamation (BoR) regions. In Panel 1 (in Arizona and New Mexico), one can also see U.S. Department of Defense (DoD) areas (olive-green regions), and U.S. Fish and Wildlife Service (USFWS) areas (light-brown regions).

One can see from the above examples National Park Service land on the Navajo Nation in Arizona (Panel 1); Bureau of Reclamation land on the Wind River reservation in Wyoming, and National Park Service land on the Pine Ridge reservation in South Dakota (Panel 2). The last example in particular touches many aspects of the landback spectrum, from land loss to co-management and use agreements and to long-standing disputes over treaty rights, trust status, and environmental stewardship.³

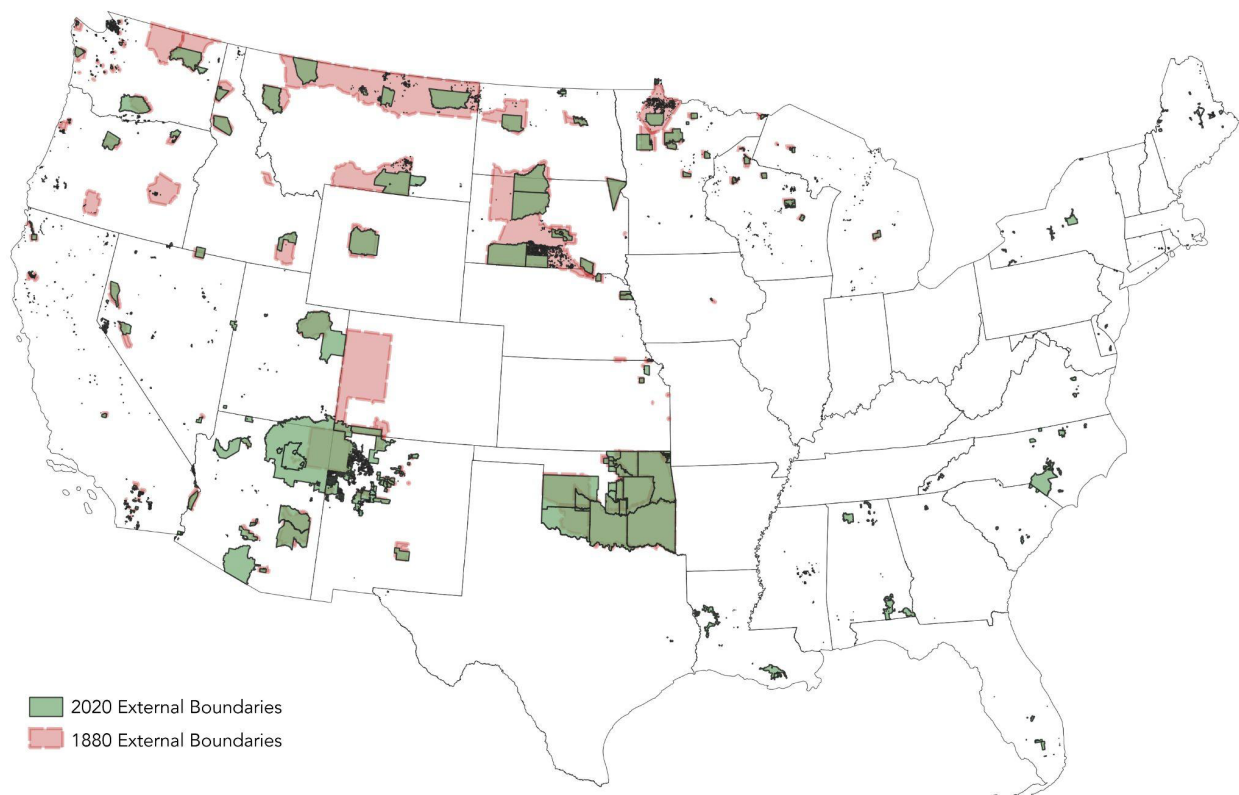
³ This is a complicated, long-protracted example of conflicts between the U.S. government and the Oglala Sioux Tribe over land rights, infrastructure, environmental stewardship and sovereignty. The Badlands National Park (the maroon area depicted on the Pine Ridge reservation), was within the original reservation as established in 1889. In 1942, the War Department took 341,725 acres to establish a bombing range,



There are also extensive federally managed public lands just outside of modern-day reservation boundaries. Approximately 25% of land within a 10-mile buffer zone of 2020 external, federal reservation boundaries within the continental U.S. are managed by one of the above-mentioned federal agencies, of which about 11% is managed by BLM and FS, each.

Figure 3 illustrates a depiction of reservation land loss over time, showing the external boundaries of federally recognized American Indian reservations in 1880 (red-shaded areas)⁴, and in 2020 (green-shaded areas).

Figure 3: Federally Recognized American Indian Reservations, External Boundaries
Current (2020) and Historic (1880) Conditions



The bulk of this reservation diminishment occurred between 1880 and 1934, a direct result of policies and legislation intended to “throw open” reservations for non-Indigenous western settlement and development, and to create opportunities for private ownership. Much of this

displacing several hundred people. Several decades later, the U.S. government agreed to return to the land to trust status, but in conjunction with creating a co-management agreement with the National Park Service and the Oglala Sioux Nation. This relationship has since evolved, but conflicts over the use and future of this area are still prevalent.

⁴ Historic boundaries from: Laura Taylor, 2020. “American Indian Reservation Boundaries and Land Characteristics: A Spatial Analysis of Reservation Decline in the American West, 1880-1915”. Working Paper. (Boundaries digitized from historic U.S. Office of Indian Affairs reports.)



activity was promulgated by the General Allotment Act (passed in 1887), where reservation-designated land in surplus of designated allotment parcels held in trust were sold back to the U.S. government at vastly reduced market rates, placed back into the public domain, and then reopened for cash purchases, homestead transfers or other types of land disposals.⁵

Passage of this act served as a catalyst for significant land loss. Yet even in the early years after its passage, Congress was able to cede even more reservation land to the public domain through special legislation. Between 1889 and 1890 alone, approximately 13 million acres of reservation land was ceded through such processes.⁶ In justifying this admittedly “rapid reduction” of reservation land, then Office of Indian Affairs Commissioner T.J. Atkins asserted that “land relinquished was not being used for any purpose whatever...[t]he Indians did not need it and would not be likely to need it at any future time ... [and t]he sooner the tribal relations are broken up and the reservation system done away with the better it will be for all concerned.” He finished, “there is always a clamor for Indian lands.”⁷

Yet despite the U.S. government pushing these policies to respond for the need for land, approximately one third of former reservation land in the continental U.S. (comparing areas that were designated as federal reservations in 1880 and in 2020) is still currently managed by one of six main federal agencies today,⁸ with 16% of the land managed by the U.S. Forest Service, and 14% managed by the Bureau of Land Management.

In Colorado, for example, large portions of land that were designated as reservation in 1880 but were removed as such in the intervening years are still federally managed today. As Figure 4 indicates, much of the former Ute reservation (light-red-shaded region) is managed by both the U.S. Forest Service (light-green-shaded area) and the Bureau of Land Management (light-blue-shaded area).

⁵ Laura Taylor (2022). *Predatory Paternalism: The Changing Rights to Water, Enforcement, and Spillover Effects on Environmental Quality in the American West*. (Publication Number: 29169588) [Doctoral Dissertation, University of Arizona]. ProQuest Dissertations and Theses database.

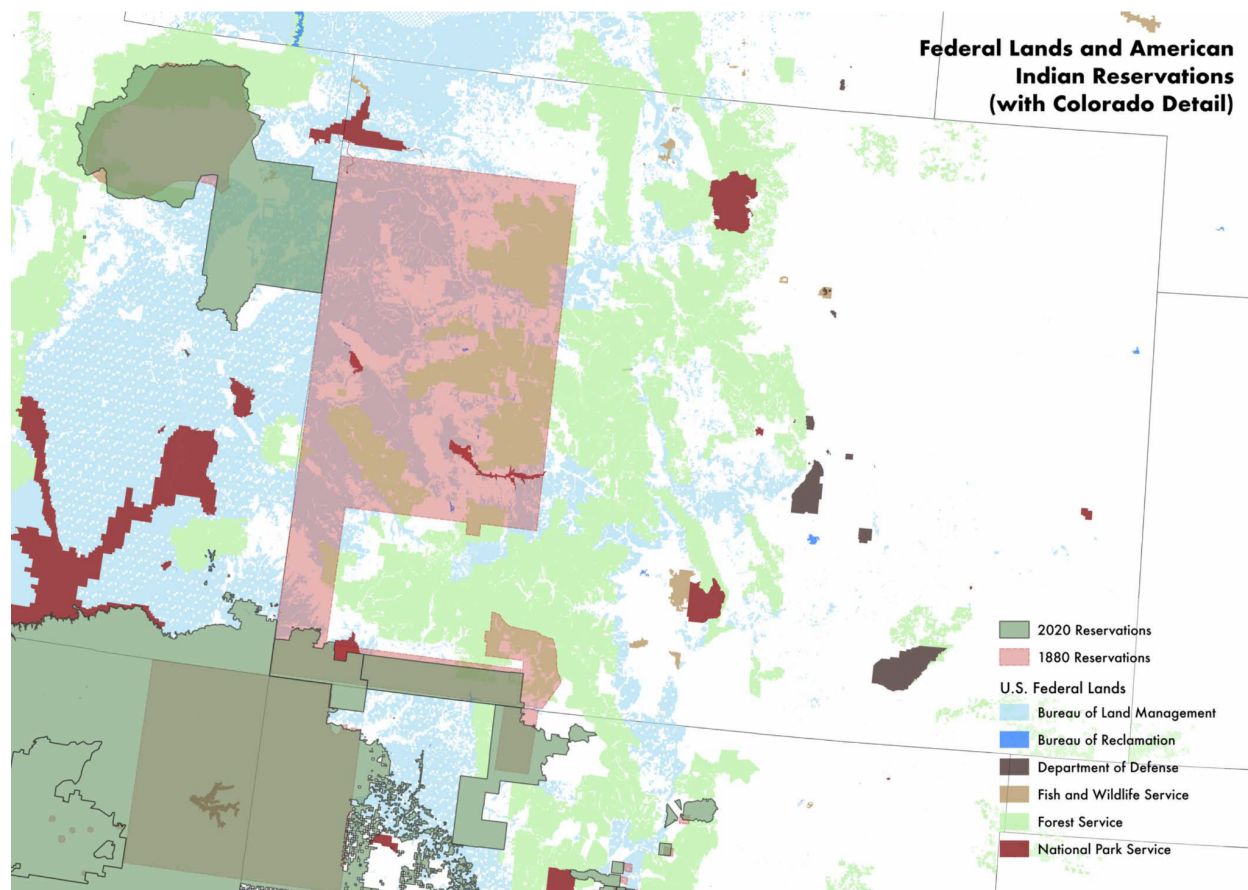
⁶ Office of Indian Affairs Annual Report, 1890

⁷ Office of Indian Affairs Annual Report, 1890, Page XXXIX.

⁸ The six agencies referred to are: U.S. Bureau of Land Management, Bureau of Reclamation, Department of Defense, Fish and Wildlife Service, Forest Service, and the National Park Service.



Figure 4: Federal Lands and External Boundaries of Federally Recognized American Indian Reservations, 1880 and 2020



III. Potential for Co-Management or Management Agreements in Protected Areas and State Trust Lands

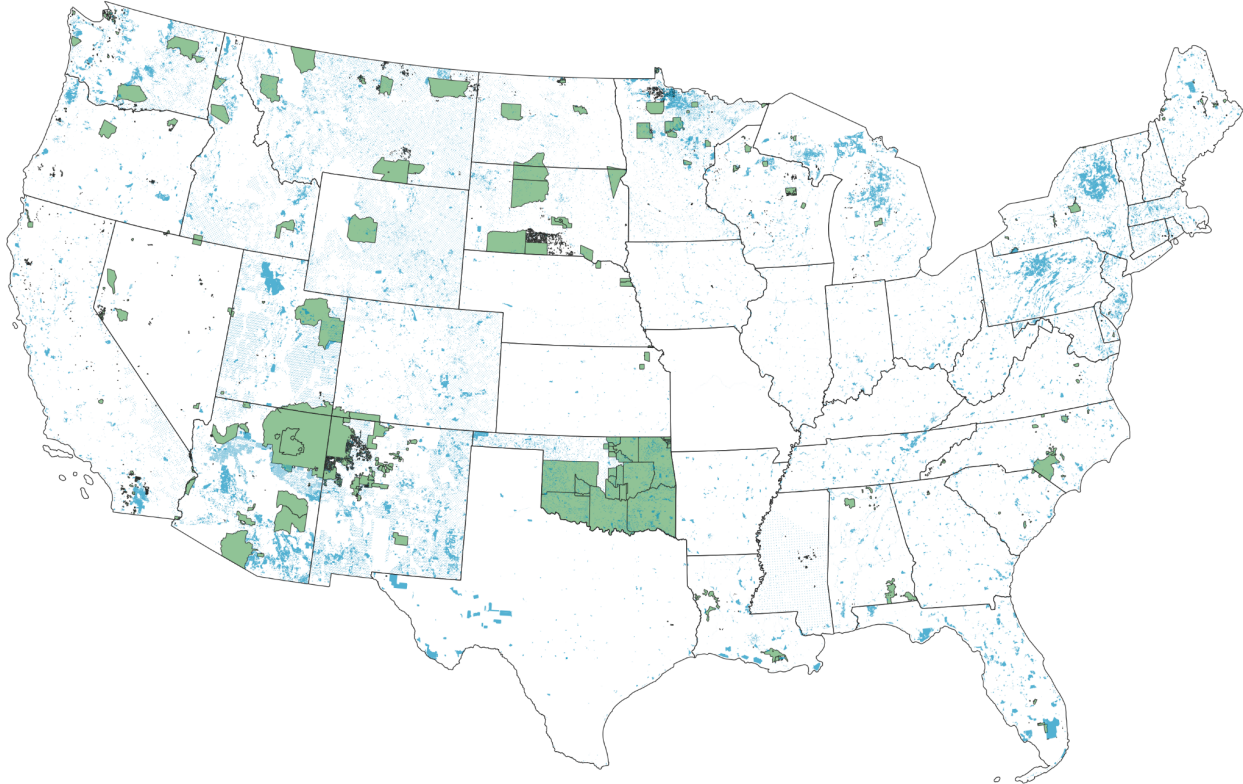
A final example depicts parcels that are identified in the Protected Area Dataset (PAD)⁹, which shows federal, state, and local public land as well as lands with conservation restrictions and other protected statuses (including private land parcels held in fee that have a protected status). One can use this database to map state trust land, for example, or land held by non-governmental organizations (NGOs), or other entities.

⁹ U.S. Geological Survey (USGS) Gap Analysis Project (GAP), 2022, Protected Areas Database of the United States (PAD-US) 3.0: U.S. Geological Survey data release, <https://doi.org/10.5066/P9Q9LQ4B>.



Figure 5 depicts state fee land, as defined in the PAD. As visible from the map, there are extensive areas of the continental United States that contain state-owned land, including large areas of the western United States.

Figure 5: Federally Recognized American Indian Reservations (2020) and PAD State Land



State trust land comprises a large subset of this type of state land. These areas currently account for approximately 46 million acres in the continental United States, and date back to the early post-Revolutionary-War years in American history, when the nascent U.S. government struggled to pay for public services and wanted to encourage settlers to help expand its western borders. The General Land Ordinance of 1785 and the Northwest Ordinance of 1787 both helped to establish the origins of this system, the former introducing the predominant method of surveying and then disposing of public land, and the latter creating the process of turning territorial governments into states, and connecting land to public education.¹⁰ As part of these systems, a centrally located parcel in each (typically 6-mile-by-6-mile) township was

¹⁰ Culp, Laurenzi, A., & Tuell, C. C. (2015). *State Trust Lands in the West*, Updated Edition. Lincoln Institute of Land Policy.

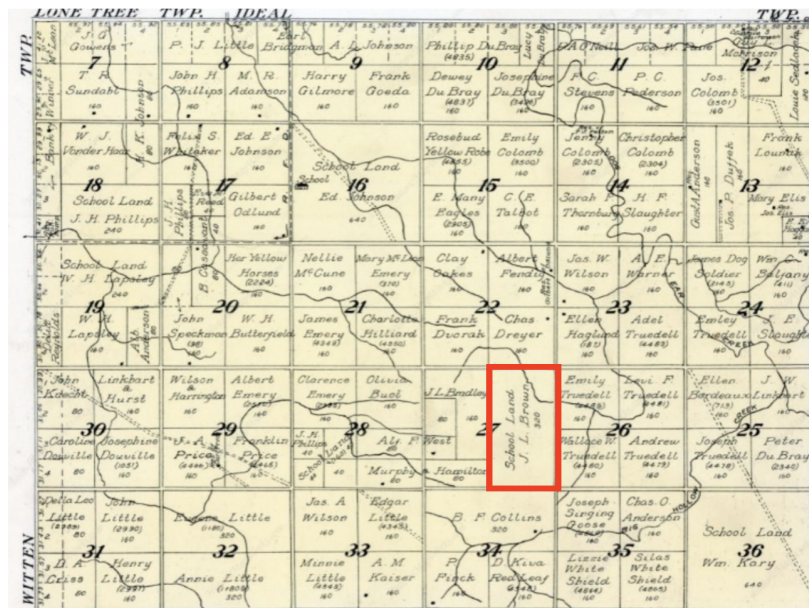


reserved for the purpose of education. Upon the territory becoming a state, it was granted title to these parcels as well as land grants to support education.¹¹

While the west developed, the routine allocation of these parcels within township squares did not necessarily match the settlement patterns that burgeoned in western regions. Populous centers developed around natural resources or other economic opportunities, and the parcels set aside for public lands could not necessarily serve public education where it was needed most. By the mid-1800's Congress began granting land directly to states and allowed them to select parcels in lieu of ones in townships that were already spoken for, and also began granting more parcels per township in more arid regions. Congress also began granting even more land in order to underwrite public investments such as universities, public buildings and schools, and to finance infrastructure projects such as railroads. There were other supplemental grant programs for states, in addition to the 1927 Jones Act, which granted mineral rights too in all previously granted land.¹²

Figure 6 shows a 1915 plat map of Tripp County in South Dakota, land that was once part of the Sioux Nation and also the Rosebud Reservation. As evidenced by the map, several parcels of land were designated as “school land.”¹³

Figure 6: Historic Plat Map, Tripp County, South Dakota, 1915



¹¹ *Ibid.* Also, see this publication's Appendix, page 53, for a historical table of land grants by state in the U.S. (reproduced from Gates, Paul W. *The Wisconsin Pine Lands of Cornell University: A Study in Land Policy and Absentee Ownership*. Ithaca, N.Y.: Fall Creek, 2011.

¹² *Ibid.*

¹³ Banner Township, Dog Ear Creek, Tripp County Map. Published by Geo. A. Ogle & Co., 1915. Accessed at: <http://www.historicmapworks.com/Map/US/841540/>



Many of these designated areas are still state trust land today. From the above Tripp County, for example, the school land designated in section 27 of the above township (red-bordered rectangle), is still currently school trust land. Figure 7 displays the current designations of South Dakota “School and Public Land” parcels (blue shaded area).

Figure 7: Current School and Public Land in Township 100N, Tripp County, South Dakota¹⁴

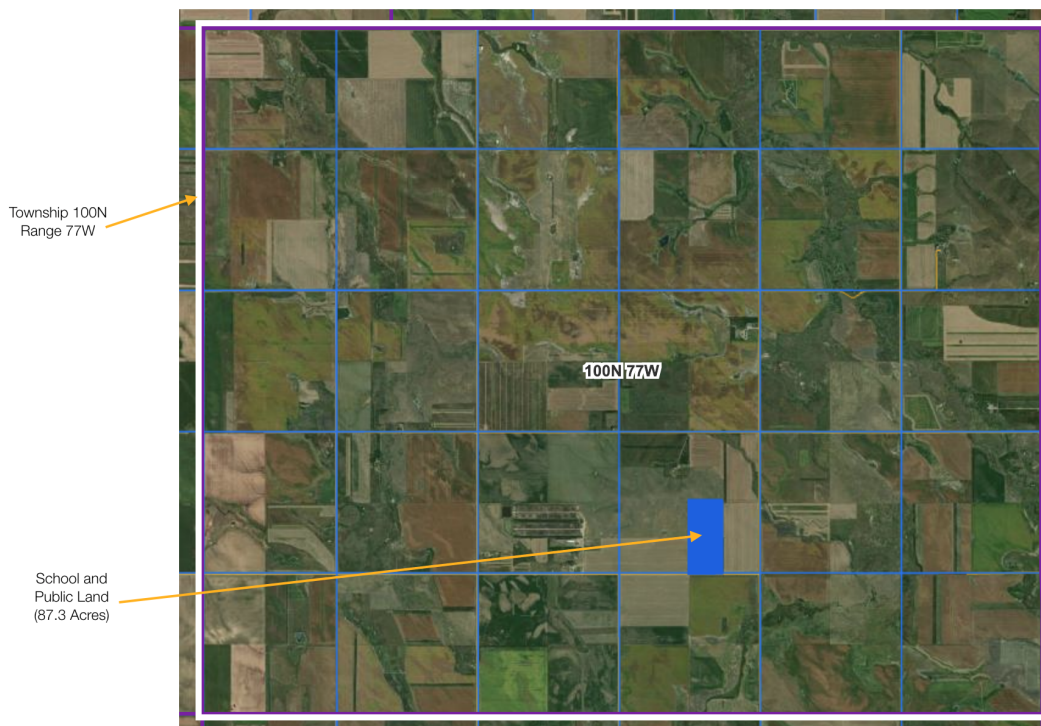


Figure 1

This is zoomed into a fine-grained area, but state trust lands are widespread across western states. Throughout history, land was used extensively to fuel and support development of land, resources, economic growth, and social and civil pursuits. Individual states and Congress regularly changed restrictions to allow for (or sometimes not allow for) various types of uses and transactions with these parcels, allowing leases, sales, and other types of natural resource extractions. In 1837, the state of Michigan established specific restrictions on the revenue generated from state trust land, requiring the state to place proceeds in a trust to manage on behalf of beneficiaries, where interest earned on these accounts could be used to support public education and other projects. This system took off widely in other states. Despite changes in restrictions over time and across states, a common theme amongst these lands is that they must be managed in trust for beneficiaries.

The following figures will show some examples of these state trust lands. Figure 8 depicts a zoomed-in version of PAD state land from the national map presented in Figure 5.

¹⁴ State of South Dakota School and Public Land Map Viewer. Last Accessed August 1, 2022 at <https://sdbit.maps.arcgis.com/apps/MapTools/index.html?appid=ef2b738350004bf08b6be743368e93dd>



Figure 8: Federally Recognized American Indian Reservations (2020) and PAD State Land, Arizona and Utah Detail

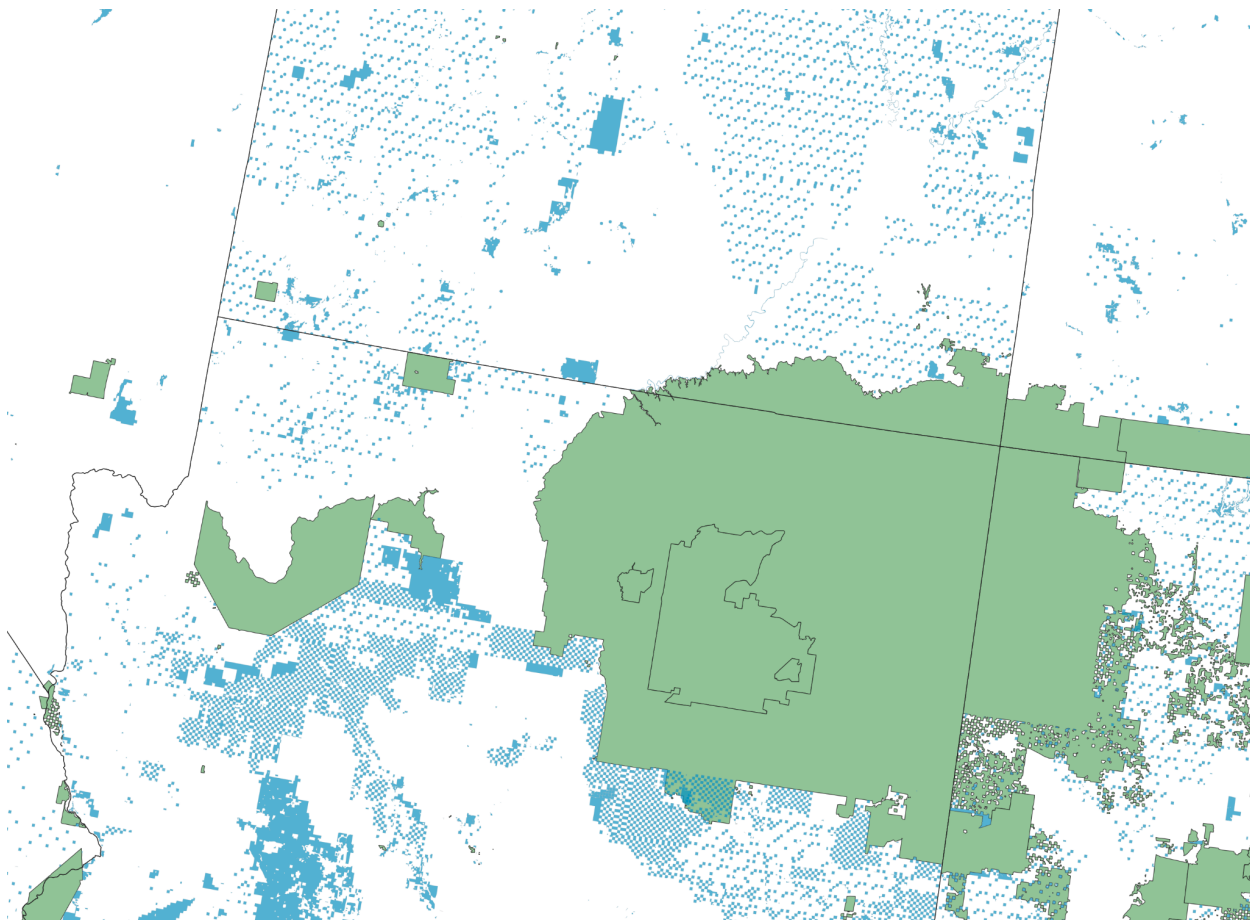
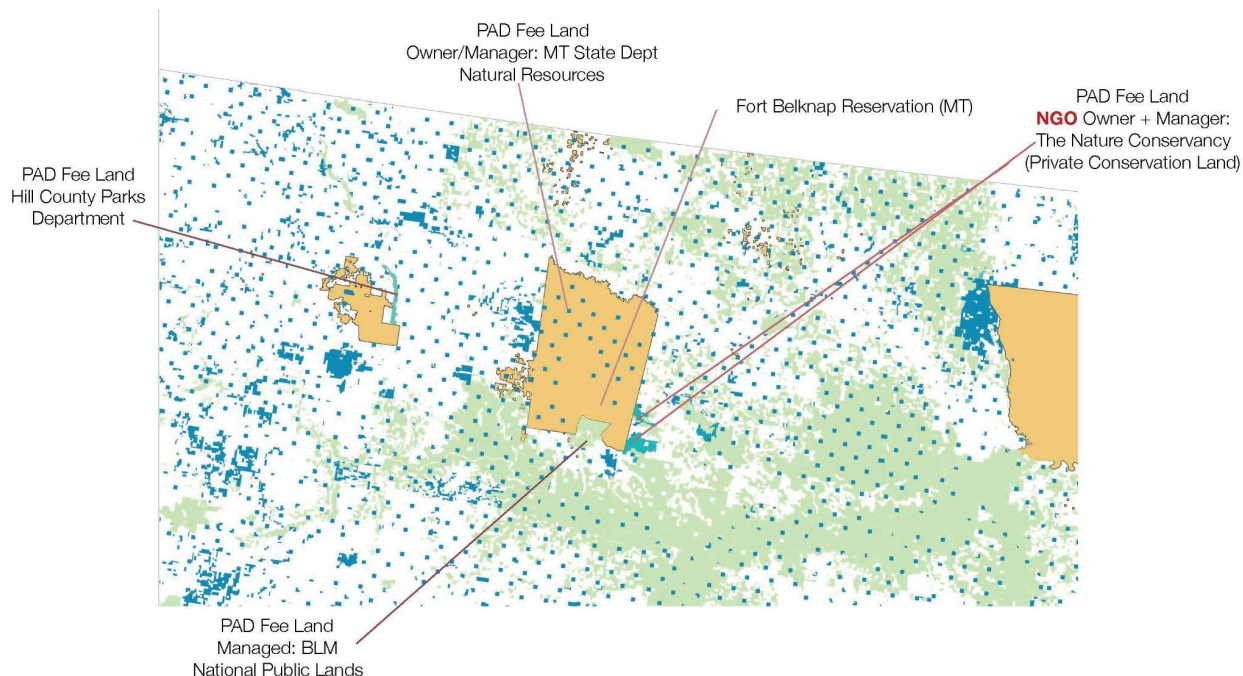


Figure 9 displays the state of Montana, with select parcels of protected or public land highlighted from the PAD. There are extensive areas that contain small parcels of state-owned land, in addition to NGO parcels and county parks. Some of these areas, depending on local or federal-administrative conditions, may prove to be fruitful opportunities for engaging with landback.

Figure 9: Protected Area Dataset (PAD) Fee Land and External Boundaries of Federally Recognized American Indian Reservations (2020), Montana Detail

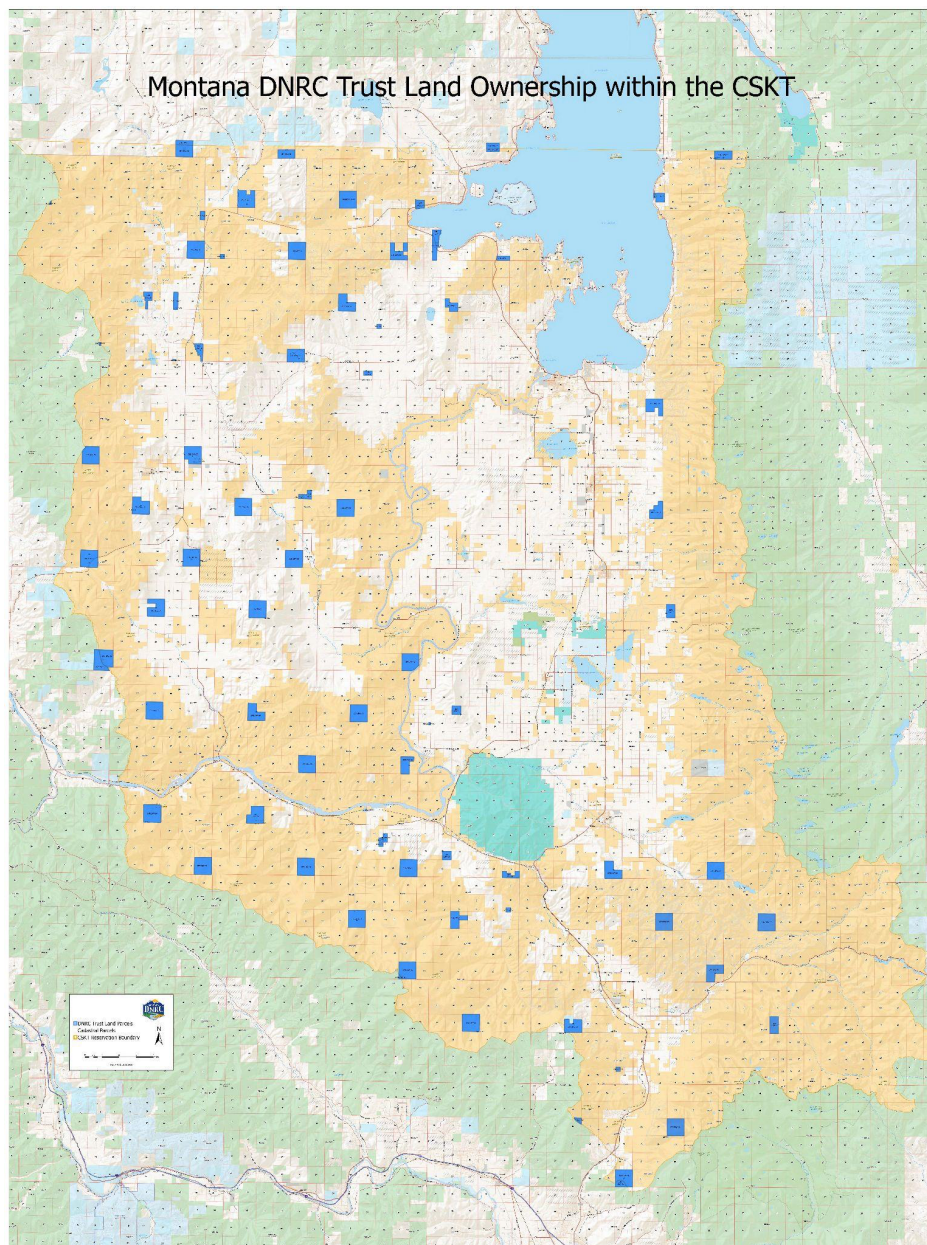


For example, the Montana Water Settlement Agreement Act (MWSA), the water settlement agreement entered into by the United States, the state of Montana, and the Confederated Salish and Kootenai Tribes of the Flathead Reservation of Montana, authorizes the exchange of state trust lands that are located within the external boundaries of the Flathead Reservation for federal public lands within the state managed either by the U.S. Secretary of Agriculture or the U.S. Secretary of Interior.¹⁵ The Act authorizes up to 29,200 surface acres eligible for exchange that are largely checker-boarded within the Flathead Reservation (and must border trust reservation land). Figure 10 shows a map of these identified state trust lands within the reservation.

¹⁵ State of Montana Department of Natural Resources: <http://dnrc.mt.gov/divisions/water/water-compact-implementation-program/confederated-salish-and-kootenai-tribes-compact/state-land-exchanges-on-the-flathead-indian-reservation>



Figure 10: Montana Department of Natural Resources & Conservation Trust Land Ownership within the Flathead Reservation



The dark-blue squares depict state trust land, and the orange-shaded region depicts the Flathead Reservation. As Figure 10 shows, many of these state-trust lands are checkerboarded within the existing reservation. The Montana Department of Natural Resources & Conservation (DNRC) has identified this checkerboarding pattern as a key reason they are willing to trade state land for consolidated federal public land outside of the reservation. The checkerboarded land can be difficult to access both for management purposes for the state, and also for the public. Therefore, it may be in the trust's best interest to exchange this land in order to gain more accessible acreage with better potential for generating revenue and allowing the public to



access. For the tribes, they benefit from this land exchange by gaining land to control and manage and helping to fill back in the checkerboarded areas within their reservation. While the actual exchange will still undergo many years of vetting from the state of Montana's Land Board, identification of potential parcels, and of win-win opportunities to co-manage or swap management of land, was a key step in this process.

This example of the Montana state-federal land exchanges illustrates a more-recent challenge for states, and opportunity for landback, in managing state trust land for beneficiaries. Traditionally, state trust land had largely derived revenue from extractive activities, such as mining and logging. As population centers change, and economies move more towards knowledge-based services than natural-resource extraction, state trustees are experimenting with new activities to better-match what state populations want. People value environmental health and living near public-access parks and recreation more so than before. As western states grow, develop, and experience demographic shifts, their populations may increasingly view state trust lands as providing valuable watershed management, open space, public spaces, and opportunities to foster Indigenous traditional knowledge and cultural practices more than just monetary revenue based on extracting resources or leasing parcels.¹⁶ As a result, these shifts may present opportunities for more land exchanges, or co-management or management agreements with Native American tribes than in previous decades.

IV. Data Collection, Dissemination, and Policy Options

Despite the difficulty in navigating land records in many states and counties, geo-spatial data provides a helpful avenue to investigate whether administrative bodies are managing or are in ownership of previously recognized Indigenous land, current external boundaries of Indigenous land, or potential parcels of land that can be returned to Indigenous use, control, stewardship, or ownership. The map of these areas indicates opportunities for either land transfers, exchanges, management or co-management agreements for land that is currently public land, or protected for conservation or other purposes.

Identifying where these parcels are is a powerful first step for tribes and government agencies to begin to develop strategies for landback. As evidence from several examples, these use or management transfers back to tribes can have profound win-win outcomes for both Indigenous Peoples and the relevant public agencies, for socio-economic cohesion and development, and for environmental conservation and stewardship.¹⁷

¹⁶ Culp, Laurenzi, A., & Tuell, C. C. (2015). *State Trust Lands in the West*, Updated Edition. Lincoln Institute of Land Policy.

¹⁷ See Caleb Stevens, Robert Winterbottom, Jenny Springer, Katie Reytar. 2014. *Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change*. World Resources Institute. Last Accessed July 13, 2022 at <https://www.wri.org/research/securing-rights-combating-climate-change>

